

Curriculum for MD/MS Ayurveda
(PRESCRIBED BY NCISM)

अभ्यासात्प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी ।

Semester III-VI
Stree Roga - Prasuti Tantra
(Ayurveda Gynaecology and Obstetrics)
(SUBJECT CODE : AYPG-SRPT)

(Applicable from 2024-25 batch, from the academic year 2025-26 onwards until further notification by NCISM)



आयुषे सर्वलोकानाम्



SKILLS

Skill
Training

Competency

Copability



BOARD OF AYURVEDA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026

PREFACE

The field of Stree Roga and Prasuti Tantra rooted in the rich heritage of Ayurveda, plays an indispensable role in addressing women's health, particularly in Stree Roga and Prasuti Tantra (Obstetrics and Gynecology), from a holistic perspective. Recognizing the need to provide comprehensive, hands-on training that aligns with modern advancements, the new Competency-Based Dynamic Curriculum (CBDC) for postgraduates has been meticulously designed to enrich learning and enhance skill development. This curriculum aims to bridge traditional Ayurvedic wisdom with contemporary medical science, offering students a robust foundation to address the complex needs of women's health care.

The revised syllabus underscores the integration of theoretical knowledge and clinical practice, ensuring that students gain proficiency in diagnostic, therapeutic, and surgical aspects of women's health, with a particular emphasis on Garbhadana (Prenatal), Garbhini (Perinatal) and Sutika (Postnatal) care. The curriculum also emphasizes individualized patient care, preventive strategies, and the application of Ayurvedic principles to manage various disorders like Artava vyapad (menstrual irregularities), Vandyatva (Infertility), Rajonivritti janya lakshana (Menopausal challenges) and reproductive endocrinology.

One of the core aspects of this updated syllabus is its competency-driven approach, which encourages students to not only understand but also apply clinical practices and research methodologies in real-world settings. By focusing on hands-on experience through case-based discussions, procedural skills, and research initiatives, students will be empowered to contribute meaningfully to women's healthcare.

As we move forward, we hope this syllabus fosters a new generation of practitioners who are both knowledgeable in the classical teachings of Ayurveda and skilled in contemporary medical practices. This curriculum seeks to nurture empathy, precision, and innovation, ultimately ensuring that future specialists in Stree Roga and Prasuti Tantra are well-prepared to provide exemplary care to women across all stages of life.

INDEX

Summary & Credit Framework	4
Course Code and Name of Course	8
Table 1 : Course learning outcomes and mapped Program learning outcomes	8
Table 2 : Course contents (Modules- Credits and Notional Learning Hours)	9
Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain-Level- TL Methods	45
Paper 1 Garbha - Garbhini Vigyana - Embryology and Obstetrics	45
Paper 2 Prasava Vigyan - Clinical Obstetrics	127
Paper 3 Stree Roga - Gynaecology	254
Paper 4 Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology)	324
Table 4 : Practical Training Activity	490
Table 5 : Experiential learning Activity	500
Table 6 : Assessment Summary: Assessment is subdivided in A to H points	509
6 A : Number of Papers and Marks Distribution	509
6 B : Scheme of Assessment (Formative and Summative Assessment)	509
6 C : Calculation Method for Modular Grade Points (MGP)	509
6 D : Semester Evaluation Methods for Semester Grade point Average (SGPA)	513
6 E : Question Paper Pattern	516
6 F : Distribution for summative assessment (University examination)	517
6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)	525
6 H : Distribution of Practical Exam (University Examination)	526
Reference Books/ Resources	528
Abbreviations	531

We want that education by which character is formed, strength of mind is increased, the intellect is expanded, and by which one can stand on one's own feet.

-Swami Vivekananda



NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Curriculum MD/ MS Ayurveda

Stree Roga - Prasuti Tantra (AYPG-SRPT)

Summary & Credit Framework

Semester III-VI

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
Semester No : 3			
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)			
M1 Garbhini Vigyana- (Diagnosis of Pregnancy)	2	60	50
M2 Garbhini Paricharya – (Antenatal care)	2	60	50
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)			
M9 Prakrita Prasava (Normal Labour)	2	60	50
M10 Prasavakaleena Upadrava (Intrapartum complications) and Complications of stages of labour	2	60	50
Paper No : 3 (Stree Roga - Gynaecology)			
M17 Artava Vyapad- Disorders of menstruation	2	60	50
M18 Yoni Vyapad -Epidemiology and general etiopathogenesis and management of Gynecological disorders	2	60	50
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))			
M25 Shastrakarma Samanya Siddhanta –General principles of Gynaecological and Obstetrical Surgeries	2	60	50
M26 Critical Care in Gynaecology and Obstetrics	2	60	50
Total	16	480	400
Semester No : 4			
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)			
	2	60	50

M3 Garbhini vyapad – (Disorders in Pregnancy)			
M4 Garbha vyapad (Fetal disorders).	2	60	50
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)			
M11 Prasava Kalaja Vikruti (Premature and Post term Labour)	2	60	50
M12 Prasava-Vyapad (Abnormal Labour)	2	60	50
Paper No : 3 (Stree Roga - Gynaecology)			
M19 Samkramika and Aupasargika rogas (Infectious disorders of Reproductive system & STD)	2	60	50
M20 Artava vyapad samuchaya, Ashta nindita and Stree janananga arbuda (Reproductive endocrinology, polycystic ovarian syndrome, neoplasms of female reproductive system)	2	60	50
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))			
M27 Medico-legal Aspects related to Stree Roga (Gynaecology) -Prasuti Tantra (Obstetrics)	2	60	50
M28 Stree Roga Sambandhita Shastrakarmani- Operative Gynaecology - Part-I	2	60	50
Total	16	480	400
Semester No : 5			
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)			
M5 Garbha vyapad– fetal Disorders -2	2	60	50
M6 Pregnancy related medical and surgical complications	2	60	50
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)			
M13 Jatamatra (Neonatal resuscitation) and Navajata Shishu Paricharya (New born care)	2	60	50
M14 Vishesha Adhyayana of Prasava Vishishta Aushadhi	2	60	50
Paper No : 3 (Stree Roga - Gynaecology)			
M21 Vandhyatwa (Female and male Infertility)	3	90	75
M22 Stana roga - Breast diseases	1	30	25
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))			
M29 Stree Roga Sambandhita Shalyakarmani - Operative Gynaecology–Part-II	2	60	50
M30 Stree Roga Sambhandhita Shalyakarma -Part-III -Garbhashaya Nirmana & Yoni Nirmana Shalyakarma (Reconstructive Surgeries of the Uterus and Vagina)	2	60	50
Total	16	480	400

Semester No : 6			
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)			
M7 Kalpa used in Garbha garbhini vyapad	2	60	50
M8 Streerog (Gynaecological disorders) complicating pregnancy-	2	60	50
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)			
M15 Sutika Vigyan (Normal Puerperium)	2	60	50
M16 Sutikavyadhi (Puerperial disorders)	2	60	50
Paper No : 3 (Stree Roga - Gynaecology)			
M23 Stree swasthya- Family welfare and demography	2	60	50
M24 Vishesha Adhyayana, recent advancements in gynecology and commonly used formulations in stree roga	2	60	50
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))			
M31 Prasava Sambandhita Shalyakarmani- Operative Obstetrics – Part-I	2	60	50
M32 Prasava Sambandhita Shalyakarmani - Operative Obstetrics – Part-II	2	60	50
Total	16	480	400
Grand Total	64	1920	1600

Credit frame work

AYPG-SRPT consists of 32 modules totaling 64 credits, which correspond to 1920 Notional Learning Hours. Each credit comprises 30 hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Important Note: The User Manual MD/MS Ayurveda is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. Each paper has 16 credits and each semester covers 16 credits across 4 papers. In case of difficulty and questions regarding the curriculum, write to syllabus24ayu@ncismindia.org.

Credit Analysis Overview					
Sem/Paper	Paper No 1	Paper No 2	Paper No 3	Paper No 4	Credits
Semester 3	M-1 2 Crs M-2 2 Crs	M-9 2 Crs M-10 2 Crs	M-17 2 Crs M-18 2 Crs	M-25 2 Crs M-26 2 Crs	16
Semester 4	M-3 2 Crs M-4 2 Crs	M-11 2 Crs M-12 2 Crs	M-19 2 Crs M-20 2 Crs	M-27 2 Crs M-28 2 Crs	16

Semester 5	M-5 2 Crs M-6 2 Crs	M-13 2 Crs M-14 2 Crs	M-21 3 Crs M-22 1 Crs	M-29 2 Crs M-30 2 Crs	16
Semester 6	M-7 2 Crs M-8 2 Crs	M-15 2 Crs M-16 2 Crs	M-23 2 Crs M-24 2 Crs	M-32 2 Crs M-31 2 Crs	16
Credits	16	16	16	16	64

Semester VI University examination					
Theory			Practical*		
Paper	Marks	Total	Practical Heads	Marks	Total
Paper -1	100	400	Long case or procedure/Major practical as applicable	100	400
			Short case or procedure/Minor practical	50	
Paper -2	100		Spotters	50	
			Assessing teaching ability	20	
Paper -3	100		Assessing presentation skills	20	
			Viva (4 examiners: 20 marks/each examiner)	80	
Paper -4	100		Dissertation Viva	40	
			Logbook (Activity record)	20	
		Practical/Clinical Record	20		
Semester VI University examination – 800 Marks					

* Details in 6H table

Course Code and Name of Course

Course code	Name of Course
AYPG-SRPT	Stree Roga - Prasuti Tantra (Ayurveda Gynaecology and Obstetrics)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) AYPG-SRPT At the end of the course AYPG-SRPT, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Synthesize key concepts of Stree Roga and Prasuti Tantra with Ayurvedic and contemporary approaches to formulate accurate diagnosis and management plans.	PO1,PO3
CO2	Evaluate clinical findings through systematic assessment and analysis to distinguish Stree Roga and Prasuti Tantra conditions using Ayurveda and scientific advances.	PO1,PO2,PO3
CO3	Design and justify integrative treatment plans incorporating Ayurveda, Yoga, and contemporary science for effective management of Stree Roga and Prasuti Tantra disorders.	PO1,PO3
CO4	Execute advanced clinical interventions, apply critical reasoning, and regulate referrals in complex conditions of Stree Roga and Prasuti Tantra through procedural expertise.	PO2,PO6
CO5	Perform surgical and para-surgical procedures, administer localized therapies, and implement pharmacological treatments with ethical compliance and patient safety.	PO4
CO6	Facilitate comprehensive reproductive counselling and educational initiatives for women and families by applying Ayurvedic principles integrated with public health frameworks.	PO3,PO4
CO7	Formulate and conduct interdisciplinary research adhering to ethical standards and legal frameworks in obstetric and gynecological practice.	PO5,PO7
CO8	Integrate principles of Stree Roga and Prasuti Tantra with contemporary science to advocate global recognition of Ayurveda through culturally sensitive and technologically adaptive practice.	PO3,PO8

Table 2 : Course contents (Modules- Credits and Notional Learning Hours)

Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)						
Semester No : 3						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
1	<p>M-1 Garbhini Vigyana- (Diagnosis of Pregnancy)</p> <p>This module explores the diagnosis, physiology, and endocrinology of pregnancy, covering <i>Garbhavakranti</i> (fetal development), <i>Beejadushti</i> (gamete defects), and <i>Garbhopaghatakar Bhava</i> (factors affecting pregnancy). It integrates traditional concepts with contemporary medical science for holistic understanding.</p> <ul style="list-style-type: none"> • M1U1 Garbhini Nidana(Diagnosis of pregnancy) Garbhini Nidana, Garbhakalina Matrugata Parivartana, Garbhini Lakshana, Dauhrida (Diagnosis of pregnancy) Garbha Poshana (Foetal circulation) Garbha Sharira Kriya Vaishishtyam (Physiological changes during pregnancy) • M1U2 Garbhavakranti(Embryology) Garbhavakranti, Matrujadi Bhava, Garbha Vriddhi, Role of Panchamahabhuta in the formation and development of foetus (Embryology) Garbha Varna Utpatti • M1U3 Garbhanga Vikruti(Chromosomal and congenital fetal anamolies) 	2	10	20	30	60

	Beeja – Beejadushti, Beejabhaga Dushti, Beejabhagavayavajanya Garbhanga Vikruti (Screening of prenatal diagnostic tests, Neural tube defects, chromosomal anomalies, congenital anomalies and recent advances in screening techniques) Garbhopaghatakara Bhava (Teratogens and Fetotoxic Agents) Endocrinology related to pregnancy and immunology of pregnancy					
2	M-2 Garbhini Paricharya – (Antenatal care) This module deals with garbhini paricharya(Antenatal care), Yamala garbha (twin pregnancy), bahuapatyata(multifetal pregnancy), PC PNDT act. • M2U1 Garbhini Masanumasika Paricharya(Antenatal care) Garbhini Masanumasika Paricharya (Antenatal care) • M2U2 Bahu-apatyata Diagnosis and management of Yamala Garbha (Twin Pregnancy). Bahu-apatyata (Multi fetal Pregnancy). • M2U3 PC&PNDT Act Communication and Councelling Ability of PC&PNDT Act.	2	10	20	30	60
		4	20	40	60	120

Semester No : 4

2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular	2G Total

					Assessment	
3	<p>M-3 Garbhini vyapad – (Disorders in Pregnancy)</p> <p>This module provides an integrative understanding of commonly encountered antenatal complications — Garbhini Pandu (Pregnancy Anaemia), Garbhini Chardi (Emesis and Hyperemesis Gravidarum), and Garbhini Shotha (Hypertensive Disorders in Pregnancy), to enhance clinical expertise in diagnosing and managing these conditions.</p> <ul style="list-style-type: none"> • M3U1 Garbhini Vyapad(minor and major medical ailments in pregnancy,Anemia in pregnancy) Diagnosis and Management of Garbhini Vyapad – Nidana, Samprapti and Chikitsa of Garbhini Vyapad, Garbhini Pandu.(minor and major medical ailments in pregnancy, Anaemia in pregnancy) • M3U2 Garbhini Chardi(Emesis and hyperemesis gravidarum) Diagnosis, differential diagnosis, and management of Garbhini Chardi (Emesis and Hyperemesis gravidarium). • M3U3 Garbhani Raktachapa (Pregnancy induced hypertension)) Diagnosis and management of Raktachapa (Hypertensive disorders.) Pregnancy-induced hypertension, Pre-eclampsia, Eclampsia. 	2	10	20	30	60
4	<p>M-4 Garbha vyapad (Fetal disorders).</p> <p>This module focuses on the understanding and management of early pregnancy complications including Garbhasrava (threatened abortion), Garbhapata (spontaneous abortion), Recurrent Pregnancy Loss (RPL), Ectopic Pregnancy,</p>	2	10	20	30	60

	<p>and Rh incompatibility-related hemolytic disorders in the fetus.,</p> <ul style="list-style-type: none"> • M4U1 Garbha Vyapad(diseases of fetus) Diagnosis and management of complications in Garbhasrava and Garbhapata (abortion) and recurrent pregnancy loss. • M4U2 Ectopic pregnancy Diagnosis, interpretation of investigations and medical management of Ectopic pregnancy • M4U3 Rh incompatibility Haemolytic diseases of the Fetus, Rh incompatibility 					
		4	20	40	60	120
Semester No : 5						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
5	<p>M-5 Garbha vyapad– fetal Disorders -2</p> <p>This module provides an in-depth exploration of fetal and placental pathologies described in Ayurvedic classics under terms such as Upavishtaka, Nagodara, Upashushka, Lina Garbha, Garbha Shosha, Garbha Kshaya, Bhutahrita Garbha, and Antarmrita Garbha, (Intrauterine Growth Restriction (IUGR),</p>	2	10	20	30	60

	<p>Intrauterine Fetal Death (IUFD), placental anomalies, and Gestational Trophoblastic Neoplasia (GTN).</p> <ul style="list-style-type: none"> • M5U1 Garbha sasha-Intra uterine growth restriction) Diagnosis and management of Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Garbha shosha, Garbha kshaya, Bhutahrita garbha, (Intra uterine growth restriction) . • M5U2 Jarayu dosha(placental anomalies and Gestational trophoblastic neoplasia) Diagnosis and management of Jarayu Dosha (placental anomalies) and diagnosis of gestational trophoblastic neoplasia. • M5U3 Antarmrita garbha (IUFD) Diagnosis and management of Antarmrita garbha (Intra uterine fetal death). 					
6	<p>M-6 Pregnancy related medical and surgical complications</p> <p>This module is designed to equip learners with a thorough understanding of diagnosis and management of high-risk pregnancies associated with pre-existing or concurrent medical and surgical disorders, obstetric challenges such as elderly primigravida, bad obstetric history (BOH), and Garbhini Makkal (psychosomatic disorders in pregnancy).</p> <ul style="list-style-type: none"> • M6U1 Evaluation of fetal and maternal health in high risk pregnancies Fetal and maternal health in high-risk pregnancies: Garbhini jwara (Pyrexia) pregnancy complicated by medical and surgical illness and their comprehensive integrated management. HIV and prevention of mother-to-child transmission of HIV infection (PMTCT). • M6U2 Elderly primi gravida , Bad obstetric history. 	2	10	20	30	60

<p>Elderly primigravida, understanding risk factors for mother and fetus, management for prevention of complications. management for the proper growth of fetus and safe delivery. Promotion of mother to identify various risk factors and report to the hospital at its earliest</p> <p>Bad obstetric history (BOH), identifying risk factors for mother and fetus, measures to predict and protect the complications, identification of high risk and referral to higher centres or intervention of the medicine and surgery dept. as needed.</p> <p>Identifying indications of emergency LSCS, pregnancy with previous caesarean delivery, clinical evaluation of scar, and developing skills for fetal management in case of preterm CS, evaluation of scar, ordering appropriate investigations, interpreting those investigations, and timely management.</p> <p>Breech presentation management.</p> <p>Clinical diagnosis, appropriate investigations, strict monitoring and management according to prim breech etc</p> <p>Evaluation of risk factors for elderly primigravida, risk of metabolic disorders and high-risk factors by clinical bedside examination or examination on simulator, PV examination, and noticeable observations to reach the diagnosis to prevent complications in mother</p> <p>Presentation of various cases and its management</p> <p>Bedside examination and demonstration and diagnosis of breech presentation, pelvic grips, LSCS scar of previous LSCS, demonstration of scar tenderness</p> <p>Evaluate the condition clinically, reporting the above diseases.</p> <p>Differentiate the signs and symptoms and reach the diagnosis and display various treatments</p> <p>• M6U3 Garbhini makkala (Antepartum hemorrhage.)</p> <p>Garbhini makkala - etiopathogenesis investigations, prediction of complications and management</p>					
	4	20	40	60	120

Semester No : 6

2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
7	<p>M-7 Kalpa used in Garbha garbhini vyapad</p> <p>This module aims to impart comprehensive knowledge of therapeutic strategies used during pregnancy, focusing on two key areas:</p> <p>Ayurvedic formulations used in the management of Garbhini Vyapad and to promote fetal growth and development.</p> <p>The pharmacology of emergency drugs utilized in modern obstetrics for managing acute and life-threatening complications.</p> <p>• M7U1 Group of drugs for fetal growth</p> <p>Group of drugs for growth of foetus:</p> <ol style="list-style-type: none"> 1. Garbhapala rasa 2. Garbhaposhaka yoga 3. Shatavari ghrita 4. Kashmaryadi ghrita 5. Phalaghrita 	2	10	20	30	60

6. Kalyanaka ghrita
7. Laghumalini vasanta ras
8. Kasherukadipayaha
9. Shatavari kalpa
10. Kushmanda Awleha
11. Lakshaditaila

• **M7U2 Group of drugs for Garbhini chikitsa**

Group of drugs for Garbhini chikitsa: Sukumar ghrita (garbhini udavarta), Mahakalyanak ghrita (garbhini prameha), Dadimadi ghrita (garbhini udarshool), Draksha ghrita (Garbhini pandu)

1. Mandura vataka (Pandu)
2. Dhatri lauha (Garbhini Pandu)
3. Gokshuradi ghrita (Garbhini Shotha)
4. Kalyanak awleha (Garbhini Atisar) Chandanadi kashay (Garbhini jwara), (Garbha poshan, Garbhini jwara)
5. Erandadikwatha (Garbhini jwara)
6. Lavangadichurna (Jwara, Ama- rakta Atisar, Shool, Shotha)
7. Gokshura kashay (Garbhini shotha)
8. Darvyadileha (Garbhini kamala)
9. Shunthi bilwa kashaya (Garbhini atisara) Chandanadi kwatha (Garbhini jwara)
10. Guduchyadi kwatha (Garbhini jwara)
11. Pippalyadi leha (Kasa Hikka)
12. Amra jambu kwatha (Garbhini grahani)
13. Huberadi kwatha (Garbhini jwara, Raktaatar garbha stava, Garbha shola)
14. Garbhachintamani rasa (Garbhini shool, Vishtambha, Jwar, Ajirna sarvaroogbhar)

	<p>15. Pruthakparnyadi ghrita (6th and 7th month of pregnancy) 16. Indushekhar ras (Garbhini rog har), Ksheer bala taila 17. Kadamba masha taila 18. Bala taila</p> <p>• M7U3 Pharmacology of drugs for prevention of abortion, preter labour Pharmacology of drugs for prevention of abortion, preterm labour</p> <p>1. Tocolytic drugs 2. Antihypertensive 3. Antiemetics 4. Magnesium sulphate 5. Mruta garbhapatan yoga Jeerakadi kashay (Garbhini strava) 6. Masanumasik rakta sravhar ghanavati</p>					
8	<p>M-8 Streerog (Gynaecological disorders) complicating pregnancy-</p> <p>This module addresses the diagnosis, clinical challenges, and integrated management of pregnancies complicated by gynaecological pathologies (uterine fibroids, ovarian tumors, genital prolapse, and carcinoma of the cervix).</p> <p>• M8U1 Tumors in pregnancy Diagnosis of Fibroids and Ovarian tumors in pregnancy. Differential diagnosis of arbuda and granthi on the basis of dosha.</p> <p>Diagnosis of raktaja arbuda and granthi. Various rakta prasadaka and manasa pachaka kwatha, local applications of tail and</p>	2	10	20	30	60

	shatadhauta ghrita and its role for labour and synchronised contraction of uterine muscles Diet and manasika bhavas for counselling • M8U2 Genital prolapse in pregnancy. Diagnosis and conservative management of genital prolapse in pregnancy. Diagnosis of Carcinoma cervix in pregnancy.					
		4	20	40	60	120
		16	80	160	240	480
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)						
Semester No : 3						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
9	M-9 Prakrita Prasava (Normal Labour) This module provides an in-depth understanding of the Prasava prakriya (physiology), vidhi (mechanism), and paricharya (management) of normal labour, emphasizing evidence-based integrative practices. Students will learn to differentiate between normal and abnormal labour, develop clinical skills for intrapartum monitoring and care, and apply principles of Surakshita prasava	2	10	20	30	60

	<p>(safe delivery) while ensuring maternal and fetal well-being. The module integrates theoretical knowledge, hands-on training, and simulation-based learning to prepare postgraduate students for competent and compassionate obstetric care.</p> <ul style="list-style-type: none"> • M9U1 Prakrita Prasava prakriya and Avastha Prasavapurva paricharya (pre-labour care), Prasava prakriya (physiology of labour), Prasava avastha (labour stages), Prasava nirikshanam (intrapartum maternal and foetal monitoring). • M9U2 Prasavagara Prasavagara - LaQshya interventions: Quality of care in labour room, maternity operation theatre, obstetric high dependency unit, and obstetrics intensive care unit. • M9U3 Prasava vidhi (Mechanism of normal labour) Prasava vidhi (mechanism of normal labour) Ayurvedic as well as contemporary concepts of the mechanism of normal labour. • M9U4 Prasava Paricharya (Management of labour) Prasava Paricharya (Management of labour) Sukhaprasava protocols -Ayurvedic and integrative methods 					
10	<p>M-10 Prasavakaleena Upadrava (Intrapartum complications) and Complications of stages of labour</p> <p>This comprehensive module explores the spectrum of Prasavakaleena Upadrava (intrapartum complications) like Garbha avsada (Foetal distress), Prasavakaleena Garbhamriti (Still birth), Obstetric management of high-risk pregnancies through the dual lens of Ayurvedic wisdom and contemporary</p>	2	10	20	30	60

<p>obstetrics. Students will develop expertise in identifying and managing, and preventing complications of Prasavakaleena upadrava, blending traditional Sthanika Chikitsa (local therapies) with evidence-based medical interventions. The curriculum emphasizes a holistic approach to maternal-fetal wellbeing while addressing emergencies through integrative protocols.</p> <ul style="list-style-type: none"> • M10U1 Garbha avasada (Fetal Distress) Garbha avasada (Fetal Distress): Causes, clinical features, diagnosis and management. • M10U2 Prasavakaleena Garbhamrita (Still birth) Prasavakaleena Garbhamrityu (Stillbirth)—causes, clinical features, diagnosis, maternal complications and management. • M10U3 Obstetric management of high-risk pregnancies Obstetrics management of Eclampsia, Abruptio placenta, Gestational Diabetes mellitus. 												
			4	20	40	60	120					
Semester No : 4												
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours									
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total						
11	M-11 Prasava Kalaja Vikruti (Premature and Post term Labour)	2	10	20	30	60						

	<p>This module focuses on the management of Akala Prasava (Preterm labour), Kalateeta Prasava (Post-term labour) and Aparasanga (Retained placenta). Students will learn to identify risk factors, diagnosis, and management of these complications to ensure optimal maternal and fetal outcomes.</p> <ul style="list-style-type: none"> • M11U1 Akala-prasava (Preterm labour) Akala-prasava (Preterm labour): Etiopathogenesis, clinical features, diagnosis, prevention and management • M11U2 Kalateeta Prasava (Post term labour) Kalateeta Prasava (Post term labour): Etiopathogenesis, clinical features, diagnosis, prevention and management • M11U3 Aparasanga (Retained placenta) Aparasanga (Retained placenta): Etiopathogenesis, clinical features, diagnosis, prevention and management 					
12	<p>M-12 Prasava-Vyapad (Abnormal Labour)</p> <p>This module focuses on the recognition, assessment, and management of Garbha Sanga—Mudhagarbha (Obstructed labour) and Vilambita prasava (Delayed labour). Students will learn to identify risk factors, diagnose, and manage these complications through integrative protocols (Ayurveda and modern obstetric) to ensure optimal maternal and fetal outcomes.</p> <ul style="list-style-type: none"> • M12U1 Garbha Sanga –Mudhagarbha (Obstructed labour) Garbha Sanga –Mudhagarbha (Obstructed labour), etiopathogenesis, clinical features, diagnosis, prevention, prognosis and management • M12U2 Vilambita prasava (Delayed labour) Vilambita prasava (Delayed labour): Etiopathogenesis, clinical features, diagnosis, prevention and management 	2	10	20	30	60
		4	20	40	60	120

Semester No : 5						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
13	<p>M-13 Jatamatra (Neonatal resuscitation) and Navajata Shishu Paricharya (New born care)</p> <p>This module provides the detailed description of Jatamatra and Navajata Shishu Paricharya (Neonatal resuscitation & New born care) and diagnostic criteria of Navajata Shishu Shvasa avarodha (birth asphyxia) with interpretation of APGAR Score and develop the clinical skill through hands on Jatamatra shishu paricharya (Neonatal resuscitation).</p> <ul style="list-style-type: none"> • M13U1 Jatamatra shishu paricharya (Neonatal resuscitation) Jatamatra shishu paricharya (Neonatal resuscitation): <ol style="list-style-type: none"> a. Jatamatra shishu pariksha - examination of neonate, APGAR Score b. Jatamatra shishu charya - neonatal resuscitation • M13U2 Navajata Shishu paricharya - Neonatal care Navajatha Shishu paricharya (Neonatal care): Saindhava sarpi pracchardana, Nabhinadi chedana - Nabhi upakalpana (cutting and care of umbilical cord), Madhu-sarpi prashana Navajata shishu Gahanopacara - Neonatal intensive care protocols of immediate resuscitation • M13U3 Navajata shishu shvasavarodha - Birth Asphyxia 	2	10	20	30	60

	Diagnosis and management of Navajata shishu shvasavarodha (Birth asphyxia)					
14	<p>M-14 Vishesha Adhyayana of Prasava Vishishta Aushadhi</p> <p>This module provides detailed description of Vishesha Adhyayana of Prasava Vishishta Aushadhi - Prasava Paricharyantargata Yoga, Sutika Paricharyantargata Yoga and Navajata-shishu Paricharyantargata Yoga.</p> <ul style="list-style-type: none"> • M14U1 Prasava Paricharyantargata Yoga Sukhaprasavakara ghrita, Balataila, Atibala taila, Guduchi taila, Shatavari taila, Madhuyashti taila, Dadimadighrita, Sukhaprasavakara Yoga, Sidharthakadi taila • M14U2 Sutika Paricharyantargata Yoga Panchakola churna, Soubhagyashunti, Dasmoolarishta, Sutika Dashamula, Panchajeerakapaka, Sootikabharan rasa. Devadaryadi Kwatha, Pratapalankeshwara Ras, Nagarakhanda, Traivrita yoga • M14U3 Navajatashishu Paricharyantargata Yoga Kushtataila, Chandanadi churna—indications, dose and time of administration 	2	10	20	30	60
		4	20	40	60	120
Semester No : 6						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total

15	<p>M-15 Sutika Vigyan (Normal Puerperium)</p> <p>This module focuses on the physiological and psychological changes of Sutika (puerperal woman), Sutika Paricharya (management of normal puerperium), Stana-Stanya Pariksha, and Physiology of Stanya utpatti (lactation), Stanyadushti (vitiation of breast milk), and alternative milk options. Students will learn to assess and manage Sutika (normal puerperal women), identify potential complications, and provide supportive care to ensure optimal maternal and newborn outcomes, and also learn counseling techniques, breastfeeding positions, and latch assistance to ensure optimal breastfeeding outcomes.</p> <ul style="list-style-type: none"> • M15U1 Sutika (Normal puerperium) Management of Sutika and Normal Puerperium • M15U2 Stanya utpatti (Lactation) Stana-stanya pareeksha, Lactation, Breast milk, Alternative milk, Counselling about the breast feeding and breast feeding techniques. • M15U3 Stanyadushti (Lactation disorders) Diagnose and management of Stanya vriddhi, kshaya and dusti (Lactation disorders) 	2	10	20	30	60
16	<p>M-16 Sutikavyadhi (Puerperial disorders)</p> <p>This module provides the detailed description of Sutika vyapad (Puerperal disorders) with their samanya nidana evam chikitsa, Sutika vyadhi (Puerperal diseases), like Yonibhramsha, Yonikshata, Makkalla Shula, Raktavidradhi, Sutika Jwara and abnormal puerperium with its diagnosis and management.</p> <ul style="list-style-type: none"> • M16U1 Sutika Vyapad (Puerperal disorders) 	2	10	20	30	60

	Sutika Vyadhi- Samanya Nidana evam Chikitsa Sutika Vyapad—Yonibhramsha, Yonikshata, Makkalla Shula, Raktavidradhi					
	• M16U2 Abnormal Puerperium Diagnosis and management of Abnormal Puerperium					
		4	20	40	60	120
		16	80	160	240	480
Paper No : 3 (Stree Roga - Gynaecology)						
Semester No : 3						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
17	M-17 Artava Vyapad- Disorders of menstruation This module provides an in-depth exploration of Artava vyapad (anartava (amenorrhoea), kashtartava (dysmenorrhoea), and Asrugdhara (menorrhagia)) and their diagnosis and management. • M17U1 Asrigdara (AUB) Diagnosis and management of - Artava vridhi (hypermenorrhoea) Asrigdara (abnormal uterine bleeding—menorrhagia, epimenorrhoea, metrorrhagia, Adenomyosis, Endometrial hyperplasia.)	2	10	20	30	60

	<ul style="list-style-type: none"> • M17U2 Anartava Diagnosis and management of Anartava (Amenorrhea) Artava Kshaya (Oligomenorrhea and Hypomenorrhoea)- evaluation and management of Anartava (Primary and secondary amenorrhea) Artava Kshaya (oligomenorrhea and hypomenorrhea) • M17U3 Kashtartava Diagnosis and management of Kashtartava (Dysmenorrhea) 					
18	<p>M-18 Yoni Vyapad -Epidemiology and general etiopathogenesis and management of Gynecological disorders</p> <p>This module provides a comprehensive, in-depth exploration of various Yoni vyapad (gynecological disorders).</p> <ul style="list-style-type: none"> • M18U1 Yonivyapad(Gynaecological disorders) Vataja,(Endometriosis) Aticharana, Prakcharana,(Pelvic Inflammatory Disease) Putraghni (recurrent pregnancy loss), Antarmukhi (acute anteversion), Shushka (vaginal dryness), Vamini Yoni vyapad,(Implanation defects) Yonishula (pelvic pain), Yoni stabdha-Karkasa-kandu-daha chikitsa. (vulvovaginal pruritus, burning sensation). • M18U2 Yonibhramsha(Pelvic organ prolapse) Diagnosis and management of Yoni bhramsha (Pelvic organ prolapse), Maha yoni, (Procidentia) Prasramsini,(second degree uterine descent), and Phalini. (Cystocele). • M18U3 Beeja dushti(Chromosomal anomalies and congenital anomalies) Diagnosis and management of Beejadushti (chromosomal anomalies and congenital 	2	10	20	30	60

	malformations of female genital tract and breast) Intersex and ambiguous sex, sex chromatin, and Karyotype study.					
		4	20	40	60	120
Semester No : 4						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
19	<p>M-19 Samkramika and Aupasargika rogas (Infectious disorders of Reproductive system & STD)</p> <p>The module integrates case-based learning, procedural demonstrations, and evidence-based reflections to prepare students for holistic and practical patient care in the area of Sa?kramika and oupasargika Yonivyapad (STI management).</p> <ul style="list-style-type: none"> • M19U1 Sankramika yoni rogas(Genital infections) Diagnosis and management of Pittaja, Kaphaja, Sannipataja, Acharana, Upapluta, and Paripluta Yoni Vyapad and sankramika yoni roga (genital infections). Overview of Shwetapradara (abnormal vaginal discharges), diagnostic tools, and treatment approaches. • M19U2 Oupasargika yoni rogas(Sexually transmitted infections) 	2	10	20	30	60

	Diagnosis and management of Aupasargika rogas- Puyameha (Gonorrhoea, Chlamydia), Phirangi (syphilis), upadamsa- Lymphogranuloma venerum, Chancroid, Granuloma inguinale, Herpes genitalis, Bacterial, vaginosis, Condyloma acuminata, AIDS					
20	<p>M-20 Artava vyapad samuchaya, Ashta nindita and Stree janananga arbuda (Reproductive endocrinology, polycystic ovarian syndrome, neoplasms of female reproductive system)</p> <p>This module provides a clear understanding of Artava Vyapad Samucchya and Ashta Nindita, with a focus on their causes, pathogenesis, and treatment. It covers reproductive endocrine disorders like PCOS, menstrual irregularities, and female reproductive system neoplasms (both benign and malignant).</p> <ul style="list-style-type: none"> • M20U1 Ashta nindita, artava vyapad samuchhaya(reproductive endocrinology and Polycystic ovarian syndrome) Diagnosis, evaluation and management of Ashta ninditas (relevant to reproductive endocrinology) Artava vyapad samuchhaya (polycystic ovarian syndrome)- Polycystic ovarian syndrome related to Hirsutism with panchakarma and samana chikitsa • M20U2 Rakta gulma, Granthi, arbuda (benign neoplasms) Diagnosis and management of Rakta gulma, Granthi, Arbuda, yoniarsa, yoni kanda. (fibroid uterus, cervical erosion, cervical polyps, cervical neoplasia (CIN 1), VAIN, VIN, vaginal cysts, Vulval epithelial disorders ovarian Benign neoplasms) • M20U3 Karkatarbuda (malignant tumors) Referral understanding and diagnostic strategies of Rakta arbuda, Sannipataja artava 	2	10	20	30	60

vyapad, Putipuya, Kunapa, granthi artava vyapad (Malignant Genital Neoplasia of Ovary, Fallopian Tubes, Uterus, Cervix, Vagina, vulva) Integrative application of Ayurvedic principles. Basic knowledge of principles of radiotherapy and chemotherapy, immunotherapy, and Gene therapy in gynecological malignancies.					
		4	20	40	60

Semester No : 5

2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
21	<p>M-21 Vandhyatwa (Female and male Infertility)</p> <p>This module provides a comprehensive exploration of Stree Vandhyatva (female infertility) and Purusha Vandhyatva (male infertility) through an integrative lens, combining Ayurvedic principles and modern reproductive medicine. Students will delve into the Nidana (etiology), Samprapti (pathogenesis), and Chikitsa (treatment) of infertility, while examining biomedical, psychological, and sociocultural factors affecting fertility.</p> <p>The course also covers recent advances in fertility treatments, including Assisted Reproductive Technologies (ART) such as IVF (K?trima Garbh?dh?na), IUI, and surrogacy (Pratinidhi M?t?tva), alongside traditional Ayurvedic interventions (V?j?kara?a, Ras?yana).</p>	3	15	30	45	90

	<ul style="list-style-type: none"> • M21U1 Stree vandhyatwa - Female Infertility Detailed study of Stree Vandhyatwa (female infertility)—aetiopathogenesis, diagnosis, and management along with recent advances. • M21U2 Shukradushti(Male infertility) Shukra dushti (Male infertility): Shukra dushti, Diagnosis and management, Congenital factors, Seminal errors – pre-testicular, testicular, post testicular and drug-induced. Investigations and management of male infertility. • M21U3 Assisted reproductive technology procedures. Advanced Assisted Reproductive technology (ART) procedures, 					
22	<p>M-22 Stana roga - Breast diseases</p> <p>This module provides a focused study on the analytical understanding of Stana Roga (breast diseases) including Stana Vidradhi, Stana Kshat, Stana Arbuda, etc. It explores benign and malignant breast conditions by identifying Dosha imbalances (especially Kapha and Meda)and emphasizes preventive strategies.</p> <ul style="list-style-type: none"> • M22U1 Stana rogas(Benign neoplasms of breast) Diagnosis and medical management of Stana grandhi, Stana arbuda (benign neoplasma of breast) 	1	5	10	15	30
		4	20	40	60	120
Semester No : 6						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning	2G Total

					including Modular Assessment	
23	<p>M-23 Stree swasthya- Family welfare and demography</p> <p>This module offers an in-depth understanding of women’s health across various life stages, covering maternal and child health, government schemes related to family welfare, and public health statistics. It includes focused study on Tarunya Avastha Swasthya Rakshana (adolescent health promotion and disease prevention), and the diagnosis and management of Rajonivritti Janya Lakshana (menopausal syndrome).</p> <p>• M23U1 Vital statistics</p> <p>a. Vital Statistics - maternal and perinatal mortality, birth rate and fertility rate b. National and state health policies and programs in relation to RMNCAH+N c. Different acts related to Demography and population dynamics, POCSO act. d. Contraception (fertility control) e. Education regarding rights and confidentiality of women’s health, specifically related to reproductive function.</p> <p>• M23U2 Taruna awastha swastya rakshana(Adolescent women health care)</p> <p>a).Taruna avastha swasthya rakshana (Adolescent women health care) b) Rajonivritti janya lakshana - Menopausal Syndrome, prevention and management geriatric health care of woman</p> <p>• M23U3 Garbha nirodha and garbhapatakara yoga (Contraceptive methods)</p> <p>Garbha nirodha and Garbhapatakara yogas (Contraceptive techniques including recent developments) -</p>	2	10	20	30	60

	<ul style="list-style-type: none"> • Temporary methods • Permanent Methods • Recent advances in contraceptive technology 					
24	<p>M-24 Vishesha Adhyayana, recent advancements in gynecology and commonly used formulations in stree roga</p> <p>This module provides an update on recent advances on gynaecology and focusing on technologies,innovative traetments and emerging trends including commonly used formulations with the indications.</p> <ul style="list-style-type: none"> • M24U1 Commonly used formulations Commonly used drugs used in Stree roga- Kumaryasava, Rajah pravartini vati, Ashokarishta, Dashamoolarishta, Pushyanuga churna, Pradarantaka lauha, Gokshuradi guggulu, Hingvadi churna, Phalasarpi, Maha kalyana ghruta, Maharasnadi Kashaya, Patrangasava, Pushpadhanva rasa, Nashta pushpantaka rasa Satapushpa taila, Mahanarayan taila, Dhanwantaram taila, Sahacharadi tail, Bala tail, Kshara taila, Kaseesadi taila, Jatyadi taila • M24U2 Recent studies Recent studies and advancement in the field of Stree Roga • M24U3 Klaibya a. Klaibya - bheda, Lakshana, Chikitsa b. Guhya roga - Sankhya, Nidana, Lakshana, Chikitsa 	2	10	20	30	60

	c. Jataharini- Nidana, bheda and chikitsa					
		4	20	40	60	120
		16	80	160	240	480
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))						
Semester No : 3						
2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
25	<p>M-25 Shastrakarma Samanya Siddhanta –General principles of Gynaecological and Obstetrical Surgeries</p> <p>This module provides a comprehensive foundation in the principles and practices of gynecological and obstetric surgeries, integrating modern surgical techniques with Ayurvedic perspectives (Stree Roga evam Prasuti Tantra Shalya Karma). Students will explore:</p> <p>Core surgical principles for women’s health conditions.</p> <p>Pain management strategies (Vedana Nivarana) in obstetrics and gynecology.</p>	2	10	20	30	60

Ethical, anatomical, and physiological considerations in perioperative care. The module emphasizes evidence-based practice, patient safety, and holistic approaches (e.g., Dosh-specific interventions) to optimize surgical outcomes

• **M25U1 Shastrakarma Siddhanta**

Preoperative Care (Purva Karma):

- Patient assessment
- Informed consent & preparation (fasting, bowel prep)
- Intraoperative Principles
- Surgical approaches (abdominal, vaginal, laparoscopic)
- Hemostasis techniques (modern + Kshara/Jalauka)
- Postoperative Care (Pashchat Karma)
- Pain management (pharmacological + Pinda Taila)
- Recovery protocols (early ambulation, Sutika Paricharya)

Complications:

- Intraoperative (hemorrhage, organ injury)
- Postoperative (infection, adhesions)

• **M25U2 Analgesia and Anaesthesia in Obstetrics**

Analgesia and anesthesia in Obstetrics:

A. Basic Principles

- Introduction to Obstetric Anesthesia
- Pain Pathways in Obstetrics
- Pharmacology of Anesthetic Drugs in Pregnancy

B. Obstetric Anesthesia & Analgesia

- Labor Analgesia

	<ul style="list-style-type: none"> • Anesthesia for Cesarean Delivery • High-Risk Obstetric Scenarios <p>• M25U3 Analgesia and Anaesthesia in Gynaecology Introduction to Pain Management in Gynecology:</p> <ul style="list-style-type: none"> • Importance of pain control in gynecological procedures • Types of pain (acute vs. chronic, somatic vs. visceral) • Local and Regional Anesthesia in Gynecology • Local anesthetics (e.g., Lidocaine, Bupivacaine) • Nerve blocks (e.g., Pudendal nerve block, paracervical block) • Spinal and epidural anesthesia for gynecological surgeries • General Anesthesia in Gynecological Procedures • Indications and contraindications • Commonly used agents (e.g., Propofol, Sevoflurane) • Airway management and monitoring <p>• M25U4 Intensive Care in Obstetric and Gynaecology Obstetric Intensive care, Gynecology Intensive care, Critical Care Management, Guidelines and Protocols, Challenges and Controversies</p>					
26	<p>M-26 Critical Care in Gynaecology and Obstetrics</p> <p>This module provides comprehensive training in managing critical conditions in obstetric and gynaecological settings. It gives an in-depth understanding of shock and its management, blood transfusion practices, fluid and electrolyte balance and fluid therapy and explores intensive care in obstetrics and gynaecology, preparing healthcare providers to manage critical conditions and emergencies in these specialties.</p>	2	10	20	30	60

<ul style="list-style-type: none"> • M26U1 Shock management Shock and its management - Types, Clinical Presentation, Pathophysiology, Management, Initial Assessment Fluid Resuscitation, Vasoactive Medications, Supportive Care, Specific Management, Complications • M26U2 Raktadana - Blood Transfusion Indications, contraindications, and types of blood transfusion in obstetric and gynecological cases, including massive transfusion protocols for postpartum hemorrhage • M26U3 Fluid and electrolyte balance and fluid therapy. Fluid Balance, Electrolyte Balance, Fluid Therapy types, Complications, Assessment, Calculation, Implementation. • M26U4 Intensive Care in Obstetric and Gynaecology Obstetric Intensive care, Gynecology Intensive care, Critical Care Management, Guidelines and Protocols, Challenges and Controversies 					
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	4	20	40	60	120
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Semester No : 4

2A Modu le Nu mber	2B Modules & units	2C Num ber of Credi ts	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
27	M-27 Medico-legal Aspects related to Stree Roga (Gynaecology) -Prasuti Tantra (Obstetrics)	2	10	20	30	60

	<p>This module equips healthcare professionals with essential medico-legal knowledge in gynecology and obstetrics. It covers critical Acts and Laws, accurate documentation, and procedures following patient death. It also deals with the introduction of robotic surgeries in Gynecology and Obstetrics.</p> <p>• M27U1 Knowledge and Application of Acts and Laws MTP Act indications and gestational limits. PCPNDT Act regulations and prohibited acts. Sterilization laws and informed consent. Medical ethics and professional conduct. Patient rights and medical negligence.</p> <p>• M27U2 Accurate Documentation in Patient Care Accurate Documentation Essential components of patient records: Importance of Accurate Documentation: Documentation Standards, Documentation Methods, Challenges, Best Practices, Case Studies, Assessment Methods, Teaching-Learning Methods</p> <p>• M27U3 Systematic Documentation of Maternal foetal death Documentation and Reporting Requirements Prompt action in maternal and fetal death. Importance of documentation and reporting. Conducting investigations and reviews. Identifying causes and contributing factors. Implementing corrective actions.</p> <p>• M27U4 Robotic surgery in Gynecology and Obstetrics Introduction to Robotic surgery. Robotic surgery in Gynecology. Robotic surgery in Obstetrics.</p>					
28	M-28 Stree Roga Sambandhita Shastrakarmani- Operative Gynaecology -	2	10	20	30	60

Part-I

Module provides training on both minor and major gynaecological surgeries. It covers minor surgeries such as cervical procedures including biopsies (cervical biopsy, cone biopsy), LEEP, cauterization, cryo-surgery, and amputation of the cervix, and procedures like polypectomy, dilatation and curettage, and marsupialization of Bartholin's cyst. The module then discusses major surgeries focusing on surgical management of genital prolapse, including techniques like anterior and posterior colporrhaphy, pelvic floor repair, Fothergill's operation, and cervicopexy. It also covers surgeries for uterine inversion -Haultain's and Kustner's operations. Additionally, the module includes operations on the ovaries, such as oophorectomy, ovarian cystectomy, ovariectomy, wedge resection, and laparoscopic ovarian drilling, providing comprehensive knowledge and skills in operative gynaecology.

- **M28U1 Upashastra karma - Minor surgeries**

Garbhashaya mukhagata Shastrakarma - Operations on Cervix: Cervical biopsy- cone biopsy

LEEP, Garbhashaya mukha dahana (Cervical cauterization), Cryo surgery

Garbhashaya mukha chedana (Amputation of Cervix)

- **M28U2 Upashastra karma - Minor surgeries**

Garbhashayagata Arsha Nirharana (Uterine and Cervical Polypectomy)

Garbhashaya Mukha Vistrutikarana and Lekhana karma (Dilatation and Curettage)

Marsupialization of Bartholin Cyst

- **M28U3 Operations for Genital prolapse**

Garbhashayasya svasthanasya sthapanam (Surgical procedures for Genital prolapse)

– Anterior colporrhaphy, Posterior colporrhaphy, Pelvic floor repair, Fothergills Operation, Cervicopexy operation

Operation for inversion of uterus- Haultains operation, Kustner operation

- **M28U4 Operations on ovary**

	Operations on ovary - Oophorectomy, Ovarian Cystectomy, Ovariectomy, Wedge resection, Laparoscopic ovarian drilling					
		4	20	40	60	120
Semester No : 5						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
29	<p>M-29 Stree Roga Sambandhita Shalyakarmani - Operative Gynaecology–Part-II</p> <p>The learners will be able to acquire knowledge of various gynaecological surgeries like be salpingectomy, myomectomy, hysterectomy, and tubal ligation. The relevant surgical techniques and postoperative care, apply the knowledge and surgical skills in performing major gynaecological surgeries like abdominal or vaginal or laparoscopic hysterectomy or myomectomy in a supervised clinical environment. Reconstructive surgeries of female reproductive tract. Reconstructive surgeries of Uterus – Metroplasty, that of vagina – Hymenoplasty, Neovagina construction, Vaginoplasty are introduced and skill development based on simulation or cases will be assessed.</p> <p>• M29U1 Operations on Fallopian Tube Types, Clinical Presentation, Pathophysiology, Surgical Approach, Indications, techniques, and post-operative care for each procedure.</p>	2	10	20	30	60

	<p>Operations on fallopian tube- Salpingectomy, Salpingostomy, surgical removal of Tubo-ovarian mass, recanalization of fallopian tube. Focus on managing ectopic pregnancies,hydrosalpinx, tubal malignancies. Infections leading to Tubal factor infertility and its surgical interventions. Surgical sterilization Procedures. Patient preparation. Post operative care of these procedures.</p> <p>• M29U2 Surgeries related to Uterus Myomectomy- Myomectomy-Indications, Types, Procedure, Complications. Surgical removal of endometriosis/Adenomyosis-Indications, Types, Procedure, Complications. Abdominal and Vaginal Hysterectomy. Robotic Assisted Hysterectomy-Indications, Types, Procedure, Complications.</p> <p>• M29U3 Reconstructive surgeries of female reproductive tract Reconstructive surgeries of Uterus – Metroplasty-Indications, Types, Procedure, Complications</p> <p>• M29U4 Reconstructive surgeries of vagina Reconstructive surgeries of Vagina – Hymenoplasty, Neovagina construction, Vaginoplasty. Indications, Types, Procedure, Complications.</p>					
30	<p>M-30 Stree Roga Sambhandhita Shalyakarma -Part-III -Garbhashaya Nirmana & Yoni Nirmana Shalyakarma (Reconstructive Surgeries of the Uterus and Vagina)</p> <p>This specialized module focuses on reconstructive and restorative surgical techniques for the female reproductive tract, addressing congenital anomalies, traumatic injuries, and functional impairments. Trainees will gain expertise in uterine and vaginal reconstruction, including advanced procedures like</p>	2	10	20	30	60

	<p>metroplasty, neovagina construction, and hymenoplasty.</p> <ul style="list-style-type: none"> • M30U1 Garbhashaya Punarnirmana Shalyakarma (Reconstructive Surgeries of the Uterus) Garbhashaya Punarnirmana Shalyakarma (Metroplasty): Surgical correction of uterine anomalies (e.g., septate uterus, bicornuate uterus). Techniques for restoring uterine anatomy to improve fertility and reduce miscarriage risk. Preoperative imaging, surgical approaches (hysteroscopic vs. abdominal), and postoperative care. • M30U2 Yoni Punarnirmana Shalyakarma (Reconstructive Surgeries of the Vagina) Yoni Punarnirmana Shalyakarma: Neovagina Construction: Surgical creation of a functional vagina for conditions like MRKH syndrome (Mayer-Rokitansky-Küster-Hauser). Vaginoplasty: Repair of vaginal stenosis, trauma, or post-obstetric injuries (e.g., fistula repair). • M30U3 Bhagadvara Sandhanakarma(Hymenoplasty) Bhagadvara Sandhanakarma (Hymenoplasty): Ethical considerations, techniques for hymen reconstruction, and patient counseling. • M30U4 Fistula Repair Fistula Repair (Obstetric & Surgical Fistulas): Vesicovaginal fistula (VVF) & rectovaginal fistula (RVF) repair Surgical approaches (vaginal, abdominal, laparoscopic) 					
		4	20	40	60	120
Semester No : 6						
2A Modu le Nu	2B Modules & units	2C Num ber of	Notional Learning hours			

Number		Credits	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
31	<p>M-31 Prasava Sambandhita Shalyakarmani- Operative Obstetrics – Part-I</p> <p>Module focuses on key obstetric surgical procedures, combining minor and advanced techniques essential for safe maternal care. It covers Dilatation and Evacuation and Manual Removal of the Placenta for managing uterine complications, alongside preventive procedures like Cervical Encirclage and Perineal Tear Repair. The module also explores safe abortion services, including techniques such as Suction Evacuation, MVA, and newer medical abortion methods. It concludes with the surgical management of septic and criminal abortions through procedures like Colpocentesis/Colpotomy and Laparotomy, providing comprehensive training for obstetric surgical care.</p> <ul style="list-style-type: none"> • M31U1 Minor surgeries 1 Dilatation and evacuation – types, indications, contraindications, risks, complications, procedure and post procedure care. Manual Removal of placenta-Indications, contraindications, preparation, technique, complications, procedure, post procedure management. • M31U2 Minor surgeries 2 Cervical encirclage –Indications,Types, Procedure, Timing and post procedure management. Perineal tear repair-Pre Operative evaluation, Classification, Timing, Techniques, Post repair Care, Complications and management. • M31U3 Safe abortion services 	2	10	20	30	60

	<p>Abortion: selection of cases, technique and management of complications Medical termination of pregnancy- i) Suction Evacuation / MVA –Indications, Contraindications, Procedure, Complications, Pre and Post Procedure Care, Equipments, Advantages, Disadvantages. ii) Extra amniotic instillations – Indications, Contraindications and procedure, Complications, Drugs used for Medical abortions. Newer methods like medical abortion-Laminaria Tent, Balloon Tamponade, Uterine Aspiration- Procedure, Complications and Procedure. • M31U4 Surgical management of Septic abortion / Criminal abortion Colpocentesis –Indications and Procedure. Colpotomy-Indications and Procedure. Laparotomy for septic abortion-Indications and Procedure. Post Operative care of each procedure and management of complications.</p>					
32	<p>M-32 Prasava Sambandhita Shalyakarmani - Operative Obstetrics – Part-II</p> <p>This module helps the learner to demonstrate proficiency in understanding, selecting, and performing key procedures related to operative obstetrics, including instrumental delivery like forceps, vacuum extraction; Analyse and develop decision-making clinical skills for Caesarean section, Understand indications, contraindications, and complications of caesarean hysterectomy with different approaches and indications, contraindications, risks, and procedural steps involved in hysterotomy. By the end of the course, learners will be able to integrate theoretical knowledge, practical skills, and experiential understanding of the general principles of Gynaecological and Obstetric surgeries with a focus on peri-operative care to ensure optimal patient outcomes, interdisciplinary collaboration, and adherence to safety protocols.</p> <p>• M32U1 Instrumental delivery</p>	2	10	20	30	60

<p>Forceps Delivery -Indications, Contraindications, Complications, Types, Risks and Benefits.</p> <p>Vacuum Delivery -Indications, Contraindications, Complications, Types, Risks and Benefits.</p> <p>• M32U2 Major surgeries-1</p> <p>Shalyakruta Prasava -Caesarean Section- Pre-operative, Types, Surgical Techniques, Post Operative Care, Complications, Risks and Benefits.</p> <p>• M32U3 Major surgeries-2</p> <p>Emergency obstetric hysterectomy, relevant anatomical considerations and surgical steps, subtotal versus total hysterectomy techniques</p> <p>• M32U4 Major surgeries -3</p> <p>Garbhashaya Patana-Hysterotomy- Pre-operative, Types, Surgical Techniques, Post Operative Care, Complications, Risks and Benefits</p>					
	4	20	40	60	120
	16	80	160	240	480
	64	320	640	960	1920

Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain-Level- TL Methods

Paper No : 1 Garbha - Garbhini Vigyana - Embryology and Obstetrics						
Semester No : 3						
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
Module 1 : Garbhini Vigyana- (Diagnosis of Pregnancy)						
Module Learning Objectives (At the end of the module, the students should be able to)						
<ul style="list-style-type: none"> ◦ Analyze Garbha Parinama (hormonal regulation and physiological adaptations in pregnancy), evaluate Garbha Lakshana (diagnostic criteria for pregnancy) and appraise the concepts of Beejadushti (gamete defects) and Garbhopaghatakara Bhava (teratological factors) ◦ Describe Garbhini Nidana (diagnostic techniques for pregnancy) ◦ Describe Garbhavakranti (fetal development stages) ◦ Identify the factors responsible for teratologic abnormality 						
<p>M 1 Unit 1 Garbhini Nidana(Diagnosis of pregnancy)Garbhini Nidana, Garbhakalina Matrugata Parivartana, Garbhini Lakshana, Dauhrida (Diagnosis of pregnancy) Garbha Poshana (Foetal circulation) Garbha Sharira Kriya Vaishishtyam (Physiological changes during pregnancy) References: 1,2,3,4,5</p>						
3A	3B	3C	3D	3E	3F	3G

CO1,CO2	Analyse Garbhini nidan	2	Lecture	CAN	Knows-how	L&GD,B S,BL
CO1,CO2	Describe Garbhakalina matrigata Parivartana (anatomical & physiological changes occurred in female during pregnancy) and Garbhini Dauhrida.	1	Lecture	CAN	Knows-how	BL,BS,DIS,L&GD
CO1,CO2	Demonstrate Garbhini Lakshana (signs and symptoms of pregnancy)of First Trimester	2	Practical Training 1.1	PSY-GUD	Shows-how	D-M,D-BED,W,PBL,D
CO1,CO4	Demonstrate garbhakalina matrigata Parivartana (changes in the body of pregnant woman as fetus grow, the physiological and anatomical changes) in pregnant woman.	2	Practical Training 1.2	PSY-GUD	Shows-how	RP,D-BED,PSM,D
CO1,CO2,CO3	Demonstrate the diagnosis and preventing complications of various abnormalities of placenta, amniotic fluid,and umbilical cord.	3	Practical Training 1.3	PSY-GUD	Shows-how	D-M,D
CO4,CO5	Discuss Garbhasanskar practices	3	Practical Training 1.4	PSY-GUD	Shows-how	D-BED,BL,D-M,W,SIM
CO2,CO3,CO4	Demonstrate the signs and symptoms and diagnosis of pregnancy.	2	Experiential-Learning 1.1	AFT-SET	Does	CD,TPW,PER,TBL,PL
CO1,CO4	Analyze Garbhakalina matrigata parivartana (physiological and anatomical changes during pregnancy.)	2	Experiential-Learning 1.2	AFT-SET	Does	D,D-BED,IBL,D-M,CBL
CO1,CO3	Analyze the concept of Garbha poshana and formulate Dauhrida management protocol (fetal circulation -nutrition)	2	Experiential-Learning 1.3	AFT-SET	Does	PSM,PAL,Mnt,EDU,RLE
CO2,CO4	Develop a research proposal to study factors affecting fetal growth mentioned in samhitas.	2	Experiential-Learning 1.4	CS	Does	TPW,RLE,PBL

CO1,CO2,CO8	Discuss the principles of shreyasipraja.(Healthy baby)	3	Experiential-Learning 1.5	PSY-MEC	Does	RLE,DIS,CBL,SDL
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M 1 Unit 2 Garbhavakranti(Embryology)Garbhavakranti, Matrjadi Bhava, Garbha Vriddhi, Role of Panchamahabhuta in the formation and development of foetus (Embryology)
Garbha Varna Uttpatti
References: 1,2,3,4,5

3A	3B	3C	3D	3E	3F	3G
CO1	Analyse the stages of Garbhavakranti (the process of embryo formation.)	1	Lecture	CAN	Knows-how	L&PPT , L&GD,L_VC
CO1	Analyse the role of Matrjadi bhava in the developing embryo.	1	Lecture	CAN	Knows-how	BS,Mnt,L &GD,L_VC
CO1	Analyze role of panchamahabhutas in the formation and development of foetus(embryology).	1	Lecture	CAN	Knows-how	BS,L&GD,BL
CO1,CO2	Demonstrate the stages of Garbhavakranti (embryonic growth and development).	4	Practical Training 1.5	PSY-GUD	Shows-how	D,BL,CBL
CO1,CO2	Evaluate the role of Garbhavakranti, Matrjadi Bhava, and other factors affecting conception in the development of the embryo.	4	Experiential-Learning 1.6	PSY-MEC	Does	CD,DIS,EDU,CBL,RLE
CO1,CO2	Evaluate the assessment of Garbhasya Maasanaasik vriddhi of fetus. (fetal growth,concept of panchamahabhutas in the formation and development of foetus(embryology).	3	Experiential-Learning 1.7	PSY-MEC	Does	SDL,CBL,RLE

M 1 Unit 3 Garbhanga Vikruti(Chromosomal and congenital fetal anomalies)Beeja – Beejadushti, Beejabhaga Dushti, Beejabhagavayavajanya Garbhanga

Vikruti (Screening of prenatal diagnostic tests, Neural tube defects, chromosomal anomalies, congenital anomalies and recent advances in screening techniques)

Garbhopaghatakara Bhava (Teratogens and Fetotoxic Agents)

Endocrinology related to pregnancy and immunology of pregnancy

References: 1,2,3,4,5,13,14,22,25

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse Bija – Bijadushti, bijbhaga dushti, bijabhagavyavajanya Garbhanga vikruti .	1	Lecture	CAN	Knows-how	BS,L_VC ,L&GD
CO1,CO2	Analyze teratology,role of teratogens and fetotoxic agents .	1	Lecture	CAN	Know	BS,L&PPT
CO1,CO2	Analyze antah-sravi grandhi parivartana (endocrinological changes) and immunology during pregnancy.	2	Lecture	CAN	Knows-how	L&PPT , BS,L&GD
CO1,CO2	Discuss Prenatal and preimplantation genetic screening techniques.	3	Practical Training 1.6	CAN	Knows-how	D,SIM,C_L,CBL
CO1,CO2	Analyze and interpret diagnostic values of placental hormones and their importance.	3	Practical Training 1.7	PSY-GUD	Shows-how	LRI,D,CBL
CO1,CO2	Evaluate the impact of prenatal and pre-implantation genetic screening in prevention of birth defects and the ethical considerations .	2	Experiential-Learning 1.8	PSY-MEC	Does	RLE,LRI,CD
CO1,CO2	Appraise the factors responsible for Garbhanga vikruti. (diagnosis and preventing the Genetic defects, prenatal and pre-implantation)	3	Experiential-Learning 1.9	PSY-MEC	Does	LRI,CD,RLE
CO1,CO2,CO3	Evaluate the level of different hormones , the maternal immune response , immunomodulatory therapy's role in controlling the maternal complications in a healthy pregnancy.	3	Experiential-Learning 1.10	PSY-MEC	Does	CD,DIS,RLE

Practical Training Activity

Practical Training 1.1 : Diagnosis of Early Pregnancy

Demonstration by the Teacher-1.5 hours.

1.The teacher will demonstrate the method of history taking and clinical examination of patient on the following points:

Chief complaint, Present history, Past history, Menstrual history, medical history, obstetric history, lifestyle factors. Estimation of gestational age and prediction of expected date of delivery.

2.Physical examination: general, abdominal, pelvic examination.

Pelvic changes (Jacquemeirs sign, vaginal sign, cervical sign, uterine signs -shape, size, consistency, Hegar sign)

Continuous monitoring of Garbhini Lakshana.

Immunological tests for the diagnosis of pregnancy, with its principle

USS for 1st trimester (Time)

The student observes the technique of examination, history-taking, and presents a case - 30mts

The Teacher shall summarize the key concepts covered in the practical session and provide input for further improvement.

Practical Training 1.2 : Garbhakalina Matrigata Parivartana(physiological and anatomical changes in the body of pregnant woman).

The teacher will demonstrate - -1 hour

on simulator /patient, Vyakta Garbha lakshana.

P/V examination to assess the size, consistency of the uterus, Bluish coloration of the vagina, and secretion of the vagina.

The student is expected to identify at minimum 2 patients -1hour hour.

1. -Vyakta Garbha lakshana.

2. Breast changes in pregnancy

3. Abdominal examination, which includes inspection, palpation, and Auscultation, as the uterus becomes a pelvic organ.

4. Estimation of maternal weight

5. Ultrasound findings of 2nd and 3rd trimester.The

6. Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 1.3 : Abnormalities of placenta, amniotic fluid,and umbilical cord.

The Teacher will Demonstrate -1 hour

Real-life case studies /case vignettes of pregnancies associated with:-

Placental abnormalities

Amniotic fluid volume (Excess or less) defects,

Umbilical cord insertion defect, length defect, and Single Umbilical Artery defects.

The student is expected to take a minimum of 2 cases -2 hours

Proper history taking, general, physical, and obstetrical examination,

Will present case reports of the abnormalities, the intervention used, and the outcomes of pregnancy.

and fetal blood flow during uterine life and changes of fetal circulation at birth.

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 1.4 : Garbhasanskar for Shareyshi Praja

The Teacher will demonstrate -1hour

the methods of Garbhasanskara practices.

The student shows the skills on

1. Ashwasana (Assurance),GarbhiniParicharya,Garbhopaghatkar bhava, antenatal education
2. Common garbhini Ahar/ayurvedic & yogic diet
3. Sangeet & Raga Chikitsa/Musictherapy
4. yogic asana/Postures
5. Pranayama /yogic breathing techniques
6. Mantra chikitsa
7. Aroma therapy
8. Garbhasamvad/fetal interaction /Asheasan(Assurance) to the unborn

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.-2 hours

Practical Training 1.5 : Garbhavakranti (embryonic growth and development)

The teacher will demonstrate (1 hour):

Anatomical models or fetal atlases /USG reports on monthly fetal development for hands-on explanation.

1. Student identifies and demonstrates monthly fetal development using 3D anatomical models/charts -1 hour
Accurately point out changes in size, shape, organ development, and fetal positioning month-wise.

Use appropriate anatomical terms along with Ayurvedic terms.

a). Interpret minimum 3 USG images of fetal development - 2 hours
for Gestational sac, crown-rump length, cardiac activity, and organ formation.

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 1.6 : Prenatal and preimplantation genetic screening and diagnosis techniques.

Demonstration

1. Teacher Demonstrate Preimplantation Genetic Testing Workflow (Mock Lab Simulation)

Students familiarize themselves with the PGT-A, PGT-M, and PGT-SR process -1 hour

2. real-time videos

IVF + embryo biopsy (blastocyst stage)

Techniques: FISH, aCGH, qPCR, NGS

Differentiation between PGT-A (aneuploidy), PGT-M (monogenic), and PGT-SR (structural)-2 hours

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 1.7 : Placental hormones and their importance.

1.The teacher Demonstrates on minimum 5 patients/case vignettes:

Normal ranges of hCG in 1st trimester.

mock testing process of hCG (rapid kit), mention antenatal triple/quad tests

Student does Interpretation of minimum 5 case reports of increased/decreased levels in pregnancy conditions (eg. Missed abortion, Molar Pregnancy, Multiple pregnancies)
-1 hour.

2.The Teacher Demonstrate how to Interpret on simulated 3–4 case reports with hormonal profiles (e.g., high hCG + low AFP + low estriol) and link to conditions-1 hour

3.Following demonstration students will interpret reports of cases/case vignettes with hormonal profiles (e.g., high hCG + low AFP + low estriol)

Fill diagnosis + explain clinical significance

Suggest Ayurveda correlation (e.g., Beeja dosha ? trisomy)-1 hour

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Experiential learning Activity

Experiential-Learning 1.1 : Diagnosis of pregnancy

Activity 1 hour

1. The students compare and match the subjective symptoms and signs with confirmatory investigations for the diagnosis of pregnancy .
2. Discuss the Chronological appearance of various signs and symptoms after first trimester of pregnancy.
3. Demonstrate on simulator/model ,the Differential Diagnosis of pregnancy from abdominopelvic swelling ,pseudocyesis.

Experiential-Learning 1.2 : Garbhakalina matrigata Parivartana((physiological and anatomical changes during pregnancy.))

activity 2 hours

1. For each trimester, trace and annotate

Uterine size & position

Diaphragm shift

Compression of the GI tract.

Breast/glandular tissue growth.

3. Demonstrate Cardiovascular adaptation

To explore blood volume, heart rate, and blood pressure changes.

Using a pulse oximeter and BP cuff before and after light activity.- 2cases.

Experiential-Learning 1.3 : Garbha poshana .(fetal circulation-nutrition)

Activity 2 hours

1. Prepare the trimester-wise diet plan to ensure garbha poshana as per both Ayurvedic principles and Modern.-1 hour
2. Identify safe and unsafe cravings in Dauhrida.
3. Customize the Garbhini diet plan based on the case profile with abnormal cravings.1 hour

Experiential-Learning 1.4 : Research proposal to study factors affecting fetal growth

Activity 2 hours.

Student Observe 1 patient

1. diet habits, cravings, hydration.

Record fetal weight, fundal height, and amniotic fluid index.

Maintain monthly log ? Reflect on Ayurvedic and modern growth markers.

Based on the log data, formulate research questions and hypotheses, practice data collection methods, including survey design, interview techniques, and clinical data handling, discuss challenges, and interpret the significance of results in terms of fetal health growth

Experiential-Learning 1.5 : Shreyasipraja(Healthy baby)

Activity: 3 hours

1. Student Demonstrate how to assess Beeja, Ritu, Kshetra using Ayurvedic tool on pre-conception care -1 hour

2. Counsel a minimum of 2 patients on:

Panchakarma for Beeja Shuddhi, Ahara-Vihara correction (Sattvik, Garbha-anukul diet), ideal Rasayana for both partners

Emotional and spiritual preparation (e.g., chanting, meditation, Music therapy)-1 hour

3. Apply principles of monthly Garbhini Paricharya including Ahara, Vihara (yoga, pranayama, music therapy) on minimum 1 patient.-1 hour.

Experiential-Learning 1.6 : Garbhavakranti, Matrijadi Bhava factors

1. Demonstrate the monthly fetal development using models/charts.-1 hour
2. Students present a clinical scenario -1hour
(Poor Beeja due to paternal alcoholism, or inadequate Ambu due to maternal malnutrition.)
Identify which Garbha Sambhava Samagri is affected.
Predict developmental impact on fetus.
Suggest Ayurvedic interventions (Ahara, Vihara, Aushadha).
3. Work on minimum of two case studies/vignettes that outline various maternal and environmental conditions; will analyze how these factors might impact fetal health according to Matrijadi Bhava principles.-2 hours

Experiential-Learning 1.7 : Normal and Abnormal Fetal Growth of Garbha

Present 2 simulated antenatal case records with.
Last Menstrual Period (LMP)
Fundal height measurements
Selected ultrasound findings
Maternal symptoms
Estimate fetal age & growth stage using Ayurvedic Maasanumaasik Vriddhi parameters.
Cross-validate with modern ultrasound-based gestational age.
Comment on Panchamahabhuta predominance in that stage.
Identify any deviations and possible causes
Each Panchamahabhuta to.

1. Fetal tissues/organs form each month.
2. Physiological functions in the fetus.-3 HOURS

Experiential-Learning 1.8 : Prenatal and pre implantation genetic screening and ethical considerations.

1. Students interpret the result of a minimum of 2 case reports/case vignettes and identify possible birth defects.
2. Evaluate if and how this screening prevents adverse outcomes. Propose Ayurvedic support (e.g., Beeja Shuddhi, Suprajanan)-1 hour
3. Analyze mock genetic screening reports (PGT-A, PGT-M, NIPT, Triple/Quad test).

Case scenarios with different risk outcomes.-1 hour

3. Students develop ethical reasoning and patient-centered thinking on the following high-risk case scenarios

Case 1: A 28-year-old pregnant woman's NIPT shows a high risk of Down syndrome. Her husband wants to terminate, but she is unsure.

Case 2: A couple requests PGT to select a male embryo because of family pressure.

Case 3: A rural patient's family refuses amniocentesis due to fear of miscarriage, despite ultrasound suggesting a neural defect.

Experiential-Learning 1.9 : Garbhanga Vikruti(Genetic abnormalities)

1. "Garbhanga Vikruti Mapping Table" (2 hours).

Each student fills a multicolumn diagnostic matrix.

Factor	Ayurvedic View	Modern View	Clinical Marker	Preventable or not
Beeja dosha	Genetic anomaly	Mutation in BRCA1	PGT-M	Yes

Kshetra dushti	Malformed uterus	Septate uterus	HSG / MRI	Maybe
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Ambu dushti	Nutritional deficiency	IUGR / Folate def.	Doppler / NT screening	Yes
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Kala viplava	Wrong time of conception	Maternal age > 35	NIPT, AMH	Partially
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2. Match gestational data with expected development in a given case/ Mock reports: PGT-A, PGT-M, NIPT, Triple test, anomaly scans, and Gestational data.

Diagnose potential Garbhanga vikruti from data (e.g., high AFP ? neural tube defect).

List Ayurvedic & modern preventive measures (e.g., folic acid + Garbhini Paricharya + Rasayana)-1 hour

Experiential-Learning 1.10 : Level of different hormones in healthy pregnancy and maternal immunity.

Link each hormone to its function in maintaining pregnancy & supporting fetal growth. (45 min)

1. Students will be given three simulated lab reports (one per trimester). Students are expected to:

Identify the trimester from hormone values.

Plot each hormone on a trimester-specific growth chart.

Interpret whether the profile is physiological.

Note how deviations might signal early complications.

2. In a given case, on the immune lab profiles of healthy pregnant women, -1 hour

Students are expected to mark values that appear abnormal in the non-pregnant state but are normal in pregnancy.

Link each adaptation to its biological purpose.

Discuss why over-suppression or over-activation can cause complications.-

3. Mini-case scenario: A healthy pregnant woman, worried about immunity, asks about "immune booster injections."- 1 hour and 15 minutes.

Students should prepare a patient counselling script:

Reassure her using her normal hormone & immune results.

Explain the body's natural protective adaptations.

Explain why unnecessary immunomodulation could be harmful.

Output: 2–3 key patient education points

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

4

OSCE Station – Garbhini Nidana (Diagnostic Techniques) – 50 marks

Station 1 – Ashtavidha Pariksha in Garbhini (10 marks)

Station 2 – Ultrasound Interpretation & Garbhavakranti (10 marks)

Station 3 – Viva / Applied Knowledge (10 marks)

Station 4 – Garbhopaghatakar Bhava Identification (10 marks)

Station 5 – Laboratory & Investigation Interpretation (10 marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning	3D Lecture/ Practical	3E Domain/ Sub	3F Level (D oes/Sho	3G Teachin g
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		Hours	Training/ Experientia l Learning	Domain	ws how/ Knows h ow/Kno w)	Learnin g Methods
Module 2 : Garbhini Paricharya – (Antenatal care)						
Module Learning Objectives (At the end of the module, the students should be able to)						
<p>Critically Analyze Garbhini paricharya, Yamala garbha, Bahupatyata (multifetal pregnancy), PC PNDT act. Demonstrate diagnostic skills of Yamala garbha, Bahupatyata and Garbhini paricharya protocols. Develop Garbhini paricharya protocols.</p>						
M 2 Unit 1 Garbhini Masanumasika Paricharya(Antenatal care)Garbhini Masanumasika Paricharya (Antenatal care)						
References: 1,2,3,4,5						
3A	3B	3C	3D	3E	3F	3G
CO1	Analyze masanumasika Garbhini Paricharya.	1	Lecture	CAN	Knows-how	L&GD,BS,BL,L_VC
CO1,CO2	Analyse components of antenatal care in first and follow-up visits.	2	Lecture	CAN	Knows-how	L_VC,L&GD,BS
CO1,CO2	Analyse screening for high-risk pregnancy and antepartum fetal surveillance in late pregnancy.	1	Lecture	CAN	Knows-how	L&GD,L_VC
CO1,CO2,CO3	Demonstrate the procedure skills at initial and in subsequent visits for Garbhini	2	Practical	PSY-	Shows-	CBL,D,P

	parichrya (antenatal care).		Training 2.1	GUD	how	L
CO1,CO3	Demonstrate documentation and schedule of immunization during antenatal care.	2	Practical Training 2.2	PSY-GUD	Shows-how	D,CBL
CO1,CO2	Demonstrate clinical examination for fetal wellbeing and Garbha Swasthya assessment in late pregnancy.	4	Practical Training 2.3	PSY-GUD	Shows-how	PL,CBL,PSM,D
CO1,CO3	Execute Antenatal care based on the concept of Garbhini Paricharya.	3	Experiential-Learning 2.1	PSY-MEC	Does	SDL,RLE,CBL
CO1,CO2,CO3	Perform antenatal care, including clinical examination and recommended investigations during the first and subsequent visits.	3	Experiential-Learning 2.2	PSY-MEC	Does	CBL,TUT,SY,RLE,LRI
CO1,CO3	Develop care plans for pregnant women that incorporate all aspects of Garbhini Paricharya .	3	Experiential-Learning 2.3	CS	Does	CBL,RLE
CO1,CO2,CO3	Perform antepartum fetal surveillance for evaluation of fetal well-being and interpret the immunization schedule.	3	Experiential-Learning 2.4	PSY-MEC	Does	RLE,CBL,LRI

M 2 Unit 2 Bahu-apatyataDiagnosis and management of Yamala Garbha (Twin Pregnancy).

Bahu-apatyata (Multi fetal Pregnancy).

References: 1,2,3,4,5

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyze Yamal Garbha ,(Factors responsible for Bahuapatyata and Sukh -Dukh of Yamal Garbha, Causes of Specific sex in twin pregnancy), Discuss Zygosity of multiple pregnancy Diagnosis.	1	Lecture	CAP	Knows-how	PER,BS,DIS,L_V C,BL
CO1,CO2,CO3	Analyze maternal physiological changes, investigations, complications, prognosis, and management of Yamal Garbha/Bahuapatyata.	1	Lecture	CAN	Knows-how	L&PPT,L&GD
CO1,CO3	Analyze the management of Yamal Garbha during Prasava and third stage of labour.	1	Lecture	CAN	Knows-how	L&GD,L&PPT

CO2,CO4	Demonstrate the abdominal examinations and sonographic findings of Yamal garbha	2	Practical Training 2.4	PSY-MEC	Shows-how	D,CBL,PL
CO1,CO2,CO3,CO4	Demonstrate the skills of antenatal diagnosis of conjoined twins and Garbhini paricharya (Antenatal care) of Yamal Garbha.	3	Practical Training 2.5	PSY-MEC	Shows-how	D-M,CBL,RP,D
CO3,CO4	Demonstrate the conduction of delivery of 2nd fetus and management of difficult cases of yamal garbha(twin pregnancy).	2	Practical Training 2.6	PSY-GUD	Shows-how	CBL,D-M,D,RP
CO2,CO3	Evaluate the diagnosis of Yamala Garbha (twin pregnancy) through symptoms.	4	Experiential-Learning 2.5	PSY-MEC	Does	CBL,LRI,RLE,PL
CO2,CO3	Evaluate the Zygoty and chorionicity of yamal garbha (twin pregnancy)	2	Experiential-Learning 2.6	PSY-MEC	Does	LRI,CBL,RLE,SIM,SY
CO3,CO4	Evaluate the abdominal findings of yamal garbha and the labour management of twin pregnancy.	4	Experiential-Learning 2.7	PSY-MEC	Does	CBL,SDL,RLE

M 2 Unit 3 PC&PNDT ActCommunication and Councelling Ability of PC&PNDT Act.

References: 18,19,23,26

3A	3B	3C	3D	3E	3F	3G
CO1	Analyse key provisions and implications of the PCPNDT Act.	1	Lecture	CAN	Knows-how	L&PPT, L&GD,L_VC
CO1	Analyse registration mandate, certification process, and grounds for suspension under PCPNDT Act.	1	Lecture	CAN	Knows-how	L_VC,BS, L&GD
CO1	Analyse the role of counselling with Prohibitions under the act.	1	Lecture	CAN	Knows-how	L&PPT, L_VC,L&GD

CO2	Demonstrate Form F filling and ultrasound as per PCPNDT Act.	3	Practical Training 2.7	PSY-GUD	Shows-how	D,D-M,P L,CBL
CO7	Demonstrate the Prescription and Regulations of PCPNDT Act.	2	Practical Training 2.8	PSY-GUD	Shows-how	PAL,CBL ,D
CO2,CO7	Evaluate the Objectives and record maintenance Of PCPNDT act	3	Experiential-Learning 2.8	CE	Does	JC,PER,S DL,RLE
CO1,CO2,CO7	Evaluate the situation where genetic counseling should be considered (specified in Form D under the rule) and integrate the part of counseling.	1	Experiential-Learning 2.9	CE	Does	RLE,PER ,JC

Practical Training Activity

Practical Training 2.1 : Garbhini parichrya (Antenatal care)

The teacher will Demonstrate -1 hour
Case based learning, Bed side demonstration

1. detailed history taking,
2. examination -general as well as systemic,
3. Routine investigations – blood, Urine, cervical cytology study by Papanicolaou stain.
4. Serological tests, genetic screening, and Ultrasound. Antenatal advice.
5. At the subsequent visits, a brief history of any fresh complaint, date of quickening, general and abdominal examination, vaginal examination, and Antenatal advice.

students activity-1 hour

1. ANC case history, General and systemic examination -minimum 2 cases.
2. Perform routine investigations – blood, Urine, cervical cytology study by Papanicolaou stain.-2 cases
3. Read USG report – interpret CRL & gestational age-2 cases.

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 2.2 : Antenatal Immunization .

The Teacher demonstrate documentation procedure -30mts

How to record :Case based learning,Demonstration

1. Mother and Child Protection (MCP) card
2. ANC register
3. • Hospital records
4. Safety and importance of vaccines
5. Schedule adherence
6. Common side effects and when to report
7. Overview of Maternal Immunization

Explain importance of Tdap-Demonstrate aseptic precautions- 30 mts-Demonstration

1. Schedule and follow-up
2. Address doubts and fears

Students activity-1 hour

1. List Vaccines & Write Schedule- Name the recommended vaccines
2. Write the correct timing and interval
3. Mention dose, route, and site
4. Documentation Practice- Fill ANC vaccine card and register (demo sheets) -5
5. Enter date, dose, next due date, initials
6. Perform injection technique:
7. Load syringe with correct dose (demo)
8. Identify IM site (deltoid)

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 2.3 : Clinically assessment of fetal wellbeing.(late pregnancy).

Demonstration:

The teacher will demonstrate -2 HOURS

1. Case-based learning: Elicit maternal complaints such as fetal movements, pain, bleeding, discharge, edema, headache, vision changes,
2. Bedside demonstration shows BP, pallor, edema, weight gain, fundal height trend, FHS recording
3. Bed side demonstration Show inspection, palpation: fundal height, lie, presentation, position, engagement, amniotic fluid estimation.
4. Bed side Explain daily fetal movement count (DFMC) – 10 kicks in 12 hours (or 3 in 1 hour after food)
5. Demonstration interpretation of NST

Students activity-2 HOURS

1. Develop history taking and problem identification skills
2. Measure and record fundal height (in cm). Correlate with gestational age
3. Perform abdominal palpation (lie, presentation, engagement) under guidance Develop hands-on skills in Leopold's maneuvers
4. Instruct mother on DFMC and demonstrate how to record it at home, and empower mother and assess fetal well-being-
5. Interpret NST or Ultrasound reports under teacher guidance Understand objective fetal surveillance methods-3 cases

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 2.4 : Yamalgarbha examination

The teacher -1 hour

1. Bed side demonstration Show clinical signs: exaggerated uterine size, two poles, multiple fetal parts, double FHR on Abdominal Examination of Twin Pregnancy.
2. Demonstration Show scan images for: number of fetuses, chorionicity (DCDA, MCDA, MCMA), AFI, fetal growth
3. Demonstration twin-specific growth monitoring charts and complications

students' activity -1 hour

1. Maintain entries for 2 twin pregnancy cases – include symptoms, measurements, USG interpretation for documentation.
2. Perform Fundal Height Measurement & Palpation, note height more than expected for GA, two fetal heads
3. Auscultate Dual Fetal Heart Rates. Use Doppler or Pinard's to detect two separate FHRs
4. Observe and record: Number of sacs, placentas, fetal biometrics, liquor, presentation

Practical Training 2.5 : Conjoined Twins .

Teacher demonstrate-1 hour

1. case based demonstration Actual or simulated ANC records of Yamal Garbha
2. Demonstration Show sonography clips showing fusion level
3. Bed side Demonstration Leopold's maneuvers in suspected twin pregnancy
4. Bed side Demonstration show how to differentiate twin lie
5. presentation Discuss herbal formulations, yoga, pathya, and mental wellness for high-risk pregnancy

student activity-2 HOURS

Perform history taking, clinical exam, counselling, and emotional support of the ANC- 2 CASES

1. Observe, interpret images, discuss types (thoracopagus, craniopagus, etc.
2. Practice plotting SFH, fetal heart sound tracing
3. Design a month-wise Garbhini Paricharya chart for conjoined twins with justification.

Practical Training 2.6 : Labor of Yamal Garbha .

Teacher demonstration -1 hour

1. Case based demonstration. Normal 1st twin delivery ,Show palpation and monitoring for the 2nd fetus
2. Demonstration Show video/images of obstructed delivery due to thoracopagus twins ,Discuss surgical approach
3. case based demonstration Breech extraction ,Indications for cesarean after 1st twin vaginal delivery.
4. Case based demonstration Taila abhyanga for the mother ,The Yoga/nidra post-delivery

student is expected to -2 hours- 1 CASE

1. Record fetal presentation
2. Note the time interval between births
3. Practice abdominal examination
4. Practice maneuvers on the simulator
5. Analyze the case and present a management plan
6. List signs indicating urgent LSCS
7. Discuss Ayurvedic interventions for twin labor
8. Create a postnatal care plan including ahara-vihara.

Practical Training 2.7 : USG and PCPNDT act.

Teacher Demonstration: 1 hour

1 case based learning .Use dummy/recorded video or real case

Explain standard scanning views

Highlight ethical caution

2. Demonstration Fill a sample Form F on screen

Point out common errors

Explain difference between MTP and USG indications.

3. Presentation Distribute 5 anonymized USG files (with Form F) for auditing

Discuss compliance and red flags.

student activity-2 hours

1.Observe scan step-by-step

Note measurements

Identify what should/shouldn't be communicated

2.Practice filling 2 mock forms:

1. First trimester USG

2. Anomaly scan

Peer-review each other's form for errors.

3.Match report details with Form F

Identify missing data, wrong indication.

The Teacher shall summarize the key concepts covered in the practical session and also give inputs for further improvement.

Practical Training 2.8 : PCPNDT Prescription and Regulations

Teacher Demonstration: 1 hour

1. Presentation Legally allow the specified purposes of diagnosis
2. case based learning Conditions where the conduct of pre-natal diagnostic techniques is permissible.
3. case based learning Preimplantation genetic diagnosis or prenatal diagnostic techniques/tests conducted after the consent (Provided in Form G) and condition where the consent is not required.
4. Presentation Purpose of consent in Invasive and non-invasive technique.

• student activity-1 hour

1. create 3 case scenarios: and decide if prenatal diagnosis is allowed .
2. Develop decision-making under the Act
3. Students act out a scenario where Form G is explained and signed and Practice communicating informed consent
4. Students fill accurately Form G (blank), patient details, and history, Build precision in legal documentation.

Experiential learning Activity

Experiential-Learning 2.1 : Garbhini Paricharya,

1. Explain and practically show appropriate diet and lifestyle for each month of pregnancy in a real /case-based scenario.
2. Patient interaction and counselling in OPD/ward
3. maintains a log of a minimum of 3 pregnant women's dietary habits, lifestyle, symptoms, and applies Garbhini Paricharya suggestions over 2–4 weeks.-3 hours

Experiential-Learning 2.2 : Antenatal Care.

Perform complete history taking from a minimum of 2 patients

Conduct general and obstetric examination.

Perform targeted examination: BP, weight, fundal height, lie, presentation, fetal heart sounds, fetal movements.

Select trimester-appropriate investigations and advice.

Record findings in the first visit ANC form. - 3 hours.

Experiential-Learning 2.3 : Comprehensive Care Plans for Pregnant Women

1. Counsel OPD patients about Pathya-Apathya and stress management, Practice patient communication and empathy- 2 cases- 1 hour
2. Follow one Garbhini for 3–4 weeks and document daily routine, Ahara, symptoms, and response to Paricharya. Build continuity of care skills.
3. perform Yoni Pichu/Matra Basti under supervision in 8th–9th month- 2 cases-1 hour
4. teach trimester-wise prenatal yoga + mantra chanting to 3 pregnant women 1 hour

Experiential-Learning 2.4 : Antepartum fetal surveillance.

Perform in a minimum of 2 cases -3 hours.

1. Perform Leopold's maneuvers to assess lie, presentation, and engagement
2. Use Pinard's stethoscope or Doppler to auscultate and record FHR. Identify normal vs abnormal FHR (110–160 bpm)
3. Measure and record Fundal height in cm; correlate with gestational age, Estimate fetal growth, and identify IUGR
4. Teach and track Daily Fetal Movement Count (DFMC) using "10 kicks in 12 hrs" rule
5. Assess for oligohydramnios/polyhydramnios signs through fluid thrill, ballotability. Correlate clinical signs with the AFI report.
6. analyse 5 parameters (NST + tone + breathing + movement + AFI); interpret USG reports ,Integrate data for risk identification
7. Read fetal biometry data (EFW, HC, AC, FL) and AFI from scan reports. Apply growth parameters to detect IUGR

Experiential-Learning 2.5 : Clinical diagnosis of Yamala Garbha

1. Discuss clinical history patterns Interview real/ simulated patient-2 cases -1 hour
2. List suspicious signs of multiple pregnancy-2 cases-30 mts

Use mannequin / patient

1. Demonstrate Leopold's maneuvers-3 cases -30 mts
2. Show SFH chart deviation Practice abdominal palpation-3 cases - 30 mts
3. Identify fetal parts- 30 mts-2 cases
4. Attempt dual FHS recording-15 mts-2 cases-30 mts
5. Show USG images and Doppler videos- 30 mts

Experiential-Learning 2.6 : Zygosity and chorionicity

1. Present minimum 2 clinical cases with birth histories and images, and determine whether cases are mono- or dizygotic based on history and placental sharing.--1 hour
2. Show labeled USG images (monochorionic/ dichorionic), twin sacs, and inter-twin membranes , interpret using USG images:
Label chorions and amnions
Identify T-sign vs Lambda sign.- 30 mts
3. Demonstrate twin pregnancy examination on real case /Simulated patient/dummy
Palpation, auscultation, position variation.-2 cases minimum - 30 mts

Experiential-Learning 2.7 : Assessment of labour of yamal garbha

Students will perform :

1. Abdominal Examination of minimum 3 patients, after voiding the urine patient patient lie on her back with slightly flexed legs
2. Inspection- shape of uterus, size of uterus
3. Palpation- Fundal height of uterus is more than GA, Girth of abdomen, fetal bulk disproportionately enlarged in relation to fetal head size. Palpation of too many fetal parts, Finding of three fetal poles or two fetal heads.
4. Auscultation-Two distinct fetal heart sounds with a difference of 10 beats per minutes.-1 hour

Evaluate the labour management of twin pregnancy.in second stage of labour.- 3 hours

1. Fetal heart monitoring
2. Internal examination
3. Delivery of First baby with extended episiotomy
4. Forceps applications with indications
5. Cord clamping
6. Delivery of second baby- detection of lie, presentation, size, FHS ascertained by abdominal examination.
7. Know and evaluate the condition when the LSCS is required.
8. Know the Referral condition

Experiential-Learning 2.8 : Objectives and record maintenance

1. Students practice filling out Form F for various case studies, practicing accurate entry of patient details, ultrasound indications, findings, and consent information.- 2 cases-1 hour
2. Evaluate record maintenance of- 2cases-1hour (genetic counselling center, genetic clinic, genetic laboratory, ultrasound clinic, and imaging centre).

Experiential-Learning 2.9 : Genetic Counselling

Present the contents of form D in seminar or presentation.

Regarding counselling consider the following points:

- respect for client autonomy
- empathy and understanding
- confidentiality
- trust of patient and rapport
- professional boundaries
- attitude
- collaborative approach- 1 hour

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Case Analysis Assessment – Garbhini Paricharya, Yamala Garbha, Bahuapatyata, PCPNDT Act
A 27-year-old primigravida comes for her 22-week antenatal check-up. Ultrasound reveals dichorionic diamniotic twin pregnancy. She has mild pedal edema, Hb 9.5 g/dl, and BP 140/90 mmHg. Family insists on knowing the gender of the babies. She asks for dietary and lifestyle advice for safe continuation of her pregnancy.
Garbhini Paricharya (Antenatal care in this case) – 15 marks
Yamala Garbha (Twin pregnancy) & Bahuapatyata (Multifetal pregnancy) – 15 marks
Clinical Problem-Solving in this case – 10 marks

4

PCPNDT Act Application – 10 marks

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 4

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
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Module 3 : Garbhini vyapad – (Disorders in Pregnancy)

Module Learning Objectives

(At the end of the module, the students should be able to)

- Analyze the signs and symptoms, diagnose, investigate and manage disorders during pregnancy.
- Conduct general and related specific examinations and provide medical management.
- Identify disorder in the metabolism predict future complications.

M 3 Unit 1 Garbhini Vyapad(minor and major medical ailments in pregnancy,Anemia in pregnancy)Diagnosis and Management of Garbhini Vyapad – Nidana, Samprapti and Chikitsa of Garbhini Vyapad, Garbhini Pandu.(minor and major medical ailments in pregnancy, Anaemia in pregnancy)

References: 1,2,3,4,5

3A	3B	3C	3D	3E	3F	3G
CO1	Analyze Garbhini pandu (Anemia in pregnancy).	2	Lecture	CAN	Knows-how	L&GD,L &PPT
CO1,CO2,CO3	Analyze sadhyaasadhyata (Prognosis) and management of all types of Garbhini pandu.	2	Lecture	CAN	Knows-how	L&GD,L _VC
CO2,CO4	Examine the Lakshnas (signs) of Garbhini pandu (Pregnancy induced anaemia)	3	Practical Training 3.1	PSY-GUD	Shows-how	D,PL,CBL
CO2,CO3,CO4	Evaluate and manage Garbhini pandu (differentiation and management).	4	Experiential-Learning 3.1	PSY-MEC	Does	RLE,LRI,CBL
CO3,CO4	Evaluate the protocol of the Garbhini pandu and review for referral.	4	Experiential-Learning 3.2	CE	Does	RLE,CBL
CO3	Counsel pregnant woman for dietary recommendations in Garbhini pandu.	4	Experiential-Learning 3.3	PSY-MEC	Does	LRI,RLE,RP,CBL

M 3 Unit 2 Garbhini Chardi(Emesis and hyperemesis gravidarum)Diagnosis, differential diagnosis, and management of Garbhini Chardi (Emesis and Hyperemesis gravidarium).

References: 1,2,3,4,5

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse nidana panchaka (etiology, signs and symptoms, pathophysiology) and vyadhi vinischya (diagnosis) of Garbhini chardi (Emesis and hyperemesis gravidarum).	1	Lecture	CAN	Knows-how	L_VC,L&GD
CO1,CO2	Analyse investigations and management of Garbhini Chardi.	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO4	Demonstrate signs and symptoms and interpret Garbhini chardi with sapeksh nidan.	3	Practical	PSY-	Shows-	D,CBL,SI

			Training 3.2	GUD	how	M
CO3,CO4	Analyze complications of hyperemesis gravidarum and management principles.	3	Practical Training 3.3	PSY-GUD	Shows-how	PL,D,CBL
CO1,CO2,CO3	Evaluate and manage Garbhini chardi (Emesis gravidarium).	4	Experiential-Learning 3.4	PSY-MEC	Does	CBL,RP,RLE
CO2,CO3,CO4	Interpret appropriate investigations in Garbhini Chardi (hyperemesis gravidarum).	4	Experiential-Learning 3.5	PSY-MEC	Does	CBL,PL,RLE
<p>M 3 Unit 3 Garbhani Raktachapa (Pregnancy induced hypertension))Diagnosis and management of Raktachapa (Hypertensive disorders.) Pregnancy-induced hypertension, Pre-eclampsia, Eclampsia.</p> <p>References: 18,23,26</p>						
3A	3B	3C	3D	3E	3F	3G
CO1	Analyse the Nidana Panchaka and diagnostic criteria (Vyadhi Vinischaya) of Garbhini Shotha.	1	Lecture	CAN	Knows-how	L&GD,L_VC
CO1	Analyse Updrava in Garbhini shotha (complications of Gestational hypertension, Pre-eclampsia, Eclampsia)	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO1,CO2	Interpret investigations required in Garbhini sotha (Gestational hypertension,pre-eclampsia,eclampsia)	1	Lecture	CE	Knows-how	L&GD,L &PPT
CO1,CO3	Analyze management of Hypertensive disorders (Gestational hypertension, Pre-eclampsia, Eclampsia,chronic hypertension , chronic hypertension with superimposed preeclampsia.)	1	Lecture	CAN	Knows-how	L&GD,L &PPT
CO3,CO4	Demonstrate diagnostic criteria of Hypertensive disorders during pregnancy-(Pregnancy induced hypertension, Pre-eclampsia, Eclampsia)	2	Practical Training 3.4	PSY-GUD	Shows-how	D,CBL

CO2,CO3	Demonstrate screening tests for prediction and prevention of garbhini shotha.(pre eclampsia, eclampsia).	3	Practical Training 3.5	PSY-GUD	Shows-how	PL,CBL, D
CO3,CO4	Demonstrate management protocol for garbhini shotha (Pre-eclampsia,eclampsia)	3	Practical Training 3.6	PSY-GUD	Shows-how	CBL,D,P L
CO2,CO3	Evaluate garbhini shoth (Hypertensive disorders-Pregnancy induced hypertension, Pre-eclampsia, Eclampsia).	2	Experiential-Learning 3.6	PSY-MEC	Does	RP,RLE, CBL
CO4	Demonstrate the clinical features of preeclampsia and eclampsia.	3	Practical Training 3.7	PSY-GUD	Shows-how	D,CBL,P L
CO4	Evaluate the management of garbhini shotha (Gestational hypertension,preeclampsia,Eclampsia) and referral to higher center.	4	Experiential-Learning 3.7	PSY-MEC	Shows-how	RLE,CBL ,SDL

Practical Training Activity

Practical Training 3.1 : Diagnosis of Garbhini Pandu

The teacher Demonstrate-1 hour

Case based learning Pallor (conjunctiva, nail beds, palms), Koilonychia, Pedal edema, Pulse and respirationExamine a patient or standardized patient,Highlight clinical signs and their Ayurvedic interpretations..

Show correct technique to assess uterine size in anemic patient

Compare with gestational age

Fundal height

- Fetal growth restriction signs
- Fetal heart rate (FHR)
- Uterine size and movements

The student is expected to-2 hours

Practice abdominal examination

Document fundal height, lie, FHR

Correlate with IUGR if suspected

fill observation chart:

Ayurvedic lakshanas

Modern signs
Hb value

Practical Training 3.2 : Garbhini chardi.

Teacher Demonstrate- 1 hour

.case based learning real/simulated patient with a history of vomiting in early pregnancy.

.General examination, Tongue observation (pale, coated), Abdominal palpation, Hydration status

1. Students observe diagnostic reasoning and doshic analysis.2 hours

2.Students practice examination skills on a simulated patient. Build skill in evaluating dehydration and clinical signs of chardi. |

3. Students document their findings, infer doshic imbalance, sapeksha diagnosis, samprapti ghatakas, and chikitsa sidhanta | Integrate clinical knowledge with Ayurvedic reasoning.

Practical Training 3.3 : Complication and Management of Garbhini Chardi

Teacher demonstration - 1 .5hours

Case-based learning: Present a real/simulated patient. Demonstrate history-taking with a focus on frequency of vomiting, weight loss, hydration, and diet.

Lab report interpretation: Show sample urine test (ketones), LFTs, electrolyte chart. Explain how to interpret them and relate them to complications.

Demonstration Emergency Management Setup: Demonstrate IV line setup, fluid selection, antiemetic choice, and nasogastric feeding in severe cases.

1. Students take history (duration, triggers, fluid intake, urinary output) and perform physical exam: weight, pulse, BP, tongue, skin turgor to develop diagnostic and communication skills-30 mts

2. Students identify doshic vitiation and plan treatment using the Samprapti Vighatana approach. Include Aahara, Aushadha, Vihara. Students apply Ayurvedic reasoning and individualized chikitsa-1 hour

Practical Training 3.4 : Diagnostic criteria of Hypertensive disorders during pregnancy

Teacher Demonstration:-1 hour

1. correct positioning, cuff size, and interpretation of systolic/diastolic values in pregnant women.

2. Step-by-step collection of clean-catch midstream urine and dipstick interpretation.

3. Present 3 mock cases (PIH, Pre-eclampsia, Eclampsia) with vital signs, labs, and symptoms. Discuss diagnosis and risk.-case-based demonstration

student activity-1 hour

1. Practice BP measurement on real cases /The mannequins using the proper method.
2. In the given sample reports. Identify: Is it PIH/Pre-eclampsia/Eclampsia? What additional test is needed?
3. Practice on dummy urine samples with various protein levels. Record dipstick values and assign diagnosis.
4. Present case scenario blurred vision/headache history, records BP, and order investigations.
5. Match Ayurvedic signs of Garbhini Shotha (Snigdha twak, daha, shiroruja) with modern signs.

Practical Training 3.5 : Garbhini shotha (Preeclampsia, eclampsia)

Demonstration: 1 hour

Teacher demonstrate

Case-based learning BP Measurement Demo and MAP Calculation. Teach $MAP = DBP + 1/3 (SBP - DBP)$, using patient values for prediction.

Case-based demonstration Uterine Artery Doppler Video and Interpretation, 1st trimester Doppler waveforms. Correlate notching, PI.

Case-based discussion: Case Discussion with Screening Report Interpretation: Discuss cases with biomarker values, Doppler, and dipstick—link to clinical decision. Include the Ayurvedic perspective.

Student activity-2 hours

Records BP and calculates MAP. Peer-check accuracy.

Different urine samples (0 to +4 protein). Students interpret findings and classify risk.

Create a flowchart for prediction: history ? MAP ? Doppler ? biomarkers.

Match classical symptoms (Panduta, Daha, Swelling) with modern clinical markers.

Practical Training 3.6 : Garbhini sotha

Teacher Demonstration-1 hour

Case-based demonstration: Case Presentation (Simulated or real patient)Present history, vitals, urine protein, edema, BP trends. Include classical Ayurvedic symptoms (Daha, Panduta, Guru Gatrata).

Case-based demonstration Show BP monitoring, MgSO₄ regimen (Pritchard method), IV line, antihypertensive (Labetalol/Nifedipine), fetal monitoring. Explain indications for delivery.

Students activity-1 hour

Each student measures BP and elicits deep tendon reflexes.
Reconstitute and dose MgSO₄ IM for eclampsia. Calculate total dose.
Students create Garbhini Shotha protocol using classical formulations for mild/moderate Shotha
Counsel a mock patient on diet, rest, early signs of worsening, and referral.

Practical Training 3.7 : Signs of Eclampsia ,Pre-eclampsia

Teacher Demonstration:1 hour

1. Case-based demonstration: Live or Simulated Case of Pre-eclampsia
2. case-based demonstration High BP measurement (>140/90 mmHg), Edema of lower limbs (pedal edema), Proteinuria dipstick, Hyperreflexia check (deep tendon reflexes)
3. Simulation-based Simulated Eclampsia Scenario | Demonstrate warning signs of eclampsia:The

Emergency management initiation (MgSO₄ setup explanation) |
Complaints: headache, epigastric pain, visual disturbances |
student activity-2 hours.

1. Measure BP and check pedal edema on pregnant subjects or models.
2. Practice eliciting deep tendon reflexes and checking ankle clonus on peers/simulator.
3. Conduct urine protein tests and interpret results.
4. In a given case (e.g., 28-week primigravida with 160/110, headache, 2+ proteinuria), students must diagnose, classify severity, and suggest action.
5. Match modern symptoms to Ayurvedic lakshanas (e.g., Gaurava, Daha, Shotha, Tamodarshana) and analyze doshic involvement.
6. simulate eclampsia protocol:

Left lateral position
Airway maintenance

MgSO₄? loading dose steps (verbal or dummy practice)
Pulse, BP, and urine monitoring | Learn emergency readiness and initial steps in management. |

Experiential learning Activity

Experiential-Learning 3.1 : Diagnosis and management of garbhini pandu

1. Match case vignettes with dosha-wise types of Pandu (anemia), with lakshana (signs), and modern types.-minimum 3 cases- 1 hour
2. Demonstrate general exam (pallor, koilonychia, pulse, edema), obstetric exam, and review of investigations. Case sheet: mark clinical findings on the checklist.-3 cases- 1 hour-
3. Show how to interpret CBC, MCV, MCH, and peripheral smear for anemia type in 3 patient lab reports and classify the anemia (Iron-def., Megaloblastic anemia.- 1 hour
4. Prepare a Pandu management chart for each type (Dosha-based and modern-based), including Ahar, Vihar, and Aushadha.- 30mts
5. Evaluates a mini case and proposes a diagnosis and chikitsa-30 mts

Experiential-Learning 3.2 : Management of garbhini pandu and referral

1. Complete the steps of screening, diagnosis, staging, treatment, and referral, and understand and internalize the clinical pathway in 2 -3 patients.- 1 hour
2. Fill case sheets with diagnosis, treatment, reason for referral, and attached lab reports. Practice real-world documentation and referral writing-3 caes- 1 hour
3. Evaluate type, severity, plan of management, and decide on referral of 3–4 given clinical cases of different Hb levels and comorbidities, and apply protocol, identify red flags.- 2 hours

Experiential-Learning 3.3 : Counselling in garbhini pandu

1. Show on a real /simulated patient, communication tone, language, and sequence.- 3 cases- 1 hour
2. Prepare diet plans for mild, moderate, and severe anemia using Ayurvedic and modern foods. Build personalized and integrated diet protocols.- 1 hour
3. Given 3 profiles (urban, rural, tribal), create a diet and counseling plan considering cultural & economic aspects. Adapt the approach based on the patient's background.- 1 hour
4. Build personalized and integrated diet protocols- 1 hour

Experiential-Learning 3.4 : Garbhini Chardi

1. Evaluate a real/simulated Garbhini with early pregnancy vomiting. Cover history, signs of dehydration, and mental state- 3 cases- 1 hour
2. Perform general & obstetric exam: vitals, tongue, weight, pulse, BP, skin turgor, urinalysis strip for ketones.-3 cases-1 hour
3. Explain Ayurvedic analysis and correlate with lab reports. Show sample LFT, electrolytes, TSH, and ketones-30mts.
4. Counsel a real/simulated patient on diet, lifestyle, stress, and signs needing referral- 2 cases-1 hour
5. Present treatment plan and referral decision with Peer and teacher feedback- 30 minutes

Experiential-Learning 3.5 : Hyperemesis progress chart.

1. Evaluate OPD/simulated 3 -4 c cases with vomiting in early pregnancy. observe how to extract history for severity, frequency, and warning signs-1 hour
2. In lab/simulation, perform mock urine ketone testing, review CBC reports.-1 hour
3. Present 3-4 case scenarios with lab findings. Students analyze, write brief clinical impression and Ayurvedic diagnosis- 1 hour
4. present minimum 3 case interpretations/case vignettes and suggested management protocol.-1 hour

Experiential-Learning 3.6 : Garbhini shoth (Hypertensive disorders-(Pregnancy induced hypertension, Pre-eclampsia, Eclampsia)

1. Check BP and deep tendon reflexes. Record findings, identify the hypertensive range, and hyperreflexia.- 3 cases-30 mts
2. Test and interpret urine protein strips. Assess for proteinuria.-3 cases-30 mts
3. Identify classical Garbhini Shotha lakshanas and correlate to doshic vitiation, develop diagnostic correlation.- 30 mts
4. Fill out charts comparing PIH, pre-eclampsia, eclampsia (symptoms, BP values, investigations, prognosis).-15 mts
5. In Given a clinical case (e.g., 34-week pregnancy with high BP + headache), decide when to refer and what management to start.-15 mts

Experiential-Learning 3.7 : management of garbhini shotha

1. Measure BP, conduct a urine dipstick test for protein, and identify diagnostic signs of preeclampsia.
2. Elicit deep tendon reflexes and ankle clonusDetect risk of seizures
3. Given case scenarios (e.g., 28 weeks + BP 170/110 + headache),
4. Diagnose type
5. Classify severity
6. Choose management steps | Clinical decision-making and treatment planning ,
7. Match signs of Garbhini Shotha with Dosha Dushya Samprapti and choose chikitsa:
8. Vata-Kapha dushti, Shothahara dravyas, Basti Integrate Ayurvedic understanding into modern diagnosis .
9. prepare a mock referral letter with all clinical details, previous treatment, and reason for referral
10. Learn clear medical communication .- minimum 3 cases -4 hours.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Case Scenario

A 29-year-old G2P1 woman at 32 weeks presents with swelling of feet, headache, and blurred vision. On examination: BP 160/100 mmHg, pedal edema ++, proteinuria 2+, Hb 10 g/dl. Ultrasound shows a single live fetus, growth lag of 3 weeks, and reduced amniotic fluid.

Nidana and Samprapti (Etiopathogenesis) – 10 marks
 Lakshana and Clinical Diagnosis – 10 marks
 Chikitsa (Management) – 15 marks
 Maternal–Fetal Complications and Prognosis – 5 marks
 Preventive and Research Aspects – 10 marks

Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
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Module 4 : Garbha vyapad (Fetal disorders).

Module Learning Objectives

(At the end of the module, the students should be able to)

- 1 Critically analyze Garbhavyapad (Pregnancy-related complications):
- 2 Perform clinical examination, recommend investigations, and interpret findings for diagnosis and management:
3. Identify the specific clinical condition and formulate an appropriate management plan.

M 4 Unit 1 Garbha Vyapad(diseases of fetus)Diagnosis and management of complications in Garbhasrava and Garbhapata (abortion) and recurrent pregnancy loss.

References: 2,3,4,16

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyse etiopathogenesis,diagnosis, relevant investigations and management of Garbhastrava and Garbhapata(abortion)	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO1,CO3,CO4	Analyse role of Garbhashaya shodhan in rupaawastha of grabhastrava and garbhapata.	1	Lecture	CAN	Knows-how	L_ VC,BS ,L&GD
CO1,CO3	Analyse various month-wise treatments for recurrent pregnancy loss(ruksha or snigdha chikitsa in aam Garbha of garbha strava and Garbha pata).	1	Lecture	CAN	Knows-how	L&GD,L &PPT
CO1,CO3	Analyse the plan of treatment of Garbhastrava and Garbhapata(abortion) and relevant management of complications.	1	Lecture	CAN	Knows-how	BL,L_ VC ,BS,DIS,P ER
CO1,CO2,CO3	Analyse on the Interpretation and classification of Recurrent pregnancy loss,. Relevant investigations, counseling, and plan of management.	1	Lecture	CC	Knows-how	BS,DIS,L ,L&GD,L &PPT
CO4	Demonstrate the clinical signs and symptoms of different types of Garbhastrava and Garbhapata(loss of pregnancy/abortion)	5	Practical Training 4.1	PSY-ORG	Shows-how	TPW,CB L,D- M,D,BL
CO3,CO4	Evaluate complications and treatment of Garbhastrava and Garbhapata.	3	Practical Training 4.2	PSY-ORG	Shows-how	TBL,BL, CD,SIM, PBL
CO2,CO3,CO4	Demonstrate the diagnosis and management of recurrent pregnancy loss .	2	Practical Training 4.3	PSY-GUD	Shows-how	LRI,D,CB L
CO1,CO2	Evaluate the aetiology of garbhastrava and garbhapat with contemporary science.	3	Experiential-Learning 4.1	CE	Does	RLE,CBL ,LRI,EDU
CO1,CO2,CO3	Evaluate the management of threatened abortion (ama and niram awastha of	3	Experiential-	PSY-	Does	CBL,RLE

	garbhastrava and garbhapata).		Learning 4.2	MEC		,RP,LRI
CO2,CO3,CO4	Evaluate cases of Garbhasrava and Garbhapat,along with its types, management strategies, and potential areas for research.	4	Experiential-Learning 4.3	PSY-MEC	Does	RP,CBL,RLE
CO1,CO3,CO4	Demonstrate the technique of varanabandha for preventing abortions and masanumasik chikitsa of garbhastrava and garbhapat.	3	Experiential-Learning 4.4	PSY-MEC	Does	JC,SDL,CBL,RLE
M 4 Unit 2 Ectopic pregnancy Diagnosis, interpretation of investigations and medical management of Ectopic pregnancy References: 23						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyse sites, etiology, diagnosis, interpretation of investigations, and medical management of Garbhashayetar garbhadhan (Ectopic pregnancy)	1	Lecture	CAN	Knows-how	L&GD,L&PPT
CO1,CO2,CO3,CO4	Analyze diagnosis of Acute ectopic pregnancy, chronic ectopic pregnancy, Hemorrhagic shock and its timely management	2	Lecture	CAN	Knows-how	L&PPT,L&GD
CO1,CO2,CO3	Demonstrate the clinical signs and symptoms of gharbhashayetar garbhadhan (ectopic pregnancy) and importance of its early diagnosis.	3	Practical Training 4.4	PSY-GUD	Shows-how	LRI,D,RP,CBL
CO3,CO4	Demonstrate examination and management of Acute ectopic pregnancy.	3	Practical Training 4.5	PSY-GUD	Shows-how	LRI,CBL,D-BED,EDU
CO2,CO3,CO4	Evaluate Garbhashayetar Garbhadh?n through clinical examination,and initiate investigations, management, and referral.	4	Experiential-Learning 4.5	PSY-MEC	Does	CBL,SIM,RLE
CO3	Council the patient and evaluate the prospect of fertility in gharbhashayetar garbhadhan (ectopic pregnancy)	4	Experiential-Learning 4.6	AFT-RES	Shows-how	RLE,LRI,RP,CBL,DIS

M 4 Unit 3 Rh incompatibility Haemolytic diseases of the Fetus, Rh incompatibility References: 23						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse diagnosis of Hemolytic diseases(Rh incompatibility)and preventive treatment. of the Fetus,(rakta dushti janya vikara)	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO1,CO2	Analyse red cell alloimmunization in Rh-negative pregnancy with reference to its mechanism and clinical outcomes.	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO2,CO3	Demonstrate steps in diagnosis, surveillance, and management of haemolytic disease of the fetus (Rakta Du??i Janya Vik?ra) due to Rh incompatibility and Rh-negative mother.	4	Practical Training 4.6	PSY-GUD	Shows-how	RP,CBL, LRI
CO2,CO3,CO4	Evaluate Rh incompatibility and Haemolytic diseases of the Fetus.	5	Experiential-Learning 4.7	PSY-MEC	Shows-how	LRI,RLE, CBL,SDL
Practical Training Activity						
Practical Training 4.1 : Garbhastrava and Garbhapata						
The teacher demonstration-2 hours						
<ol style="list-style-type: none"> 1. Case-based demonstration Threatened Abortion Simulated patient with spotting, mild abdominal cramps, closed os, live fetus on USG. 2. Case-based demonstration Simulated case of inevitable and incomplete with open os, vaginal bleeding, POC in os/vagina, pain; discuss differential diagnosis 3. Case-based demonstration findings of missed abortion with no fetal heartbeat, uterus size < gestational age, history of early pregnancy symptoms disappearing 4. Case-based demonstration: Clinical signs of septic abortion, with fever, foul discharge, shock; discuss recurrent pregnancy loss causes 						

Students activity

1. Examine mannequins/simulated cases with different presentations (threatened, inevitable, incomplete abortion)
2. Evaluate printed sonography reports of live fetus, fetal demise, and incomplete abortion
3. Match Dosha-specific Garbhastrava/Garbhapata symptoms with treatment principles (e.g., Vataja ? Matra basti + Laja + Ashwagandha)
4. Practice emergency response to a bleeding abortion case:1 hour

Stabilization (IV access, fluids), Consent & referral,

Documentation | Emergency care & referral skills |

counsel on cause, care, future fertility, follow-up | Communication & empathy |

Fill the case sheet and clinical summary for a given abortion case for Clinical documentation practice - 2 hours

Practical Training 4.2 : Garbhastrava and garbhapata.

teacher Demonstration-1 hour

case diagnosis clinical scenarios (e.g., severe bleeding, septic abortion, shock, anemia, infertility, psychological distress).

Case-based demonstration Modern Management Protocols

Threatened: Observation, progesterone, bed rest

Inevitable/incomplete: D&E

Septic: Antibiotics, IV fluids, hospitalization

Missed: USG-guided D&C

3. Case-based demonstration: Dosha-specific chikitsa, Rasayana therapy, Pathya-apathya, Counseling.

students activity to-2hours

1. Write findings from a simulated case (threatened/incomplete/septic abortion).
2. Fill chart mapping each type of Garbhapata to its possible complications (shock, infertility, anemia, DIC, infection)
3. Group drill: Manage septic abortion case (start IV fluids, oxygen, referral protocol)
4. Match Ayurvedic formulations with dosha-wise Garbhastrava .
5. perform grief counseling, discuss care plan, future pregnancy guidance

6. Identify and interpret 2 USG images or clinical symptoms associated with different types of abortion.

Practical Training 4.3 : Recurrent pregnancy loss

Teacher Demonstration -1 hour

Case-based Demonstration: History taking on the previous pregnancies, menstrual, family, infections, consanguinity

Examination of thyroid, pelvic anomalies, signs of infection/anemia

Investigations: USG, HSG, hormonal assay, TORCH, karyotyping, APLA, endometrial biopsy.

students activity-1 hour

Analyze a case sheet of a woman with 3 early pregnancy losses; write down the diagnosis and causative factors.

present 3 to 4 case vignettes/cases of 3 or more pregnancy losses with all detailed history, examination, and the investigations needed.

Practical Training 4.4 : Gharbhashayetar garbhadhan

Teacher Demonstrate-1 hour

case-based demonstration -real/simulated case of ectopic pregnancy.

students activity

2-3 cases/simulation-2 hours.

1. Take history from a standardized patient/simulated patient
2. Note PV exam findings
3. Interpretation of ultrasound images
4. Interpretation of serial β -hCG results
5. Identify if ectopic is likely
6. Determine site (tubal, cervical, ovarian)
7. Decide management (expectant/medical/surgical)

Practical Training 4.5 : conservative treatment Associated Complications

Teacher will demonstrate -1 hour

1. a case of ruptured ectopic pregnancy. (live patient, simulation mannequin, or video)
2. Transvaginal sonography findings: empty uterus, adnexal mass, free fluid in Pouch of Douglas.
3. Serial β -hCG interpretation:
4. Non-doubling hCG levels or plateauing .
5. Point-of-care testing: CBC, Rh typing, crossmatch, urine pregnancy test.

students are expected to-2hours

1. Interpret ultrasound image showing ectopic pregnancy
2. Write emergency orders
3. Communicate diagnosis and explain surgery to patient (roleplay)
4. Chart management differences between stable vs. ruptured ectopic
5. Present Emergency Room Simulation (use mannequins or standardized patient):
6. Assess vitals, perform abdominal exam
7. Simulate fluid resuscitation (IV setup)
8. Request USG and labs
9. Initiate surgical prep
10. Communicate with OT team

Practical Training 4.6 : Haemolytic diseases of the Fetus

Teacher Demonstration 1 hour

Discussion discusses Antenatal Surveillance & Management Plan of Rh incompatibility- 1 hour

lab interpretation presents indirect and Direct Coombs test reports

Demonstration USG image with fetal hydrops

MCA Doppler graph

student activity -2 hours

1. Identify the diagnosis of Rh incompatibility
2. Interpret the findings
3. List further investigations
4. Create a surveillance protocol
5. Propose a management plan
6. Discuss neonatal care and complications
7. Decide if intrauterine transfusion is indicated
8. Suggest when Anti-D should be administered -on minimum 2 cases.

Experiential learning Activity

Experiential-Learning 4.1 : Ateiology of garbhastrava and garbhapat

1. Provide a list of potential causes from Ayurveda, such as Vata imbalance, Asatmya (incompatibility with diet or lifestyle), or previous Vyadhi (illness), and from contemporary science, including genetic anomalies, infections, hormonal imbalances, autoimmune disorders, and lifestyle factors.i hour
presented with TSH, USG, Progesterone, TORCH, and APLA results. analyze each finding and suggest the likely cause and management.- 2 hours

Experiential-Learning 4.2 : Ama and niram awastha of garbhastrava and garbhapata

1. Present case scenarios with symptoms indicative of Ama (e.g., heaviness, undigested Ama symptoms like lethargy, poor appetite, coating on the tongue) and Niram (clarity, lightness, proper digestion).- 1 hour
2. Simulate clinical evaluations, such as checking fetal heart rate and cervical status, to determine the severity and classify the condition.- 1 hour
3. Provide practical demonstrations of Ruksha therapies (e.g., dry ginger decoctions, light diet plans) and Snigdha therapies (e.g., medicated oils, ghee-based foods) for balancing Vata and supporting pregnancy stability.-30 mts.
4. students must counsel simulated patients based on their diagnosis of Ama or Niram Awastha, including diet (light, easily digestible foods for Ama; nourishing foods for Niram) and rest recommendations.30 mts

Experiential-Learning 4.3 : Garbhasrava (threatened miscarriage) and Garbhapata (abortion).

1. Conduct case study sessions covering different types of Garbhasrava (threatened abortion) and Garbhapata (various types of abortion or pregnancy loss).- 1 hour
2. Present cases with patient history, physical findings, and lab results, and evaluate, classify each case according to both Ayurvedic and modern diagnostic criteria.- 1 hour
3. Simulate clinical observational studies to assess the effects of Ayurvedic interventions in Garbhasrava cases.- 1 hour-3 cases
4. Present cases involving early pregnancy bleeding, recurrent pregnancy loss, or anatomical or hormonal issues.- 3 cases 1 hour

Experiential-Learning 4.4 : Varanabandha and Masanumasik chikitsa for preventing garbhasrava and garbhapat

1. Conduct a literature review on the origins, techniques, and purposes of Varanabandha.- 1 hour
2. Students develop a research proposal that investigates the efficacy of Varanabandha in preventing Garbhasrava and Garbhapat-1 hour
3. Conduct reflective discussions based on case studies of successful and unsuccessful outcomes related to Varanabandha.-30 mts
4. Demonstrate Varanabandha techniques in a supervised, simulated environment.-30 mts

Experiential-Learning 4.5 : Examination of pregnant woman with gharbhashayetar garbhadhan

1. Evaluate Simulated Clinical Case -2 hours
Take a focused history
Perform physical exam (guided)
Order appropriate investigations
Interpret ultrasound and ?-hCG
Plan management or refer
Write referral letter if needed

2. Perform Investigation Interpretation Drill on provided samples-2 hours

?-hCG: 1200 IU/ml and 1400 IU/ml after 48 hrs

UPT: Positive

USG: No intrauterine sac, adnexal shadow, free fluid

Tasks:

3. perform Management Planning Exercise on below scenario

Stable ectopic <3 cm

Hemorrhagic shock due to rupture

Previous ectopic with current pregnancy of unknown location

Tasks:

Choose management modality

Mention follow-up protocol (serial ?-hCG if on MTX)

Plan referral or operative note

Diagnose ectopic pregnancy

Decide medical vs. surgical pathway

Identify referral indicators

Experiential-Learning 4.6 : Counselling of Gharbhashayetar garbhadhan (ectopic pregnancy) and prospect of fertility

1. Role-play counseling sessions and explain the impact of an ectopic pregnancy on reproductive health.-30mts

2. Review cases of patients managed with methotrexate, surgical intervention, or expectant management, discussing fertility outcomes and recovery trajectories and counsel the couple.-30mts

3. Examine data on recurrent ectopic pregnancy risks, fertility preservation success, and counseling protocols.- 30 mins

4. Draft a comprehensive follow-up plan tailored to a patient post-ectopic pregnancy, including recommended intervals for beta-hCG monitoring, ultrasound checks, and consultations with reproductive specialists if needed, and a counseling strategy for the couple -1 hour

5. Plan for fertility assessments and the potential need for assisted reproductive technologies in cases of tubal damage.-1.5hours.

Experiential-Learning 4.7 : Rh incompatibility and Haemolytic diseases of the Fetus

1. Order and Review Blood Typing: Learn to request maternal and paternal blood typing to determine Rh factor and identify Rh incompatibility 1 hour-2 cases
2. Indirect Coombs Test (ICT): Conduct mock ordering of the ICT for Rh-negative mothers to detect Rh antibodies hour -2 cases
3. Discuss Prophylactic Anti-D Immunoglobulin Administration: Role-play planning Anti-D administration at key intervals—28 weeks gestation and within 72 hours post-delivery—to prevent maternal alloimmunization.- 1 hour -2 cases
4. Evaluate Risk-Based Monitoring Frequency: Determine the timing and frequency of indirect Coombs tests based on initial results and gestational age.- 1 hour -2 cases
5. Simulate assessing signs such as fetal distress, anemia, or hydrops fetalis, which may result from untreated Rh incompatibility.-1 hour

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Case Scenario

A 26-year-old woman, G3P0A2, presents at 9 weeks of gestation with complaints of mild vaginal bleeding and lower abdominal pain. She has a past history of two spontaneous abortions in the first trimester. On examination: cervix closed, uterus slightly enlarged, vitals stable. Ultrasound: live intrauterine pregnancy, small subchorionic hemorrhage. Her blood group is O negative, husband’s blood group is B positive. She is anxious about recurrence.

Diagnosis and Differential Diagnosis – 10 marks

Risk Factors & Pathogenesis – 10 marks

Management Plan – 15 marks

Ectopic Pregnancy (Applied Aspect) – 5 marks

Preventive & Research Aspects – 10 marks

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And
Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 5

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
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Module 5 : Garbha vyapad– fetal Disorders -2

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Critically analyze integrative management strategies for various types of Garbhavyapad (fetal disorders)
2. Demonstrate the ability to diagnose various types of Garbhavyapad through clinical examination and relevant investigations (e.g., ultrasonography, lab tests), and formulate a personalized and evidence-based management plan
3. Identify and interpret the signs and symptoms of fetal complications (Garbhavyapad), recommend and evaluate relevant investigations, predict possible maternal-fetal complications, and plan a holistic and stage-appropriate management protocol including dietary, therapeutic, and procedural interventions.

M 5 Unit 1 Garbha sosha-Intra uterine growth restriction)Diagnosis and management of Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Garbha shosha, Garbha kshaya, Bhutahrita garbha, (Intra uterine growth restriction) .

References: 2,3,4,9,11

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Discuss Upavishtak, Nagodar,Upashushkak ,Leengarbha, Gudhgarbha, Garbha	1	Lecture	CK	Knows-	BL

	shosh, Garbhakshaya, Bhutahrita garbha.				how	
CO2	Analyse conditions of Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Garbha shosha, Garbha kshaya, Bhutahrita garbha, (Intra uterine growth restriction).	1	Lecture	CAN	Knows-how	L&PPT, L&GD
CO3	Analyse the Management of Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Garbha shosha, Garbha kshaya, Bhutahrita garbha, (Intra uterine growth restriction).	1	Lecture	AFT-SET	Knows-how	L
CO1, CO3	Analyse the Complications that arise in Intrauterine Growth restriction during labor and the neonatal period.	1	Lecture	CAN	Knows-how	L&PPT, BS, L_V C
CO1, CO2	Analyze the role of causative factors (Hetus) including Ah?ra, Vih?ra, and M?nasika Bh?vas (e.g., ?oka, Krodha, Bhaya) in the development of Upavi??aka (Intrauterine Growth Restriction), Sampr?pti involving Srotorodha, ?ma and Dh?tu-k?haya.	1	Lecture	CAN	Knows-how	L&GD
CO1	Demonstrate the evaluation of signs and symptoms of Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Garbha shosha, Garbha kshaya, Bhutahrita garbha, (Intra uterine growth restriction)	4	Practical Training 5.1	PSY-GUD	Shows-how	D, CBL, SIM
CO1, CO2, CO3	Demonstrate various clinical signs of Upavishtak (IUGR).	4	Practical Training 5.2	PSY-GUD	Shows-how	CBL, RP, D
CO1, CO2, CO3	Demonstrate examination of history taking and evaluation of Upavishtaka, Nagodara / Upashushka, Lina garbha, Goodagarbha, Garbha shosha, Garbha kshaya, Bhutahrita garbha, (Intra uterine growth restriction).	4	Experiential-Learning 5.1	PSY-MEC	Does	RLE, CBL, LRI
CO1, CO2, CO3	Analyse the ayurvedic aspect of Upavishtak with modern IUGR.	5	Experiential-Learning 5.2	CAN	Does	CBL, LRI, RLE

M 5 Unit 2 Jarayu dosha (placental anomalies and Gestational trophoblastic neoplasia) Diagnosis and management of Jarayu Dosha (placental anomalies) and diagnosis of gestational trophoblastic neoplasia.

References: 9,11,23

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyse etiopathogenesis and diagnosis of Jarayu Dosha (placental anomalies),	1	Lecture	CAN	Knows-how	L&GD,L &PPT
CO3	Analyse the role of Ahar, vihar, rajaswala paricharya,shodhan chikitsa in the prevention of jarayu dosha. (placental abnormalities) and the Management of pathological conditions arising due to dysfunction of the jarayu (Placenta).	1	Lecture	CAN	Knows-how	L&PPT , L&GD,C BL
CO1,CO2,CO3	Analyse the Diagnosis and management of Gestational Trophoblastic diseases.	1	Lecture	CAN	Knows-how	L&PPT ,BS,L_V C
CO1,CO2	Demonstrate clinical skills in diagnosing and managing placental abnormalities.	3	Practical Training 5.3	PSY-GUD	Shows-how	LRI,CBL, D
CO4	Demonstrate the skills of management of Placental abnormalities and molar pregnancy.	4	Practical Training 5.4	PSY-GUD	Shows-how	D,PBL,C BL
CO4	Develop the checklist of examination of Jarayu (placenta)after delivery.	4	Experiential-Learning 5.3	PSY-MEC	Does	LRI,CBL
CO1,CO2,CO3 ,CO4	Diagnose Jarayu dosha (placental abnormalities) and molar pregnancy.	4	Experiential-Learning 5.4	PSY-MEC	Shows-how	CBL,LRI, RLE

M 5 Unit 3 Antarmrita garbha (IUFD)Diagnosis and management of Antarmrita garbha (Intra uterine fetal death).

References: 2,3,4,23

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse etiopathogenesis, diagnosis and management of Antarmrita garbha (Intra uterine fetal death).	1	Lecture	CAN	Knows-how	L_VC,L& PPT ,BS

CO4	Analyse the treatment protocol of Antarmrita Garbha (Intra uterine fetal death) .	1	Lecture	CAN	Knows-how	BS,L&PP T ,L&GD
CO1,CO2,CO3	Demonstrate the diagnosis and management skills of Antarmrita garbha (Intra-uterine fetal death).	5	Practical Training 5.5	PSY-GUD	Shows-how	PSM,CB L,D,SIM, LRI
CO1,CO2,CO3	Advise investigations and manage Antarmrita Garbha (Intra-uterine fetal death).	4	Experiential-Learning 5.5	PSY-MEC	Does	RLE,SIM, CBL,LRI
CO4	Demonstrate the skills of Preconceptional Counseling and preventive measures of Antarmrita garbha (intrauterine fetal death).	5	Experiential-Learning 5.6	AFT-VAL	Does	SIM,RLE, LRI,CBL

Practical Training Activity

Practical Training 5.1 : Intra uterine growth restriction.

The teacher Demonstrate -1 hour

Simulation based learning Present students with cases involving mannequins or digital simulators to create realistic case scenarios. Each scenario can represent a type of IUGR, with simulated signs like reduced amniotic fluid (for Nagodara), decreased fetal movement (for Lina garbha), and fetal wasting (for Garbha shosha).g overlapping symptoms, challenging them to identify the type of IUGR through clinical reasoning and Ayurvedic understanding.

Students activity

1. Demonstrate examination skills, interpret findings, and propose management strategies, receiving real-time feedback on their approach on IUGR in 2 -3 cases/case vignettes.-3 hours

Practical Training 5.2 : Upavishtak (IUGR).

The teacher demonstrates-1.5hour-case based learning

1. History Taking and Counseling of Pregnant Woman Suspected of IUGR
2. Fundal Height and Abdominal Girth Measurement
3. Abdominal Palpation and Fetal Growth Assessment
4. Sonographic Differentiation of IUGR
5. Case-Based Explanation of Clinical and Sonographic Findings

The students' activity- 3 hours.

1. Given 2 different IUGR scan reports, take history from the patient
2. Counsel the couple regarding the risk factors of IUGR and the importance of fetal growth monitoring
3. Compare with the gestational age chart
4. Perform Leopold maneuvers to assess fetal size
5. Calculate percentile values.

Determine type (symmetrical/asymmetrical)

1. Interpret Doppler findings
2. Decide on frequency of follow-up or need for delivery.

Practical Training 5.3 : Jarayu(Placenta).

The Teacher Demonstrates 2 hours

1. simulation-based demonstration Show specimens/models/images of:
 - Placenta previa
 - Abruptio placentae (concealed and revealed)
 - Circumvallate placenta
 - Succenturiate lobe
 - Velamentous insertion

2. Use ultrasound images or videos to explain features like:

- Placenta previa (internal os covered)
- Retroplacental hematoma
- Low-lying placenta
- Abnormal cord insertion.

3. Real or simulated case presentation involving bleeding per vagina, shock, or IUGR with placental pathology suspected.

Students are expected to -1 hour

Document history, clinical findings, investigations, and management of a patient with a placental abnormality

observe placental expulsion after delivery and assess

- Complete expulsion
- Membrane integrity
- Cord insertion
- Infarct or calcification.

Practical Training 5.4 : Jarayu dosh(placental Abnormalities) and Molar pregnancy.

Teacher demonstration-2 hours

case-based demonstration

Abdominal and speculum examination in the third trimester of bleeding

Ultrasound interpretation for

Placenta previa

Abruptio placentae

Snowstorm appearance in molar pregnancy

case sheets and lab reports (?-hCG, histopathology)

Monitoring vitals and shock management

Active Management of Third Stage of Labour (AMTSL).

Students are supposed to practice for 2 hours

Pelvic examination to assess bleeding

Reading ultrasound images and identifying abnormalities

Interpret investigation reports: CBC, coagulation profile, serum ?-hcg

Evacuation planning in molar pregnancy

Practical Training 5.5 : Antarmrita garbha (Intra uterine fetal death)

The teacher Demonstrate-case-based learning- 2 hours

1. Present a case of a woman in 3rd trimester with loss of fetal movement for 2–3 days.
2. Show reduced fundal height, flabby uterus, and unengaged fetal head.
3. Use a Pinard stethoscope/Doppler – to demonstrate heartbeat absence.
4. Display an image showing no fetal heart movement, collapsed fetal skull, fetal hydrops, or maceration.

students are expected to spend 3 hours.

1. Elicit obstetric history, gestational age, and maternal complaints (reduced fetal movement).
2. Perform a supervised exam – fundal height, fetal parts, tone of uterus.
3. Use Doppler/Pinard to confirm absence of fetal heart.
4. Identify absent cardiac activity, overlapping bones, and hydrops.
5. drafts a plan: hospital admission, induction of labor, labs (CBC, LFTs, Coagulation profile).
6. Subjective, Objective, Assessment, Plan documentation for IUFD case.

Experiential learning Activity**Experiential-Learning 5.1 : Upavishtak (IUGR) .**

1. perform in a minimum of 5 cases-4 hours

General & Systemic Examination to check

Maternal weight gain monitoring

Nutritional status

Signs of anemia, edema, hypertension-

2. Abdominal Examination to check

Fundal height < gestational age

Reduced abdominal girth
Palpation of fetal parts (fetal wasting)
Reduced liquor volume
3. USG report with EFW <10th percentile
Doppler scan showing uteroplacental insufficiency
Hb, nutritional profile
Present a short case with:
Ayurvedic diagnosis (e.g., *Upashushka Garbha*)
Nidana, Samprapti
Modern diagnosis (e.g., asymmetric IUGR)
Investigations & management plan (modern + Ayurvedic)

Experiential-Learning 5.2 : upavishtak

1. Measure fundal height and correlate with gestational age in a minimum of 5 Antenatal cases, identify lags and suspect IUGR; document findings.
2. View and interpret sonographic images (fetal biometry, Doppler indices).
3. Design a trimester-specific diet plan.
4. Prepare a report comparing the Ayurvedic concept of *Upavi??aka* with modern IUGR (causes, management, prognosis).-5 hours.

Experiential-Learning 5.3 : Examination of Jarayu (placenta)

1. Examines freshly expelled placenta and identifies maternal and fetal surfaces (Placenta Handling and Identification)
2. Counts all 15–20 cotyledons and checks for completeness using the maternal surface. (Cotyledon Counting and Mapping)
3. spreads out the membranes and confirms integrity. If incomplete, alert supervising clinician (Membrane Spread Technique)

4. Cut and cross-section the cord to count arteries and veins; note abnormalities.(Umbilical Cord Vessel Count)
5. Draw diagrams of observed placenta, mark findings (previa, infarcts, velamentous insertion)(Placenta Drawing and Labeling)
6. Use a weighing scale and measuring tape to document size, weight, and thickness.(Placental Weight and Measurement Practice)- 4 hours.

Experiential-Learning 5.4 : Jarayu dosha (placental abnormalities) and molar pregnancy .

1. Reviews case of antepartum hemorrhage, makes differential diagnosis (previa, abruption, mole).-1 case- 4 hours
2. Interpret sonographic findings of placenta previa, velamentous insertion, and molar pregnancy
3. Show USG image of molar pregnancy (snowstorm), abnormal placenta.
4. Graph serial hCG levels from molar pregnancy vs normal pregnancy.
5. Identify chorionic villi swelling and trophoblastic proliferation.
6. Fill antenatal case sheet of a woman with abnormal bleeding and suspected molar pregnancy-

Experiential-Learning 5.5 :
Antarmrita Garbha (Intra uterine fetal death).

In a Given case vignette/ a real case of IUFD -4 hours

1. Take history sensitively (ask about fetal movement)
2. Confirm IUFD with USG
3. Order necessary investigations
4. Choose a safe induction method
5. Document thoroughly.

Experiential-Learning 5.6 : IUF D counselling.

identify risk factors for IUF D and plan prevention.-2 cases-5 hours

1. Elicit reproductive history, previous IUF D, chronic illness, lifestyle factors., Identify anemia, thyroid issues, diabetes, infections, advanced maternal age, Rh incompatibility
2. Explain the need for folic acid, iron, and a balanced diet before conception.
3. Avoid tobacco/alcohol, maintain ideal BMI, control stress
4. Recommend TORCH screening, blood grouping, Hb, TSH, sugar, and genetic tests if history of IUF D
5. Rubella, Hepatitis B, and Tetanus immunizations before conception.
6. Emphasize Shodhana, Rasayana, Garbhasamskara, Ritu-shuddhi, and Beeja-shuddhi.
7. Create a trimester-specific and preconceptional dietary chart including Ayurveda + modern aspects..
8. designs and uses a screening form to assess pre-pregnancy readiness.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

- Case-Based Scenario 20 Clinical diagnosis + management planning
- OSCE – Clinical Skill 20 Demonstrate fetal assessment techniques
- Investigation Interpretation 10 Analyze reports: USG, CBC, OGTT, etc

Or
Any practical in converted form can be taken for assessment. (25 Marks)
And
Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

4

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
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Module 6 : Pregnancy related medical and surgical complications

Module Learning Objectives

(At the end of the module, the students should be able to)

Critically analyze common medical and surgical disorders complicating pregnancy(hypertensive disorders, anemia, diabetes, renal disease, and APH).
Demonstrate skills in performing bedside examination, history-taking, and clinical assessment of pregnant women with associated medical or obstetric complications.

Identify high-risk factors and complications in pregnancy-related medical conditions, recommend and interpret relevant investigations (USG, Doppler, CBC, OGTT) and formulate an appropriate and stage-specific management protocol.

M 6 Unit 1 Evaluation of fetal and maternal health in high risk pregnanciesFetal and maternal health in high-risk pregnancies:

Garbhini jwara (Pyrexia) pregnancy complicated by medical and surgical illness and their comprehensive integrated management.

HIV and prevention of mother-to-child transmission of HIV infection (PMTCT).

References: 3,4,5,23

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse nidana samprapti and chikitsa of Garbhini jwara (Etiopathogenesis, Diagnosis and integrated management for safe and effective care of fever during pregnancy.) .	1	Lecture	CAN	Knows-how	L&GD,L &PPT

CO1,CO2	<p>Analyze the Nidana (causative factors), Samprapti (pathogenesis), and Chikitsa Sutra (principles of management) of selected systemic disorders, including</p> <ul style="list-style-type: none"> • Hridroga (cardiac disease), • Madhumeha (diabetes), • Kamala (liver disorders), • Kasa & ?vasa (respiratory diseases), • Mutraghata (urinary retention/renal disorders), and • Apasmara (epilepsy), and recognize the diagnostic criteria for early identification of pregnancy complicated by these systemic diseases. 	1	Lecture	CAN	Knows-how	L&GD,L &PPT
CO1,CO2	<p>Analyse etiopathogenesis,diagnosis, and management of Jataharini(Infections in pregnancy: (Toxoplasmosis, Viral infections ,Rubella, CMV, Hepatitis-B, Herpes, Syphilis and other Sexually Transmitted Infections) HIV, prevention of mother-to-child transmission of HIV infection (PMTCT).</p>	2	Lecture	CAN	Knows-how	L&GD,L &PPT

M 6 Unit 2 Elderly primi gravida , Bad obstetric history.Elderly primigravida, understanding risk factors for mother and fetus, management for prevention of complications. management for the proper growth of fetus and safe delivery. Promotion of mother to identify various risk factors and report to the hospital at its earliest Bad obstetric history (BOH), identifying risk factors for mother and fetus, measures to predict and protect the complications, identification of high risk and referral to higher centres or intervention of the medicine and surgery dept. as needed.
Identifying indications of emergency LSCS, pregnancy with previous caesarean delivery, clinical evaluation of scar, and developing skills for fetal management in case of

preterm CS, evaluation of scar, ordering appropriate investigations, interpreting those investigations, and timely management.

Breech presentation management.

Clinical diagnosis, appropriate investigations, strict monitoring and management according to prim breech etc

Evaluation of risk factors for elderly primigravida, risk of metabolic disorders and high-risk factors by clinical bedside examination or examination on simulator, PV examination, and noticeable observations to reach the diagnosis to prevent complications in mother

Presentation of various cases and its management

Bedside examination and demonstration and diagnosis of breech presentation, pelvic grips, LSCS scar of previous LSCS, demonstration of scar tenderness

Evaluate the condition clinically, reporting the above diseases.

Differentiate the signs and symptoms and reach the diagnosis and display various treatments

References: 19

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Demonstrate skills in the diagnosis of early recognition and evaluation of signs and symptoms of pregnancy complicated by medical, surgical, or Gynecological disorders like Garbhini jwara (pyrexia), Hridroga (Heart disease,) Madhumeha (Diabetes mellitus), Kamala(Liver disorders) Kasa,swasa(Respiratory diseases), Mootraaghata (Renal diseases), Apasmara(Epilepsy), Jataharini(Infections in pregnancy: Toxoplasmosis, Viral infections ,Rubella, CMV, Hepatitis-B, Herpes, Syphilis and Other Sexually Transmitted Infections HIV infection) along with their management.	6	Practical Training 6.1	PSY-GUD	Shows-how	D-BED,R P,LRI,CB L
CO1,CO2	Analyse diagnostic methods and management of Elderly primi gravida (risk factors for mother and fetus, management for prevention of complications management for the proper growth of the fetus and safe delivery.)	1	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO1,CO2,CO3	Analyse Bad obstetric history(BOH), risk factors for the mother and fetus along with pregnancy with a previous Cesarean Delivery,	1	Lecture	CAN	Knows-how	BS,L&PPT ,L&GD
CO1,CO2,CO3	Analyse the Breech presentation,clinical diagnosis, appropriate investigations and management.	2	Lecture	CAN	Knows-how	L_VC,L&GD,L&P

						PT
CO1,CO2	Analyze the risk factors for elderly primigravida, metabolic disorders and diagnosis of breech presentation.	6	Practical Training 6.2	CAN	Knows-how	CBL,D-M,D-BED
CO1,CO2,CO3	Evaluate the management of elderly primi gravida, Bad obstetric history(BOH), Pregnancy with previous cesarean Delivery, emergency LSCS and Breech presentation	6	Experiential-Learning 6.1	CE	Does	SIM,RLE,CBL
M 6 Unit 3 Garbhini makkala (Antepartum hemorrhage.) Garbhini makkala - etiopathogenesis investigations, prediction of complications and management						
References: 2,3,4,26						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Evaluate signs and symptoms of pregnancy complicated by medical, surgical, or Gynecological disorders like Garbhini jwara (pyrexia), Hridroga (Heart disease), Madhumeha (Diabetes mellitus), Kamala(Liver disorders,) Kasa,swasa(Respiratory diseases,), Mootraaghata (Renal diseases), Apasmara (Epilepsy), Jataharini (Infections in pregnancy: Toxoplasmosis, Viral infections, Rubella, CMV, Hepatitis-B, Herpes, Syphilis and HIVinfection and their comprehensive integrated management.	6	Experiential-Learning 6.2	PSY-MEC	Does	PBL,RLE,CBL
CO1,CO2,CO3	Discuss the classification of Garbhini makkal along with Signs and symptoms, Etiopathogenesis investigations, Prediction of complications and management	2	Lecture	CK	Know	L&PPT,L&GD
CO1,CO2,CO3,CO4	Demonstrate the clinical signs and symptoms of Garbhini makkal (Abruption, placenta praevia, its types, Dos and don'ts) and Assessment of Rasa Raktakshaya.	8	Practical Training 6.3	PSY-GUD	Shows-how	PBL,D,CBL,SIM

	Relevant investigation to assess the hematocrit. Relevant investigation for diagnosis of APH(USG)					
CO1,CO2,CO3	Demonstrate the differential diagnosis, relevant investigations and management of Garbhini makkala (Antepartum haemorrhage)	8	Experiential-Learning 6.3	PSY-MEC	Does	CBL,RLE ,SIM
CO4	Develop skills in the emergency management of Garbhini makkal(Anti partum haemorrhage).	6	Experiential-Learning 6.4	PSY-MEC	Knows-how	CBL,RP, RLE

Practical Training Activity

Practical Training 6.1 : Medical, Surgical, and Gynecological Complications in Pregnancy.

The teacher- 2 hours-case based learning,Bedside Demonstration

1. Prepare patient-based or simulated case scenarios of pregnant women with suspected systemic diseases.
2. Use flashcards or interactive tools with symptoms and ask students to match them with probable diagnosis and trimester-related risks.
3. Show how to order and interpret relevant labs (CBC, LFT, KFT, RBS, ECG, USG, TSH, HIV/TPHA). Explain which tests are trimester-safe.
4. Display step-wise approach charts integrating Ayurvedic chikitsa with modern diagnostics.
5. shows how to evaluate a high-risk case and counsel the patient and relatives.
6. Explain how systemic illness (e.g., epilepsy or hepatitis B) affects Shukra-Artava, Rasa-Rakta, and Garbha sthiti, from Ayurvedic and modern views.

Students are expected to-4 hours.

1. Take detailed history of pregnant women with systemic complaints.-minimum 5 cases
2. Perform general, systemic, and obstetric exam under supervision.
3. Map symptoms like jaundice, SOB, or seizures to trimester-specific danger signs
4. Document a case of Garbhini with pyrexia, hepatitis, or heart disease

5. Select and justify required labs and imaging (USG, ECG, LFT, serologies)
6. Counsel a pregnant woman with diabetes/heart disease on diet, monitoring, and delivery planning
7. Suggest herbal formulations for Garbhini jwara or kamala and plan dosha-prakriti-based management
8. perform Emergency Drill (e.g., seizure management) Mock scenario: 8-month pregnant woman has seizure in class/hospital Recognition of Apasmara/GTC seizure, emergency steps

Practical Training 6.2 : Elderly Primi gravida, Breech presentation

Teacher will Demonstrate-2 hours-Case based learning,Bedside demonstration.

1. Preconception counseling steps
2. "Antenatal risk assessment form (including age-related risks)
3. Discuss protocols for fetal anomaly scan, NIPT.
4. Review Ayurvedic perspective of aging & Garbhadharana
5. How to elicit detailed BOH (loss type, gestational age, causes)
6. Explain lab investigations: antiphospholipid antibodies, TORCH, karyotyping
7. Show how to assess uterine scar on USG & during labor
8. Discuss criteria for VBAC vs. repeat CS
9. Leopold's maneuvers for breech diagnosis
10. Demonstrate external cephalic version (ECV) video or model.

The students are expected -4 hours

1. Conduct a simulated counseling session with an "elderly gravida"
2. Identify risk factors and record in a dummy file
3. Interpret sample reports of fetal screening-minimum 3 cases
4. Correlate vata-pradhana prakriti with obstetric risk in elderly
5. Take full history of a mock or actual patient with BOH-minimum 3 cases
6. Analyze 3 different BOH cases and prepare summary reports

7. Present 1 BOH case, list probable causes and preventive plans
8. Review and interpret post-CS scar thickness reports.
9. Create a decision table for VBAC eligibility-minimum 3 cases
10. Practice breech palpation using manikin or simulation
11. Interpret indications and contraindications of ECV
12. Identify breech on sample USG images-minimum 3 cases.

Practical Training 6.3 : Garbhini makkala (Anti Partum haemorrhage)

The teacher Demonstrate

1. detailed history taking: onset, quantity, color of bleeding, associated pain, fetal movements, trauma
2. Show obstetric examination: fundal height, lie, presenting part, fetal heart sounds, signs of concealed hemorrhage
3. Explain red flags and differential diagnosis (previa vs abruption)
4. simulation of emergency response: setting up IV line, arranging blood, administering corticosteroids
5. Discuss Ayurvedic understanding of *Garbhashaya gata raktasrava* or *Raktapitta in Garbhini*
6. Case-based summary: How to triage, stabilize, and decide for delivery

The students are expected to

1. Observe and record symptoms and risk factors of APH in clinical setting
2. Practice history taking using structured proformas
3. Interpret lab reports and create evaluation profiles
4. Draw and label placenta previa types and note management per type
5. Simulate APH emergency handling and debrief performance
6. Prepare a case summary of APH with diagnosis, findings, investigations, and integrated management
7. Engage in interactive quiz on case-based clinical decisions
8. Reflective log writing: “What I learned from today's APH drill and how I will respond in a real scenario”

Experiential learning Activity

Experiential-Learning 6.1 : Comprehensive Clinical Training in High-Risk Obstetrics and Maternal Emergencies

Demonstration of real case/case vignettes

Elderly Primi Gravida: Identifying risks in first-time mothers over 35, evaluating complications, and managing pregnancy and delivery.-2 cases

Bad Obstetric History (BOH): Understanding causes and implications of recurrent pregnancy losses, and planning specialized care for future pregnancies.-2 cases

Pregnancy with Previous Cesarean: Evaluating risks for VBAC (vaginal birth after cesarean) or repeat cesarean, and decision-making in delivery.-2 cases

Emergency LSCS: Indications, techniques, and management of complications during an urgent cesarean section.-2 cases

Breech Presentation: Diagnosis, management options (vaginal delivery vs caesarean), and handling complications- 3 cases

Experiential-Learning 6.2 : Integrated Management of Medical, Surgical, and Gynecological Disorders Complicating Pregnancy.

1. Create a day-wise journal mapping a real or simulated case of Garbhini Jwara, documenting temperature trends, associated symptoms (rash, chills, dysuria), investigations ordered, and Ayurvedic dosha correlation, Include Oushadhi prayoga rationale with choice of Jwarahara dravya.
2. Use digital tools or case recordings to identify and reflect on heart murmurs or gallop rhythm , Submit a written interpretation linking cardiac lesion types (e.g., mitral stenosis) to pregnancy risk and Ayurvedic hridroga classification (vataja, pittaja, kaphaja).
3. Record real or simulated blood sugar values (FBS, PPBS) of a pregnant woman , Write a reflection on glycemc variation
4. Create a pocket reference card listing red flag symptoms of hepatic dysfunction in each trimester. Annotate with signs of pittaja kamala and pregnancy-specific differentials (e.g., intrahepatic cholestasis of pregnancy) ,and integrated management with liver corrective drugs.
5. make a short video showing the use of a spacer device/inhaler for asthma in pregnancy, followed by a reflective note on breathlessness causes and Ayurvedic pranavaha srotodushti and integrated management with swasa chikitsa., Include yogic breathing/Anulom-Vilom as supportive management.
6. Create a checklist/rubric to evaluate risk of seizure in a pregnant patient with known epilepsy
7. Write and submit a script as a counselor explaining TORCH screening results or HIV status to a pregnant woman in simple, empathetic language., Include Ayurvedic immunity-boosting (rasayana) suggestions and explain vertical transmission prevention in both systems.

Experiential-Learning 6.3 : Garbhini makkala (Antipartum haemorrhage)

1. Illustrate the signs and symptoms of garbhini makkala its associated risk factors and management protocols. Conduct evaluations for prevention of complications of APH (history, investigation, examination, does and do not's)
2. Case-Based Learning: Discuss real patient cases, asking students to evaluate and decide management.
3. Hands-On Training: Clinical skills of examination of patient with placenta praevia, Abruption and other than placental bleeding.
4. Simulation based demonstration of APH
5. Interactive Quizzes: Assess knowledge with clinical scenarios and decision-making pathways.
6. These methods integrate theoretical learning with clinical application.

Experiential-Learning 6.4 : Placenta praevia ,Abruption placenta .

1. Case-based discussions on patient history, signs, and symptoms, using real or simulated cases to identify placenta previa and placental abruption.- 2 cases-1 hour
2. Simulation exercises using models to demonstrate physical examination techniques while ensuring patient safety and minimizing risk.-1 hour
3. Role-playing scenarios where students practice rapid assessment, decision-making, and prioritizing tasks under supervision.- 1 hour
4. Simulated management drills for emergency C-section preparation, focusing on collaborative skills with anesthesiologists and nursing teams.- 1 hour
5. Simulation drills for handling maternal shock and coordinating emergency care, including blood transfusion protocols and fetal monitoring.-1 hour
6. Role-play conversations with simulated patients and families to practice explaining conditions, risks, and treatment plans in an empathetic and clear manner.-1 hour

Modular Assessment

Assessment method	Hour
Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.	4

1. Case-Based Scenario 20- Clinical case: identify + investigate + management.
 2. OSCE – Clinical Skill Station 20 - Bedside examination + patient communication
 3. Investigation Interpretation 10
 Analyze reports: USG, CBC, placenta location.
 Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 6

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
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Module 7 : Kalpa used in Garbha garbhini vyapad

Module Learning Objectives

(At the end of the module, the students should be able to)

- 1 Critically analyze the pharmacological principles, indications, formulations (yoga), therapeutic rationale and safety profile of Ayurvedic and modern drugs.
- 2 Demonstrate the ability to select appropriate dosage forms(dose precision, route of administration, and anupana/vehicle used.)
- 3 Identify potential research areas in the field of pregnancy pharmacology in Ayurveda and integrative medicine,

M 7 Unit 1 Group of drugs for fetal growth Group of drugs for growth of foetus:

1. Garbhapala rasa
2. Garbhaposhaka yoga
3. Shatavari ghrita
4. Kashmaryadi ghrita
5. Phalaghrita
6. Kalyanaka ghrita
7. Laghumalini vasanta ras
8. Kasherukadipayaha
9. Shatavari kalpa
10. Kushmanda Awleha
11. Lakshaditaila

References: 1,2,3,4,5,6,7,9,11,12

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse the karmukhata(mode of action) on the following group of drugs for fetal growth. Garbhapal rasa,Garbhaposhak yoga,Shatavari ghrita,Kashmaryadi ghrita,Phalaghrita, Kalyanak ghrita,Laghumalini vasant, Kasherukadipayaha ,Shatavari kalpa,Kushmand Awleha,Lakshaditaila.	3	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO2,CO3	Demonstrate selection of Ayurveda Kalpas for Garbha Vridhi based on Anupana, Sevana Kala, Karmukhata, and factors like Prakruti, Desha, Kala, Agni Bala, Garbhini Bala, Srotorodha, and Ama Avastha. Analyse the different conditions to use Ayurveda Kalpas along with anupana,aushadha sevana kala.(Time of administration),karmukhata (mode of action) for Garbha vridhi based on prakruti, desha, kala, aagni bal, garbhinibala,strotorodha, aama awastha.	6	Practical Training 7.1	PSY-GUD	Shows-how	PSM,CB L,RLE,S DL,D

CO2,CO3	Classify the various drugs and its use in specific conditions ingredients of the drugs along with its use in Garbha vriddhi.	8	Experiential-Learning 7.1	CAN	Does	RLE,SDL ,CBL
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M 7 Unit 2 Group of drugs for Garbhini chikitsa Group of drugs for Garbhini chikitsa: Sukumar ghrita (garbhini udavarta), Mahakalyanak ghrita (garbhini prameha), Dadimadi ghrita (garbhini udarshool), Draksha ghrita (Garbhini pandu)

1. Mandura vataka (Pandu)
2. Dhatri lauha (Garbhini Pandu)
3. Gokshuradi ghrita (Garbhini Shotha)
4. Kalyanak awleha (Garbhini Atisar) Chandanadi kashay (Garbhini jwara), (Garbha poshan, Garbhini jwara)
5. Erandadikwatha (Garbhini jwara)
6. Lavangadichurna (Jwara, Ama- rakta Atisar, Shool, Shotha)
7. Gokshura kashay (Garbhini shotha)
8. Darvyadileha (Garbhini kamala)
9. Shunthi bilwa kashaya (Garbhini atisara) Chandanadi kwatha (Garbhini jwara)
10. Guduchyadi kwatha (Garbhini jwara)
11. Pippalyadi leha (Kasa Hikka)
12. Amra jambu kwatha (Garbhini grahani)
13. Huberadi kwatha (Garbhini jwara, Raktaatar garbha stava, Garbha shola)
14. Garbhachintamani rasa (Garbhini shool, Vishtambha, Jwar, Ajirna sarvarogbhar)
15. Pruthakparnyadi ghrita (6th and 7th month of pregnancy)
16. Indushekhar ras (Garbhini rog har), Ksheer bala taila
17. Kadamba masha taila
18. Bala taila

References: 1,2,3,4,5,6,7,8,9,10,11,12

3A	3B	3C	3D	3E	3F	3G
CO3,CO4	Analyse the mode of action, utility, Anupan, and pathya apathya of the following group	5	Lecture	CAN	Knows-	L&PPT

	of drugs for Garbhini vyapad chikitsa like Sukumar ghrita (garbhini udavarta), Mahakalyanak ghrita (garbhini prameha), Dadimadi ghrita (garbhini udarshool), Draksha ghrita (Garbhini pandu), Mandur vatak (pandu), Dhatri lauha(garbhini pandu), Gokshuradi ghrita (garbhini shooth), Gokshur kashay (garbhini shootha), Kalyanak awleha (garbhini atisar) chandanadi kashay(garbhini jwara), Erandadikwatha (garbhini jwara)Lawangadichurna (jwar, ama rakta atisar, shool , shotha),Darvyadileha (garbhini kamala), Shunthi bilwa kashaya(garbhini atisar), Chandanadi kwath (garbhini jwara), Guduchyadi kwatha (garbhini jwara), Pippalyadi leha (kasa hikka), Amra jambu kwatha (garbhini grahani), Huberadi kwath(garbhini jwar , raktaatisar garbha strava , garbha shola), Garbhachintamani rasa(garbhini shool,vishtambha,jwar,ajirna sarvaroogbhar), Pruthakparnyadi ghrita(6Th and & 7th month of pregnancy), Indushekhar ras (Garbhini rog har) Ksheer bala taila, Kadamba masha taila, Bala taila.				how	,L&GD
CO2,CO3,CO4	Discuss the Garbhini vyapadahar kalpas along with anupana,aushadha sevana kala.(time of administration),karmukhata (mode of action) based on prakruti, desha, kala, aagni bal, garbhinibala,strotorodha, aama awastha.	8	Practical Training 7.2	PSY-GUD	Shows-how	CBL,D,PER
CO2,CO3,CO4	Analyse and Categorize the various drugs, indications,ingredients ,precise doses, Pathya apathya and anupana, in specific conditions of garbhini vyapadas.	6	Experiential-Learning 7.2	PSY-MEC	Does	RLE,DA,DIS,PER,CBL
CO2,CO3	Evaluate and categorize Garbhini Vyapadahar Kalpas based on specific Garbhini Vyapadas, calibrate their ingredients, precise dosage, and clinical reasoning.	6	Experiential-Learning 7.3	CE	Does	RLE,IBL,PER

M 7 Unit 3 Pharmacology of drugs for prevention of abortion, preter labour Pharmacology of drugs for prevention of abortion, preterm labour

1. Tocolytic drugs
2. Antihypertensive
3. Antiemetics

4. Magnesium sulphate
5. Mruta garbhapatan yoga Jeerakadi kashay (Garbhini strava)
6. Masanumasik rakta sravhar ghanavati

References: 2,3,4,5,6,9,12,23

3A	3B	3C	3D	3E	3F	3G
CO3	Analyze the Pharmacology of drugs for prevention of abortion, preterm labour like Tocolytic drugs, Antihypertensive drugs, Antiemetic drugs Magnesium sulphate along with drugs used to enhance the process of delivery of mruta garbha like Mruta garbhapatan yog, Jeerakadi modak (garbhini yonirog har) and Masanumasik rakta stravhar ghanavati (garbha strava)	2	Lecture	CAN	Knows-how	L&PPT ,L&GD
CO3,CO4	Demonstrate the preparation, correct dosage, route of administration, and monitoring protocols for Tocolytic drugs, Antihypertensives, Antiemetics, and Magnesium sulfate in obstetric emergency scenarios, along with the preparation and appropriate use of Ayurvedic formulations such as <i>Jeerakadi Modaka</i> (for Garbhini Yoni Roga), <i>Rakta Stravahara Ghanavati</i> (for Garbha Strava), and <i>Mruta Garbhapatan Yoga</i> (for expulsion of Mruta Garbha).	6	Practical Training 7.3	PSY-GUD	Shows-how	RLE,D,R P,SIM
CO2,CO3	Analyze the emergency conditions along with pharmacological and Ayurvedic management strategies, including the use of Mruta Garbhapatan Yog, Jeerakadi Modak, and Rakta Stravahara Ghanavati.	6	Experiential-Learning 7.4	CAN	Does	SIM,CBL ,RLE

Practical Training Activity

Practical Training 7.1 : Therapeutic Applications in Pregnancy.

The teacher will demonstrate-case based learning,Bedside demonstration-2 hours

1. Present case studies for analysis highlighting patient Prakruti, Agni, Bala, and disease condition.
2. Facilitate group discussions on the influence of Desha and Kala on drug efficacy and Kalpa selection.
3. Conduct simulation exercises on dose calculation according to Agni, Bala, and Prakruti.
4. Demonstrate preparation of Kalpas like Garbha Vriddhikara Dravyas, Jeerakadi Modaka, and Rakta Stravahara Yogas.
5. Showcase sensory evaluation – color, texture, smell, dose, Anupana, and Kala of administration.
6. Lead bedside demonstrations explaining indications and action of drugs on Srotas, Dhatus, and Malas.
7. Explain dietary principles and demonstrate preparation of personalized Pathya-Apathya plans during pregnancy.

The students are expected to-4 hours.

1. Analyze given case studies, identify Prakruti, Agni, and Bala, and suggest appropriate Kalpas.
2. Participate in group discussions and present findings on seasonal/geographical variations in drug response.
3. Practice dosage calculations under teacher guidance for various formulations tailored to individual patient types.
4. Prepare Kalpas practically, following SOPs for consistency in classical method.
5. Evaluate and record sensory attributes (Varna, Gandha, etc.) and justify selection of Anupana and timing of drug administration.
6. Observe and report effects of drugs on specific Srotas and Dhātu rejuvenation in real or simulated cases.
7. Design diet plans (Pathya/Apathya) for Garbhini with emphasis on fetal growth and maternal health balance.

Practical Training 7.2 : Garbhini vyapadhar kalpas

The teacher demonstrate-By case based learning, Demonstration, presentation-3 hours

1. Phalagh?ta, Pushyanuga Churna – identification of raw drugs, preparation steps
2. Clinical reasoning for timing, mode of intake, combination
3. Explain pharmacodynamics and pharmacokinetics in Ayurvedic terms
4. Real or simulated case (e.g., recurrent abortion), choosing appropriate Kalpa
5. Record drug name, dose, timing, effects, vitals monitoring

The students are expected to

1. Chart Making on Garbhini Vyapads with appropriate Kalpas, Anupana, Sevana Kala-1 hour
2. Identify raw drugs for 3 major kalpas from crude specimens-1 hour
3. Assess prak?ti from mock case and suggest kalpa accordingly-1 hour
4. Case-based discussion on Garbhasrava or Garbhap?ta management in minimum of 3 cases- 1 hour
5. short presentation on assigned Vyapad Kalpa and its justification- 1hour

Practical Training 7.3 : Emergency Conditions in Pregnancy Using Ayurvedic Interventions.

The teacher Demonstrate-Demonstration,real life expirience,simulation,practical- 2hours

1. preparation and IV line setup for MgSO?, Isoxsuprine, Labetalol using dummy vials.
2. Dose calculation, dilution steps, syringe labeling, and administration technique (bolus, infusion)
3. monitoring protocols,vitals, reflex testing, FHR charting on manikins or charts..
4. Conduct a case scenario: E.g., “Pre-eclampsia with seizures” – demonstrate drug protocol on simulation model
5. Show preparation of Jeerakadi Modaka and tablet-making of Rakta-Stravahara Ghanavati.
6. Present clinical scenarios and justify why the kalpa is chosen with dosha, kala, bala, aama, srotorodha in mind

The students are expected to-4 hours

1. Practice drug preparation and labelling (mock vials) for MgSO? and Tocolytics.

2. Perform injection techniques (IM and IV push) on training pads/manikins
3. Fill observation and monitoring charts (vitals, reflexes, fluid intake/output, contraction frequency)
4. Role play scenario – Emergency team handles preterm labor with bleeding: assign roles (Doctor, Nurse, Observer)
5. prepare modaka and ghanavati using mock materials
6. Counseling patient on Jeerakadi Modaka use postpartum, explaining diet, dosage, signs of improvement

Experiential learning Activity

Experiential-Learning 7.1 : Garbha vridhikar kalpa and dravyas.

1. Identify each drug's primary effects and their specific application in prenatal care.-1 hour-any 10 drugs
2. Differentiate conditions like maternal weakness, Aama, and anemia where specific drugs or formulations would be most beneficial.-minimum 3 conditions and 5 formulations-1 hour
3. Case analysis where students recommend a specific Ayurvedic drug based on maternal symptoms -3 cases-2 hours.
4. Group exercises on identifying conditions like anemia or fatigue in real or hypothetical patients and selecting appropriate drugs to address these.-1 hour
5. Case-based discussions to evaluate when each drug is appropriate, focusing on reasoning and therapeutic justification.-2 cases - 1hour
6. Diet-planning sessions where students create Pathya-Apathya lists for patients taking specific Ayurvedic drugs, aiming to enhance drug efficacy.-1 hour
7. Discussion sessions on the importance of Anupan selection and its impact on drug absorption and patient outcomes.-1 hour

Experiential-Learning 7.2 : Ayurvedic Kalpas in Garbhini Vyapadas.

1. Given a case (e.g., 2nd-trimester bleeding with prior abortion), students choose a Kalpa, justify dosage, Anupana, Pathya, and modifications based on prakriti.- 3 cases- 2 hours
2. Counseling on dosage, dietary dos and don'ts (Pathya-Apathya), and administration time.- 3 cases- 2 hours

3. Perform prakṛti analysis (questionnaire-based), and suggest kalpa adaptation- 5 cases- 2 hours.

Experiential-Learning 7.3 : Garbhini Vyapadahar Kalpas.

- 1.Fill out a table using the provided cases of Garbhini Vyapadas, matching them with Kalpa, dose, ingredients, and rationale.
- 2.Identification of 10 key raw drugs used in Vyapadahar Kalpas (e.g., Lodhra bark, Dhataki, Shatavari, Guduchi).-2 hours
- 3.take 3-4 simulated cases (e.g., 8-week bleeding, or 28-week IUGR) and Analyze dosha-dushya-samya
Choose suitable Kalpa- 2 hours
- 4.Justify the rationale based on Agni, Prakriti, Bala, ama, Srotorodha
create diet charts for 3 conditions (e.g., Garbhasrava, Chardi, Shotha), highlighting Pathya-Apathya according to dosha and stage.- 2 hours

Experiential-Learning 7.4 : emergency drugs in pregnancy.

- 1.Execute emergency protocols (e.g., give MgSO4, insert IV, counsel patient)
Simultaneously suggest Ayurvedic supportive measures and note the indication
Use manikins or standardized patient actors.-2 hours
2. Justify for each intervention (both systems)
When Ayurvedic drugs can be introduced (post-stabilization, supportive phase)
- 3.Identify conflicts or gaps between modern and Ayurvedic protocols- 2 hours
- 4.Fill out the “Integrated Management Log Sheet.”-1 hour
- 5.Create a flowchart or poster:
“Emergency ? Modern Drug ? Ayurvedic Drug ? Monitoring ? Follow-up”- 1hour

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C

4

.Long Answer Question (LAQ – 50 Marks)

Discuss in detail the therapeutic strategies used during pregnancy with special reference to:

- (a) Ayurvedic formulations for the management of Garbhini Vyapad and promotion of fetal growth and development.(25 marks)
- (b) The pharmacology of emergency drugs used in modern obstetrics for managing acute and life-threatening complications.(25 marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experientia l Learning	3E Domain/ Sub Domain	3F Level (D oes/Sho ws how/ Knows h ow/Kno w)	3G Teachin g Learnin g Methods
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Module 8 : Streerog (Gynaecological disorders) complicating pregnancy-

Module Learning Objectives

(At the end of the module, the students should be able to)

- 1.Critically analyze the clinical presentation, progression, and complications of surgical conditions(genital prolapse, uterine fibroids, ovarian tumors, and pregnancy-associated malignancies.)
- 2 .Demonstrate clinical competence in planning and executing conservative or non-invasive integrated management strategies for pregnant women with coexisting surgical illness
- 3 Identify opportunities for integrating newer diagnostic modalities (e.g., high-resolution ultrasonography, MRI, Doppler, tumor markers) in pregnancy affected by surgical conditions

M 8 Unit 1 Tumors in pregnancy Diagnosis of Fibroids and Ovarian tumors in pregnancy.
 Differential diagnosis of arbuda and granthi on the basis of dosha.
 Diagnosis of raktaja arbuda and granthi.
 Various rakta prasadaka and manasa pachaka kwatha, local applications of tail and shatadhauta ghrita and its role for labour and synchronised contraction of uterine muscles
 Diet and manasika bhavas for counselling

References: 23,30

3A	3B	3C	3D	3E	3F	3G
CO1	Analyse Etiology, signs, and symptoms for the diagnosis of arbud and granthi (Fibroids and Ovaria.) during pregnancy.	2	Lecture	CAN	Knows-how	IBL,L&PPT ,L_VC
CO1,CO2	Analyse the Differential diagnosis of arbud and granthi on the basis of dosha during pregnancy and prediction of complications.	2	Lecture	CAN	Knows-how	L&GD,L &PPT ,CBL
CO1,CO2	Analyse difficulties of foetal development in pregnancy complicated by raktaj arbud (fibroid) and granthi (cyst).	2	Lecture	CK	Know	DIS,PER, L&PPT ,SIM
CO3	Analyse Preconceptional shodhan chikitsa and Garbhini parichary to prevent Pregnancy loss in garbhashay Aarbud or Granthi.	2	Lecture	CAN	Knows-how	L&PPT ,L,DIS
CO2,CO3	Demonstrate the selection and trimester-wise administration of Ayurvedic drugs such as <i>Shatavari</i> , <i>Gokshura</i> , and <i>Ashoka</i> in the management of pregnancy complicated by uterine fibroids or ovarian tumors, considering <i>Garbha-bala</i> and specific drug actions—such as phytoestrogenic, <i>granthi-hara</i> , and <i>stanya-janana</i> properties—while critically analyzing and comparing the pharmacological profiles and safety data of estrogen/progesterone-modulating modern drugs with Ayurvedic formulations, to propose evidence-based integrative treatment strategies supported by clinical research	6	Practical Training 8.1	PSY-GUD	Shows-how	D,CBL,IBL

	and therapeutic outcomes.					
CO1,CO2,CO3	Demonstrate clinical skills in the diagnosis and integrated management of <i>Garbhashaya Arbud</i> and <i>Granthi</i> (uterine fibroids and ovarian tumors) during pregnancy through symptom evaluation, investigation planning, and monitoring strategies, along with the application of Ayurvedic conservative treatments—such as <i>Rakta Prasadak</i> and <i>Mansa Pachak Kwathas</i> , <i>Shatadhauta Ghrita</i> , and medicated <i>tailas</i> —for symptom relief, labour support, psychological counselling, and emphasis on appropriate <i>Ahara</i> (diet) and <i>Manasika Bhava</i> .	8	Practical Training 8.2	PSY-GUD	Shows-how	D-BED,PBL,D,CBL
CO1,CO2,CO3	Counsel and plan treatment along with the prediction of various complications during pregnancy, labour, and puerperium.	6	Experiential-Learning 8.1	PSY-MEC	Does	PER,CBL,SIM,PSM
CO3	Evaluate the research scope in pregnancy with Garbhashay Arbud and Granthi (uterine fibroid and ovarian tumor)	8	Experiential-Learning 8.2	CE	Does	CBL,JC,BS

M 8 Unit 2 Genital prolapse in pregnancy.Diagnosis and conservative management of genital prolapse in pregnancy.
Diagnosis of Carcinoma cervix in pregnancy.

References: 23

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyse the Etiology, Diagnosis and conservative management of Genital prolapse.	2	Lecture	CAN	Knows-how	L&PPT,L
CO1,CO2,CO3	Identify the degree of genital prolapse in pregnancy, its effects and complications along with counselling skills and management.	6	Practical Training 8.3	PSY-GUD	Shows-how	PER,SIM,D,CBL
CO1,CO2,CO3	Identify pregnancy associated with genital prolapse and its degree and its treatment plan along with counselling	6	Experiential-Learning 8.3	CAN	Does	PrBL,PER,RLE,C

						BL
CO1,CO2,CO3	Identify the scope of research in pregnancy associated with genital prolapse.	6	Experiential-Learning 8.4	PSY-MEC	Does	CBL,TP W,JC

Practical Training Activity

Practical Training 8.1 :

The teacher Demonstrate-case based learning,demonstration,inquiry based learning-3 hours
clinical vignettes and illustrate:
Drug selection based on Garbha-bala, Aama avastha, and presence of Granthi.
Display herb samples and explain:
Phytoestrogenic actions of Shatavari.
Anti-inflammatory effects of Gokshura.
Uterine toning effect of Ashoka.
Present a table comparing:
Letrozole, GnRH agonists, Danazol vs.
Shatavari, Ashoka, Lodhra.
Lead a mock integrative board meeting: Modern Ob-Gyn, Ayurvedic doctor, and patient preferences considered.
The students are expected to-3 hours
Measure dosage and determine shelf-life.
Choose a trimester-specific case (e.g., 12 weeks pregnancy with fibroid).
Select appropriate drug(s), dosage, Anupana, and route of administration.
Present rationale for chosen Ayurvedic drug based on Samprapti, Strotorodha, and Rogibala.
reate a comparison table of:
Modern vs. Ayurvedic drugs based on:
Hormone modulation
Trimester safety
Teratogenicity
Tumor response.
Given a clinical scenario, propose an integrative management plan combining safe Ayurvedic and modern options.
Justify with evidence, trimester, maternal health, and tumor size.

Practical Training 8.2 : Uterine fibroids and ovarian tumors during pregnancy.

The teacher Demonstrate -case based learning,Demonstration bedside-3 hours

1. Demonstrate structured history-taking focusing on pain, bleeding, mass effect.
2. Demonstrate palpation skills, identification of mass, uterine size in pregnancy.
3. Show USG findings, Doppler, tumor markers (CA-125, AFP), CBC, thyroid profile.
4. Explain trimester-wise follow-up protocols, risk of degeneration, preterm labor, surgical decision-making.
5. Demonstrate preparation of Rakta Prasadak (e.g., Draksha, Musta, Guduchi) and Mansa Pachak kwathas
6. Show use of Shatadhauta Ghrita, *Taila Pichu*, gentle local abhyanga in symptom relief
7. Discuss Pathya-Apathya, labor-supportive diet, Garbhopaghatakara ahara, Satvika ahaara

The students are expected to-5 hours

1. Take full history and prepare case sheets for suspected fibroid or tumor in pregnancy
2. Perform supervised abdominal palpation on models or patients with safe boundaries
3. Interpret USG and lab reports, correlate with clinical signs.
4. Write integrated management protocol (Ayurveda + Modern) including monitoring
5. Practice external application techniques under guidance (Taila, Ghrita) on models
6. Design diet plan for Garbhini with Arbud, include *Tridosha balancing* meals
7. Conduct counseling roleplay on Manasika bhava and stress reduction in high-risk pregnancy
8. Submit a management summary integrating Ayurvedic & modern conservative approach for fibroid/ovarian cyst in pregnancy.

Practical Training 8.3 : pregnancy with genital prolapse

The teacher Demonstrate-case based learning,demonstration,simulation.-2 hours

1. Using simulator or patient method of identifying degree of prolapse.
2. Mock counselling of a pregnant woman with prolapse – lifestyle advice, risk communication, delivery planning.
3. Show per speculum and per vaginal examination to identify the degree of prolapse (1st, 2nd, 3rd).
4. Present 2–3 cases with different outcomes—preterm labour, urinary retention, infection, etc
5. demonstrate counselling to a prolapse patient (rest, pessary, delivery planning).

The students are expected to-4 hours

1. Perform pelvic examination and record findings under supervision-5 cases
2. Observe 1–2 real cases , identify prolapse degree
3. Draw a chart linking prolapse to trimester-wise maternal & fetal risks.
4. Present complication analysis of one assigned clinical scenario.
5. Practice counselling a mock patient, observed with feedback.
6. prepares an individual plan: rest advice, Ayurvedic interventions, pessary use, delivery method.

Experiential learning Activity

Experiential-Learning 8.1 : Counselling

1. counsels a mock patient (roleplay or simulation) on diet, lifestyle, rest, warning signs, and birth preparedness-30 mts
2. Prepare a trimester-wise risk chart for prediction of complications (PIH, GDM, IUGR, PROM, etc.) with signs to watch-1 hour
3. explains stages of labour, pain management options, and red flags to a simulated patient./real case-3 cases-30mts
4. drafts a personalized birth plan for a pregnant woman (hospital, VBAC, C-section readiness, etc.)- 1 hour
5. Analyze a case of obstetric complication (e.g., APH, PPH, eclampsia). Predict risks and frame a preventive strategy-1 hour
6. Counsel a new mother (simulation) about rest, breastfeeding, lochia monitoring, and red flags (fever, depression)- 3 cases -1 hour
7. Fill a full case history including risk factors and write a proposed line of management
8. Prepare and present a counselling script on yoga, garbhasamskara, and garbhini paricharya
9. Participate in a simulated obstetric emergency drill (e.g., eclampsia, PPH) and reflect on role-1 hour

Experiential-Learning 8.2 : research scope

1. Search and summarize 3–5 recent research papers (Ayurveda/Modern) on uterine fibroids/ovarian tumors in pregnancy. Note gaps in treatment strategies.-3hours
2. Frame a research question (e.g., “Does X kwatha reduce the growth of uterine fibroid during pregnancy?”) using the PICO mode- 30mts hour
3. Select a pregnancy case with fibroid or ovarian tumor. Document observed clinical features, management, outcomes, and scope for Ayurvedic intervention.- 2 hours-3 cases
4. Write a 250-word research abstract on a potential study involving Ayurvedic treatment in Garbhashay Arbud/Granthi in pregnancy-30mts hour
5. Create a chart comparing modern and Ayurvedic approaches in managing pregnancy complicated by fibroids or ovarian tumors.- 2 hour

Experiential-Learning 8.3 : pregnancy associated wiyth genital prolapse

1. Illustrate Grades I–IV of uterine prolapse. Explain descent of cervix, vaginal walls, and surrounding organs.on models-1 hour
2. evaluate minimum 3 case scenarios of genital prolapse during different trimesters. Each case includes history, symptoms, examination findings, trimester-specific concerns, and Ayurvedic vs. modern management plans.- 2 hours
3. Demonstrate using different pessary types (ring, donut, cube). Demonstrate sizing, insertion technique, precautions, and care using pelvic mannequins.-1 hour
4. Live demonstration Pelvic Floor Muscle Exercise Session (Kegels, Tilts, Squats) and Discuss modifications for pregnancy and contraindications. Encourage mindfulness with breath awareness during exercise as a part of Preventive care, physical therapy counseling, conservative management to the patients.-1 hour
5. Use simulated clinical environments to teach response to complications like urinary retention, UTI risk, premature labour signs-1 hour

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Experiential-Learning 8.4 : research scope

1. Conduct a survey or retrospective data review in a clinical setting to gather information on factors associated with prolapse in pregnancy.-1 hour
2. Review and analyze clinical cases of pregnant patients with varying degrees of genital prolapse to identify patterns in maternal and fetal outcomes.-3 cases-2 hours

3. Engage in hands-on workshops on pessary fitting, types, and management protocols tailored for pregnancy.- 1 hour
- 4..Conduct a comprehensive literature review to analyze existing research on prolapse management in pregnancy, highlighting effective strategies and identifying knowledge gaps.-1 hour
- 6.conduct Group discussions on finding scope for research in using sthanik chikitsa inpregnancy associated with genital prolapse-1 hour

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Case-Based Essay (50 Marks)

Case Stem:

A 32-year-old pregnant woman at 18 weeks presents with abdominal pain and rapid uterine enlargement. USG reveals a large uterine fibroid with intrauterine pregnancy.

Discuss the diagnostic challenges, fetal complications and integrated management.

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Paper No : 2 Prasava Vigyan - Clinical Obstetrics						
Semester No : 3						
Module 9 : Prakrita Prasava (Normal Labour)						
Module Learning Objectives (At the end of the module, the students should be able to)						
<ol style="list-style-type: none"> 1. Demonstrate the Prakrita Prasava (normal labour) stages, Intrapartum maternal and foetal monitoring. 2. Examine the design and essential features of a Prasavagara (a modern labour room), expound upon the roles of the labour room and Obstetric High Dependency Unit (HDU), and evaluate the specialized critical care interventions provided by the Obstetric Intensive Care Unit (ICU). 3. Analyse the diagnostic criteria, interpret the progress of labour and decision-making through hands on examination of intrapartum women and plotting of partogram to diagnosis normal Prasava vidhi (mechanism of normal labour). 4. Develop clinical skills through hands on procedures like Parisheka, Vasti, and Yonipichu administration in obstetric patients and integrated management of Prasava (normal labour). 						
M 9 Unit 1 Prakrita Prasava prakriya and Avastha Prasavapurva paricharya (pre-labour care), Prasava prakriya (physiology of labour), Prasava avastha (labour stages), Prasava nirikshanam (intrapartum maternal and foetal monitoring).						
References: 1,3						
3A	3B	3C	3D	3E	3F	3G
CO1	Evaluate the molecular and clinical determinants of labour onset, interpret the dynamic physiology of normal labour.	1	Lecture	CK	Know	L_VC,L&PPT,L&GD
CO1	Analyse the stages of labour through the lens of the Partogram, apply its use to monitor progress, detect abnormalities, and guide clinical decision-making.	1	Lecture	CAN	Knows-how	L_VC,L&GD,L&PPT

CO1	Analyse evidence-based intrapartum maternal and fetal monitoring strategies to identify risk, guide timely interventions, and improve perinatal outcomes.	1	Lecture	CAN	Knows-how	L,L&PPT ,L_VC
CO2	Demonstrate the stages of Prasava avastha (Prajayinee, Aasanna prasava and Upasthita prasava) along with the abnormal conditions.	2	Practical Training 9.1	PSY-GUD	Shows-how	D,CBL,D-M
CO2,CO4	Assess cervical dilation, fetal descent, and maternal-fetal well-being during labour correlating modern and Ayurvedic concepts.	3	Practical Training 9.2	PSY-GUD	Shows-how	C_L,CD, D-M,PER ,PAL
CO2,CO4	Examine and monitor the progress of labour, interpret diagnostic reports and plot the partogram:	3	Experiential-Learning 9.1	CAN	Shows-how	D-BED,C BL,SIM
CO3,CO4	Demonstrate Prasvapurva paricharya in Ayurveda (Pre-labour care) for promoting uncomplicated labour, elucidating its preventive, promotive and supportive measures correlating it with modern obstetric frameworks	3	Experiential-Learning 9.2	CAN	Shows-how	CBL,SIM

M 9 Unit 2 PrasavagaraPrasavagara - LaQshya interventions:
Quality of care in labour room, maternity operation theatre, obstetric high dependency unit, and obstetrics intensive care unit.

References: 27,37,43

3A	3B	3C	3D	3E	3F	3G
CO1	Appraise the purpose and components of a standard Prasavagara - labour room, waiting area, and recovery room in obstetric care with the essential equipment, medications, and supplies required in each of these areas as per MoHFW/WHO guidelines.	1	Lecture	CC	Knows-how	L&PPT , L&GD,L_VC
CO1	Discuss patient care across the labour room, Obstetric High Dependency Unit, and Obstetric Intensive Care Unit	1	Lecture	CC	Knows-how	L&GD,L &PPT ,L_VC
CO3,CO6,CO8	Describe the setting and indications for Obstetric High Dependency Unit and Obstetric	3	Practical	PSY-	Knows-	

	Intensive Care Unit in detail, with their importance.		Training 9.3	ADT	how	
CO2,CO3,CO4,CO8	Discuss the purpose and function of an Obstetric High Dependency Unit (OHDU) with the appropriate clinical conditions and demonstrate proficiency in monitoring critically ill obstetric patients.	5	Experiential-Learning 9.3	AFT-RES	Shows-how	IBL,RLE

M 9 Unit 3 Prasava vidhi (Mechanism of normal labour)Prasava vidhi (mechanism of normal labour) Ayurvedic as well as contemporary concepts of the mechanism of normal labour.

References:

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse the sequential cardinal movements of labour and their biomechanical significance, along with the variations in maternal pelvic anatomy which may alter fetal descent patterns.	4	Practical Training 9.4	PSY-GUD	Knows-how	SIM,D-M
CO1	Discuss the cardinal movements of the fetus during labour	1	Lecture	CK	Know	L,L_VC, L&PPT
CO1	Correlate Ayurvedic concepts (Garbha Pravesha Vidhi) to modern mechanisms (engagement, descent, flexion, internal rotation, extension, restitution, external rotation) and correlate these movements with Vata Dosha's role in propulsion and alignment.	1	Lecture	CK	Know	L_VC,L, L&PPT
CO1	Analyse the indications and contraindications, guidelines (traditional and evidence-based) of episiotomy	1	Lecture	CK	Know	L_VC,L&PPT
CO2,CO3,CO4	Demonstrate the positioning of the patient and the steps of episiotomy, along with haemostasis techniques such as suturing.	2	Practical Training 9.5	CAN	Knows-how	D,RP,CD, D-BED,PAL
CO2,CO3,CO4	Assess labour progression delays based on deviation from normal mechanisms, along	5	Experiential-	PSY-	Shows-	D-BED,P

	with measuring fetal station and rotation angles during descent.		Learning 9.4	MEC	how	BL,SIM
CO2,CO4,CO5	Perform the steps and techniques of Episiotomy procedure. and Identify, diagnose and manage the complications of Episiotomy	4	Experiential-Learning 9.5	PSY-MEC	Shows-how	RLE,PBL
CO3,CO4	Correlate the cardinal movements of fetal descent, with Ayurvedic Garbha Pravesha Vidhi and modern obstetric terminology, and document the structured labor progress	2	Practical Training 9.6	PSY-MEC	Shows-how	CBL,PSM,D-BED

M 9 Unit 4 Prasava Paricharya (Management of labour)Prasava Paricharya (Management of labour)
Sukhaprasava protocols -Ayurvedic and integrative methods

References: 1,2,3,4,5

3A	3B	3C	3D	3E	3F	3G
CO1,CO3,CO4	Analyze the principles of Prasava Paricharya (Management of Labour) with a detailed elaboration of paricharya during Aasanna-prasava (imminent delivery stage), including Ayurvedic and evidence-based interventions.	1	Lecture	CK	Know	L_VC,L&PPT
CO1,CO3,CO4,CO5	Analyze the management strategies for Anagata-prasava (failure of fetal descent) and post-Garbhaparivartana (fetal descent) care protocols, integrating Ayurvedic interventions and evidence-based obstetric practices	1	Lecture	CAN	Knows-how	L_VC,L,L&PPT
CO2,CO3	Plan a holistic labor management plan integrating Ayurvedic principles, Ayurvedic formulations (Yogas), Vasti and Yonipichu administration, Nabhilepana, Nasya and non-pharmacological interventions (Daiva Vyapashraya) and contemporary evidence-based practices.	3	Experiential-Learning 9.6	CAP	Shows-how	RLE
CO1,CO3,CO4,CO5	Demonstrate the correct preparation and application of Sthanika Chikitsa (local therapies) such as Yonipichu (medicated vaginal tampon), Nabhilepana (umbilical paste), Basti (medicated enema) for appropriate stage of labor (Prathama/Dwitiya/Tritiya Kala)	3	Experiential-Learning 9.7	PSY-MEC	Shows-how	RLE,CBL

	based on cervical dilation progress, fetal descent and positioning.					
CO2,CO3	Assess labour progression using diagnostic tools and demonstrate the maternal and fetal factors and prasava paricharya (labour management) for Anagata prasava.	4	Practical Training 9.7	CAP	Knows-how	PL,D,LRI ,PAL,W

Practical Training Activity

Practical Training 9.1 : Prasava parikshana (Monitoring of labour)

Activity-I: 2 hours

Teacher will demonstrate:

Guidelines for Intrapartum Care

Prasava purva nirikshana (Antepartum/Pre-labour Care):

-Fetal monitoring (CTG, Doppler), cervical assessment, and partograph initiation.

Prasava Pashchat Nirikshana (Postpartum Care):

-PPH surveillance.

2. Importance of vital monitoring & documentation

Track maternal vitals (BP, pulse, temperature) and fetal heart rate before, during, and after labour using MEOWS (Modified Early Obstetric Warning System).

Maintain digital/paper records (e.g., partograph, medication logs) for audit and continuity of care.

3. Simulated Informed Consent & Counselling

In a simulated labour room, administer:

-Verbal/written consent for interventions (e.g., episiotomy, operative delivery).

-Counselling on labour progression, pain relief options, and potential complications.

Practical Training 9.2 : Prasava pragati - progress of labour

1. Teacher's Demonstration: 2 hours

Materials: Simulators/ real patients

-Stages of Labour & Clinical Features:

First Stage (Dilatation):

-Latent phase (0-4 cm), Active phase (4-10 cm)

-Signs: Regular contractions, cervical position, consistency, dilatation and effacement, rupture of membranes.

-Fetal head position

Second Stage (Expulsion):

- Station of fetal head
- Signs of internal rotation: Maternal urge to push, crowning of fetal head.

Third Stage (Placental Delivery):

- Uterine contractions for placental separation.
- Gush of fresh bleeding

Fourth Stage (Recovery):

- Monitoring for postpartum hemorrhage (PPH) and maternal vitals.

-Partogram Plotting – Importance & Methodology:

- Demonstrate how to plot:
 - Cervical dilation (cm) vs. time (hrs).
 - Fetal heart rate (FHR), contractions, maternal vitals.
 - Alert line & Action line for identifying prolonged labour.

Practical Training 9.3 : Obstetric High Dependency Unit and Obstetric Intensive Care Unit

Activity: 3 hours

Teacher will demonstrate:

1. Guidelines for admission and monitoring in Obstetric HDU and Obstetric ICU
2. Explain the criteria for admitting patients to the Obstetric HDU and Obstetric ICU
3. Discuss the importance of continuous monitoring (e.g., vitals, fluid balance, oxygen saturation).
4. Demonstrate the use of specialized equipment (e.g., cardiac monitors, infusion pumps, ventilators).

Practical Training 9.4 : Prasava Vidhi (Mechanism of normal labour)

Activity-I: 4 hours

Teacher Will Demonstrate:

1. Demonstration on simulator/ virtual/ real patients/skeleton models: Stages of Labour & Fetal Movements

Show the cardinal movements of labour (engagement, descent, flexion, internal rotation, extension, restitution, external rotation, expulsion).

Explain how fetal position (e.g., occiput anterior/posterior) affects labour progression.

2. Elucidate the Importance of Monitoring Labour Progress

Demonstrate palpation techniques (Leopold's maneuvers) to assess fetal position and engagement.

Explain the significance of cervical dilation, effacement, and station tracking using a partogram.

Discuss how uterine contractions (frequency, duration, intensity) contribute to the mechanism.

Practical Training 9.5 : Vitapachedana - Episiotomy

Duration: 2 Hours

Method: Teacher-led demonstration on 5 cases/simulators

Objective: Master the step-by-step surgical technique of episiotomy and repair.

Activity Breakdown

1. Introduction & Orientation (15 mins)

Demonstrate anatomical landmarks on a pelvic model (perineum, posterior fourchette, ischial tuberosity).

Review indications (e.g., fetal distress, rigid perineum) and types (mediolateral vs. midline).

2. Case 1: Standard Mediolateral Episiotomy (20 mins)

Procedure:

Positioning: Simulate lithotomy position.

Anesthesia: Demonstrate perineal infiltration (10 mL lidocaine 1%).

Incision:

Scissor technique: Insert fingers to protect fetal head, cut at 45-60° from midline (4-5 cm).

Emphasize angle, depth, and hemostasis.

Debrief: Common errors (e.g., shallow cut, wrong angle).

3. Case 2: Episiotomy with Shoulder Dystocia (20 mins)

Scenario: Simulate delayed delivery requiring wider incision.

Key Focus:

Extend incision laterally to avoid anal sphincter injury.

Coordinate with McRoberts maneuver.

Debrief: Team communication and urgency.

4. Case 3: Repair Technique (20 mins)

Layered Closure:

Vaginal mucosa: Start above the apex (continuous suture).

Perineal muscles: Interrupted sutures for muscle approximation.

Skin: Subcuticular vs. interrupted sutures.

Debrief: Knot security, avoiding dead space.

5. Case 4: Complication Management (20 mins)

Scenario:

Excessive bleeding: Demonstrate pressure and figure-of-8 sutures.

3rd-degree tear: Identify sphincter injury and refer.

Debrief: When to call for senior help.

6. Case 5: Ethical & Patient Communication (15 mins)

Simulate: Counseling for informed consent (risks/benefits).

Role-play: Explaining post-op care (ice packs, analgesia, hygiene).

7. Q&A & Skill Practice (10 mins)

Students practice scissor grip and suturing on models.

Practical Training 9.6 : Prasava vidhi -Mechanism of labour

Duration: 2 Hours

Mode: Teacher-led demonstration with student participation & record-keeping

Teacher demonstrates:

1. Introduction & Tools (15 mins)

Teacher demonstrates:

Pelvic model (Stree Shroni), fetal doll (Garbha), and birth canal simulator.

Use of a partogram to record labor progress.

Students prepare:

Observation sheets (template provided).

Labels for stages: Prathama, Dvitiya, Tritiya Kala (1st, 2nd, 3rd stages).

2. Demonstration of Cardinal Movements (45 mins)

Teacher performs on a birth simulator, explaining each step:

Engagement (Pravesha): Fetal head enters pelvic inlet (biparietal diameter at spines).

Descent (Avatarana): Progress through pelvis (measured by station -3 to +3).

Flexion (Namana): Chin-to-chest to reduce head diameter.

Internal Rotation (Antah Parivartana): Occiput rotates anteriorly under symphysis pubis.

Extension (Paschat Prasarana): Head delivers by extending over perineum.

Restitution (Punarsthapana): Head realigns with shoulders.

External Rotation (Bahih Parivartana): Shoulders rotate to AP diameter for delivery.

Students:

Palpate fetal head position on models.

Sketch movements in records with time stamps.

3. Role-Play: Labor Monitoring (30 mins)

Scenario: Simulate a progressing labor (teacher acts as midwife).

Tasks for students:

Vaginal Exam: Assess dilation (on cervical model) and station.

Plot findings on partogram (e.g., dilation rate, fetal heart rate).

Identify delays (e.g., Vata-related arrest ? note rigidity).

4. Ayurvedic Correlation (20 mins)

Discuss:

Vata Dosha's role in propulsion (Avarana if obstructed).

Prasava Paricharya for Vata balance (e.g., Snehapana, Ushna Jala Pana).

Record:

Dosha-specific observations (e.g., dry cervix ? Vata).

5. Debrief & Documentation (10 mins)

Students submit:

Completed partogram with annotations.

1. Page reflection comparing Ayurvedic and modern mechanisms.

Materials Provided:

Pelvic/fetal models, partogram sheets, Garbha Pravesha Vidhi charts.

Timer, lubricant, cervical dilation simulators.

Practical Training 9.7 : Anagata-prasava paricharya (Management of foetal descent failure)

Demonstration by students:

Activity 1: Clinical Examination & Diagnosis (1 Hour)

Task: Identify causes of delayed fetal descent in simulated cases.

Steps:

Pelvic Assessment (Stree Shroni Pariksha):

-Measure pelvic diameters (inlet, outlet) on models.

-Palpate sacral promontory and ischial spines for cephalopelvic disproportion.

Fetal Position Assessment (Garbha Sthiti):

-Leopold's maneuvers to detect malposition (e.g., occiput posterior).

-Use ultrasound (simulated) to confirm fetal lie and presentation.

Ayurvedic Evaluation (Dosha Analysis):

-Correlate Vata dominance (dryness, rigidity) with uterine inertia.

-Observe Pitta-Kapha imbalances (e.g., edema, infections).

Tools: Pelvic models, fetal dolls, ultrasound simulators.

Activity 2: Case-Based Management (1 Hour)

Task: Develop Prasava Paricharya (labor management) plans for 3 scenarios:

Case 1: Vata-Related delay (Hypotonic contractions, dry birth canal)

Interventions:

Snehana-Swedana (oleation/fomentation) with Bala Taila.

Vata-pacifying diet (warm milk, ghee).

Modern: Oxytocin augmentation (simulated).

Case 2: Cephalopelvic Disproportion

Interventions:

Trial of labor with Yoni Pichu (medicated vaginal tampon) for relaxation.

Decision-making for cesarean vs. instrumental delivery.

Case 3: Emotional Distress (Mana Imbalance)

Interventions:

Satvavajaya (counseling, Pranayama).

Ambulation and position changes (Vata-pacifying postures).

Debrief: Compare Ayurvedic and biomedical approaches

Activity 3: Simulation & Role-Play (1 Hour)

Task: Manage a simulated Anagata-prasava delivery.

Steps:

Team Roles: Assign Vaidya (Ayurvedic physician), midwife, and obstetrician.

Scenario:

Stage 2 arrest ? Perform Dhupana (inhalation of medicated fumes) therapy (simulated).

Apply fundal pressure (mock) and assess fetal heart rate.

Decision Point:

Choose between Prasuti Karma (Ayurvedic maneuvers) or cesarean.

Assessment: Checklist for timely interventions and communication.

Experiential learning Activity

Experiential-Learning 9.1 : Monitoring of progress of labour

Activity-1: Monitoring progress of labour: 2 hours

Tools Needed:

- Sample amniotic fluid charts & CTG tracings
- Case vignettes with maternal-fetal data
- Partogram templates

Activity Steps:

Assign Case Studies – Students review 10 real/virtual labour cases with varying complexities.

Assess Amniotic Fluid – Check colour (clear/meconium/blood-tinged) and consistency.

Interpret Reports – Analyze CTG, ultrasound (AFI), or lab findings (pH, infection markers).

Detect Abnormalities – Identify issues like fetal distress, poor progress, or infection.

Reflect on outcomes – Discuss how findings impact delivery decisions and neonatal health.

Record Observations – Document findings in a structured labour monitoring sheet.

Experiential-Learning 9.2 : Prasavapurva Paricharya (pre-labour care)

Student Hands-on Practice:

Activity-I: 2 hours

A. Simulation/ real case exercise – Labour monitoring & Partogram plotting:

Given a case scenario, students plot:

- Cervical dilation progression
- FHR decelerations/accelerations
- Contraction frequency & duration
- Identify if labour is normal, delayed, or obstructed based on plotted data.

B. Role-Play – Decision Making in Labour:

Students act as obstetricians, discussing interventions (e.g., augmentation, C-section) based on partogram findings

Activity-II: 1 hour

Students are assigned real cases/case vignettes (minimum 05)

Each student designs a personalized 1-week Prasavapurva (antenatal) plan for a Vataja Prakriti pregnant woman, incorporating:

- Ahara (e.g., warm milk with Ashwagandha, Vata-pacifying diet)
- Abhyanga (oil massage with Sesame or Bala Taila)

- Pranayama (Nadi Shodhana, Bhramari)

C. Students demonstrate the plan on consenting pregnant women under supervision.

2. Reflect on the fetal /labour outcomes

Assess if the Prasavapura plan improved fetal stability (e.g., reduced fetal distress, optimal descent).

Compare outcomes of non-prasava pura paricharya women with women who had undergone prasavapura paricharya.

3. Record the observations

Maintain detailed documentation of:

- Maternal compliance with the plan.
- Labour trends & fetal well-being.
- Subjective feedback from the mother.

Experiential-Learning 9.3 : Obstetric High Dependency Unit

Activity-I: 03 hours

I. Simulation-Based Scenarios

Activity: High-fidelity simulations (e.g., eclamptic seizure, massive PPH).

Debrief: Guided reflection on decision-making, teamwork, and technical skills.

2. Case-Based Discussions

Activity: Analyze real/simulated OHDU cases (e.g., peripartum cardiomyopathy, sepsis).

Outcome: Group discussion on differential diagnoses and management plans

Students will –

Assess and interpret hemodynamic parameters (BP, HR, SpO₂, urine output) in critically ill obstetric patients using real patient cases or high-fidelity simulators.

Demonstrate stabilization techniques for obstetric emergencies (e.g., severe preeclampsia, PPH) on mannequins or simulated patients, including IV access, fluid resuscitation, and emergency medication administration.

Perform structured handovers (using SBAR technique) for at least two real or simulated OHDU cases, ensuring clear communication with the multidisciplinary team.

Practice invasive monitoring procedures (e.g., setting up arterial lines, interpreting CVP readings) on simulation models or under supervision in the OHDU.

Engage in a multidisciplinary team simulation (e.g., eclampsia crisis) with assigned roles (obstetrician, anesthetist, midwife) to enhance teamwork and crisis management skills.

Experiential-Learning 9.4 : Prasava Vidhi (Mechanism of normal labour)

Duration: 5 Hours

Objective: Perform, document, and analyze the stages and cardinal movements of labour through hands-on activities.

Activity 1: Pelvic Anatomy & Fetal Positioning Lab (1 Hour)

Task:

Examine a Stree Shroni (female pelvis model) and Garbha (fetal doll).

Palpate and mark pelvic landmarks (sacral promontory, ischial spines) with colored stickers.

Demonstrate fetal engagement by positioning the doll in the pelvic inlet.

Documentation:

Sketch pelvic diameters and fetal head position in records.

Label Vata-dominant zones (e.g., sacral curvature for propulsion).

Activity 2: Simulation of Cardinal Movements (1.5 Hours)

Task:

Use a birth simulator to replicate:

Engagement (Pravesha) – Measure station (-3 to +3).

Internal Rotation (Antah Parivartan) – Rotate occiput anteriorly.

Extension (Paschat Prasarana) – Deliver head over perineum.

Time each movement with a stopwatch.

Documentation:

Record timings and angles of rotation in a partogram template.

Note deviations (e.g., delayed rotation ? correlate with Vata imbalance).

Activity 3: Live Perineal Support & Delivery Practice (1 Hour)

Task:

Perform Ritgen's maneuver on a perineal mannequin:

Apply warm compresses (Ushna Sweda).

Support perineum during "crowning."

Practice controlled head delivery to prevent tears.

Documentation:

Diagram hand positions and perineal tension.

Reflect on Ayurvedic measures (Snehana with Bala Taila).

Activity 4: Role-Play Labour Monitoring (1 Hour)

Task:
Simulate a labour scenario in teams:
Vaidya (Ayurvedic): Assess Dosha status (e.g., dry cervix ? Vata) and track cervical dilation (on model).
Observer: Document findings.
Intervene for "delayed descent" (Anagata-prasava) with:
Position changes (Vata-reducing: squatting).
Pranayama (simulated breathing techniques).
Documentation:
Fill a combined partogram + Dosha sheet.
Justify interventions (e.g., "Squatting for Apana Vayu activation").
Activity 5: Video Analysis & Reflection (30 mins)
Task:
Watch a real labour video (normal vs. obstructed).
Compare observed movements with textbook Prasava Vidhi.
Debrief on Dosha imbalances in obstructed labour (e.g., Vata rigidity).
Documentation:
Write a 300-word case analysis linking:
Biomedical causes (e.g., CPD).
Ayurvedic parallels (Avarana by Vata).
Records to Submit:
Pelvic & Fetal Sketches (anatomy + positioning).
Partogram with timings and interventions.
Perineal Support Diagrams + reflection.
Case Analysis (video observations).
Dosha Assessment Sheet (e.g., "Vata dominance ? delayed rotation").

Experiential-Learning 9.5 : Steps and techniques of Episiotomy procedure

Session- 4 hours
Hour 1: Foundational Knowledge & Clinical Reasoning
1.1: Interactive Pre-Test (15 mins)
Activity: Digital quiz (e.g., Kahoot!) on core concepts.

1.2: Guided Anatomy & Decision-Making (45 mins)

Activity: Small group work with pelvic models and clinical scenario cards.

Hour 2: Procedural Deconstruction & Initial Skill Acquisition

2.1: Expert Demonstration with Commentary (30 mins)

Activity: Live demonstration on high-fidelity simulator, emphasizing each step of incision and repair.

2.2: Part-Task Trainers (30 mins)

Activity: Stations for dedicated practice of incision (EO 2.2) and basic suturing on foam pads.

Hour 3: Integrated Procedure Practice & Complication Management

3.1: Full Procedure Simulation (30 mins)

Activity: Students perform a complete 3-layer repair on a perineal repair trainer under direct observation.

3.2: Complication Management Stations (30 mins)

Activity: Rotating stations with specific complication scenarios (e.g., extension, hemorrhage).

Hour 4: Clinical Integration & Competency Assessment

4.1: Objective Structured Clinical Examination (OSCE) Station (30 mins)

Activity: Integrated scenario combining communication, procedure, and documentation.

4.2: Structured Feedback & Reflection (30 mins)

Activity: Faculty provides structured feedback based on OSCE checklists. Students complete a self-reflection form.

Experiential-Learning 9.6 : Prasava Paricharya - Management of labour.

Analyze the Ayurvedic recommendations for diet (Ahara), lifestyle (Vihara), and Aushadha support during labor.

Evaluate the role of Vasti, Yonipichu, Nabhilepana, Nasya and other supportive therapies like Yoga and Pranayama in facilitating a smooth delivery.

Demonstrate the appropriate use of Ayurvedic formulations (Yogas) and non-pharmacological interventions (Daiva Vyapashraya) for labor support.

Formulate a holistic labor management plan integrating Ayurvedic principles and contemporary evidence-based practices.

Experiential learning activity

Activity -1: Case-Based Learning & Simulation Duration: 3 hours

Instructions:

Case Assignment:

Students are given 10 real cases/case vignettes/simulated cases related to different stages of labor (Prathama, Dwitiya, Tritiya avastha).

Cases may include scenarios like excessive pain (Shoola), maternal exhaustion (Daurbalya), or emotional distress (Bhaya).

Student Tasks:

For each case, students must:

A. Diagnose the Case

Identify the stage of labor and any associated complications.

Assess the labour progressing normally or abnormal.

B. Select Appropriate Ayurvedic Interventions

Choose relevant Aushadhis (e.g., Prasavakara Ghrita, Kebuka Taila, Bala taila, Dhanvantaram taila etc.).

Decide on Panchakarma / Sthanika chikitsa procedures (Vasti, Nasya, Yonipichu, Nabhilepana).

Suggest non-pharmacological measures (Mantra, Sattvavajaya, Pranayama, Yogasana).

C. Record the Case & Reflect on Prasava pragati.

Document the case findings, interventions, and expected outcomes.

Explain how the treatment helped the progress of labour.

Group Discussion & Role-Play (Optional)

Students present their case analyses in groups.

Simulate Yonipichu application or Nabhilepana procedure using models.

Experiential-Learning 9.7 : Application of Sthanika chikitsa.in labour

Activity-1: Duration: 3 hours

Activity Steps:

1. Preparation of Sthanika Chikitsa (1 hour)

Task:

Students prepare three key local therapies:

Yonipichu (medicated vaginal tampon using Shatavari Ghrita or Bala Taila)

Nabhilepana (umbilical paste with Dhanwantaram Thailam or Ksheerabala Taila)

Basti (medicated enema - Matra Basti or Niruha Basti for postpartum care)

Materials: medicated oils, sterile gauze, cotton, mixing bowls, and applicators.

Technique:

Demonstrate proper hygiene and measurement of ingredients.

Practice rolling and inserting Yonipichu on anatomical models/real cases.

2. Case-Based Application (1 hour)

Task: Students receive simulated labor cases/real cases with details on:

Cervical dilation (Prathama Kala: 0-4 cm, Dwitiya Kala: 4-10 cm, Tritiya Kala: delivery)

Fetal station and position (e.g., occiput anterior/posterior)

Group Discussion:

Decide which Sthanika Chikitsa is appropriate for each stage.

Justify choices (e.g., Nabhilepana in early labor for Vata pacification).

Hands-on Practice:

Apply Yonipichu in Dwitiya Kala (active labor) on mannequins /real patients.

Administer Basti post-delivery (Tritiya Kala) for recovery.

3. Stage-Specific Simulation (30 minutes)

Scenario Role-Play:

Case 1: Prathama Kala (latent phase) – Administer Matra/Niruha Basti for uterine contractions.

Case 2: Dwitiya Kala (active labor) – Use Yonipichu for cervical effacement.

Case 3: Tritiya Kala (postpartum) – Apply Nabhilepana to ease Vata symptoms.

Assessment:

Accuracy in timing and technique.

Explanation of Dosha-based rationale.

4. Reflection & Protocol Development (30 minutes)

Guided Questions:

What challenges did you face in application?

How does Sthanika Chikitsa differ from modern local therapies (e.g., soap water enema/perineal warm compresses)?

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

4

OSCE/OSPE-Based Assessment (50 marks)

Station 1 (10 marks): Label cardinal movements of labour on a mannequin/pelvic model.

Station 2 (10 marks): Demonstrate intrapartum fetal heart monitoring (CTG / fetoscope).

Station 3 (10 marks): Write down steps of active management of 3rd stage of labour (AMTSL).

Station 4 (10 marks): Differentiate normal vs abnormal labour from a case vignette.

Station 5 (10 marks): Explain Surakshita Prasava principles and supportive Ayurvedic paricharya.

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

Module 10 : Prasavakaleena Upadrava (Intrapartum complications) and Complications of stages of labour

Module Learning Objectives

(At the end of the module, the students should be able to)

- Explain the Ayurvedic and contemporary pathophysiology of Garbha Avsada (fetal distress) and Prasavakaleena Garbhamriti (intrapartum stillbirth).
- Diagnose high-risk pregnancies using integrated methods (e.g., Nadi Pariksha + CTG interpretation).
- Manage intrapartum complications with combined approaches (e.g., Bala Taila Yoni Pichu + Yoga, meditation).
- Counsel families on perinatal loss and prevention using culturally sensitive, evidence-based strategies.
- Apply Ayurvedic Garbhini Paricharya (antenatal care) to modern high-risk pregnancy protocols.

M 10 Unit 1 Garbha avasada (Fetal Distress) Garbha avasada (Fetal Distress): Causes, clinical features, diagnosis and management.

References: 1,2,3,4,15,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Discuss the etiopathogenesis (Nidana & Samprapti) of fetal distress as per Ayurveda and contemporary medicine, identify the risk factors and causes of fetal distress, including maternal, fetal, and placental factors.	1	Lecture	CAP	Knows-how	L&PPT, L,L_VC, L&GD
CO1,CO2,CO3	Plan an integrated management plan for fetal distress, including: Medical management, Obstetric interventions (timely decision for delivery, instrumental/cesarean section if needed) and apply preventive strategies (Garbhini Paricharya, Sadvritta, Yoga and meditation, Ahara-Vihara) to reduce fetal distress risk.	2	Lecture	CAP	Knows-how	L,L&PPT, L_VC
CO2,CO3,CO4	Interpret cardiotocography (CTG) tracings to identify signs of fetal distress (late decelerations, reduced variability, tachycardia/bradycardia), demonstrate the use of Doppler ultrasound to assess fetal blood flow (umbilical artery, middle cerebral artery)	2	Practical Training 10.1	CE	Knows-how	D-M,D-BED,SIM

	and correlate clinical findings (meconium-stained liquor, abnormal fetal heart rate) with Ayurvedic concepts (Dosha Dushti, Garbha Avasada).					
CO2,CO3,CO4,CO5	Identify immediate measures to stabilize the fetus using modern techniques and Ayurvedic formulations, demonstrate NST, interpret Cardiotocography and apply Ayurvedic Garbhini Paricharya (antenatal care) protocols to prevent fetal distress in high-risk pregnancies.	2	Practical Training 10.2	CAN	Knows-how	D-BED,CBL,D-M,X-Ray,TBL
CO2,CO3,CO4,CO5	Demonstrate responsive protocol for Garbhavasada, appropriate delivery methods, management of foetal distress and communication with patients or relatives effectively.	6	Experiential-Learning 10.1	AFT-RES	Shows-how	CBL,PBL,RLE
<p>M 10 Unit 2 Prasavakaleena Garbhamrita (Still birth)Prasavakaleena Garbhamrityu (Stillbirth)—causes, clinical features, diagnosis, maternal complications and management.</p> <p>References: 2,3,4,15,17,23,26</p>						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyze the etiopathogenesis (Samprapti) of Prasavakaleena Garbhamriti (stillbirth) from Ayurvedic (Dosha-Dushya samprapti) and modern perspectives (placental insufficiency, infections, etc.). Evaluate the diagnostic criteria for stillbirth, difference between Garbha Shosha (IUGR), Garbha Mriti (fetal demise), and modern classifications (fresh vs. macerated stillbirth). Design a multidisciplinary management plan for psychological and physical care of the mother post-stillbirth, including Satvavajaya Chikitsa (counselling) and Sutika paricharya (Puerperal regimen).	1	Lecture	CK	Know	L&PPT, L,L_VC
CO3,CO4,CO5,CO7	Identify risk factors and causes of stillbirth through maternal history, fetal examination, and placental pathology and demonstrate systematic clinical examination of stillborn foetus, key investigations and parent counselling.	3	Practical Training 10.3	PSY-MEC	Shows-how	D,PAL,D-BED,PER,PL

CO2,CO3,CO4,CO5,CO7	Demonstrate the clinical management of stillbirth, including maternal stabilization, labor induction, delivery, compassionate care and emotional support for bereaved parents, systematic post delivery examination and role of investigations.	3	Practical Training 10.4	CAN	Knows-how	SIM,D-BED,PER,Mnt,C_L
CO2,CO3,CO4,CO7	Classify stillbirth using WHO criteria and gestational age (early, late, term), identify maternal, fetal, placental, and genetic risk factors through history and examination, discuss fetal autopsy, placental pathology, and laboratory investigations, interpret ultrasound, autopsy, and lab findings to establish probable causes, and communicate empathetically with bereaved parents by explaining diagnostic findings.	4	Experiential-Learning 10.2	AFT-CHR	Shows-how	RLE,CBL,SIM
CO2,CO3,CO4,CO7	Demonstrate the immediate clinical steps in managing stillbirth (maternal stabilization, labor induction, and delivery), perform a respectful post-delivery examination of the fetus and placenta to identify potential causes, explain the role of investigations (autopsy, placental pathology, labs), practice empathetic communication with bereaved parents including breaking bad news and obtaining consent for autopsy, and design a follow-up care plan addressing physical recovery, psychological support, and future pregnancy counseling.	4	Experiential-Learning 10.3	AFT-VAL	Shows-how	RLE,SIM

M 10 Unit 3 Obstetric management of high-risk pregnanciesObstetrics management of Eclampsia, Abruption placenta, Gestational Diabetes mellitus.
References: 23

3A	3B	3C	3D	3E	3F	3G
CO1	Identify the clinical features and complications of eclampsia, its pathophysiology and maternal–fetal impact, outline stepwise acute management including magnesium sulfate, blood pressure control, and seizure prophylaxis, develop definitive obstetric plans regarding timing and mode of delivery, and discuss postpartum care with long-term follow-up.	2	Lecture	CAN	Knows-how	JC,L&PPT,L_VC,L
CO1	Analyse the risk factors for placental abruption, recognize typical and atypical presentations, apply the clinical grading and appropriate diagnostics, prioritize emergency stabilization with an ABCDE approach, and formulate evidence-based delivery plans based on gestational age, maternal status, and fetal condition.	2	Lecture	CAN	Knows-how	CBL,LS,L,PSM,DIS

CO1	Describe the complication of all stages of labour (Prasavottar Raktastrava-Postparum Haemorrhage, Garbhashaya Vyutkramana- Inversion of uterus and Janm marga kshati-injuries to the Birth canal) and their management.	2	Lecture	CC	Knows-how	L&PPT , BL,L_VC ,LS,L&G D
CO2,CO4,CO5 ,CO7	Demonstrate the diagnosis, differential diagnosis, management of Eclampsia and delivery plan for Eclampsia patient.	3	Practical Training 10.5	CAN	Knows-how	D-M,Mnt, LRI,RP,T BL
CO2,CO3,CO4 ,CO5,CO7	Identify clinical signs of abruptio placenta, management of haemorrhaging patients and DIC and demonstrate post-delivery uterine compression techniques.	4	Practical Training 10.6	CAN	Knows-how	D-BED,D -M,PER, RP,TBL
CO2,CO4,CO5	Demonstrate evidence based protocol for intrapartum glucose monitoring, insulin management plans for GDM patients, fetal surveillance, potential delivery complications and glucose management plans.	3	Practical Training 10.7	CAP	Knows-how	PBL,D-B ED,D,PE R,C_L
CO2,CO3,CO4 ,CO5,CO7	Identify the signs, management, dosage forms and emergency conditions of Eclampsia.	6	Experiential-Learning 10.4	PSY-MEC	Shows-how	RLE
CO2,CO3,CO4	Identify the risk factors, clinical signs, grading, diagnostic tools, emergency and complication management of Abruptio placenta	3	Experiential-Learning 10.5	CS	Shows-how	RLE,SIM
CO2,CO3,CO4	Demonstrate intrapartum glucose monitoring techniques, insulin regimens, CTG patterns and shoulder dystocia maneuvers in GDM specific scenarios.	3	Experiential-Learning 10.6	PSY-MEC	Shows-how	RLE

Practical Training Activity

Practical Training 10.1 : Evaluation of Garbha avasada (Fetal Distress)

Demonstration by teacher - 2 hours

1. Introduction & Overview (20 mins)

Activity: Brief recap of fetal distress (definition, causes, Ayurvedic correlation [Garbha Soshana/Dosha Dushti]).

Teacher's Role: Use a flowchart to compare modern and Ayurvedic pathophysiology.

2. Live/Simulated Fetal Monitoring (60 mins)

Activity 1: CTG Interpretation

Demonstrate normal vs. abnormal CTG tracings (late decelerations, tachycardia, loss of variability).

Highlight how Ayurvedic principles (Vata-Pitta imbalance) correlate with fetal hypoxia.

Activity 2: Doppler Ultrasound Demo

Show umbilical artery/MCA waveforms and explain compromised blood flow.

3. Clinical Case Demonstration (40 mins)

Case Scenario: Simulated patient with meconium-stained liquor + fetal bradycardia.

Teacher's Demonstration:

Step-by-step clinical assessment (abdominal palpation, auscultation, cervical exam).

Decision-making: When to intervene? (e.g., O2 administration, position change, emergency delivery).

Practical Training 10.2 : Management of Garbha avasada (Fetal Distress)

Demonstration by Teacher - 2 hours

Interactive Recap (10 mins): Use a flowchart to compare:

Modern pathophysiology (umbilical cord compression, placental insufficiency)

Ayurvedic concepts (Vata-Pitta prakopa, Garbha Poshanavarodha)

Case Presentation (5 mins)

Present a real case vignette:

"32-week primigravida with reduced fetal movements and meconium-stained liquor"

Phase 2: Diagnostic Demonstrations (40 mins)

Modern Monitoring (20 mins)

Live CTG demonstration:

Show normal vs. pathological traces

Demonstrate how to identify late decelerations/variability loss

Doppler ultrasound demo (if available):

Umbilical artery PI measurement

Middle cerebral artery Doppler

Ayurvedic Assessment (20 mins)

Demonstrate Nadi Pariksha for Garbha Vikriti

Show Garbha Sthiti Pariksha (abdominal palpation correlating with Vata dominance)

Prepare and explain:

Shatavari Ghrita for fetal resilience

Dashamoola Kwatha for Vata imbalance

Phase 3: Management Protocols (45 mins)

Acute Management (25 mins)

Simulation drill:

Maternal repositioning + Oxygen administration

IV fluid bolus demonstration

Decision point: When to proceed to emergency delivery?

Simultaneously show:

Modern: Preparation for cesarean section

Ayurvedic: Snehapana with Bala Taila while prepping OR

Chronic Management (20 mins)

Demonstrate formulation of:

Ashwagandha-Yashtimadhu Kalpa for daily use

Medicated Vasti protocol for high-risk cases

Show lifestyle modifications:

Garbhini Ahara (diet for placental perfusion)

Yoga poses (Viparita Karani for circulation)

Phase 4: Crisis Scenario & Decision Making (15 mins)

Simulated Emergency (10 mins)

Role-play: Shoulder dystocia with fetal distress

Demonstrate:

McRoberts maneuver + suprapubic pressure

Ethical Discussion (5 mins)

"When would you prioritize maternal health over fetal survival?"

Compare Ayurvedic Maatru-Aarogya principle vs. modern obstetric ethics

Phase 5: Integration & Wrap-up (5 mins)

Quick Skill Check

"Name one Ayurvedic and one modern intervention you'd combine for chronic fetal distress".

Apply Ayurvedic Garbhini Paricharya (antenatal care) protocols to prevent fetal distress in high-risk pregnancies.

Practical Training 10.3 : Diagnostic method of Garbhakaleena Garbhamriti - Intrapartum fetal death - stillbirth

Activities:

Practical 1

Practical Learning Activities (3-Hour Session)

1.Introduction & Case Discussion (30 min)

Activity: Facilitated discussion on stillbirth definitions (WHO criteria) and global/local epidemiology.

Case Scenario: Present a real/hypothetical case of stillbirth—discuss risk factors (maternal, fetal, placental).

Group Task: List possible causes (infections, placental insufficiency, congenital anomalies, etc.).

2.Fetal & Placental Examination (60 min)

Hands-on Activity (if models/simulators available):

Perform anthropometric measurements (fetal weight, length, head circumference).

Identify external abnormalities (facial dysmorphism, limb defects, skin maceration).

Examine the placenta (cord insertion, infarcts, clots, infections).

Visual Aids: Use images/videos of stillborn exams (if real specimens are unavailable).

Small Groups: Rotate through stations (fetal exam, placental assessment, documentation).

3.Role-Play: Breaking Bad News & Counseling (45 min)

Simulated Scenario: Learners take turns playing the doctor and grieving parents.

Structured Feedback: Peers and facilitator assess communication skills (empathy, clarity, non-verbal cues).

Key Points: Discussing autopsy consent, psychological support, and recurrence risks.

4.Interactive Case-Based Learning (45 min)

Group Work: Given a stillbirth case (history, lab reports, ultrasound, autopsy findings), determine likely cause.

Debrief: Compare group conclusions with actual diagnosis (if available).

Discussion: How findings influence future pregnancy management.

5.Wrap-Up & Q&A (30 min)

Recap Key Takeaways: Most common causes, essential investigations, counseling principles.

Open Forum: Address learner questions and concerns.

Take-Home Task: Write a reflective note on challenges in stillbirth diagnosis/counseling.

Practical Training 10.4 : Management of Prasavakaleena Garbhamrita (Still birth).

Practical Learning Activities (3-Hour Session)

1.Introduction & Case-Based Discussion (30 min)

Activity: Brief lecture on stillbirth management protocols (WHO/local guidelines).

Case Scenario: Present a case of intrauterine fetal demise (IUFD) at 32 weeks—discuss immediate steps.

Group Discussion: What are the key priorities in managing stillbirth (maternal health, delivery, parental support)?

2.Simulation: Labor Induction & Delivery (60 min)

Hands-on Activity (using mannequins/simulation):

Demonstrate steps for labor induction (misoprostol, Foley catheter, oxytocin protocols).

Practice managing delivery (vaginal vs. cesarean if needed) with emphasis on minimizing trauma.

Role-Play:

Simulate a multidisciplinary team approach (OBGYN, midwife, counselor) during delivery.

Discuss pain management and emotional support during labor.

3.Post-Delivery Examination & Investigations (45 min)

Station-Based Learning:

Station 1: Fetal examination (measurements, dysmorphism, photography for records).

Station 2: Placental examination (gross pathology, sampling for histopathology).

Station 3: Counseling on autopsy and genetic testing (role-play obtaining consent).

Debrief: Why each step is critical for determining cause and recurrence risks.

4.Breaking Bad News & Bereavement Support (45 min)

Role-Play Activity:

Learners take turns delivering bad news to "parents" (simulated patients/actors).

Practice phrases like, "I'm so sorry, but your baby has no heartbeat."

Feedback Session:

Peers and facilitators assess empathy, clarity, and non-verbal communication.

Discuss cultural and religious sensitivities in grief counseling.

5.Follow-Up & Future Pregnancy Planning (30 min)

Group Discussion:

When to schedule follow-up visits?

How to discuss recurrence risks (e.g., diabetes, hypertension, thrombophilia)?

When is preconception counseling needed?

Case Scenarios:

"A mother with a previous stillbirth wants to try again—what advice would you give?"

Assessment & Wrap-Up

Quick Quiz (10 min): MCQs on key management steps.

Reflection Activity (10 min): "What was the most challenging part of today's session, and why?"
Q&A (10 min): Clarify doubts and summarize key takeaways.

Practical Training 10.5 : Obstetric management of Eclampsia

Practical Learning Activities (3-Hour Session)

1. Case-Based Discussion & Recognition (30 min)

Activity: Present a real or simulated case of a pregnant woman with severe preeclampsia progressing to eclampsia.

Task:

Groups discuss key clinical features (headache, visual disturbances, seizures, hypertension, proteinuria).

Differentiate eclampsia from other conditions (e.g., epilepsy, stroke, HELLP syndrome).

2. Simulation Drill: Acute Eclampsia Management (60 min)

Activity: High-fidelity simulation (or role-play with a mannequin) of a patient having an eclamptic seizure.

Tasks:

Step 1: Secure airway, position laterally, administer oxygen.

Step 2: Administer magnesium sulfate (IV loading dose) and monitor for toxicity.

Step 3: Control BP with IV labetalol/hydralazine.

Step 4: Assess fetal status and prepare for delivery.

Debrief: Discuss team roles, common errors, and time-critical interventions.

3. Delivery Planning & Decision-Making (45 min)

Activity: Small-group discussion on two case scenarios:

Case 1: Eclampsia at 28 weeks – weighing risks of prematurity vs. maternal safety.

Case 2: Eclampsia at 38 weeks – decision between vaginal delivery vs. C-section.

Task: Present a delivery plan with justification for timing and mode.

4. Postpartum Care & Follow-Up (30 min)

Activity: Interactive quiz or tabletop exercise on:

Monitoring for postpartum eclampsia (can occur up to 6 weeks postpartum).

Long-term risks (hypertension, renal disease, cardiovascular risks).

Counseling on future pregnancy risks and prevention strategies (low-dose aspirin, calcium, close monitoring).

5. MCQ/Quick Quiz & Wrap-Up (15 min)

Activity: 5-10 rapid-fire questions (e.g., MgSO₄ toxicity signs, first-line antihypertensives, delivery indications).

Discussion: Key takeaways and common pitfalls in eclampsia management.

TLM: Simulation, Case discussions

Practical Training 10.6 : Obstetric management of abruptio placenta

Activities: 4 hours

1. Case-Based Triage Drill (30 min)

Activity: "Code Placenta" - Rapid-fire case scenarios

Teams receive 3 escalating cases (Grade I-III abruption)

Tasks:

Identify red flags in each scenario

Prioritize actions using SBAR (Situation-Background-Assessment-Recommendation)

Tool: Timed digital quiz with instant feedback

2. High-Fidelity Simulation (90 min)

Scenario: Unstable abruption with concealed hemorrhage

Phases:

Recognition:

Mannequin with rigid abdomen + worsening CTG

Learners palpate "woody" uterus and recognize concealed hemorrhage

Resuscitation:

Place 2 large-bore IVs

Simulate massive transfusion protocol (4 units PRBCs: 4 FFP: 1 platelet)

Delivery:

Emergency C-section decision with "fetal bradycardia"

Manage Couvelaire uterus findings

Debrief: Video playback of team performance

3. Skills Stations Rotation (60 min)

Groups rotate every 20 minutes:

Station 1: DIC Lab

Analyze lab results (? fibrinogen, ?D-dimer)

Calculate blood product ratios for simulated hemorrhage

Station 2: CTG Interpretation

Identify abruption patterns (late decelerations ? prolonged bradycardia)

Practice intrauterine resuscitation (O?, left tilt, tocolysis if preterm)

Station 3: Utonox™ Uterine Balloon

Hands-on training for postpartum hemorrhage control
Practice packing techniques for atonic uterus
4.Multidisciplinary Team Challenge (30 min)
Activity: "The Golden Hour" - Real-time abruption management game
Teams compete to:
Order correct labs (CBC, coagulation panel, KB test)
Prepare blood products
Call anesthesia for emergency delivery
Scoring: Speed + accuracy of decisions
5.Counseling Role-Play (30 min)
Scenario: Patient with previous abruption planning next pregnancy
Learner Tasks:
Explain recurrence risks (10-25%)
Recommend prevention (low-dose aspirin, smoking cessation)
Address PTSD from prior stillbirth
Tool: Standardized patient with emotional responses
Assessment Tools
Checklists: For DIC management and delivery decisions
Team Evaluation: Using NOTECHS II scale for non-technical skills
Pre/Post-Test: 10-question quiz on critical actions
Low-Resource Adaptations:
Replace high-fidelity sim with moulage (fake blood under abdominal binder)
Use paper-based transfusion calculators instead of electronic systems

Practical Training 10.7 : Obstetric management of Gestational Diabetes

Activities: 3 hours
Format: Interactive lecture with live demonstrations, case scenarios, and skills practice
1.Intrapartum Glucose Monitoring Protocol (30 min)
Demonstration:
Show real glucose monitoring devices (continuous vs. point-of-care)
Live demo of correct fingerstick technique and documentation
Display a sample monitoring log with target ranges (pre-labor vs. active labor)

Interactive Element:

Groups analyze 3 patient scenarios to determine monitoring frequency

Poll: "Would you monitor Q1h or Q2h for this well-controlled GDM patient?"

2. Insulin Management Plans (45 min)

Demonstration:

Prepare IV insulin drip (show calculation: units/kg/hour)

Compare with subcutaneous sliding scale protocols

Project a decision tree for when to switch between methods

Hands-on Practice:

Learners calculate insulin doses for different BMI patients

Error-spotting game: Identify mistakes in prepared insulin orders

3. Fetal Surveillance in GDM (30 min)

Demonstration:

Interpret 3 CTG tracings showing:

Early decelerations (normal)

Late decelerations (hyperglycemia effect)

Saltatory pattern (cord compression risk)

Show AIUM guidelines for ultrasound surveillance

Case Challenge:

"This patient's glucose is 150 mg/dL with recurrent variables – what's your next step?"

4. Delivery Timing Strategies (30 min)

Demonstration:

Present a gestational age vs. glucose control matrix (39 weeks vs. earlier delivery)

Show ACOG guidelines on elective induction in GDM

Group Activity:

Teams debate: "Induce at 38+5 or wait for spontaneous labor?" for 2 case studies

5. Complication Preparedness (30 min)

Demonstration:

Shoulder dystocia drill: McRoberts maneuver + suprapubic pressure

PPH kit: Show uterotonics (extra oxytocin for GDM patients)

Simulation Lite:

"Glucose spikes to 180 mg/dL during shoulder dystocia – what do you prioritize?"

6. Postpartum Transition (15 min)

Demonstration:

Compare postpartum insulin tapering vs. oral agent protocols

Show a discharge checklist with follow-up testing reminders

Closing Activity:

Learners create a 3-step postpartum plan for a patient on IV insulin during labor

Teaching Tools Needed

Glucose meters + test strips

IV insulin preparation supplies

CTG strips with GDM-specific patterns

Shoulder dystocia mannequin

Sample medication orders for error-spotting

Assessment:

Spot quizzes during demonstrations

Group case responses evaluated with rubric

Experiential learning Activity

Experiential-Learning 10.1 : Management of Garbha avasada (Foetal Distress)

1. Simulation Drill: Immediate Response to Acute Garbhavasada (1.5 Hours)

Activity - Scenario-Based Emergency Simulation:

A case of acute fetal distress (abnormal heart rate, meconium-stained liquor) is presented.

Students must perform rapid assessment (Doppler, CTG, maternal vitals).

Execute emergency protocols:

Ayurvedic: Basti (if time permits / chronic cases).

Modern: Maternal oxygen, IV fluids, positioning, and preparation for emergency delivery.

Debrief: Discuss correct actions, errors, and time-critical decisions.

2. Case-Based Role-Play: Diagnosis & Risk Factor Analysis (1.5 Hours)

Activity - Role Assignment:

Group 1 (Clinicians): Diagnose Garbhavasada using -

Ayurvedic: Garbha Pariksha (uterine palpation, Garbha Sphurana assessment).

Modern: CTG tracing, USG findings, APGAR score prediction.

Group 2 (Researchers): Identify risk factors (e.g., maternal Vata imbalance, IUGR, hypertension, diabetes).

Interactive Discussion:

Compare Ayurvedic Nidana (e.g., Dauhrida Avamana, Vega Dharana) vs. modern risks (placental insufficiency, cord prolapse).

3. Delivery Method Planning & Management Strategies (1 Hour)

Activity - Small Group Task: Given 3 case scenarios (mild, moderate, severe distress), each group must:

Decide delivery method (normal, forceps/vacuum, C-section).

Justify Ayurvedic support (e.g., Mustadi Kwatha for uterine tone, Yapana Basti for chronic cases).

Debate: "When is modern intervention mandatory vs. Ayurvedic management sufficient?"

4. Managing Acute vs. Chronic Fetal Distress (1 Hour)

Activity - Comparison Workshop:

Acute Cases: Hands-on simulation (as in Activity 1).

Chronic Cases: Long-term management planning (Santarpana vs. Apatarpana Chikitsa, Garbhini Paricharya modifications).

Poster Presentation: Each group presents differences in management approaches.

5. Patient Counseling & Communication Skills (1 Hour)

Activity - Role-Play:

Student 1: Doctor explaining Garbhavasada to an anxious family.

Student 2: Relative asking about risks, delivery options, and Ayurvedic safety.

Feedback Round: Peers assess clarity, empathy, and accuracy of information.

Experiential-Learning 10.2 : Prasavakaleena Garbhamriti (Still birth)

Experiential Learning Activities (4 Hours)

1. Interactive Case-Based Introduction (30 min)

Activity: Small groups review a real/hypothetical stillbirth case (e.g., "32-week IUFD in a diabetic mother").

Task: Brainstorm potential causes using a "Fishbone Diagram" (categories: maternal, fetal, placental, environmental).

Debrief: Facilitator summarizes key risk factors and diagnostic pathways.

2. Hands-On Fetal & Placental Examination (90 min) (Simulated/Real Specimens)

Station 1: Fetal Examination

Practice anthropometry (weight, foot length, head circumference) and assess for maceration/dysmorphology.

Use checklists to document findings (e.g., cleft palate, limb anomalies).

Station 2: Placental Pathology

Examine placental models/specimens for infarcts, clots, cord abnormalities (e.g., velamentous insertion).

Discuss how findings correlate with causes (e.g., infarcts ? placental insufficiency).

Station 3: Imaging & Lab Correlation

Review ultrasound images (e.g., absent fetal movement, oligohydramnios) and lab reports (TORCH, karyotype).

3. Simulated Autopsy & Multidisciplinary Review (60 min)

Role-Play:

Learners act as pathologists, obstetricians, and geneticists to "present" findings from a mock autopsy report.

Debate the most likely cause (e.g., "Was it preeclampsia or fetal infection?").

Key Discussion:

When is genetic testing (microarray) indicated?

How does placental histopathology change management in future pregnancies?

4. Breaking Bad News & Counseling (60 min)

Simulated Scenarios:

Learners rotate through 3 stations, counseling "parents" (actors/peers) at different stages:

Diagnosis: "Your baby has no heartbeat."

Consent for Autopsy: Explain benefits/limitations.

Follow-Up Visit: Share investigation results (e.g., "The placenta showed severe infarcts").

Feedback: Peers rate communication skills using a modified SPIKES protocol (empathy, clarity, silence use).

5. Reflection & Application (30 min)

Small Groups:

Design a stillbirth diagnostic protocol for their workplace, prioritizing cost-effective tests.

Discuss one ethical challenge (e.g., religious objections to autopsy).

Wrap-Up:

"One Word" Reflection: Each learner shares a takeaway (e.g., "Compassion," "Thoroughness").

Q&A: Address lingering doubts.

Logistics & Adaptations

Low-Resource Settings: Use photographs, 3D-printed models, or virtual autopsy software if specimens unavailable.

Sensitivity: Provide trigger warnings and assign a counselor for distressed learners.

Experiential-Learning 10.3 : Active management, documentation, legal and ethical consideration. of Prasavakaleena Garbhamrita (Still birth) .

Experiential Learning Activities (Student-Led Demonstrations)

**1. Introduction & Case Scenario (30 min)

Student-Led Activity:

A student presents a brief case (e.g., "A 28-week stillbirth in a hypertensive mother").

Peers discuss immediate actions (maternal assessment, delivery options, emotional support).

Group Task:

Create a step-by-step flowchart for stillbirth management (from diagnosis to post-delivery care).

**2.Simulated Labor & Delivery (90 min) (Student Demonstrators + Mannequins/Simulation Tools)

Station 1: Induction Protocol Demonstration

Students demonstrate labor induction methods (misoprostol, Foley catheter, oxytocin) using simulation models.

Discuss pain relief options and monitoring during labor.

Station 2: Delivery & Immediate Postpartum Care

Show gentle handling techniques for stillborn delivery (vaginal/C-section if needed).

Practice maternal hemorrhage management (PPH risk in stillbirth).

Debrief: What went well? What challenges arose?

**3.Fetal & Placental Examination (60 min) (Hands-On)

Student Demonstrators:

Perform a systematic fetal exam (measurements, dysmorphology, photography for records).

Examine a placental model/specimen, identifying abnormalities (infarcts, clots, cord issues).

Peer Learning:

Small groups practice documenting findings and correlating them with possible causes.

**4.Breaking Bad News & Counseling Role-Play (60 min)

Student-Led Scenarios:

Scenario 1: Delivering the news: "I'm so sorry, but we couldn't find your baby's heartbeat."

Scenario 2: Discussing autopsy: "This may help us understand what happened—would you like more details?"

Scenario 3: Follow-up counseling: "Based on the findings, here's what we recommend for future pregnancies."

Peer Feedback:

Use a checklist (empathy, clarity, non-verbal cues) to evaluate each demonstrator.

**5.Follow-Up Care Planning & Reflection (30 min)

Student Small Groups:

Design a follow-up care plan (e.g., 6-week visit, mental health support, preconception counseling).

Present key points in a 1-minute "pitch" to the class.

Reflection Roundtable:

"What was the hardest part of today's session? What skill do you want to improve?"

Assessment & Adaptations

Formative: Peer feedback during role-plays.

Summative: Post-session quiz ("List 3 key steps in stillbirth management").

Low-Resource Settings: Use paper-based cases, images, or videos if models unavailable.

Sensitivity Note: Assign a "wellness monitor" to check in on participants.

Key Message for Students:

"Managing stillbirth requires both clinical skill and compassionate care—your actions can help families heal."

Experiential-Learning 10.4 : Obstetric management of Eclampsia

1. Activity: Interactive Case-Based Learning – "Spot the Red Flags"

Time: 1 hour

Mode: Small Group Discussion

Instructions:

Divide into small groups.

Review provided video or paper cases depicting a patient with preeclampsia progressing to eclampsia.

As a group, analyze the symptoms presented (e.g., headache, visual changes, epigastric pain).

Develop a differential diagnosis (e.g., eclamptic seizure vs. stroke vs. epilepsy).

Prepare to present your differential to the larger group.

Debrief: An instructor will lead a discussion highlighting the key clinical decision points that signal progression to eclampsia.

2. Activity: High-Fidelity Simulation – "Code Eclampsia"

Time: 2 hours

Mode: Simulation + Debrief

Instructions:

You will participate in a simulated eclamptic seizure emergency using a high-fidelity mannequin or through role-play.

Phase 1: Seizure Management: Focus on immediate airway management, administering the MgSO₄ loading dose, and initiating BP control.

Phase 2: Maternal & Fetal Stabilization: Work to stabilize the mother while interpreting fetal monitoring. Make a decision regarding the need for emergency delivery.

Phase 3: Post-Seizure Care: Manage fluid balance and monitor for complications like pulmonary edema or renal injury.

Debrief: Participate in a video-assisted playback (if available) and discussion focused on team dynamics, potential errors, and time-critical actions.

3. Activity: Skills Stations Rotation

Time: 1 hour

Mode: Hands-on Drills (Rotating Small Groups)

Instructions:

Rotate through all three stations in assigned groups. You will have 20 minutes per station.

Station 1: "MgSO₄ Administration & Toxicity Management"

Practice calculating and preparing a MgSO₄ IV infusion.

Recognize signs of toxicity (e.g., loss of reflexes, respiratory depression).

Challenge: Manage a simulated scenario of MgSO₄ overdose by preparing and administering calcium gluconate.

Station 2: "BP Control & Antihypertensive Drills"

Gain hands-on practice preparing and administering IV antihypertensives (labetalol, hydralazine) and oral nifedipine.

Scenario: Manage a case of refractory hypertension and decide when to escalate therapy.

Station 3: "Delivery Decision-Making"

Review case cards with patients at different gestational ages (e.g., 24, 34, 39 weeks).

As a group, debate the critical question: "Deliver now or stabilize first?" and present your rationale.

4. Activity: Role-Play – Multidisciplinary Team (MDT) Meeting

Time: 1 hour

Mode: Team-Based Learning

Instructions:

Simulate a real-time "Eclampsia Huddle" with assigned roles (Obstetrician, Anesthetist, Neonatologist, Midwife, ICU Specialist).

Task: As a team, develop a unified management plan for a severe case. Your plan must include:

The mode of delivery (vaginal vs. Cesarean section).

A discussion of anesthesia risks (e.g., airway edema, thrombocytopenia).

A plan for neonatal resuscitation preparedness.

5. Activity: Postpartum & Long-Term Follow-Up Workshop

Time: 30 minutes

Mode: Role-Play

Instructions:

Participate in the "Life After Eclampsia" patient counseling workshop.

Scenario: A survivor of eclampsia asks, "Will this happen again? Can I have another baby safely?"

Task: Take turns role-playing as the healthcare provider to counsel the patient on:

Postpartum monitoring for BP, proteinuria, and neurologic symptoms.

Long-term cardiovascular risks.

Preconception advice for future pregnancies.

6. Activity: Gamified Quiz & Reflection – "Eclampsia Escape Room"

Time: 30 minutes

Mode: Interactive Assessment

Instructions:

Move through timed quiz stations in groups to solve puzzles related to eclampsia management.

Example Challenges:

"Decode the Toxicity": Match MgSO₄ side effects to the correct interventions.

"BP Crisis": Arrange the steps for managing a hypertensive emergency in the correct sequence.

"Delivery Dilemma": Choose the safest delivery route based on a given maternal-fetal status.

Wrap-Up: Participate in a final group reflection to discuss key takeaways and complete a self-assessment.

Session Flow

Time	Activity	Mode
0:00-1:00	Interactive Case-Based Learning	Small Group Discussion
1:00-3:00	High-Fidelity Simulation	Simulation + Debrief
3:00-4:00	Skills Stations (Rotation)	Hands-on Drills
4:00-5:00	Multidisciplinary Team (MDT) Role-Play	Team-Based Learning
5:00-5:30	Postpartum Counseling Workshop	Role-Play
5:30-6:00	Gamified Quiz & Reflection	Interactive Assessment

Experiential-Learning 10.5 : Obstetric management of abruptio placenta

1. Activity: Case-Based Learning – "Is This Abruptio?"

Time: 30 minutes

Mode: Group Discussion

Instructions:

Divide into small groups.

Review the provided clinical vignettes (e.g., concealed hemorrhage vs. placenta previa).

As a group, develop a differential diagnosis using the "3 P's" framework: Pain, Peritonism, and Placental separation.

Use the audience response system (e.g., Mentimeter) to vote on the most likely diagnosis for each case.

Be prepared to justify your group's reasoning to the larger group.

2. Activity: Simulation Drill – Acute Abruptio

Time: 90 minutes

Mode: Simulation + Debrief

Scenario: Manage an unstable patient with a suspected Grade III abruptio.

Instructions:

Phase 1: Rapid Assessment & Resuscitation: Perform an ABCDE assessment. Secure large-bore IV access, initiate fluid resuscitation, and prepare for blood product administration.

Phase 2: Coagulopathy Management: Simulate the transfusion of Fresh Frozen Plasma (FFP) and cryoprecipitate in response to developing Disseminated Intravascular Coagulation (DIC).

Phase 3: Delivery Decision: Determine the need for an emergency Cesarean section. A "time-to-delivery" clock will be running to emphasize urgency.

Debrief: Participate in a facilitated discussion focusing on team communication, leadership, and identifying potential delays in management.

3. Activity: Skills Stations Rotation

Time: 60 minutes

Mode: Hands-on Practice (Rotating Small Groups)

Instructions:

Rotate through all three stations in assigned groups. You will have 20 minutes per station.

Station 1: "DIC Lab"

Interpret simulated lab results indicative of DIC (low fibrinogen, elevated D-dimer, thrombocytopenia).

Calculate and simulate the appropriate blood product replacement (e.g., FFP at 15 mL/kg; platelets for counts <50,000/ μ L).

Station 2: "CTG Crisis"

Analyze critical fetal heart rate tracings (e.g., late decelerations, bradycardia).

Decide and defend your answer: "Is there time to administer steroids for fetal lung maturity, or is immediate delivery required?"

Station 3: "Anesthesia Dilemma"

Role-play a consultation with an anesthesia colleague.

Debate the risks and benefits of regional vs. general anesthesia in a patient with DIC.

Discuss fluid management strategies in ongoing hemorrhagic shock.

4. Activity: Role-Play – Multidisciplinary Team (MDT) Meeting

Time: 30 minutes

Mode: Team-Based Decision-Making

Instructions:

Participate in a simulated "Abrupt Huddle."

Assume one of the following roles: Obstetrician, Anesthetist, Hematologist, or Neonatologist.

Task: As a team, debate and decide on the optimal timing of delivery for a complex case: a 32-week abruptio with currently stable maternal vitals but a non-reassuring fetal status.

The goal is to develop a unified, consensus-based management plan.

5. Activity: Postpartum Counseling Workshop

Time: 30 minutes

Mode: Standardized Patient / Role-Play

Instructions:

Scenario: "Your patient experienced a stillbirth due to a severe abruption. How do you counsel her during her postpartum follow-up?"

Tasks: Take turns role-playing the healthcare provider to:

Explain the recurrence risks in a future pregnancy.

Discuss the indications and limitations of thrombophilia screening.

Address the patient's grief and provide guidance for future pregnancy planning with empathy.

Session Flow

Time	Activity	Modality
0:00-0:30	Case-Based Learning	Group Discussion
0:30-2:00	Simulation Drill	Mannequin/Actor + Debrief
2:00-3:00	Skills Stations (Rotation)	Hands-on Practice
3:00-3:30	MDT Role-Play	Team-Based Decision-Making
3:30-4:00	Counseling Workshop	Standardized Patient/Role-Play

Key Teaching Tools:

Simulation: Postpartum hemorrhage trolley, simulated blood products.

Visual Aids: Abruption grading charts, sample CTG strips.

Assessment: Checklists for DIC management and delivery decision-making.

Experiential-Learning 10.6 : Obstetric management of Gestational Diabetes

1. Activity: Glucose Monitoring Boot Camp

Time: 40 minutes

Instructions:

Divide into three groups for a station rotation. You will have 10 minutes per station with a 5-minute group debrief at the end.

Station 1 (CGM Setup):

Apply a demonstration Continuous Glucose Monitor (CGM) sensor to a mannequin.

Interpret sample CGM readouts, focusing on the meaning of trend arrows.

Station 2 (Point-of-Care Testing):

Participate in a timed fingerstick challenge on a training model, balancing accuracy with speed.

Station 3 (Charting Drill):

Annotate sample blood glucose logs with appropriate clinical actions (e.g., for "BG 140 mg/dL," write "notify provider").

Debrief: As a full group, compare the reliability and appropriate use cases for each monitoring method.

2. Activity: Insulin Simulation Lab

Time: 50 minutes

Scenario: Manage insulin for a patient (BMI 38) on an IV insulin drip who requests an epidural.

Instructions:

Phase 1: Calculate the initial insulin drip rate (using 0.02 units/kg/h).

Phase 2: Adjust the drip rate in response to a sudden hypoglycemic event (80 mg/dL).

Phase 3: Calculate and order a subcutaneous insulin regimen for the postpartum transition.

Tools:

Use insulin preparation kits under a "time pressure" challenge.

Identify and correct errors in sample insulin orders.

3. Activity: Fetal Surveillance Olympics

Time: 45 minutes

Instructions:

Compete in teams across three stations. Points are awarded for both speed and accuracy.

Station A (CTG Interpretation): Review a cardiotocography (CTG) strip and identify late decelerations exacerbated by maternal hyperglycemia.

Station B (Ultrasound Biometry): On an ultrasound simulator, measure the abdominal circumference/head circumference (AC/HC) ratio to assess for macrosomia.

Station C (Guideline Quiz): Complete a quiz matching appropriate fetal surveillance frequency to patient risk level based on AIUM guidelines.

4. Activity: Shoulder Dystocia Drill

Time: 30 minutes

Scenario: A patient with GDM and a glucose level of 160 mg/dL is delivering a macrosomic infant (estimated fetal weight 4200g). Shoulder dystocia occurs.

Instructions:

Perform the following maneuvers in sequence:

McRoberts maneuver.

Suprapubic pressure.

If unsuccessful, prepare for and verbally describe the Zavanelli maneuver, including calling a formal time-out.

Activate the neonatal hypoglycemia protocol for the incoming pediatric team.

Debrief: Participate in a video review of team performance and positioning.

5. Activity: Postpartum Transition Challenge

Time: 15 minutes

Instructions:

In your teams, you will receive a handoff report (e.g., "Patient on 6 units/h insulin at delivery").

In a timed speed round, create a 24-hour postpartum plan that must include:

Timing of the first postpartum glucose check.

A scheduled insulin taper.

A feeding plan to prevent neonatal hypoglycemia.

Assessment:

Performance will be evaluated using:

Checklists: For insulin calculation accuracy and correct sequence of dystocia maneuvers.

Peer Evaluation: On team leadership and communication.

Time Trials: For glucose monitoring efficiency.

Low-Resource Adaptations:

If CGMs are unavailable, use paper-based graphs for trend interpretation.

If a high-fidelity mannequin is unavailable, use weighted dolls for shoulder dystocia practice

Modular Assessment

Assessment method	Hour
Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C. OSCE/OSPE (– 50 marks) Station 1 (10 marks): Interpret CTG/partograph showing fetal distress. Station 2 (10 marks): List causes and Ayurvedic correlates of intrapartum stillbirth. Station 3 (10 marks): Emergency steps in managing obstructed labour (Ayurveda + modern). Station 4 (10 marks): Demonstrate intrapartum maternal monitoring checklist. Station 5 (10 marks): Explain Surakshita Prasava principles in preventing Prasavakaleena Upadrava. Or Any practical in converted form can be taken for assessment. (25 Marks) And Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)	4

Semester No : 4

Module 11 : Prasava Kalaja Vikruti (Premature and Post term Labour)

Module Learning Objectives

(At the end of the module, the students should be able to)

Demonstrate the Akala-prasava (Preterm labour), Kalateeta Prasava (Post term labour) and Apra Sanga (Retained placenta) with their etiopathogenesis, Clinical features, preventive and management methods.

Analyse the diagnostic criteria, interpret the investigation reports and decision-making diagnosis of Prasavakalaja Vikriti (Preterm and Post term labour) and Apra Sanga (Retained placenta).

Develop decision making clinical skills, integrate management (Emergency management and Ayurvedic protocols in Prasavakalaja Vikriti (Preterm and Post term labour) and Apra Sanga (Retained placenta), hands on procedure like Apra hasta nishkashan (Manual removal of placenta).

M 11 Unit 1 Akala-prasava (Preterm labour) Akala-prasava (Preterm labour): Etiopathogenesis, clinical features, diagnosis, prevention and management

References: 2,3,4,15,17

3A	3B	3C	3D	3E	3F	3G
CO1	Classify preterm labour using WHO criteria, identify risk factors and warning signs, select diagnostic tools, manage acute cases with appropriate interventions, make informed decisions on delivery timing, and prepare for associated neonatal and maternal complications.	2	Lecture	CE	Knows-how	L&PPT, BL, REC, JC, L&GD
CO1, CO3	Appraise the management and preventive measures to arrest Akala-prasava (Preterm labour).	2	Lecture	CK	Know	PSM, ML, L, LS, CBL
CO2, CO4, CO5	Identify clinical signs of preterm labour (PTL) through live assessment. Demonstrate correct administration of tocolytics and corticosteroids. Practice cervical assessment techniques on models. Prepare neonatal resuscitation equipment for preterm delivery.	3	Practical Training 11.1	CS	Knows-how	CD, SIM
CO2, CO3, CO4	Demonstrate Ayurvedic assessment techniques for uterine hyperactivity, prepare and compare Ayurvedic and modern tocolytic interventions, develop a preventive care plan, and identify conditions requiring referral to modern care related to Akala prasava (Pre-term labour)	3	Practical Training 11.2	PSY-GUD	Shows-how	SIM, TBL, X-Ray, CBL, D-M

CO2,CO3	Diagnose preterm labour using clinical and ultrasound criteria, administer appropriate acute interventions, apply decision-making for management, anticipate complications, and counsel patients on prevention and long-term risks.	5	Experiential-Learning 11.1	PSY-MEC	Shows-how	RLE
CO2,CO3	Design and administer integrative care for preterm labour by preparing Ayurvedic emergency formulations, comparing Ayurvedic and modern tocolytics, formulating a multimodal treatment plan, identifying red flags for referral, and counseling patients on preventive strategies.	5	Experiential-Learning 11.2	PSY-GUD	Shows-how	D-BED,CBL,RLE,CD

M 11 Unit 2 Kalateeta Prasava (Post term labour) Kalateeta Prasava (Post term labour): Etiopathogenesis, clinical features, diagnosis, prevention and management
References: 2,3,4,15,17,22

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyze Kalateeta Prasava by integrating Ayurvedic and modern medical perspectives, identifying diagnostic criteria, etiological factors, clinical features, diagnostic methods, and associated maternal-fetal risks.	2	Lecture	CAN	Knows-how	L&PPT, L&GD
CO1	Evaluate preventive and management strategies for Kalateeta Prasava from Ayurvedic and modern perspectives, explain respective interventions, compare protocols, and identify indications for specialist referral in high-risk cases.	1	Lecture	CE	Knows-how	IBL,DIS, L&GD,LS,CBL
CO2,CO3	Demonstrate and interpret Ayurvedic and modern diagnostic methods to assess post-term pregnancy, differentiate risk levels, and document findings for informed clinical decision-making.	4	Practical Training 11.3	PSY-GUD	Shows-how	PAL,PBL,PL,LRI,DL
CO2,CO3	Demonstrate preventive and management strategies for post-term pregnancy by integrating Ayurvedic practices and modern obstetric interventions for holistic maternal care.	4	Practical Training 11.4	PSY-MEC	Shows-how	W,PER,PL,D-BED,D
CO2,CO3,CO4,CO5	Identify risks and complications of post-term pregnancy, perform Ayurvedic assessments, demonstrate labour induction techniques, compare Ayurvedic and modern methods, and develop integrated management plans with timely recognition of surgical needs.	4	Experiential-Learning 11.3	CE	Shows-how	CBL,D-BED,RLE,SIM

CO2,CO3,CO4,CO5	Demonstrate clinical decision-making by applying Ayurvedic and modern assessment, preventive, and management strategies in simulated post-term pregnancy scenarios through integrated care planning.	4	Experiential-Learning 11.4	CAP	Shows-how	SIM,RLE
M 11 Unit 3 Aparasanga (Retained placenta) Aparasanga (Retained placenta): Etiopathogenesis, clinical features, diagnosis, prevention and management References: 2,3,4,14,15,17,22						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyze the etiology, pathogenesis, clinical features, management, and prevention of Aparasanga in Ayurveda and correlate with retained placenta in modern medicine to develop integrative treatment strategies for improved maternal outcomes.	2	Lecture	CAN	Knows-how	L&PPT, L_VC
CO1	Discuss the integrative preventive and therapeutic strategies for Aparasanga by evaluating Ayurvedic and modern approaches, including prenatal care, Vata management, AMTSL, and emergency preparedness	1	Lecture	CK	Know	BL,BS
CO2,CO3,CO4,CO5	Evaluate Aparasanga through classical Ayurvedic diagnostic criteria and correlate with modern clinical findings of retained placenta using comprehensive history-taking, physical examination, and diagnostic tools to differentiate from other postpartum conditions.	3	Practical Training 11.5	CE	Knows-how	PL,D-M, Mnt,PAL, TBL
CO2,CO3,CO4,CO5	Compare Ayurvedic management tools with modern obstetrical interventions for Aparasanga, severity and complications.	3	Practical Training 11.6	PSY-GUD	Shows-how	PL,X-Ray, W,C_L,P BL
CO2,CO3,CO4,CO5,CO7	Analyse the risk factors, Ayurvedic and modern diagnostic methods, manual removal techniques, integrated and emergency protocol for Aparasanga (Retained placenta)	4	Experiential-Learning 11.5	CAP	Shows-how	RLE
CO2,CO3,CO4,CO5,CO7	Demonstrate Ayurvedic preventive principles, management techniques, their efficacy and safety, integrated protocols, and emergency conditions protocol in relation to Aparasanga (Retained placenta)	4	Experiential-Learning 11.6	CAP	Shows-how	RLE

Practical Training Activity

Practical Training 11.1 : Diagnosis of Akala-prasava (Preterm labour).

Teacher-Led Demonstration Activities (3 Hours)

1.Live Case Simulation (40 min)

Activity: "Is This True PTL?"

Teacher Demonstrates:

Leopold's maneuvers to assess uterine activity

Speculum exam technique on pelvic model to check cervical changes

Interpretation of fFN test strips and ultrasound cervical length images

Learner Participation:

Volunteers palpate "contractions" (via tocodynamometer simulation)

Group votes on PTL diagnosis using clinical criteria

2.Medication Administration Drill (50 min)

Demonstrations:

Nifedipine Protocol:

Show correct oral loading dose (20mg) and maintenance (10-20mg q6h)

Simulate BP monitoring for hypotension

Betamethasone IM Injection:

Demonstrate dorsogluteal technique with placebo vials

Highlight timing (2 doses 24h apart)

MgSO₄ Neuroprotection:

Prepare IV infusion (4g bolus + 1g/hr maintenance)

Test patellar reflexes for toxicity

Hands-on Segment:

Learners practice drawing up "medications" with safety checks

3.Preterm Delivery Prep (45 min)

Teacher Shows:

Neonatal Resuscitation:

Setting up radiant warmer

Pre-wrapping preterm-sized (<2kg) resuscitation blanket

Maternal Interventions:

Episiotomy decision-making for preterm breech

Active management of third stage (extra oxytocin for PTL)

Skills Practice:

Teams compete to assemble preterm delivery kits fastest

4. Counseling Role-Play (30 min)

Teacher Models:

Breaking bad news about periviable delivery (22-25 weeks)

Scripted responses to common patient questions:

"Will my next pregnancy be preterm too?"

"Can we delay delivery until 36 weeks?"

Learner Practice:

Paired role-playing with feedback rubric

5. Complication Management (15 min)

Live Demo:

Tocolytic Side Effects:

Simulate pulmonary edema (listen for crackles, O₂ stats drop)

Demonstrate rapid discontinuation protocol

Shoulder Dystocia Drill:

McRoberts maneuver on birthing mannequin

Key Teaching Tools:

Pelvic Task Trainer for cervical exams

Placebo Meds (labeled saline vials for nifedipine/MgSO₄)

Preterm Neonatal Simulator (<2kg doll)

Laminated Cards with counseling scripts

Assessment:

Spot-test learners during demonstrations (e.g., "Show me how you'd check reflexes during MgSO₄ infusion")

Adaptations:

For low-resource settings: Use mangoes for "uterus" palpation practice, paper dolls for neonatal prep

Practical Training 11.2 : Management of Akala-prasava (Preterm labour)

Activity 1: Simulation & Demonstration (60 mins)

Station 1: Ayurvedic Tocolysis

Teacher demonstrates:

Udara lepana(abdominal anointment) with Shatadhouta Ghrita

Yoni Pichu (medicated tampon) with Shatadhouta ghrita, Ksheerivriksha kashaya

Station 2: Modern-Ayurvedic Integration

Compare tocodynamometer readings with Nadi Pariksha findings

Practice sterile speculum exam alongside Yoni Pareeksha (Ayurvedic assessment)

Activity 2: Case-Based Role Play (60 mins)

Scenario:

*A 28-week primigravida with 2cm cervical dilation and anxiety (*Udvega).

Group Tasks:

Team Ayurveda: Prescribe Shatavari ksheerapaka + Udara lepana with Shatadhouta ghrita

Team Modern OB: Suggest fetal fibronectin testing + betamethasone

Integrative Team: Draft a combined plan with timelines for reassessment

Activity 3: Formulation Lab (60 mins)

Hands-On Preparation:

Ksheerivruksha Ghrita (dosed at 20ml QID)

Emergency Gutika (e.g., Kamadudha Rasa for hyperacidity-induced contractions)

Dosage Calculation Exercise:

Adjust Shatavari Kalpa quantity based on trimester and Prakriti

Assessment Tools

OSCE Station (15 mins):

Perform Vata-Shamana massage on mannequin while explaining mechanism

MCQ Test (10 mins):

"Which Marma point is pressed to reduce uterine hyperactivity?" (Ans: Basti Marma)

Reflective Journaling:

"How would you modify care for a Vata-Pitta dominant patient with PPROM?"

Teaching Aids

Physical: Uterine models, Marma dolls, herbal preparation kits

Digital: FHR tracing examples, 3D cervical remodeling animations

Cheat Sheets: Quick-reference guides for Vata-pacifying protocols

Practical Training 11.3 : Diagnosis of Kalateeta Prasava (Post term labour).

Teacher Demonstration & Student Engagement - 4 hours

1. Ayurvedic Diagnostic Methods (45 mins)

Teacher Demonstration:

Showcase Naadi Pariksha (pulse diagnosis) to assess Vata imbalance in post-term pregnancy.

Demonstrate Garbha Pariksha (abdominal palpation techniques) to evaluate fetal position and growth.

Student Activity:

Practice Naadi Pariksha in pairs under supervision.

Attempt Garbha Pariksha on anatomical models/dolls with feedback.

2. Modern Clinical Examination (1 hour)

Teacher Demonstration:

Perform Leopold's maneuvers to assess fetal lie, presentation, and engagement.

Demonstrate fetal heart rate monitoring (Doppler/USG).

Explain Bishop's Score for cervical readiness.

Student Activity:

Small groups practice Leopold's maneuvers on mannequins.

Simulate fetal heart monitoring and interpret findings.

3. Diagnostic Tools & Imaging (45 mins)

Teacher Demonstration:

Interpret ultrasound reports (AFI, placental grading, fetal weight estimation).

Explain non-stress test (NST) and biophysical profile (BPP) tracings.

Student Activity:

Analyze sample USG/NST reports in groups and present findings.

4. Case-Based Differentiation & Documentation (30 mins)

Teacher Demonstration:

Present 2 case scenarios (normal vs. high-risk post-term pregnancy).

Discuss red flags (meconium, oligohydramnios) and referral criteria.

Student Activity:

Fill out a structured diagnostic sheet for each case.

Debate management decisions in groups.

Assessment & Feedback:

Spot Quiz (10 mins): 3-5 short questions on key diagnostic steps.
Peer Review: Students exchange documentation sheets for feedback.
Q&A: Clarify doubts and summarize critical takeaways.

Practical Training 11.4 : Prevention and management of Kalateeta Prasava (Post term labour)

(Teacher Demonstration & Student Engagement) 4 hours

1.Prevention Strategies (1 hour)

Teacher Demonstration:

Discuss Garbhini Paricharya (pregnancy care) for preventing post-term labour (Snehana, Swedana, dietary measures).

Explain modern preventive strategies (antenatal monitoring, lifestyle modifications).

Student Activity:

Role-play counseling a pregnant woman on preventive measures.

Create a comparative chart of Ayurvedic vs. modern prevention techniques.

2.Ayurvedic Management (1 hour)

Teacher Demonstration:

Prepare and explain Vata-pacifying herbal formulations (Dashamoola, Eranda, Ashwagandha, Bala Taila).

Demonstrate Snehapana (medicated oil therapy - Eranda taila pana) and Yoni Pichu (vaginal tampon) for cervical ripening.

Vasti dravya Kalpana from Niruha basti (Dashamula kwatha/ Eranda Kwatha) and Matra basti (Eranda taila/ Dashamula taila/ Sukumara taila/ Sukhaprasavakara ghrita)

Student Activity:

Practice preparing simple herbal decoctions (Kwatha) under guidance.

Simulate Yoni Pichu application on anatomical models.

Administration of Vasti in pregnant women on real cases / simulated cases

3.Modern Medical Management (1 hour)

Teacher Demonstration:

Show steps for membrane separation /stripping (on pelvic model).

Explain prostaglandin gel application and oxytocin infusion protocols.

Demonstrate fetal monitoring during induction (CTG interpretation).

Student Activity:

Small groups practice mock scenarios for induction decision-making.

Interpret sample CTG readings and identify abnormalities.

4.Integrated Case Management (30 mins)

Teacher Demonstration:

Present a case of post-term pregnancy and discuss holistic (Ayurvedic + modern) management.

Highlight when to refer for cesarean section.

Student Activity:

Groups design a combined Ayurvedic-modern management plan for a given case.

Present and justify their approach in a 5-minute discussion.

Assessment & Feedback

Skill Check (30 mins):

Quick oral quiz on key preventive and management steps.

Peer evaluation of case presentations.

Q&A (15 mins): Address doubts and summarize critical takeaways.

(Ensures hands-on, clinically relevant learning with a balance of Ayurvedic and modern techniques.)

Practical Training 11.5 : Diagnosis of Aparasanga (Retained Placenta) – Ayurveda & Modern Approach

Activities: 3 hours

Teacher demonstration:

1. Introduction & Case Presentation (20 min)

Teacher Demonstration:

Presents two real/virtual cases (Ayurvedic + modern) of retained placenta.

Highlights key diagnostic clues:

Ayurvedic: History of Vata-aggravating factors (prolonged labor, dehydration), Shula (pain), bleeding (Asrava).

Modern: Signs of incomplete placenta, hemorrhage, uterine atony.

Uses a whiteboard/flip chart to map Samprapti (pathogenesis) and modern risk factors side by side.

Student Task:

Take notes and ask clarifying questions.

2. Ayurvedic Physical Examination (45 min)

Teacher Demonstrates:

a) Nadi Pariksha (Pulse Diagnosis)

Shows how to assess Vata-dominant pulse (thin, irregular) in a postpartum case.

Explains correlation with retained placenta due to Vata imbalance.

b) Udara Pariksha (Abdominal Examination)

Demonstrates palpation techniques to check for:

Uterine firmness/softness (Vata-related atony vs. modern uterine tone assessment).

Tenderness, distension (Shula).

c) Jihva & Mukha Pariksha (Tongue & Oral Examination)

Points out dry, coated tongue (Vata-Kapha imbalance) vs. pale tongue (indicating blood loss).

Student Task:

Observe and note findings.

Practice in pairs under supervision.

3. Modern Diagnostic Techniques (45 min)

Teacher Demonstrates:

a) Ultrasound Diagnosis (Live/Video Demonstration)

Shows sonographic signs of retained placental tissue (hyperechoic masses, thickened endometrium).

Compares with Ayurvedic assessment of Avarana (obstruction by Vata).

b) Manual Exploration (Simulation on Pelvic Model)

Demonstrates sterile technique for manual placental removal (if applicable).

Explains when to intervene urgently (modern) vs. when to use Ayurvedic management (Vata-shamana drugs, Basti).

Student Task:

Observe ultrasound markers and practice on models (if available).

4. Differential Diagnosis & Interactive Discussion (30 min)

Teacher-Led Activity:

Presents 3 differential cases (e.g., PPH, uterine inversion, infection).

Guides students to differentiate using Ayurvedic & modern criteria:

Aparasanga (Vata symptoms, gradual bleeding) vs. Asrigdara (PPH, sudden hemorrhage).

Uses a comparative table for clarity.

Student Task:

Participate in discussion, ask questions.

Fill out a diagnostic checklist based on observations.

5. Recap & Assessment (10 min)

Teacher Demonstration:

Summarizes key diagnostic steps in a flowchart.

Conducts a quick oral quiz (e.g., "What Nadi pattern suggests Aparasanga?").

Student Task:

Self-assess understanding and clarify doubts.

Key Teaching Aids for Demonstration:

Case sheets (Ayurvedic & modern)
Pulse demonstration tool (if available)
Ultrasound videos/images
Pelvic model for manual removal simulation
Comparative charts (Ayurvedic vs. modern diagnosis)

Practical Training 11.6 : Management of Aparasanga (Retained Placenta)

Teacher Demonstration Activities (3-Hour Session)

1.Introduction & Case-Based Discussion (30 min)

Teacher Demonstration:

Presents two real/virtual cases (one managed with Ayurveda, one with modern medicine).

Highlights key differences in approach:

Ayurvedic: Focus on Vata Shamana, Uttara Basti, and herbal decoctions.

Modern: Use of oxytocics, manual removal, or surgery.

Uses a flowchart to explain decision-making based on severity.

Student Task:

Take notes and discuss pros/cons of each approach.

2.Demonstration of Ayurvedic Management (60 min)

Teacher Demonstrates:

a)Herbal Preparations & Oral Medicines

Shows preparation of Dashamoola Kwatha (for Vata pacification).

Explains Eranda Taila (castor oil) for gentle evacuation.

b)Uttara Basti (Medicated Enema for Uterus)

Demonstrates the procedure (on a pelvic model) using:

Basti preparation (e.g., Ksheera Basti with milk + medicated oils).

Catheter insertion technique (simulated).

Discusses indications, contraindications, and precautions.

c)External Therapies (Abhyanga, Padabhyanga)

Demonstrates Vata-pacifying massage (lower back, abdomen) with Bala Taila.

Student Task:

Observe and practice preparation of herbal formulations (in groups).

3.Demonstration of Modern Obstetric Management (45 min)

Teacher Demonstrates:

a) Oxytocin Administration (Simulation/Videos)

Shows correct intramuscular (IM) injection technique.

Explains dosage, timing, and monitoring.

b) Manual Placental Removal (Pelvic Model Demo)

Step-by-step demonstration of:

Aseptic technique.

Uterine palpation and controlled cord traction (CCT).

Highlights risks (e.g., infection, hemorrhage).

Student Task:

Practice simulated manual removal (if models available).

4. Integrated Approach & Decision-Making (30 min)

Teacher-Led Activity:

Presents 3 clinical scenarios (mild, moderate, severe Aparasanga).

Guides discussion on:

When to use only Ayurveda? (e.g., mild cases with no bleeding).

When to combine both? (e.g., Uttara Basti + oxytocin).

When to refer for surgery? (e.g., placenta accreta).

Uses a decision tree for visual learning.

Student Task:

Group discussion and presentation of management plans.

5. Recap & Safety Protocols (15 min)

Teacher Demonstration:

Summarizes key do's and don'ts in Aparasanga management.

Reviews emergency protocols (e.g., when to transfer to a hospital).

Quick quiz (e.g., "Which Basti is best for Vata-dominant Aparasanga?").

Student Task:

Self-assessment and Q&A.

Teaching Aids Required:

Herbal preparations (Dashamoola Kwatha, Eranda Taila).

Uttara Basti kit (catheter, oils, pelvic model).

Oxytocin injection trainer.

Pelvic model for manual removal simulation.

Flowcharts & case sheets.

Outcome:

Students will gain confidence in managing Aparasanga using Ayurvedic, modern, and integrated approaches under expert guidance.

Experiential learning Activity

Experiential-Learning 11.1 : Diagnosis of Akala-prasava (Preterm labour).

Experiential Learning Activities (3 Hours)

1. Case-Based Triage (30 min)

Activity: "Is This True PTL?"

Task:

Groups review 3 case vignettes (e.g., 32 weeks with contractions vs. UTI symptoms).

Decide: "Would you admit, treat, or discharge?"

Tool: Rapid-fire voting with colored cards (Red=PTL, Yellow=Observation, Green=Discharge).

2. Simulation: Acute PTL Management (60 min)

Scenario: 30-week PTL with intact membranes.

Phases:

Assessment:

Perform speculum exam (demo on mannequin) to check cervical dilation/effacement.

Interpret fFN results (hand out sample lab reports).

Intervention:

Prepare nifedipine (PO) and betamethasone (IM) with correct dosing.

Set up MgSO₄ infusion (calculate 4g bolus over 20 mins).

Decision:

Debate: "Continue tocolysis vs. deliver" if CTG shows late decelerations.

3. Skills Stations (45 min, Rotating Groups)

Station 1: "Cervical Length Ultrasound"

Measure cervical length on printed USG images (<25mm = high risk).

Station 2: "Neonatal Prep"

Assemble a preterm delivery kit (cord clamp, warmer, surfactant).

Practice swaddling a preterm baby doll (<1.5kg).

Station 3: "Tocolytics in Action"

Administer "nifedipine" (placebo pills) to a standardized patient while explaining side effects (hypotension, flushing).

4.Role-Play: Patient Counseling (30 min)

Scenario: "You're 28 weeks with PTL. Will my baby survive?"

Tasks:

Explain survival rates by gestational age (use local data).

Discuss NICU transfer options.

Teach kick counts post-tocolysis.

5.Escape Room Challenge (15 min)

Activity: "PTL Code Blue"

Solve 3 timed tasks:

"Steroid Clock": Schedule betamethasone doses (0h/24h).

"MgSO₄ Toxicity": Spot symptoms (lost reflexes, respiratory depression).

"Delivery Decision": Choose intervention for breech preterm delivery.

Teaching Tools

Low-cost alternatives: Use balloon pumps for "IV MgSO₄," paper dolls for neonatal practice.

Assessment: Checklists for MgSO₄ setup, counseling communication skills.

Outcome: Learners gain hands-on experience in PTL triage, acute management, and family-centered care. Adaptable for both high- and low-resource settings.

Experiential-Learning 11.2 : Management of Akala-prasava (Preterm labour)

Activity 1: Simulation & Demonstration (60 mins)

Station 1: Ayurvedic Tocolysis

Teacher demonstrates:

Udara lepana (abdominal application) with Shatadhauta ghrita

Yoni Pichu (medicated tampon with Shatadhouta Ghrita) for uterine relaxation

Station 2: Modern-Ayurvedic Integration

Compare tocodynamometer readings with Nadi Pariksha findings

Practice sterile speculum exam alongside Yoni Pareeksha (Ayurvedic assessment)

Activity 2: Case-Based Role Play (60 mins)

Scenario:

*A 28-week primigravida with 2cm cervical dilation and anxiety (*Udvega).

Group Tasks:

Team Ayurveda: Prescribe Shatadhauta ghrita Yonipichu, Parisheka + Phalaghrita internal administration.

Team Modern OB: Suggest fetal fibronectin testing + betamethasone

Integrative Team: Draft a combined plan with timelines for reassessment

Activity 3: Formulation Lab (60 mins)

Hands-On Preparation:

Shatavari ksheerapaka (dosed at 30ml QID)

Emergency Gutika (e.g., Kamadudha Rasa for hyperacidity-induced contractions)

Dosage Calculation Exercise:

Adjust Shatavari Kalpa quantity based on trimester and Prakriti

Assessment Tools

OSCE Station (15 mins):

Perform Vata-Shamana massage on mannequin while explaining mechanism

MCQ Test (10 mins):

"Which Marma point is pressed to reduce uterine hyperactivity?" (Ans: Basti Marma)

Reflective Journaling:

"How would you modify care for a Vata-Pitta dominant patient with PPRM?"

Teaching Aids

Physical: Uterine models, Marma dolls, herbal preparation kits

Digital: FHR tracing examples, 3D cervical remodeling animations

Cheat Sheets: Quick-reference guides for Vata-pacifying protocols

Experiential-Learning 11.3 : Diagnosis of Kalateeta Prasava (Post term labour)

Experiential Learning Activities (4 Hours)

1. Case-Based Discussion & Role-Play (1 Hour)

Activity:

Scenario: A 42-week pregnant woman with Vata-Kapha symptoms (dry skin, oligohydramnios).

Tasks:

Group 1: Propose Ayurvedic induction (Eranda Taila massage, Yavagu diet).

Group 2: Outline modern induction (membrane sweeping, Pitocin).

Group 3: Debate risks vs. benefits of waiting vs. intervening.

2. Hands-On Skill Stations (2 Hours)

Station 1: Ayurvedic Labour Induction Techniques

Matra/ Niruha vasti with Dhanwantaram Taila/ Dashamula kvatha
Simulate Yoni Pichu (medicated tampon with Bala Taila) application.
Station 2: Fetal Monitoring & Decision-Making
Interpret CTG tracings and correlate with Ayurvedic Nadi findings.
Conduct a mock multidisciplinary team meeting (Ayurvedic physician + obstetrician).

3.Simulation & Reflection (1 Hour)

Activity:

Simulated Delivery: Manage a post-term labour case using integrated approaches.

Debrief: Discuss challenges, ethical considerations, and cultural beliefs.

Reflective Writing: "How would you counsel a patient refusing induction due to Garbha Sanskar beliefs?"

Assessment Tools

OSCE Station: Perform Nadi Pariksha and justify induction method.

MCQs: E.g., "Which Dosha dominates in Kalateeta Prasava?" (Ans: Vata-Kapha).

Portfolio Entry: Document lessons from case simulations.

Experiential-Learning 11.4 : Prevention and management of Kalateeta Prasava (Post term labour)

Part 1: Prevention Strategies Workshop (1 Hour)

Activity 1a: Ayurvedic Wellness Demonstration (30 mins)

-Rotate through three stations to learn and then demonstrate key Ayurvedic self-care techniques for pregnancy.

Instructions:

Station 1: Dietary Counseling

Demonstrate: Counsel a standardized patient on a Vata-pacifying diet for pregnancy.

Station 2: Relaxation Techniques

Demonstrate: Guide a partner through a 5-minute relaxing meditation and breathing exercise (Pranayama)

Station 3: Yoga for Pregnancy

Demonstrate: Perform and explain the benefits of two safe yoga postures for pregnancy (e.g., Cat-Cow, Modified Butterfly Pose).

Activity 1b: Modern Risk Assessment Practice (30 mins)

Instructions:

Analyze: Review the sample patient case and identify all obstetric risk factors.

Develop: Create an evidence-based antenatal monitoring schedule using standard clinical guidelines.

Presentation: Student prepare and deliver a concise, 3-minute presentation to the other groups to demonstrate team's proposed prevention plan.

Part 2: Hands-on Management Training (2 Hours)

Station 1: Ayurvedic Intervention Skills (60 mins)

-Demonstration and preparation and application of specific Ayurvedic therapies.

Instructions:

Task 1 (Herbal Prep): Student prepares a simulated medicated oil and a simple herbal decoction (Kvatha). Verbally explain the purpose of the key ingredients.

Task 2 (Matra Basti): Demonstrate the correct setup for Matra Basti with prescribed oils on a models/live patient.

Task 3 (Yoni Pichu): Demonstration of the preparation and safe, hygienic application of a medicated tampon (Yoni Pichu) on a model for cervical ripening.

Station 2: Modern Procedure Proficiency (60 mins)

Your Goal: Demonstrate competency in common modern obstetric procedures.

Instructions:

Task 1 (Membrane Sweep): Student demonstrate the membrane sweeping technique on a pelvic model while explaining the procedure, benefits, and risks to a "patient."

Task 2 (Fetal Monitoring): Interpret a series of three fetal heart rate monitoring strips. Identify any non-reassuring patterns and state the recommended clinical actions.

Task 3 (Induction Role-Play): Role-play an induction scenario. One student (Doctor) explains the protocol, another (Patient) asks questions, and a third (Nurse) demonstrates preparing a medication (saline syringe).

Part 3: Integrated Case Management (1 Hour)

Activity: Collaborative Care Simulation (60 mins)

Instructions:

Review: As a team, thoroughly review the provided detailed patient case file (history, exam findings, lab reports).

Create: Develop a management plan that incorporates:

Ayurvedic Approaches (specific dietary advice, therapies, or herbs).

Modern Interventions (medical monitoring, procedures, or medications).

Clear Referral Criteria (when to seek specialist consultation).

Demonstrate team's integrated plan in a 10-minute presentation to faculty. Justify clinical decisions and be prepared to answer questions and receive constructive feedback.

Experiential-Learning 11.5 : Diagnosis of Aparasanga (Retained placenta)

Student demonstration - 4 hours

1. Case-Based Learning & History-Taking

Format: Small Group Discussion

Activity: Groups will receive two standardized patient cases:

Case 1: Focused on Ayurvedic presentation (e.g., Vata imbalance post-delivery).

Case 2: Focused on modern clinical presentation (e.g., signs of hemorrhage or infection).

Task: Analyze symptoms, risk factors, and historical clues.

Develop a preliminary differential diagnosis for each case.

Prepare to justify findings during group debrief.

2. Physical Examination Stations

Format: Rotating Hands-On Stations

Materials: Pulse simulators, abdominal palpation models, pelvic trainers.

Station 1: Nadi Pariksha (Pulse Diagnosis)

Task: Detect Vata-dominant pulse qualities (thin, irregular, rapid) using pulse simulators programmed for postpartum scenarios.

Goal: Correlate pulse findings with symptoms of Vata imbalance (e.g., anxiety, dryness, pain).

Station 2: Udara Pariksha (Abdominal Examination)

Task: Palpate abdominal models to identify uterine atony, tenderness, or distension.

Goal: Correlate findings with Ayurvedic concepts of Vata imbalance and modern signs of postpartum complications.

Station 3: Yoni Pareeksha (Simulated Pelvic Examination)

Task: Use pelvic models to assess for bleeding, clots, or retained placental tissue.

Goal: Practice sterile technique and document observations aligned with both Ayurvedic and modern frameworks.

3. Modern Diagnostic Simulation

Format: Hands-On Workshop

Materials: Ultrasound images/videos, pelvic models, sterile gloves.

Activity 1: Ultrasound Workshop

Task: Observe a teacher demonstration of sonographic signs of retained tissue (e.g., hyperechoic fragments).

Analyze sample ultrasound images to identify abnormalities.

Activity 2: Manual Exploration Drill

Task: Practice sterile manual uterine exploration on pelvic models to simulate removal of retained tissue.

Goal: Develop proficiency in combining tactile feedback with ultrasound findings.

4. Differential Diagnosis Role-Play

Format: Small Group Scenario Analysis

Activity: Groups receive scenario cards (e.g., Aparasanga vs. postpartum hemorrhage vs. infection).

Task: Defend your diagnosis using:

Ayurvedic evidence: Dosha analysis, pulse, and symptom correlation.

Modern evidence: Vitals, imaging, and lab findings.

Present your findings via comparative tables highlighting integrative reasoning.

5. Integrated Protocol Development

Format: Collaborative Design

Activity: Groups design a stepwise diagnostic flowchart for postpartum complications that includes:

Ayurvedic methods: Nadi Pariksha, Ashtavidha Pariksha.

Modern methods: Ultrasound, hemoglobin monitoring, vital signs.

Peer review and refine protocols for clarity and clinical applicability.

6. Assessment & Debrief

Format: Individual and Group Reflection

Spot Quiz: 5 MCQs on key diagnostic criteria (e.g., pulse qualities, sonographic signs).

Reflection: One-minute paper on "Most challenging diagnostic aspect today."

Q&A: Clarify doubts with an expert panel of Ayurvedic and modern medicine practitioners.

Teaching Aids Provided: Case sheets, Skills checklists, Ultrasound images and videos, Pelvic models and pulse simulators, Scenario cards and diagnostic flowcharts

Experiential-Learning 11.6 : Prevention and management of Apra Sanga (Retained placenta)

Activities: (4 hours session)

Apply Ayurvedic preventive principles (e.g., Garbhini Paricharya, Vata-pacifying diet) to reduce risks of retained placenta.

Demonstrate Ayurvedic management techniques (Basti, Vata-shamana drugs) and modern interventions (AMTSL, manual removal).

Compare efficacy and safety of Ayurvedic vs. modern approaches through case analysis.

Develop integrated protocols for prevention and management based on severity.

Practice emergency response for complications (e.g., hemorrhage, infection).

1.Prevention Workshop (60 min)

Activity 1: Role-Play – Antenatal Counseling

Groups act as Ayurvedic physicians/midwives counseling pregnant women:

Teach Vata-balancing diet (e.g., warm ghee, Shatavari).

Demonstrate prenatal yoga (safe postures for labor preparation).

Modern OB/GYN group explains AMTSL (Active Management of Third Stage Labor).

Activity 2: Poster Design

Create prevention checklists comparing:

Ayurvedic: Ahara, Vihara, Aushadhi (e.g., Dashamoola).

Modern: Oxytocin prophylaxis, controlled cord traction.

2.Ayurvedic Management Stations (90 min)

Rotating Hands-on Stations (30 min each):

Station 1: Herbal Preparation

Prepare Dashamoola Kwatha and Eranda Taila for Vata Shamana.

Station 2: Matra or Niruha Basti Simulation

Practice catheter insertion on pelvic models using Matra Basti procedure (medicated oil).

Station 3: Abhyanga & Swedana

Demo lower back massage with Bala Taila to stimulate uterine contractions.

Materials: Herbs, pelvic models, Basti kits, massage oils.

3. Modern Obstetric Drills (60 min)

Activity 1: AMTSL Simulation

Step-by-step demo of:

Intramuscular oxytocin injection (on mannequins).

Controlled cord traction (using birthing simulators).

Debate: "When to choose Ayurvedic vs. modern prevention?"

Activity 2: Complication Management

Scenario: Hemorrhage post-retained placenta.

Ayurvedic team: Administer Lodhra Churna + cold compress.

Modern team: Simulate IV fluids + uterine massage.

4. Case-Based Integration (45 min)

Activity: Case Challenge

Groups receive 3 cases (mild/moderate/severe Aparasanga).

Tasks:

Propose integrated plans (e.g., Uttara Basti + oxytocin for moderate cases).

Justify when to refer for surgery (e.g., placenta accreta).

Output: Present plans via flowcharts.

5. Emergency Preparedness (30 min)

Activity: Mock Drill

Simulate emergencies (e.g., PPH, septic shock):

Ayurvedic response: Sip Musta Kwatha (hemostatic) + elevate legs.

Modern response: Call for blood transfusion + IV antibiotics.

Debrief: Compare strengths/limitations of each approach.

Assessment & Reflection (15 min)

3-2-1 Reflection:

3 key takeaways.

2 questions remaining.

1 skill to practice further.

Peer Feedback: Evaluate team protocols using rubrics.

Teaching Aids:

Herbs, injection trainers, birthing simulators, case cards, emergency kits.

Low-resource adaptation: Use cloth dolls for massage demo, paper charts for protocols.

Modular Assessment

Assessment method	Hour
<p>Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.</p> <p>Case-Based Assessment-50 marks</p> <p>A 29-year-old multigravida presents at 34 weeks with uterine contractions. On another day, a 41-week primigravida comes with absent labour pains. In a different case, a woman develops postpartum hemorrhage due to retained placenta.</p> <ul style="list-style-type: none">Identify the respective complications with Ayurvedic terminology. (10) <p>Discuss the risk factors for each condition. (10)</p> <p>Outline the methods of diagnosis in each case. (10)</p> <p>Explain the integrated management (Ayurveda + modern obstetrics). (15)</p> <p>Summarize preventive strategies for safe maternal–fetal outcome(5)</p> <p>Or</p> <p>Any practical in converted form can be taken for assessment. (25 Marks)</p> <p>And</p> <p>Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)</p>	4

Module 12 : Prasava-Vyapad (Abnormal Labour)

Module Learning Objectives

(At the end of the module, the students should be able to)

Identify risk factors and early signs of Mudhagarbha (obstructed labour) and Vilambita Prasava (delayed labour) in Ayurvedic and modern contexts.

Differentiate between normal labour progression and pathological labour dystocia.
 Perform Ayurvedic diagnostic methods (Naadi Pariksha, Garbha Pariksha) for labour complications.
 Apply modern obstetric assessments (Leopold's maneuvers, cervical Bishop's score, CTG interpretation).
 Interpret imaging (ultrasound, X-ray pelvimetry) and clinical findings to confirm obstruction/delay.
 Formulate Ayurvedic protocols (Snehana, Vata-balancing herbs, Yoni Pichu) for early-stage delay.
 Demonstrate modern interventions (oxytocin augmentation, instrumental delivery, cesarean decision-making).
 Integrate Ayurvedic supportive care (e.g., Shodhana in selected cases) with emergency obstetric management.
 Recognize red flags (fetal distress, uterine rupture) requiring urgent referral.
 Simulate multidisciplinary teamwork (Ayurvedic practitioner, obstetrician, midwife) for crisis scenarios.
 Counsel patients/families on labour risks while respecting cultural preferences.
 Advocate for timely referral when biomedical intervention is lifesaving.
 Audit case studies to refine protocols for maternal-fetal wellbeing.
 Reflect on challenges in integrating Ayurveda and modern obstetrics.

M 12 Unit 1 Garbha Sanga –Mudhagarbha (Obstructed labour)Garbha Sanga –Mudhagarbha (Obstructed labour), etiopathogenesis, clinical features, diagnosis, prevention, prognosis and management

References: 2,3,4,14,15,17,22

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO4	Analyse Garbha Sanga–Mudhagarbha from Ayurvedic and modern perspectives, Dosha and Srotorodha involvement, compare Ayurvedic and obstetric classifications, identify causes and risk factors, Garbha Pareeksha and Naadi Pariksha, and clinical red flags.	2	Lecture	CAN	Knows-how	REC,LS, L_VC,SD L,L&GD
CO2,CO3,CO4	Identify risk factors for Garbha Sanga and Mudhagarbha from Ayurvedic and modern perspectives, differentiate delayed and obstructed labor, recognize related complications, outline multidisciplinary collaboration steps, and develop integrative case-based management protocols.	2	Lecture	CS	Knows-how	L_VC,BS ,L&PPT ,L&GD
CO2,CO3,CO4	Discuss integrative preoperative care for obstructed labor, informed consent process, instrumental delivery techniques with Ayurvedic support, outline C-section and	2	Lecture	CE	Knows-how	L&GD,L &PPT

	postoperative Rasayana steps, safe manual extraction, and integrate Ayurvedic and modern monitoring methods.					,L_VC
CO2,CO3,CO4,CO5,CO7	Analyse Garbhasanga and Mudhagarbha from Ayurvedic and modern obstetric perspectives, clinical signs of obstructed labor, demonstrate diagnostic techniques for malpresentation, interpret ultrasound findings, differentiate maternal and fetal distress, and apply decision-making for timely referral or intervention.	4	Practical Training 12.1	CAP	Knows-how	PAL,SIM,RLE
CO2,CO4,CO5	Identify the clinical signs of obstructed labor, non-invasive and life-saving interventions, plan for emergency cesarean section, integrate Ayurvedic supportive measures, and communicate effectively with patients and families during obstetric emergencies	4	Practical Training 12.2	PSY-GUD	Shows-how	D-M,D-BED,SIM
CO2,CO3,CO4,CO5,CO7	Identify indications, contraindications, and procedural steps of Mudhagarbha Shalyoddhara karma, demonstrate proper use of surgical instruments, apply surgeon's decision-making, recognize relevant medicines, and demonstrate critical procedures.	4	Practical Training 12.3	PSY-MEC	Shows-how	SIM,D-M,D-BED
CO2,CO3,CO4,CO5,CO7	Discuss Mu?hagarbha from Ayurvedic and modern perspectives, identify clinical signs, apply diagnostic principles and examination techniques, differentiate it from other labour complications, and develop systematic emergency management and referral plans.	6	Experiential-Learning 12.1	CE	Shows-how	RLE,SIM,CBL
CO2,CO3,CO4,CO5	Discuss the Ayurvedic and modern principles for managing Mu?hagarbha, demonstrate life-saving interventions, apply appropriate techniques based on scenarios, plan emergency management with referral decisions, and collaborate effectively in multidisciplinary teams during simulated emergencies.	6	Experiential-Learning 12.2	PSY-GUD	Shows-how	SIM,RLE,CBL
CO2,CO3,CO4,CO5	Perform Mudhagarbha Shalyoddhara karma, demonstrate correct use of Yantras and Shastras, apply surgeon's decision-making in managing complications, prepare and administer relevant medicines, and evaluate challenges encountered during the procedure.	6	Experiential-Learning 12.3	PSY-MEC	Shows-how	RLE,CBL,SIM

M 12 Unit 2 Vilambita prasava (Delayed labour) Vilambita prasava (Delayed labour): Etiopathogenesis, clinical features, diagnosis, prevention and management
References: 2,3,4,14,15,17,22

3A	3B	3C	3D	3E	3F	3G
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CO1,CO2,CO3,CO4	Appraise Vilambita Prasava by integrating Ayurvedic and modern obstetric perspectives, explain its etiological factors, identify maternal and fetal clinical features, apply diagnostic criteria, and differentiate it from other labour complications.	2	Lecture	CE	Knows-how	IBL,L&PPT ,SIM,L&GD,L_VC
CO1	Appraise the prevention and management of Vilambita Prasava (Delayed labour /Prolonged labour).	2	Lecture	CAN	Knows-how	BS,TBL,L_VC,L&PPT ,DIS
CO2,CO3,CO4,CO5	Identify etiological factors and clinical signs of prolonged labour, demonstrate Ayurvedic and modern diagnostic methods, and differentiate Vilambita Prasava from obstructed or false labour.	4	Practical Training 12.4	CE	Knows-how	SIM,D-BED,D-M
CO2,CO3,CO4,CO5	Demonstrate step-by-step management of prolonged labour through Ayurvedic and modern protocols, non-pharmacological and medical interventions, identify criteria for surgical referral, and manage potential complications.	4	Practical Training 12.5	PSY-GUD	Shows-how	LRI,SIM,C_L,CD,D-M
CO2,CO3,CO4,CO5,CO7	Identify causes and clinical signs of prolonged labour, perform appropriate diagnostic assessments, differentiate it from other labour patterns, and decide on timely intervention or referral.	5	Experiential-Learning 12.4	PSY-ADT	Shows-how	RLE
CO2,CO3,CO4,CO5,CO7	Apply non-pharmacological techniques for managing prolonged labour, demonstrate administration of Vasti and simulated oxytocin use, identify indications for surgical referral, and respond effectively to obstetric emergencies.	3	Experiential-Learning 12.5	PSY-GUD	Shows-how	PBL,SIM,RLE

Practical Training Activity

Practical Training 12.1 : Diagnosis of Garbha Sanga –Mudhagarbha (Obstructed labour)

Practical Learning Activities: Duration: 4 Hours (Teacher Demonstration + Student Practice)

1.Introduction & Case Presentation (30 min)

Teacher Activity:

Compare Ayurvedic (e.g., Ashtanga Hridaya's descriptions) and modern definitions of obstructed labor.

Present a case video of a woman with prolonged labor + fetal distress.

Student Activity:

Brainstorming: "What are the red flags in this case?"

2.Diagnostic Skill Stations (2.5 Hours, Rotating Groups)

Station 1: Leopold's Maneuvers

Task:

Practice 4 maneuvers on a pregnancy simulator to determine:

Fetal lie

Presentation

Position

Engagement

Tool: Pregnancy abdomen model, fetal doll.

Station 2: Pelvic Assessment

Task:

Measure diagonal conjugate on a pelvic model.

Identify cephalopelvic disproportion (CPD) markers.

Tool: Pelvimeter, bony pelvis model.

Station 3: Ultrasound Interpretation

Task:

Analyze USG images/videos for:

Breech/transverse lie

Placenta previa

Oligohydramnios

Tool: USG image bank, labeled diagrams.

Station 4: Maternal-Fetal Monitoring

Task:

Interpret CTG tracings (late decelerations, tachycardia).

Palpate uterine contractions (simulator with timer).

Tool: CTG strips, contraction simulation belt.

3.Simulation & Role-Play (1 Hour)

Scenario 1:

Primigravida at 38 weeks with non-progressing labor ? Diagnose occipito-posterior position.

Scenario 2:

Patient with Bandhyatva (secondary arrest) ? Detect CPD and plan cesarean.

Debrief:

Compare Ayurvedic (e.g., Basti, Matra Basti) and modern (oxytocin, C-section) interventions.

4.Documentation & Referral (30 min)

Activity:

Fill out a partogram with fictional case data.

Role-play referral communication to a tertiary center.

Materials Needed:

- Pregnancy simulator, pelvimeter, USG images, CTG strips, partogram forms.

Ayurvedic Integration:

- Discuss Garbhpravartini Dravya (labor-aiding herbs) and when to avoid them in obstruction.

Practical Training 12.2 : Management of Garbha Sanga –Mudhagarbha (Obstructed labour)

Activities: Duration: 4 Hours (Teacher Demonstration + Hands-on Skills Practice)

1. Teacher-Led Demonstrations (2 Hours)

A. Non-Invasive Management (30 min)

Demonstration 1:

Position changes (hands-and-knees, left lateral) to relieve shoulder dystocia using a birth simulator.

McRoberts maneuver with pelvic model.

Visual Aid:

Show animated videos of fetal descent patterns in obstructed labor.

B. Instrumental Delivery (45 min)

Demonstration 2:

Vacuum extraction on a fetal head model (correct cup placement, traction force limits).

Symphysiotomy (simulated with pelvic trainer) – emphasize rare indications.

Safety Drill:

"3 T's" check (Tone, Trauma, Tissue) post-delivery for uterine rupture.

C. Ayurvedic Adjuncts (30 min)

Demonstration 3:

Prepare Matra Basti (medicated enema) for labor stimulation.

Demonstrate Garbhpravartini Kwatha administration with safety caveats.

D. Cesarean Preparation (15 min)

Demo 4:

Time-out checklist (confirm fetal position, consent, blood availability).

Surgical site marking on abdominal model.

2.Student Practice Stations (1.5 Hours, Rotating Groups)

Station 1: Position & Maneuvers

Task:

Practice McRoberts maneuver and suprapubic pressure on mannequin.

Tool: Birth simulator, pelvic model.

Station 2: Vacuum Extraction

Task:

Apply vacuum cup correctly on fetal head model; simulate "pop-off" scenarios.

Tool: Vacuum extractor, fetal head model with force sensor.

Station 3: Emergency Decision-Making

Task:

Manage case cards (e.g., "Patient with 4-hour second stage + fetal bradycardia").

Tool: Decision flowcharts, partogram.

Station 4: Communication Role-Play

Task:

Counsel a "family" on need for emergency C-section using BREAKS protocol (Background, Risk, Empathy, Action, Kindness, Summary).

3.Simulation & Debrief (30 min)

Scenario:

Simulate shoulder dystocia with time pressure; debrief using SBAR (Situation-Background-Assessment-Recommendation).

Takeaway Skill:

"Never waste time in obstructed labor – act, document, and escalate!"

Materials required:

Birth simulator, vacuum extractor, pelvic models, Matra Basti kit, cesarean checklist posters.

Low-Resource Adaptations:

Substitute vacuum with modified silk suture for traction (only for demonstration).

Use rolled cloth to simulate suprapubic pressure.

Practical Training 12.3 : Shalyakarma in Mudhagarbha.(Obstructed labour)

Activities: Duration: 4 Hours

Mode: Teacher Demonstration

Session Breakdown (4 Hours)

1.Introduction & Theoretical Overview (30 min)

Activity:

Brief discussion on Mudhagarbha (obstructed labor), its causes, and why Shalyakarma is needed.

Explanation of Mudhagarbha Shalyoddhara karma procedure as per classical texts (Sushruta Samhita).

Indications (Nidana) and contraindications (Apathyata).

2.Demonstration of Instruments (Yantra & Shastra) (45 min)

Activity:

Display and explain each instrument:

Yantras: Mudrika Yantra, Shalaka, Ankusha

Shastras: Vrihimukha Shastra, Karapatra, Mandalagra

Demonstration of handling techniques, sterilization, and positioning.

3.Step-by-Step Demonstration of Mudhagarbhoddhara (90 min)

Activity:

Pre-operative:

Patient positioning (Asana), Snehana-Swedana (if applicable).

Use of Aushadhis like Dashamoola Kwatha for pain relief.

Intra-operative:

Teacher demonstrates:

Insertion of Yantras for fetal extraction.

Use of Shastras in case of obstruction.

Handling complications (Upadrava) like bleeding.

Emphasis on Adhipati Ajna (surgeon's judgment).

Post-operative:

Pichu Dharana (medicated tampon), Kashaya Basti (enema).

Aushadhis like Jatyadi Ghrita for wound healing.

4.Interactive Discussion & Doubt Clearing (45 min)

Activity:

Students ask questions on complications, alternatives, and variations.

Discussion on Yukti (surgical skill) vs. Shastra (tools).

Recap of key points.

5. Assessment & Feedback (30 min)

Activity:

Short quiz (oral/written) on instruments, steps, and medicines.

Students summarize what they learned in groups.

Teacher provides feedback and corrections.

Teaching Aids Required:

Surgical instruments (Yantra-Shastra set).

Dummy/model for demonstration (if cadaver not available).

Charts of Mudhagarbha conditions.

Samples of Aushadhis used.

Evaluation Criteria:

Accuracy in identifying instruments.

Understanding of procedural steps.

Clarity in explaining Adhipati Ajna and complications.

Practical Training 12.4 : Diagnosis of Vilambita Prasava (Delayed labour /Prolonged labour)

Activities: Duration: 4 Hours Mode: Teacher-Led practical activities

Mode: Teacher Demonstration + Interactive Activities

1. Etiology Demonstration (45 mins)

Activity:

Case Cards: Display 3 cases (e.g., Vata-aggravated diet, CPD, hypotonic uterus).

Group Task: Match causes to Ayurvedic/modern categories (stickers on whiteboard).

Teacher Demo: Summarize with a flowchart.

2. Clinical Features Observation (1 hour)

Tools: Video clips of real labours (blurred patient faces) + Simulated patient (SP).

Demo Steps:

Teacher examines SP/mannequin:

Checks maternal pulse, exhaustion signs.

Demonstrates fetal heart auscultation (Doppler).

Class Activity: Students note observations on a checklist.

3. Diagnostic Techniques (1.5 hours)

Station 1 (Ayurvedic):

Teacher demonstrates Sparshana (palpation for Vata dominance) and Prashna (Q&A on labour history).

Station 2 (Modern):

Partogram plotting demo (highlight prolonged active phase).

Cervical dilation check on pelvic model.

Class Practice: Students repeat steps in pairs with peer feedback.

4. Case Differentiation (45 mins)

Activity:

Teacher presents 2 cases: True prolonged labour vs. obstructed labour.

Students debate diagnostics using a decision tree (projected).

Teacher reveals correct answers with rationale.

Materials Needed:

Mannequins/pelvic models, Doppler, partogram sheets.

Case cards, flowcharts, checklist handouts.

Projector for video/decision tree.

Practical Training 12.5 : Management of Vilambita Prasava (Delayed/Prolonged labour)

Activities: Teacher Demonstration Activities (4 Hours)

1. Introduction & Protocol Overview (30 mins)

Demo: Flowchart of management steps (projected).

Interactive Q&A: Compare Ayurvedic (Vatahara, Basti) vs. modern approaches.

2. Non-Pharmacological Methods (1 hour)

Live Demo:

Maternal positioning (hands-and-knees, squatting) using a birth simulator/mannequin.

Amniotomy simulation (with balloon model).

Class Practice: Students replicate positions in pairs.

3. Medical & Ayurvedic Interventions (1.5 hours)

Station 1 (Modern):

Teacher demonstrates oxytocin IV setup (dummy arm) and explains dosage.

Station 2 (Ayurvedic):

Prepares and applies Garbhashaya Basti (mock demo with herbal paste).

Video Clip: Emergency C-section decision (5 mins discussion).

4. Complication Management (1 hour)

Scenario Demo:

PPH: Uterine massage + IV fluids (mannequin).

Fetal Distress: Immediate delivery steps (forceps/vacuum demo on model).

Role-Play: Students act as "rapid response team" with teacher guidance.

5.Recap & Skill Check (30 mins)

Quiz: "When would you choose Basti over oxytocin?"

Spot Test: 2 students demonstrate one intervention (e.g., positioning).

Materials Needed

Birth simulator/pelvic mannequin, IV setup (dummy), herbal Basti materials.

Projector for protocols, timer for drills.

Experiential learning Activity

Experiential-Learning 12.1 : Diagnosis of Garbha Sanga- Mudhagarbha (Obstructed labour)

Activities (6 Hours)

1.Interactive Lecture & Case Discussion (1.5 Hours)

Activity:

Brief lecture on Mudhagarbha (definition, causes, symptoms).

Compare Ayurvedic (Garbha Sanga) and modern obstetrics perspectives.

Case scenarios (real/virtual) – Group discussion on differential diagnosis.

2.Simulation-Based Learning (2 Hours)

Activity:

Role-play: Participants simulate a patient with obstructed labour (using mannequins if available).

Hands-on Practice: Abdominal palpation (Leopold's maneuvers), pelvic assessment, and fetal monitoring.

Debrief: Facilitator provides feedback on diagnostic accuracy.

3.Diagnostic Skill Station (1 Hour)

Activity:

Station 1: Interpretation of CTG (Cardiotocography) for signs of fetal distress.

Station 2: Identifying malpresentations (breech, transverse lie) via ultrasound images/models.

Station 3: Clinical decision-making – When to refer for C-section?

4.Group Case Study & Management Plan (1 Hour)

Activity:

Small groups analyze a complex case of Mudhagarbha.

Develop a step-by-step emergency management and referral plan.

Present and defend their approach in a peer-review session.

5. Reflection & Assessment (0.5 Hour)

Activity:

Quiz: MCQs on key diagnostic criteria.

Reflective Writing: "What challenges did you face in diagnosing M?dhagarbha?"

Q&A: Clarify doubts and summarize key takeaways.

Assessment Methods:

Participation in simulations & case discussions.

Accuracy in diagnostic stations.

Group case study presentation.

Quiz scores & reflective responses.

Materials Needed:

Mannequins/Simulation models.

Ultrasound/CTG images.

Case sheets, assessment rubrics.

Whiteboard/flip charts for group work.

Experiential-Learning 12.2 : Management of Garbha Sanga – Mudhagarbha (Obstructed Labour)

Activities: (4 Hours)

1. Case-Based Discussion & Protocol Review (1 Hour)

Activity:

Short lecture: Key principles of managing Mu?hagarbha (Ayurvedic Chikitsa + modern obstetrics).

Group discussion: Compare and contrast management approaches using case vignettes.

Protocol review: WHO/ACOG guidelines vs. Ayurvedic Sushruta Samhita recommendations.

2. Simulation Drill: Emergency Management (1.5 Hours)

Activity:

Scenario 1: Maternal distress + fetal bradycardia – Perform resuscitation (IV fluids, oxygen, positioning).

Scenario 2: Shoulder dystocia – Practice McRoberts maneuver, suprapubic pressure.

Scenario 3: Obstructed labour due to malposition – Manual rotation techniques on mannequins.

Debrief: Team roles, timeliness, and errors in management.

3.Skill Stations: Hands-on Techniques (1 Hour)

Activity:

Station 1: Vacuum-assisted delivery (demonstration + practice on model).

Station 2: Decision-making game: "When to refer for C-section?" (case cards with time constraints).

Station 3: Ayurvedic Basti (medicated enema) for uterine relaxation (theory + demo).

4.Role-Play & Team Coordination (0.5 Hour)

Activity:

Simulate an emergency obstructed labour case with assigned roles (OBGYN, midwife, anesthetist, Ayurvedic physician).

Focus on communication, leadership, and time-bound decisions.

Assessment Methods:

Participation in simulations and debriefs.

Competency in skill stations (checklist-based evaluation).

Case-based quiz (10 mins) on critical decision points.

Peer feedback on teamwork during role-play.

Materials Needed:

Obstetric mannequins (for maneuvers/vacuum practice).

Simulation props (IV setup, oxygen mask, partograph).

Case cards, timer, emergency protocol charts.

Ayurvedic medicine samples (Basti ingredients).

Experiential-Learning 12.3 : Mudhagarbha Shalyoddhara karma

Activities: Duration: 6 Hours

Mode: Hands-on Practical Training

Session Breakdown (6 Hours)

1.Pre-Procedure Preparation (1 Hour)

Activity:

Case Discussion: Review a case of Mudhagarbha (obstructed labor) with students, discussing Nidana (causes) and Apathyata (contraindications).

Sterilization & Setup: Students practice sterilization (Shuddhikarana) of Yantras and Shastras using traditional (Agni, Dhara) and modern methods.

Aushadhi Preparation: Students prepare Dashamoola Kwatha, Jatyadi Ghrita, and other relevant medicines under guidance.

2. Hands-on Simulation (3 Hours)

Activity:

Step 1: Patient Positioning & Pre-op Measures

Students practice proper positioning (Asana) and Snehana-Swedana (if applicable).

Step 2: Instrument Handling & Fetal Extraction

Each student uses Mudrika Yantra, Shalaka, and Vrihimukha Shastra on a dummy/model.

Emphasis on correct angles, pressure, and precautions to avoid maternal injury.

Step 3: Managing Complications (Upadrava)

Simulated scenarios (e.g., excessive bleeding, fetal malposition) where students apply Adhipati Ajna to adjust techniques.

Step 4: Post-op Care

Students practice Pichu Dharana (medicated tampon) and Kashaya Basti administration.

3. Live Demonstration (If Possible) (1 Hour)

Activity:

If a real case is available, students observe the teacher performing Mudhagarbhoddhara while assisting in minor tasks (instrument passing, medicine application).

If no live case, a recorded surgery is analyzed with step-by-step commentary.

4. Group Discussion & Problem-Solving (1 Hour)

Activity:

Case-Based Learning: Groups discuss hypothetical complications (e.g., Yantra slippage, retained placenta) and propose solutions.

Debrief Session: Students reflect on challenges faced during hands-on practice and receive corrective feedback.

Teaching Aids Required:

Surgical instrument kit (Yantra-Shastra).

Anatomical models/dummies for simulation.

Sterilization equipment (autoclave, Dhara Yantra).

Pre-prepared Aushadhis (Kwatha, Ghrita, etc.).

Checklist for procedural steps.

Assessment Methods:

Direct Observation: Instructor evaluates hands-on performance of each student.

Oral Viva: Questions on instrument use, decision-making, and complications.

Peer Assessment: Students review each other's techniques in groups.

Key Notes for Instructors:

Ensure strict adherence to safety protocols during hands-on practice.

Encourage students to verbalize their thought process (Adhipati Ajna) during simulations.

Use a blend of traditional (Sushruta-described) and modern techniques for holistic learning.

Experiential-Learning 12.4 : Diagnosis of Vilambita Prasava (Delayed labour/ Prolonged labour)

Duration: 5 Hours

Approach: Hands-on Stations, Case Simulations, and Guided Practice

Experiential Activities (5 Hours)

1. Etiology Sorting Challenge (1 Hour)

Activity:

Case Cards: 10 laminated cards with causes (e.g., Vata-provoking diet, CPD, malposition).

Team Task: Groups sort cards into Ayurvedic/modern categories and present rationale.

Teacher Role: Debrief with a comparative flowchart (projected).

2. Clinical Skills Stations (2 Hours)

Rotating Small Groups (30 mins/station)

Station 1: Maternal Assessment

Practice evaluating exhaustion, dehydration, and vital signs on a simulated patient (SP).

Tool: Checklist with red flags (e.g., tachycardia >100 bpm).

Station 2: Fetal Monitoring

Hands-on Doppler/CTG interpretation (using prerecorded abnormal tracings).

Task: Identify late decelerations/meconium staining risks.

Station 3: Ayurvedic Trividha Pariksha

Demo: Sparshana (abdominal palpation for Vata signs) + Prashna (structured labour history).

Practice: Students interview SPs using an Ayurvedic assessment form.

3. Diagnostic Simulation (1 Hour)

Activity:

Case Scenarios: 3 SPs with varied presentations (e.g., slow dilation, fetal distress).

Teams: Perform rapid assessments (modern + Ayurvedic methods) and diagnose.

Debrief: Teacher compares group findings with gold-standard answers.

4. Differential Diagnosis Game (45 mins)

Activity:

"Prolonged or Not?" Quiz with case vignettes (e.g., latent phase vs. true prolonged labour).

Teams use decision trees to justify answers. Points for speed/accuracy.

5. Reflection & Skill Check (15 mins)

Self-Assessment:

Learners complete a 3-2-1 form (3 key takeaways, 2 doubts, 1 skill to improve).

Teacher Spot-Check:

Randomly assess 2-3 students performing cervical dilation check on a pelvic model.

Assessment Tools

Station Checklists: Graded for accuracy (e.g., "Correctly identified 3/5 CTG red flags").

Case Simulation Rubric: Criteria include history-taking, physical exam, and diagnosis.

Quiz Scores: Differential diagnosis game results.

Materials Needed

Simulation: SPs, pelvic models, Dopplers, CTG printouts.

Ayurvedic Tools: Nadi Pariksha mats, Vata assessment forms.

Games: Laminated case cards, decision tree posters, timers.

Experiential-Learning 12.5 : Management of Vilambita Prasava (Delayed labour/ Prolonged labour)

Experiential Activities (3 Hours)

1.Skill Stations (90 mins | Rotate in small groups)

Station 1: Non-Pharmacological Management

Task: Practice maternal positioning (hands-and-knees, squatting) using birth simulators.

Tool: Timed drill – "Improve dilation in 10 mins with position changes."

Station 2: Medical Interventions

Demo: Oxytocin IV setup (dummy arm) + dosage calculation quiz.

Ayurvedic: Prepare mock Basti (herbal paste) and discuss indications.

Station 3: Emergency Response

Scenario: Manage PPH (uterine massage + IV fluids on mannequin).

Simulation: React to fetal distress (CTG strips + rapid delivery decision).

2.Case-Based Role Play (60 mins)

Activity:

Teams receive 2 cases (e.g., "Primigravida at 8cm for 4 hours").

Role-Play: Students act as obstetrician, midwife, and Ayurvedic physician to:

Assess progress (partogram, Nadi Pariksha).

Decide intervention (Basti vs. oxytocin vs. referral).

Debrief: Teacher compares team choices to guidelines.

3.Competency Challenge (30 mins)

Quiz: "Name 3 signs you'd refer for C-section." (Written + oral).

Speed Drill:

Set up IV oxytocin (dummy) OR perform uterine massage – timed for accuracy.

Assessment Tools

Checklists: Used at stations (e.g., "Correctly performed 3 positions").

Peer Feedback: Rate teamwork during role-play.

Teacher Spot-Check: Observe 1 skill/student (e.g., Basti application).

Materials Needed

Birth simulators, IV dummy arms, herbal Basti kits.

CTG strips, partograms, case cards.

Timers, flip charts for team decisions.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

OSCE 50 marks)

Station 1 (10 marks): Identify obstructed labour from partograph findings.

Station 2 (10 marks): Demonstrate assessment of uterine contractions and fetal heart rate.

Station 3 (10 marks): Enumerate Ayurvedic management approaches for Mudhagarbha.

Station 4 (10 marks): Explain modern interventions for delayed labour (oxytocin, instrumental delivery).

Station 5 (10 marks): Write preventive and safe delivery strategies.

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

4

Semester No : 5

Module 13 : Jatamatra (Neonatal resuscitation) and Navajata Shishu Paricharya (New born care)

Module Learning Objectives

(At the end of the module, the students should be able to)

Demonstrate the Jatamatra shishu paricharya –Pranapratyagamana kriya (Neonatal resuscitation) and Navajatha Shishu paricharya (New born care).
 Develop clinical skills through hands on Jatamatra shishu paricharya (Neonatal resuscitation).
 Analyse the diagnostic criteria of Navajata Shishu Shvasa avarodha (birth asphyxia), interpret the APGAR Score and formulation of management.

M 13 Unit 1 Jatamatra shishu paricharya (Neonatal resuscitation)Jatamatra shishu paricharya (Neonatal resuscitation):

a. Jatamatra shishu pariksha - examination of neonate, APGAR Score

b. Jatamatra shishu charya - neonatal resuscitation

References: 1,2,3,4,15,18,22

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Describe the principles and importance of neonatal resuscitation, identify risk factors and clinical signs requiring intervention, explain the steps of initial newborn care, and discuss the indications and procedure for chest compressions.	2	Lecture	CAN	Knows-how	L_VC,L, L&PPT
CO3,CO4	Demonstrate Jatamatra shishu parikshan (examination of neonate) And Jatamatra shishu paricharya - Pranapratyagamana kriya (neonatal resuscitation)	2	Practical Training 13.1	PSY-GUD	Shows-how	BL,CBL, D-M
CO1,CO3,CO4	Demonstrate initial neonatal resuscitation steps, effective bag-mask ventilation and chest compressions with proper technique and coordination, indications for advanced interventions, and apply team communication strategies during resuscitation.	5	Experiential-Learning 13.1	PSY-MEC	Shows-how	W,RLE, Mnt,SIM, C_L
CO1,CO2,CO3	Describe admission criteria and conditions for the Special Care Newborn Unit (SCNU), triage and stabilization procedures, essential components of care, monitoring protocols, and role of multidisciplinary teamwork in managing high-risk newborns.	1	Lecture	CC	Knows-how	PER,L,L &PPT
CO1,CO2,CO3,CO8	Discuss the importance of infection prevention and control in the neonatal ward, common infection sources and risk factors for HAIs, standard precautions to prevent infections, and the role of environmental hygiene in reducing infection risks.	1	Lecture	CAN	Knows-how	L&GD,L _VC,L&P PT ,L
CO1,CO2,CO3	Describe the principles and steps of neonatal resuscitation as per NRP/AAP guidelines, identify clinical indicators requiring intervention, demonstrate initial care steps and	4	Practical Training 13.2	PSY-GUD	Shows-how	D-M,SIM ,CBL

	effective bag-mask ventilation, perform coordinated chest compressions, and recognize indications for advanced resuscitative measures.					
CO2,CO3,CO4	Identify common neonatal ward infection sources, demonstrate proper hand hygiene and PPE use, apply standard precautions during neonatal care, and perform environmental disinfection of equipment and surfaces.	4	Practical Training 13.3	PSY-GUD	Shows-how	CBL,D-M
CO2,CO3,CO4	Describe the systematic newborn examination, differentiate normal and abnormal findings, demonstrate accurate anthropometric measurements, assess neurological status and primitive reflexes, and identify red flags requiring urgent referral.	5	Experiential-Learning 13.2	PSY-GUD	Shows-how	RLE,SIM,CBL

M 13 Unit 2 Navajata Shishu paricharya - Neonatal care Navajatha Shishu paricharya (Neonatal care): Saindhava sarpi pracchardana, Nabhinadi chedana - Nabhi upakalpana (cutting and care of umbilical cord), Madhu-sarpi prashana
 Navajata shishu Gahanopacara - Neonatal intensive care protocols of immediate resuscitation
References: 1,2,3,4,15,17,22

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO8	Analyze Navajata Shishu paricharya (New born care) including Saindhava sarpi prachhardana, Nabhinadi chhedan - Nabhi upakalpan (cutting of umbilical cord), Madhu-sarpi prashan with their scientific reasoning.	2	Lecture	CAN	Knows-how	L&PPT, L_VC,L&GD,L
CO1,CO4	Demonstrate Saindhava sarpi prachhardana, Nabhinadi chhedan - Nabhi upakalpan (cutting of umbilical cord) and Madhu-sarpi prashan	5	Practical Training 13.4	PSY-GUD	Shows-how	PrBL,D-M,BL,W,TUT
CO4,CO5	Integrate the Ayurvedic principles with evidence-based neonatal care through hands-on practice, demonstrate clinical decision-making in cord care, design context-specific newborn care protocols, and evaluate the safety of traditional practices.	5	Experiential-Learning 13.3	PSY-GUD	Shows-how	SY,RLE,CBL
CO1,CO8	Discuss the general care & examination of newborn.	1	Lecture	CC	Knows-how	D-BED,L_VC,BL,BS,L&PPT

CO2,CO3,CO4	Demonstrate immediate newborn care procedures, effective thermoregulation, assess newborn viability using APGAR and clinical signs, execute basic resuscitation with bag-mask ventilation, and apply evidence-based cord care practices.	5	Experiential-Learning 13.4	PSY-MEC	Shows-how	SIM,D-M,CBL
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M 13 Unit 3 Navajata shishu shvasavarodha - Birth AsphyxiaDiagnosis and management of Navajata shishu shvasavarodha (Birth asphyxia)
References: 1,2,3,4,14,15,17,25

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Describe birth asphyxia and its pathophysiology, identify risk factors and clinical signs using APGAR and HIE staging, ABCDE approach to neonatal resuscitation, management as per NRP guidelines, and complications and post-resuscitation care.	3	Lecture	CAN	Knows-how	L&PPT , L&GD,L_VC
CO1,CO2,CO4	Demonstrate the clinical signs of birth asphyxia using APGAR scoring and HIE staging, NRP algorithm including effective bag-mask ventilation, chest compressions, and emergency medication preparation with accurate dose calculation.	5	Practical Training 13.5	PSY-GUD	Shows-how	CBL,SIM ,D-M
CO1,CO5,CO8	Identify the early signs of birth asphyxia, demonstrate full neonatal resuscitation including advanced interventions, team-based resuscitation with effective communication, techniques for special cases, evaluate post-resuscitation care, and develop quality improvement strategies for clinical management.	6	Experiential-Learning 13.5	PSY-MEC	Shows-how	SIM,CBL ,RLE

Practical Training Activity

Practical Training 13.1 : Jatamatra shishu parikshana (examination of neonate)

Activities for 2 hours

(Teacher Demonstration + Student Practice)

1.Introduction & Demonstration (30 min)

Teacher Activity:

Explain the sequence of neonatal examination (ABC approach: Airway, Breathing, Circulation first).

Demonstrate proper handling (warm hands, gentle restraint, infection control).

Show use of instruments (stethoscope, thermometer, measuring tape, pulse oximeter).

Student Activity:

Observe and take notes.

Ask clarifying questions.

2. Step-by-Step Examination (60 min)

Teacher Demonstration (30 min):

Head-to-Toe Exam:

Head: Fontanelles, sutures, caput succedaneum/cephalohematoma.

Eyes: Red reflex, discharge.

Mouth: Cleft palate, thrush.

Chest: Breath sounds, heart murmurs.

Abdomen: Organomegaly, umbilical stump.

Genitals: Undescended testes, hypospadias (if applicable).

Extremities: Hip dysplasia, clubfoot, polydactyly.

Neurological Exam:

Demonstrate primitive reflexes (Moro, rooting, grasp).

Anthropometry:

Measure and plot weight, length, head circumference.

Guided Student Practice (30 min):

In pairs, students practice examination on a mannequin/swaddled doll under supervision.

Teacher provides real-time feedback on technique.

3. Case-Based Discussion & Red Flags (20 min)

Teacher Activity:

Present 2-3 clinical cases (e.g., jaundiced baby, preterm with tachypnea).

Discuss differential diagnoses and when to refer.

Student Activity:

Identify abnormal findings in cases.

Suggest next steps (e.g., lab tests, specialist consult).

4. Documentation & Recap (10 min)

Teacher Activity:

Show a sample newborn examination form and explain key entries.

Summarize key takeaways.

Student Activity:

Fill out a mock examination form based on findings from practice.

Practical Training 13.2 : Jatamatra shishu paricarya (Neonatal resuscitation)

Activities: 4 hours (Teacher Demonstration + Student Practice)

1. Introduction & Theory Overview (30 min)

Teacher Activity:

Explain the NRP algorithm and key decision points.

Discuss risk factors (e.g., meconium, prematurity, maternal fever).

Show equipment setup (radiant warmer, bag-mask, laryngoscope, suction).

Student Activity:

Participate in Q&A on scenarios requiring resuscitation.

Familiarize themselves with resuscitation tools.

2. Demonstration of Initial Steps (60 min)

Teacher Demonstration (30 min):

Initial Steps:

Warm & dry the baby (use mannequin).

Position (sniffing position), clear airway (suction mouth then nose).

Stimulate (flicking feet, rubbing back).

Assessment:

Evaluate breathing, heart rate (HR), color using a pulse oximeter.

Decision Making:

When to start PPV (if apnea/gasping or HR <100).

Guided Student Practice (30 min):

In small groups, students practice initial steps on mannequins.

Teacher corrects positioning, suction technique, and stimulation.

3. Bag-Mask Ventilation & Chest Compressions (90 min)

Teacher Demonstration (45 min):

PPV Technique:

Show proper mask seal (C-grip), ventilation rate (40-60/min).

Demonstrate troubleshooting leaks (repositioning, adjusting pressure).

Chest Compressions:

Teach two-thumb vs. encircling method (compress 1/3 of chest depth).

Coordinate with ventilation (3:1 ratio, 90 compressions + 30 breaths/min).

Student Practice (45 min):

Rotate roles: ventilator, compressor, team leader.

Simulate HR improvement (or lack thereof) to decide next steps.

4. Advanced Interventions & Scenarios (60 min)

Teacher Demonstration (30 min):

Endotracheal Intubation:

Show laryngoscope use, insertion depth, confirmation.

Medications:

Indications for epinephrine, volume expansion.

Special Cases:

Meconium aspiration, preterm baby, twins.

Simulation Drills (30 min):

Groups manage 3-4 timed scenarios (e.g., baby not breathing, HR <60).

Debrief after each case (what worked, errors, corrections).

5. Post-Resuscitation Care & Documentation (30 min)

Teacher Activity:

Explain monitoring vitals, glucose, temperature.

Show Apgar scoring and documentation.

Student Activity:

Fill out a mock resuscitation record.

Discuss ethical considerations (when to stop resuscitation).

Practical Training 13.3 : Infection Prevention and Control (IPC) in the Neonatal Ward (Kumaragara)

Activities: 4 hours (Teacher Demonstration + Hands-on Practice)

1. Introduction & IPC Principles (30 min)

Teacher Activity:

Present statistics on neonatal infections (e.g., sepsis rates due to poor IPC).

Explain the chain of infection and how to break it.

Show IPC guidelines (WHO/MSF/local protocols).

Student Activity:

Brainstorm common IPC lapses in their clinical experience.

Quiz on key terms (asepsis, sterilization, HAI).

2. Hand Hygiene & PPE (60 min)

Teacher Demonstration (30 min):

Demonstrate WHO's 6-step handwashing with soap/water and alcohol-based rub.

Show PPE donning/doffing (gloves ? gown ? mask ? goggles) with emphasis on order to avoid contamination.

Student Practice (30 min):

Handwashing competition: Use UV glow gel to check missed areas.

PPE relay: Teams race to wear/remove PPE correctly (timed with feedback).

3. Standard Precautions in Procedures (90 min)

Teacher Demonstration (45 min):

Aseptic techniques for:

Umbilical cord care (chlorhexidine application).

IV cannulation (skin prep, sterile drapes).

Enteral feeding (handling expressed breast milk, syringe hygiene).

Waste segregation (color-coded bins for sharps, soiled linen, biomedical waste).

Student Practice (45 min):

Role-play:

"Clean vs. contaminated" game: Students identify IPC breaches in a staged ward scenario.

Practice cord care and mock IV insertion on mannequins using sterile kits.

4. Environmental Cleaning & Outbreak Response (60 min)

Teacher Demonstration (30 min):

Show correct disinfectant preparation (e.g., chlorine solution for spills).

Demonstrate incubator cleaning (daily vs. terminal cleaning).

Simulate outbreak response (e.g., cohort isolation, increased surveillance).

Student Activity (30 min):

Group task: Design a cleaning checklist for cots, monitors, and ventilators.

Case study: Solve an outbreak scenario (identify source, suggest IPC measures).

5. Monitoring & Audits (30 min)

Teacher Activity:

Explain IPC audits (checklists, swab cultures, hand hygiene compliance).

Show documentation examples (infection rate logs, incident reports).

Student Activity:

Mock audit: Inspect a "dirty ward" setup and list IPC violations.

Debate: "Can low-resource settings achieve zero HAIs?"

Assessment: Formative:

Spot checks during handwashing/PPE drills.

Feedback on aseptic technique during procedures.

Summative: OSCE stations: Hand hygiene + PPE.

Sterile IV insertion. Outbreak scenario discussion.

Materials Needed: Handwash UV kit, PPE sets, chlorhexidine, sterile gloves, IV demo kits, bleach solutions, cleaning checklists.

Practical Training 13.4 : Navajatha Shishu paricharya (New born care)

Practical: Teacher demonstration + Student practice

Hour 1: Foundation & Navajata Shishu Paricharya (Teacher Demonstration & Explanation)

Theme: Laying the Groundwork for Immediate Care

(0-15 mins): Introduction & Theoretical Framework

Teacher Activity: Briefly introduce the importance of Navajata Shishu Paricharya in Ayurveda for establishing lifelong health (Swasthavritta). Outline the sequence of care from birth onwards.

Student Activity: Listen, ask initial questions.

(15-45 mins): Step-by-Step Demonstration of Immediate Care

Teacher Activity: Using the baby model, demonstrate and explain each step:

Prasuta-Griha Pravesha (Entry to the Delivery Room): Ensuring a warm, calm, and clean environment.

Saindhava sarpi prachhardana, Nabhinadi chhedan - Nabhi upakalpan (cutting of umbilical cord): Briefly introduce the concept (detailed demo in Hour 3).

(45-60 mins): Q&A and Rationale Discussion

Teacher Activity: Facilitate a discussion on the 'why' behind each step. Connect procedures to Doshic balance (especially Vata pacification) and strengthening immunity.

Student Activity: Engage in discussion, relate Ayurvedic principles to the practical steps.

Hour 2: Procedure 1 - Saindhava Sarpi Pracchardana (Teacher Demo & Student Practice)

Theme: Cleansing the Alimentary Canal

(0-15 mins): Detailed Explanation

Teacher Activity: Explain the purpose of Pracchardana: to cleanse the stomach of amniotic fluid residue (Amaja Bhavas) and stimulate digestion. Discuss the ingredients: the unctuousness of Ghee (Sarpi) and the cleansing property of Rock Salt (Saindhava). Mention the ideal time (just before first feed) and contraindications.

Student Activity: Listen and note down key points.

(15-30 mins): Teacher Demonstration

Teacher Activity: Demonstrate the procedure on the baby model.

Preparation: Mix a tiny, pea-sized amount of fresh ghee with a grain of powdered Saindhava salt.

Positioning: Place the baby model in a semi-reclining position.

Administration: Gently apply the mixture to the back of the tongue and the soft palate using a small, soft finger cot or spatula.

Observation: Explain the expected response (mild coughing, gagging, or swallowing).

Student Activity: Observe the technique, handling, and dosage carefully.

(30-60 mins): Student Practice Session

Teacher & Student Activity: Students break into small groups. Each group practices the procedure on their baby models under the teacher's supervision.

Focus: Correct dosage, gentle technique, proper positioning, and hygiene.

Teacher's Role: Rotate among groups, provide corrective feedback, and ensure confidence.

Hour 3: Procedure 2 - Simulated Nabhi Upakalpana (Teacher Demo & Student Practice)

Theme: The First Surgical Procedure

(0-20 mins): Theoretical Background & Demonstration

Teacher Activity: Explain the importance of the umbilical cord (Nabhi) as a vital Marma. Describe the traditional and modern methods for cutting and caring for the cord.

Emphasize sterility and precision.

Demonstration: Using a cord simulator (e.g., a piece of rope/tubing clamped to the model), demonstrate:

Site Selection: Where to cut (leaving a 2-3 fingerbreadth stump).

Cutting Technique: Using a sterile instrument in one swift, confident motion.

Stump Care: Application of medicated powder (e.g., Yashtimadhu or Rakshoghna Churna) and a sterile, dry dressing.

Student Activity: Observe the entire process, focusing on safety and aseptic technique.

(20-50 mins): Student Practice Session

Teacher & Student Activity: In their groups, students practice the simulation on their models.

Focus: Measuring the stump length, simulating the cutting motion, and practicing the dressing.

Teacher's Role: Supervise closely, correct hand placement, and reinforce the principles of infection control.

(50-60 mins): Recap and Discussion

Teacher Activity: Recap the key points of the first three hours. Briefly connect the procedures done so far.

Student Activity: Share their experiences and challenges during practice.

Hour 4: Procedure 3 - Madhu-Sarpi Prashana (Teacher Demo & Student Practice)

Theme: The First Oral Immunization

(0-15 mins): In-depth Explanation

Teacher Activity: Elaborate on the significance of Madhu (Honey) and Sarpi (Ghee) as the first oral intake (Prashana). Quote classical texts (e.g., Ashtanga Hridaya) regarding its benefits for intellect, strength, and immunity (Medha, Bala, Aarogya). Stress the importance of using pure, certified, and sterilized honey for infants.

Student Activity: Listen and understand the profound implications of this simple procedure.

(15-30 mins): Teacher Demonstration

Teacher Activity: Demonstrate the procedure step-by-step.

Preparation: Mix a tiny drop of honey with a tiny drop of warmed, liquid ghee on a clean spoon.

Samskara (Purification): Explain the concept of purifying the honey (by mixing with a little gold-treated water or simply by ensuring its quality).

Administration: Gently place a minute amount of the mixture on the tip of the baby's tongue using a soft spoon or a clean finger.

Student Activity: Observe the meticulous preparation and administration.

(30-60 mins): Student Practice Session

Teacher & Student Activity: Students practice the mixing and administration on their models.

Hour 5: Integration, Assessment, and Refinement

Theme: Putting It All Together

(0-30 mins): Integrated Practice Session

Teacher & Student Activity: Students perform a complete, sequential simulation on their models, integrating all three procedures in the correct order:

Nabhi Upakalpana (Simulated), Saindhava Sarpi Pracchardana, Madhu-Sarpi Prashana

Practical Training 13.5 : Birth Asphyxia management

Activities: 5 Hours (Teacher-Led Skills Training)

1. Introduction & Case Scenario (30 min)

Teacher Activity:

Present a real case video of birth asphyxia (e.g., meconium-stained baby with HR <60).

Highlight key decision points (when to start PPV, escalate to compressions).

Student Activity:

Group discussion: "What went wrong in this scenario?"

2. Core Skill Stations (3 Hours, Rotating Groups)

Station 1: Initial Steps & PPV

Task:

Practice drying, positioning, suctioning, stimulation on a mannequin.

Perform PPV with bag-mask (adjust PIP/PEEP to achieve chest rise).

Tool: Neonatal mannequin with chest rise feedback, pulse oximeter.

Station 2: Chest Compressions

Task:

Demonstrate two-thumb technique (depth: 1/3 of chest, rate: 90/min).

Coordinate with PPV (shout "Breathe-2-3-Compress-2-3").

Tool: Mannequin with compression depth sensor.

Station 3: Advanced Interventions

Task:

Simulate endotracheal intubation (blade size, insertion depth).

Prepare epinephrine (1:10,000) and normal saline for volume expansion.

Tool: Intubation trainer, umbilical vein cannulation model, medication vials.

Station 4: Post-Resuscitation Care

Task:

Set up therapeutic hypothermia (cooling cap/mattress).

Monitor vitals, blood glucose, seizures.

Tool: Cooling device simulator, EEG seizure demo (video).

3.High-Fidelity Simulations (1 Hour)

Scenario 1:

Term baby with primary apnea (HR >100, no breathing) ? Focus on PPV.

Scenario 2:

Preterm baby with severe bradycardia (HR <60) ? Full resuscitation (PPV + compressions + epinephrine).

Scenario 3:

Baby with HIE ? Initiate hypothermia and discuss prognosis with "parents."

4.Debrief & Protocol Development (30 min)

Activity:

Analyze team performance in simulations (communication errors, delays).

Draft a local birth asphyxia management protocol for participants' workplaces.

Assessment Tools:

Formative: Instructor feedback during skill stations.

Summative:

OSCE: Manage a simulated asphyxiated newborn.

Medication calculation test (e.g., "Dose of epinephrine for 3kg baby?").

Materials Needed:

High-fidelity mannequin, bag-mask, laryngoscope, umbilical catheters, cooling devices, timer.

Experiential learning Activity

Experiential-Learning 13.1 : Jatamatra prana pratyagamana kriya (neonatal resuscitation)

Activities:

1. Pre-Test & Baseline Knowledge (30 min)

Activity:

Written quiz (MCQs on NRP algorithm, normal vitals, risk factors).

Group discussion: "What scares you most about neonatal resuscitation?"

2. Skill Stations (2 Hours, Rotating Small Groups)

Station 1: Initial Steps & Airway Management

Task:

Practice drying, positioning, suctioning (using bulb syringe/mechanical suction).

Identify obstructed airway scenarios (e.g., meconium).

Tool: Neonatal mannequin with airway obstruction simulator.

Station 2: Bag-Mask Ventilation

Task:

Demonstrate mask seal (C-grip), adjust PIP/PEEP, troubleshoot leaks.

Simulate HR response (improvement vs. no change).

Tool: Self-inflating bag with pressure gauge + pulse oximeter feedback.

Station 3: Chest Compressions & Team Dynamics

Task:

Practice two-thumb technique (depth, rhythm, coordination with ventilation).

Role-play team leader vs. compressor vs. documenter.

Tool: Mannequin with compression feedback device.

Station 4: Advanced Interventions

Task:

Demo laryngoscopy (blade size, insertion depth), umbilical vein cannulation.

Calculate epinephrine dose (1:10,000) and simulate administration.

Tool: Intubation trainer, umbilical cord model, medication vials.

3. High-Fidelity Simulations (2 Hours)

Scenario 1: Primary Apnea (HR >100, No Spontaneous Breathing)

Goal: Reinforce initial steps + PPV.

Debrief: Importance of timely intervention.

Scenario 2: Secondary Apnea (HR <60, Cyanosis)

Goal: Escalate to chest compressions + medications.

Debrief: Team roles, error analysis (e.g., delayed compressions).

Scenario 3: Extreme Prematurity (23 Weeks, No Response to PPV)

Goal: Discuss viability limits, ethical pauses.

Debrief: Shared decision-making with parents.

4. Post-Test & Reflection (30 min)

Activity:

OSCE stations (e.g., "This baby needs PPV—show correct steps").

Group reflection: "What skill was hardest? How will you improve?"

Experiential-Learning 13.2 : Navajata Shishu parikshana (Neonatal examination)

Activities:

1. Pre-Session Assessment (30 min)

Activity:

Baseline knowledge quiz (MCQs on normal newborn physiology).

Group discussion: "What abnormalities are most commonly missed in newborn exams?"

2. Skill Stations (3 Hours, Rotating Small Groups)

Station 1: Anthropometry & Vital Signs

Task:

Measure weight (digital/spring scale), length (infantometer), head & chest circumference.

Practice axillary temperature, respiratory rate, and heart rate assessment.

Tool: Live newborns (with parental consent) or realistic mannequins.

Station 2: Head-to-Toe Physical Exam

Task:

Head: Palpate fontanelles, assess for caput/cephalohematoma.

Eyes: Check red reflex (ophthalmoscope), conjunctival hemorrhage.

Mouth: Inspect for cleft palate/thrush.

Chest/Auscultation: Identify murmurs, grunting, retractions.

Abdomen: Palpate liver/spleen, check umbilical stump.

Genitals/Anus: Confirm patency (e.g., imperforate anus).

Hips: Perform Barlow/Ortolani maneuvers for DDH.

Tool: Newborn mannequins with pathologic findings (e.g., simulated cleft palate).

Station 3: Neurological & Reflex Assessment

Task:

Elicit primitive reflexes (Moro, rooting, sucking, grasp, stepping).

Assess tone (scarf sign, limb resistance).

Tool: Swaddled dolls with adjustable resistance.

Station 4: Documentation & Communication

Task:

Fill out a standard newborn exam form (emphasizing abnormal findings).

Role-play parent counseling (e.g., explaining jaundice or hip dysplasia).

Tool: Sample forms, SPIKES protocol cards for breaking bad news.

3.Real Case Practice (1 Hour)

Activity:

Supervised newborn exams (with consent) in postnatal ward/NICU.

Find-the-error game: Instructor plants subtle abnormalities (e.g., simulated heart murmur) for detection.

4.Post-Session Debrief (30 min)

Activity:

Group reflection: "Which findings were challenging? How will you improve?"

OSCE-style stations (e.g., "Examine this baby for hypotonia").

Experiential-Learning 13.3 : Jatamatra shishu paricarya -prana pratyagamana kriya (neonatal resuscitation)

Activities:

1.Knowledge Lab (1 Hour)

Activity 1: Comparative Science Deep-Dive

Small groups research/report on:

Ghee's fatty acids vs. petroleum jelly for skin barrier.

Botulism spores in honey: Heat-treatment evidence.

Chlorhexidine vs. turmeric in cord infection prevention.

Output: Infographics to display in workshop area.

Activity 2: "Myth Busters" Debate

Teams debate statements like:

"Traditional practices are always safer than hospital interventions for newborns."

2.Multi-Station Skill Circuit (2.5 Hours)

Station 1: Dynamic Cord Care Lab

Task:

Perform 4 techniques on cord models:

Ayurvedic (turmeric+ghee)

WHO-standard (chlorhexidine)

Hybrid (chlorhexidine + ghee massage)

High-risk (contaminated tool simulation)

Swab & culture samples (pre/post intervention) with UV lamp demo of "germ spread".

Station 2: Madhu-Sarpi Safety Challenge

Task:

Prepare honey-ghee mixtures:

Raw vs. heat-treated honey (120°C for 5 mins)

Fresh vs. rancid ghee

Use pH strips/microscopes to assess microbial growth (pre-prepared slides).

Station 3: Thermoregulation Olympics

Task:

Test 3 methods on mannequins:

Saindhava Sarpi + swaddling

Skin-to-skin + radiant warmer

Oil massage + kangaroo care

Monitor "temperature" changes (simulated data).

Station 4: Crisis Role-Plays

Scenarios:

Parent refuses cord clamping; insists on home remedy.

Baby develops omphalitis after turmeric application.

3.Live Clinic/Simulation (1 Hour)

Option A: Supervised practice on live newborns (post-delivery ward with consent).

Option B: High-fidelity simulated cases with feedback:

Preterm baby: Adjust traditional practices.

LBW baby: Modify massage pressure.

4.Protocol Design Sprint (30 min)

Groups create checklists for:

Hospital setting: Integrating ghee massage with routine care.

Home birth: Emergency signals (when to transfer to hospital).

PHC: Low-cost antiseptic alternatives.

5.Reflection & Certification (30 min)

Activity:

"One change I'll make in my practice" commitments (written pledges).

Micro-credential badges awarded for:

Safety Champion (best risk mitigator)

Culture Bridge (top counseling skills)

Experiential-Learning 13.4 : Sadyojata shishu paricharya-Immediate newborn care

1.Pre-Session Knowledge Check (30 min)

Activity:

Baseline Quiz (MCQs on normal newborn transition, APGAR parameters).

Group Brainstorming: "What are the most critical first 90 seconds after birth?"

2.Rotating Skill Stations (3 Hours)

Station 1: The Golden Minute Drill

Task:

Practice delayed cord clamping (time 1-3 minutes using timer).

Perform drying, positioning, and stimulation on mannequin.

Tool: Newborn mannequin, cord clamp, warm towels, timer.

Station 2: Thermoregulation Challenge

Task:

Demonstrate skin-to-skin contact with weighted doll (proper positioning).

Operate radiant warmer with servo-control.

Tool: Infant mannequin, radiant warmer, temperature probes.

Station 3: Airway Management & Stimulation

Task:

Clear simulated meconium with bulb syringe/mechanical suction.

Practice tactile stimulation techniques (flicking feet, back rubs).

Tool: Airway trainer, suction devices.

Station 4: APGAR Scoring & Documentation

Task:

Evaluate video scenarios of newborns at 1/5/10 minutes.

Document findings on newborn care forms.

Tool: APGAR video clips, scoring sheets.

Station 5: Parent Counseling Role-Play

Task:

Explain delayed bathing benefits to "parents".

Teach danger sign recognition (grunting, lethargy, poor feeding).

Tool: Counseling checklist, role cards.

3. Emergency Simulation Drills (1 Hour)

Scenario 1: Vigorous Term Baby

Focus: Routine care (DCC, thermoregulation, early breastfeeding).

Scenario 2: Non-Vigorous Baby (HR <100)

Focus: Escalate to PPV with bag-mask.

Scenario 3: Preterm (32 Weeks)

Focus: Special considerations (plastic wrap, delayed cord clamping).

4. Debrief & Protocol Development (30 min)

Activity:

Groups design ideal immediate care protocols for their workplaces.

Share & refine based on evidence.

Experiential-Learning 13.5 : Diagnosis and management of birth asphyxia

Activities: 6 Hours (Immersive Simulation-Based Training)

1. Pre-Session Assessment (45 min)

Baseline Knowledge Check:

Interactive Quiz using audience response system (e.g., "What is the first action for a non-breathing newborn?")

Skill Gap Identification: Participants self-rate confidence in resuscitation steps.

2. Core Skill Stations (3 Hours, Rotating Groups)

Station 1: Rapid Assessment & Decision-Making

Activity:

Analyze video vignettes of newborns (normal vs. asphyxiated) and document APGAR scores.

Use augmented reality (AR) to visualize hypoxia effects on organs.

Tool: Tablets with AR apps, video case library.

Station 2: High-Fidelity Resuscitation

Activity:

Manage computerized mannequins that respond to interventions (HR rises with effective PPV).

Practice team roles (leader, compressor, ventilator, medication nurse).

Tool: SimNewB® or equivalent, role cards.

Station 3: Procedure Lab

Activity:

Hands-on practice of:

Endotracheal intubation (with video laryngoscope feedback)

Umbilical vein catheterization (using gelatin-based cord models)

Epinephrine administration (dose calculation drills)

Tool: Task trainers, 3D-printed umbilical cords, medication kits.

Station 4: Debrief & Reflection

Activity:

Review video recordings of team performance in simulations.

Identify 3 strengths and 1 area for improvement using structured checklist.

3. Progressive Scenario Drills (1.5 Hours)

Scenario 1: Primary Apnea

Focus: Initial steps + PPV ? Debrief on ventilation effectiveness.

Scenario 2: Severe Asphyxia (HR <60)

Focus: Full resuscitation (PPV + compressions + epinephrine) ? Debrief on team dynamics.

Scenario 3: Post-Resuscitation Crisis

Focus: Seizure management + hypothermia initiation ? Debrief on transition to NICU care.

4. Quality Improvement Workshop (45 min)

Activity:

Groups design checklists or mnemonics for:

Emergency equipment readiness (e.g., "TONGS": Temperature, Oxygen, NRP guidelines, Glucose, Suction)

Human factors (e.g., "CLEAR" communication: Concise, Loud, Eye contact, Acknowledged, Repeated)

Present protocols to peers for feedback.

5. Certification & Commitment (30 min)

Activity:

Objective Structured Clinical Exam (OSCE):

5-minute test on a randomized scenario.
 Personal Action Plans: Participants write "One change I will implement within 1 week."
 Assessment Tools:
 Formative:
 Real-time mannequin data (e.g., ventilation rate accuracy).
 Peer evaluations during team scenarios.
 Summative:
 OSCE scoring (pass/fail critical actions).
 Pre/post-test knowledge gains.
 Materials Needed:
 High-fidelity mannequins, AR devices, video debrief system, task trainers, emergency medication kits.
 Innovative Elements:
 Stress Inoculation: Add ambient delivery room noise/distractions during simulations.
 Cultural Competency: Include scenarios with parental refusal of interventions.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

OSCE 50 marks)

- Station 1 (10 marks): Identify essential Jatamatra Shishu care from a checklist.
- Station 2 (10 marks): Demonstrate airway clearance and positioning of neonate.
- Station 3 (10 marks): Interpret a given APGAR score at 1 and 5 minutes.
- Station 4 (10 marks): Write diagnostic features of Shvasa Avarodha (Ayurvedic + modern).
- Station 5 (10 marks): Demonstrate first two steps of neonatal resuscitation (drying, stimulation).

Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 14 : Vishesha Adhyayana of Prasava Vishishta Aushadhi

Module Learning Objectives

(At the end of the module, the students should be able to)

Demonstrate the detailed description of Vishesha Adhyayana of Prasava Vishishta Aushadhi - Prasava Paricharyantargata Yoga, Sutika Paricharyantargata Yoga and Navajata-shishu Paricharyantargata Yoga.

Analysis of different ingredients in aushadhayoga and their chemical constituents with their biochemical, pharmacological properties and therapeutic effects in Prasava Paricharya, Sutika Paricharya and Navajata shishu Paricharya.

Develop the skill to assess the Mechanism of action of different yogas and adequate application during Prasavavasta, Sutikavasta and Navajata shishu Paricharya.

M 14 Unit 1 Prasava Paricharyantargata Yoga Sukhaprasavakara ghrita, Balataila, Atibala taila, Guduchi taila, Shatavari taila, Madhuyashti taila, Dadimadighrita, Sukhaprasavakara Yoga, Sidharthakadi taila

References: 1,2,3,4,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO4	Elucidate the concept and clinical applications of Prasava Paricharyantargata Yoga (therapeutic formulations used during labour), highlighting the pharmacological and therapeutic properties of various formulations such as Bala Taila, Eranda Taila, Guduchi Taila, Shatavari Taila, Shatapushpa Taila, Madhuyashti Taila, Dadimadi Ghrita, and Sukhaprasavada Ghrita.	2	Lecture	CAP	Knows-how	L,L&GD, L&PPT
CO4	Analysis of different ingredients in Sukhaprasavakara ghrita, Bala Taila, Atibala Taila, Guduchi taila, Madhuyashtyadi taila, Dadimadi ghrita and Sukhaprasavakara yoga and their chemical constituents with their biochemical, pharmacological properties and therapeutic effects in Prasava Paricharya	5	Practical Training 14.1	PSY-GUD	Shows-how	ML,TPW, PAL,BL, PrBL
CO1,CO3,CO4	Evaluate the knowledge and skills necessary to prepare and administer	10	Experiential-	CE	Does	TPW,PA

,CO8	prasnparicharyantargata formulations used in prasava paricharya (intrapartum care), focusing on their therapeutic effects, preparation techniques, and safe administration practices.		Learning 14.1			L,LRI,ML,DA
CO4,CO8	Identify, collect, prepare, and apply the Prasava Paricharyantargata Yogas (Therapeutic Formulations) used during prasava (labour).	5	Practical Training 14.2	PSY-GUD	Shows-how	FV,D,DA,DG
CO1,CO3	Evaluate the Prasava Paricharyantargata Yogas (Therapeutic formulations used during labour) in facilitating Sukhaprasava (Easy Labour).	7	Experiential-Learning 14.2	PSY-ADT	Does	SY,DIS,PSM,PBL,RLE
CO1,CO2	Explain the role of Prasava Paricharyantargata Yoga (therapeutic formulations used during labor) in facilitating Sukhaprasava (easy labor), by promoting uterine tone and enhancing maternal strength through their Ayurvedic properties, supported by contemporary evidence-based insights."	2	Lecture	CC	Knows-how	L&GD,L,L&PPT

M 14 Unit 2 Sutika Paricharyantargata Yoga Panchakola churna, Soubhagyashunti, Dasmoolarishta, Sutika Dashamula, Panchajeerakapaka, Sootikabharan rasa. Devadaryadi Kwatha, Pratapalankeshwara Ras, Nagarkhanda, Traivrita yoga

References: 1,2,3,4,6,15,17

3A	3B	3C	3D	3E	3F	3G
CO1	Analyse the Sutika Paricharyantargata Yoga, including Panchakola churna, Dasmoolarishta, Sutika Dashamoola, Panchajeerakapaka, Jeerakadyarishta, Sootikabharan rasa, Devadarvadi Kwatha, Pratapalankeshwara Ras, Nagarkhanda, Soubhagyashunti paka, Traivrita yoga, Stanyavridhhi kar yoga, Shatavari kalpa, Shatavari granules, and Bala taila.	4	Lecture	CAN	Knows-how	DIS,TBL,L_VC,L&PPT
CO3,CO4	Demonstrate the identification and mode of action of Sutika Paricharyantargata Yoga, including Panchakola churna, Dasmoolarishta, Sutika Dashamoola, Panchajeerakapaka, Jeerakadyarishta, Sootikabharan rasa, Devadarvadi Kwatha, Pratapalankeshwara Ras, Nagarkhanda, Soubhagyashunti paka, Traivrita yoga, Stanyavridhhi kar yoga, Shatavari kalpa, Shatavari granules, and Bala taila.	4	Practical Training 14.3	PSY-GUD	Shows-how	DL,TBL,D,CBL,DG

CO2,CO4,CO7,CO8	Evaluate the use of common medications used in Sutika kaal (postpartum care), such as Vedanahar (analgesics), antibiotics (Krumihar), and Garbhashaya sankochkar (uterotonic).	4	Experiential-Learning 14.3	CAP	Knows-how	RP,CBL,RLE,D-BED,PBL
CO3,CO4	Demonstrate the standard method of preparation, administration/ application/ Side-effects (if any) of Sutika Paricharyantargata Yogas, such as Panchakola churna, Dasmoolarishta, Sutika Dashamoola, Panchajeerakapaka, Jeerakadyarishta, Sootikabharan rasa, Devadarvadi Kwatha, Pratapalankeshwara Ras, Nagarkhanda, Soubhagyashunti paka, Traivritta yoga, Stanyavridhhi kar yoga, Shatavari kalpa, Shatavari granules, and Bala taila.	3	Practical Training 14.4	PSY-GUD	Shows-how	DG,FV,DA,D
CO3,CO4,CO8	Plan treatment strategies using Sutika Paricharyantargata Yogas based on diverse clinical presentations:	3	Experiential-Learning 14.4	PSY-ADT	Does	TBL,PSM,RLE,FV,PBL

M 14 Unit 3 Navajatashishu Paricharyantargata Yoga Kushtataila, Chandanadi churna—indications, dose and time of administration

References: 1,2,3,4,13,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Describe the application of Navajata-shishu Paricharyantargata Yoga, including Ajmodadi arka, Kushtataila, Yastimadhu taila, Balataila, Panchvalkal kashaya, Jatyadi taila, Mahatiktaka lepa, and Chandanadi churna.	2	Lecture	CAP	Knows-how	L,L_VC,L&PPT, BL,L&GD
CO1,CO4,CO8	Demonstrate the proper techniques and procedures for safe and effective drug administration in navajat shishu (newborns).	3	Practical Training 14.5	PSY-GUD	Shows-how	TUT,C_L,BL,D-M,D
CO3,CO4,CO8	Appraise the administration and monitoring of medications in Navajat shishu paricharya (newborn care) in clinical settings and evaluate the appropriate dosages and potential side effects.	2	Experiential-Learning 14.5	CE	Knows-how	CBL,RLE,SIM

Practical Training Activity

Practical Training 14.1 : Prasava Paricharyantargata Yoga

Activity: Teacher demonstration + Student practice 5 hours

A.Hour 1: Foundation & The Science of Sneha Kalpana

1. Teacher-Led Demonstration & Interactive Lecture (45 mins)

Introduction to Analytical Framework (15 mins):

The 'Why' behind the Formulation: Reiterate the clinical goals of Prasava Paricharya: Garbhasthapana (maintaining pregnancy), Sukhprasava (easing parturition), and Sutika Paricharya (post-natal recovery).

The Bioavailability Factor: Demonstrate the Murchana process of oil/ghee. Explain pharmacologically how this lipid-based medium (Sneha) enhances the absorption of fat-soluble active phytoconstituents.

Demo: Standardized Sneha Kalpana Preparation (30 mins):

Quickly prepare a small batch of a simple Bala Taila.

While preparing, focus the discussion on the science:

"What are we extracting?" Link the heat and the lipid medium to the extraction of alkaloids, steroids, and fatty acids from the Bala root.

"Why is constant stirring important?" Explain it from a chemical perspective: to ensure uniform heat distribution and prevent the degradation of thermolabile constituents.

2. Student Practice & Analysis (15 mins)

Group Task: Students, in groups, will be given samples of raw Bala (*Sida cordifolia*) and Atibala (*Abutilon indicum*) roots.

Activity: Using provided data sheets, they will create a comparative table for the two herbs, noting down:

Primary Bioactive Compounds: (e.g., Alkaloids, Flavonoids, Phytosterols).

Pharmacological Action: (e.g., Anti-inflammatory, Analgesic, Immunomodulatory).

Therapeutic Role in Pregnancy: (e.g., Vata pacification, strengthening Ojas).

B.Hour 2: Deep Dive into Vata-Shamana Tailas (Bala & Atibala)

Teacher-Led Demonstration & Analysis (30 mins)

Comparative Phytochemistry Demo:

Set up microscopes with slides of Bala and Atibala root powders.

Project images or use charts to show the chemical structures of key constituents:

Bala: Ephedrine (a sympathomimetic alkaloid - explain its role in mild uterine tonification with caution), Phytosterols (precursors to hormones), Fatty Acids.

Atibala: Abutilin (alkaloid), Flavonoids (antioxidants).

Pharmacological Bridge: Explain how these constituents contribute to their Vata-Pacifying properties: Anti-inflammatory (reducing pain), neuromuscular relaxation, and nutritive effects.

Student Practice & Case Discussion (30 mins)

Lab Activity: Students will analyze prepared samples of Bala Taila and Atibala Taila. They will document organoleptic properties (color, smell, touch).

Case Analysis: Groups are given a case: "A pregnant woman in her 8th month complains of severe lower backache, sciatic pain, and anxiety."

Task: Justify the choice of Bala Taila for gentle abdominal massage over Atibala, linking the choice to the stronger nervine and analgesic properties backed by its specific chemical profile.

C.Hour 3: Analysis of Rasayana & Uterine Tonic Formulations

Teacher-Led Demonstration & Analysis (30 mins)

Demo: Sukhaprasavakara Ghrita & Guduchi Taila:

Display the complex herb mix for Sukhaprasavakara Ghrita.

Interactive Mapping: Create a live mind-map on the board.

Herb: Shatavari -> Constituents: Shatavarins (steroidal saponins) -> Action: Phytoestrogenic, Galactagogue -> Therapeutic Effect: Hormonal balance, tissue nourishment.

Herb: Guduchi -> Constituents: Berberine, Tinosporin (alkaloids) -> Action: Immunomodulatory, Hepatoprotective -> Therapeutic Effect: Protects mother from infections, supports detoxification.

Herb: Bala -> Constituents: (as before) -> Action: Uterine tonic -> Therapeutic Effect: Provides strength for labor.

Conclusion: Explain how the Ghrita base synergistically integrates these actions for a holistic effect.

Student Practice & Group Project (30 mins)

Formulation Breakdown: Groups are assigned one formulation: Guduchi Taila or Madhuyashtyadi Taila.

Task: Create a detailed "Pharmacological Profile" poster for their assigned Taila. It must include:

Key Ingredients (Latin Names).

Key Chemical Constituents (e.g., Glycyrrhizin in Madhuyashti).

Proven Pharmacological Actions (e.g., Anti-inflammatory, Demulcent).

Therapeutic Application in Prasava (e.g., For perineal massage to prevent tearing).

Groups present their posters in a 5-minute speed-sharing session.

Hour 4: Post-Partum & Digestive Formulations

Teacher-Led Demonstration & Analysis (30 mins)

Demo: Dadimadi Ghrita and Sukhaprasavakara Yoga (Churna/Kwatha):

Dadimadi Ghrita:

Focus on Dadima (Pomegranate). Highlight Punicalagins (potent antioxidants) and Tannins.

Pharmacology: Explain its Astringent and Digestive Stimulant (Deepana-Pachana) properties. Link this to post-partum care: managing lochia, healing tissues, and restoring digestive fire (Agni).

Sukhaprasavakara Yoga (as Churna):

Contrast the delivery system (powder vs. medicated fat). Explain how water-based decoctions (Kwatha) provide faster, though less sustained, action.

Analyze key ingredients like Lakshmana and their purported oxytocic or spasmolytic effects from a modern research perspective, highlighting the need for more evidence.

Student Practice & Formulation Rationale (30 mins)

Scenario-Based Learning:

Scenario A: "A patient had a normal delivery 5 days ago. She has weak digestion, low appetite, and mild anemia."

Scenario B: "A patient is in the first stage of labor, with slow cervical dilation."

Task: Groups decide whether Dadimadi Ghrita or Sukhaprasavakara Yoga (as Kwatha) is more appropriate for each scenario. They must justify their choice with a rationale based on the formulation's ingredient analysis, pharmacokinetics (Ghrita vs. Kwatha), and pharmacological target.

Hour 5: Integration, Validation & Critical Appraisal

Teacher-Led Session (20 mins)

The Synergy Session:

Revisit all formulations. Discuss how they create a comprehensive therapeutic strategy

Practical Training 14.2 : Prasava Paricharyantargata Yogas

Activity: 1: 2 hours

The teacher will demonstrate:

1. Identification of each herb of the Prasava Paricharyantargata Yogas, including Bala-taila, Eranda-taila, Guduchi-taila, Shatavari-taila, Shatapushpa-taila, Madhuyashti-taila, Dadimadi Ghrita, and Sukhaprasavada Ghrita.
2. Method of collection of each herb, along with an explanation of the Ideal season and time of collection, Plant part to be collected, Post-harvest handling, and storage
3. Phytoconstituents of each herb and their mode of action during prasava (labour).
4. Ayurvedic pharmacodynamic properties (Rasa, Guna, Virya, Vipaka, Prabhava) as mentioned in classical texts.
5. Standard method of preparation, administration/application, and therapeutic properties of each Prasava Paricharyantargata Yoga.

Activity: 1: 3 hours

The student will:

1. Visit the herbal garden and the Ayurvedic pharmacy at the college.
2. Observe and participate in the method of collection and identification of herbs.
3. Ensure quality assessment of raw materials using organoleptic evaluation (appearance, smell, texture).
4. Identify drugs and formulations specifically used for *prasava* support.
5. Enlist tools and equipment required for preparation of Prasava Paricharyantargata Yogas, such as Grinders, Mortars and pestles, measuring cups, Filtration cloths,

Sterile containers, and storage bottles

6. Demonstrate the phytoconstituents of each herb and discuss their mode of action.

7. Participate in a discussion on pharmacodynamic properties based on Ayurvedic principles.

8. Observe the preparation process of classical *Prasava Paricharyantargata Yogas*.

9. Discuss dosage and method of administration/application of each formulation of *Prasava Paricharyantargata Yogas*, including *Balataila*, *Erandataila*, *Guduchitaila*, *Shatavari taila*, *Shatapushpataila*, *Madhuyashtitaila*, *Dadimadi Ghrita*, and *Sukhaprasavada Ghritam*.

Practical Training 14.3 : *Sutika Paricharyantargata Yoga*

Activity: 1: 2 hours

The teacher will demonstrate:

The identification of each herb/ mineral of *Sutika Paricharyantargata Yogas*, including *Panchakola churna*, *Dasmoolarishta*, *Sutika Dashamoola*, *Panchajeerakapaka*, *Jeerakadyarishta*, *Sootikabharan rasa*, *Devadarvadi Kwatha*, *Pratapalankeshwara Ras*, *Nagarkhanda*, *Soubhagyashunti paka*, *Traivritta yoga*, *Stanyavridhi kar yoga*, *Shatavari kalpa*, *Shatavari granules*, and *Bala taila*.

Mode of action of each constituent of *Sutika Paricharyantargata Yogas*.

Activity: 1: 2 hours

The student will:

Visit the herbal garden and the Ayurvedic pharmacy of his/her college.

Observe the method of collection and Storage of herbs & minerals.

The student is expected to identify the drugs/ minerals and their formulation used for *Sutika* and ensure that the herbs/ minerals are of high quality.

Practical Training 14.4 : Preparation and Application of *Sutika Paricharyantargata Yogas*

Activity: 1: 1hour

The teacher will demonstrate the standard techniques for preparing *Sutika Paricharyantargata Yogas* and their applications, benefits, complications, and management.

Activity: 2: 2hours

Student will:

Enlist all the necessary tools to prepare Sutika Paricharyantargata Yogas.

Demonstrate the standard method/ techniques of preparation of Sutika Paricharyantargata Yogas and their mode of action.

Students are expected to observe the preparation of classical Sutika Paricharyantargata Yogas.

Students are expected to discuss the dose and administration/ application and Side-effects (if any) of Sutika Paricharyantargata Yogas (Panchakola churna, Dasmoolarishta, Sutika Dashamoola, Panchajeerakapaka, Jeerakadyarishta, Sootikabharan rasa, Devadarvadi Kwatha, Pratapalankeshwara Ras, Nagarkhanda, Soubhagyashunti paka, Traivritta yoga, Stanyavridhhi kar yoga, Shatavari kalpa, Shatavari granules, and Bala taila).

Practical Training 14.5 : Drugs used in navajata shishu (newborns) care

Teacher led demonstration - 3 hours

Part 1: Introduction & Theoretical Foundation

Demonstration of Ingredients: Hold up samples or high-quality images of key ingredients

Principles and Safety Protocols: Use a flip chart to list these points.

Critical Safety: The stump must be kept clean and dry until it falls off naturally.

Perform a patch test on a small area of the leg before a full application to check for any sensitivity.

Part 2: Step-by-Step Demonstration of Application

Teacher's Script & Actions: Demonstrate the entire procedure from preparation to completion. Student observe the sequence, the pressure used, and the communication with the mother.

Phase 1: Preparation

Environment: The room must be warm, draft-free, and calm. Have all materials within reach.

Show a tray with pre-sterilized supplies: small bowl of warm water, cotton balls, soft napkins, fresh diaper, and the formulations.

Warming the Oil: Kushtadi Taila must be warm, not hot. We warm it by placing the bottle in a bowl of warm water. Test the temperature on your inner wrist—it should feel comfortably warm, not hot.

Preparing the Powder: We ensure the Chandanadi Churna is finely sieved and lump-free.

Phase 2: Demonstration of Samvahana (Gentle Massage) with Kushtadi Taila (45 mins) (Using a demonstration newborn doll)

Phase 3: Demonstration of Udgharshana (Powder Application) with Chandanadi Churna (30 mins)

Part 3: Integrated Scenarios & Troubleshooting

Scenario Demonstration: Summer Care

"In hot weather, we may skip the oil massage and use only a light application of Chandanadi Churna after bath to keep the skin dry and cool in the folds."

Scenario Demonstration: The Fussy, Gassy Baby

Materials for Demonstration: Demonstration newborn doll, Authentic Kushtadi Taila and Chandanadi Churna, Bowls, warm water, soft napkins, cotton balls, diapers, Visual aids (images of ingredients, step-by-step charts), Flip chart for noting key safety points

Experiential learning Activity

Experiential-Learning 14.1 : Prasava Paricharyantargata Yoga

Activities: Student demonstration - 10 hours

Session 1 & 2: The Foundation & The Vata Pacifiers (4 Hours)

Learning Focus: Mastering the science behind base preparation and the primary neuromuscular stabilizers (Bala & Atibala Taila).

Student Demonstration Activities (Group-led):

The "Why" Behind the Base (1.5 Hours):

Group Task: A student group is assigned to demonstrate the Murchana (purification) of Sesame Oil and Ghee.

Experiential Twist: They must not just show the process, but design a mini-experiment.

They will prepare two small batches of a simple herbal oil: one with Murchita Taila and one with raw, unpurified oil.

Using organoleptic analysis (sight, smell, touch), the demonstrating group will lead the class in comparing the two final products, hypothesizing how purification affects shelf life, skin penetration, and therapeutic efficacy.

Peer Evaluation: Other groups score the demonstration on clarity, scientific rationale, and the effectiveness of their comparative analysis.

The Bala vs. Atibala "Drag Race" (2.5 Hours):

Group Task: Two groups are assigned as "Team Bala" and "Team Atibala."

Experiential Twist: The Pharmacological Debate.

Each team prepares their assigned Taila (Bala Taila or Atibala Taila) simultaneously.

During the preparation, they must present a "constituent profile" of their main herb, focusing on key chemicals (e.g., Bala's Ephedrine vs. Atibala's Flavonoids).

The Challenge: A hypothetical case is presented: "A 32-year-old primigravida with a history of muscle wasting and severe anxiety." The two teams must debate, using their pharmacological knowledge, why their Taila is the superior choice for this patient's Abhyanga (oil massage).

Peer Learning: The rest of the class acts as a panel, asking questions and finally voting on the most compelling scientific argument.

Session 3 & 4: The Uterine Tonics & Immunomodulators (4 Hours)

Learning Focus: Deconstructing complex formulations and understanding synergy.

Student Demonstration Activities (Group-led):

Reverse-Engineering Sukhprasavakara Ghrita (2 Hours):

Group Task: A student group is provided with the finished Sukhprasavakara Ghrita and the raw ingredients.

Experiential Twist: The Formulation Deconstruction Lab.

Instead of making the Ghrita from scratch, the group will create "Station Cards" for 3-4 key ingredients (e.g., Shatavari, Guduchi, Lakshmana).

At each station, they display the herb, its powder, and a chart of its key chemical constituents and proven actions.

The demonstrating group leads a walk-through, explaining how the pharmacological property of each herb (e.g., Shatavari's phytoestrogenic Shatavarins) contributes to the Ghrita's overall goal of Sukhprasava.

They then demonstrate a critical step of the Ghrita preparation, focusing on how to identify the correct Paka Lakshana that ensures optimal extraction of these diverse compounds.

Guduchi Taila & Madhuyashtyadi Taila: The Protector & The Soother (2 Hours):

Group Task: Two groups demonstrate the preparation of Guduchi Taila and Madhuyashtyadi Taila.

Experiential Twist: Clinical Role-Play.

After preparation, the groups engage in a role-play.

Scenario for Guduchi Team: They act as Ayurvedic doctors counseling a pregnant woman with low immunity and recurrent UTIs, explaining how the alkaloids in Guduchi (like Berberine) provide protection.

Scenario for Madhuyashti Team: They counsel a woman in her third trimester with perineal dryness and fear of tearing, explaining the demulcent and anti-inflammatory properties of Glycyrrhizin in Madhuyashti.

Peer Feedback: Peers provide feedback on the accuracy, clarity, and patient communication skills demonstrated in the role-play.

Session 5: Integration, Post-Partum Care & Capstone Challenge (2 Hours)

Learning Focus: Synthesizing all knowledge and applying it to a complex clinical scenario.

Student Demonstration Activities (Group-led):

Dadimadi Ghrita & Sukhprasavakara Yoga: The Recovery Team (1 Hour):

Group Task: A single group demonstrates both Dadimadi Ghrita and the powder form of Sukhprasavakara Yoga.

Experiential Twist: The "Formulation Selection" Committee.

The group presents two detailed post-partum cases:

Case A: A woman with weak digestion, excessive bleeding (lochia), and fatigue.

Case B: A woman with after-pains, mild breast engorgement, and anxiety.

The demonstrating group must lead the entire class in a discussion to choose the most appropriate formulation for each case (Dadimadi Ghrita for Case A, Sukhprasavakara Yoga for Case B), justifying the choice based on a deep analysis of ingredients, constituents, and pharmacological actions.

The Prasava Paricharya "Viva Voce" Capstone (1 Hour):

The Ultimate Test: This is a full-class, interactive demonstration.

Setup: All previously prepared formulations are displayed on a table.

Activity: The Grand Round.

The instructor acts as a senior consultant, and students are the junior doctors.

The consultant presents a complex, multi-stage case spanning pregnancy, labor, and post-partum.

The consultant randomly selects students to:

Pick a Formulation from the table for a given stage of the case.

Justify their choice by naming the key ingredient, its primary chemical constituent, and the biochemical pathway or pharmacological action it leverages.

Explain the Contraindications: E.g., "I would use this Madhuyashtyadi Taila topically, but not internally in this case due to potential hypertensive effects of Glycyrrhizin."

Assessment Structure for the 10-Hour Module:

Quality of Student Demonstration (40%): Clarity, preparation, depth of pharmacological analysis, and engagement of peers.

Peer Teaching & Interaction (20%): Ability to answer questions and facilitate learning in others.

Clinical Integration & Case Analysis (30%): Performance in debates, role-plays, and the capstone viva.

Final Portfolio (10%): A compiled portfolio including their group's recipe cards, constituent analysis charts, and personal reflections on each session.

Experiential-Learning 14.2 : Prasava paricharyantargata Roga

Activity: Student-Led Demonstrations & Simulations Time Allocation: 7 Hours

Session 1: The Pharmacopoeia Deep Dive (2 Hours)

Theme: "From Herb to Hypothesis: Deconstructing the Prasava Yogas"

Student Demonstration Activities:

The Drug Identification & Analysis Station (45 mins):

Student Task: A team of students sets up a "Museum of Intrapartum Botanicals." Stations feature raw herbs (Shatavari, Bala, Guduchi, Ashoka, Madhuyashti), their powders, and prepared formulations (Sukhaprasavakara Ghrita, Bala Taila, etc.).

Demonstration Focus: At each station, the team must:

Identify the drug by its Sanskrit, Latin, and common name.

Describe its botanical key features (for raw herbs).

Explain its core Ayurvedic Pharmacodynamics (Rasa, Guna, Virya, Vipaka, Prabhava) and its relevance to labour.

Hypothesize its modern pharmacological mechanism (e.g., "Shatavari's saponins may have oxytocic or spasmolytic effects; Ashoka's tannins may promote uterine tone").

The Symposium: Classical vs. Contemporary (1 hour 15 mins):

Student Task: The class is divided into two panels for a structured debate.

Panel A (The Shastris): Argues from a purely classical Ayurvedic perspective, using quotes from Vagbhata and Sushruta to justify the use of formulations like Sukhaprasavakara Yoga.

Panel B (The Scientists): Argues from a modern evidence-based perspective, demanding clinical trial data, safety profiles, and a clear understanding of mechanism of action.

Demonstration Focus: Each panel presents their case for a specific drug. The demonstrating students must facilitate a discussion on integration, culminating in a consensus statement on how to responsibly use these drugs in a contemporary context, acknowledging both traditional wisdom and scientific rigor.

Session 2: The Art of Preparation & Simulation (2 Hours)

Theme: "The Hands of the Healer: Preparation and Decision-Making"

Student Demonstration Activities:

Live Pharmacy Lab: Formulation in Action (1 hour):

Student Task: Small groups simultaneously demonstrate the preparation of key formulations.

Group 1: Prepares Bala Taila for Abhyanga (massage).

Group 2: Prepares a Kwatha (decoction) of Sukhprasavakara Yoga.

Group 3: Demonstrates the correct method of administering Sukhprasavakara Ghrita with Anupana (adjuvant).

Demonstration Focus: While preparing, students must explain the why behind each step: "We are stirring constantly to prevent the degradation of thermolabile alkaloids," or "This Anupana (warm milk) is chosen to enhance the bioavailability of the fat-soluble actives in the Ghrita."

Simulated Clinical Scenarios (1 hour):

Student Task: Groups create and perform role-playing scenarios based on real-life case studies.

Sample Scenarios:

Scenario A (Prolonged Labour): A patient has delayed cervical dilation with maternal exhaustion. The "student midwife" must recommend a formulation, justify its Ayurvedic and pharmacological rationale (e.g., a uterine tonic like Sukhprasavakara Ghrita), and "administer" it in the simulation.

Scenario B (Severe Pain & Anxiety): A patient is experiencing intense back pain and anxiety, hindering the labour process. The team must decide on using Bala Taila for a lower back massage and explain its Vata-pacifying and analgesic properties.

Demonstration Focus: The demonstration is in the clinical reasoning and communication. Peers observing act as "senior consultants," grilling the team on their choices, contraindications, and monitoring parameters.

Session 3: Clinical Integration & Reflective Practice (3 Hours)

Theme: "From Simulation to Reality: Teamwork and Reflection"

Student Demonstration Activities:

"Grand Rounds" Case Conference (1.5 hours):

Student Task: Prior to this session, student groups are assigned real-life (anonymized) case studies from clinical practice where Ayurvedic intrapartum drugs were used.

Demonstration Focus: Each group presents their case as a "Clinical Vignette."

The Presentation: They outline the maternal/fetal condition, the drug(s) chosen, the dosage, and the outcome.

The Analysis: They lead a class discussion on the effectiveness, analyzing what went well and what could be done differently. "Was the Ghrita the best choice, or would a Taila have been more effective? What does modern pharmacology say about the mechanism here?"

The Integration: They must discuss how the classical Ayurvedic diagnosis (e.g., Vata Prakopa) correlated with the modern clinical picture.

Interprofessional Team (IPT) Simulation (1 hour):

Student Task: A complex scenario is run involving multiple "healthcare providers," all played by students.

Roles: Ayurvedic Practitioner, Midwife (Modern), Obstetric Nurse, and a Family Member.

Scenario: A patient desires to use Madhuyashtyadi Taila for perineal massage but has borderline hypertension. The modern midwife is concerned about the Glycyrrhizin in Madhuyashti.

Demonstration Focus: The students must demonstrate effective interprofessional communication. The Ayurvedic practitioner must clearly explain the drug's action and safety profile (topical vs. internal use). The team must collaboratively develop a safe, integrated care plan, documenting the decision-making process. This demonstrates the critical importance of teamwork.

Clinical Observation & Reflective Journaling (30 mins):

Student Task: This activity is based on prior observations. Students are asked to have observed at least one intrapartum case (live or via recorded video) with an experienced practitioner.

Demonstration Focus: The final activity is a structured, peer-led reflection circle.

Students share one key insight from their observation.

They discuss the gap between "textbook knowledge" and "clinical wisdom."

They reflect on a personal "Aha!" moment—a time when the pharmacological theory suddenly made sense in a clinical context (e.g., seeing the calming effect of a Bala Taila massage on an agitated mother).

Each student articulates one personal learning goal for their future clinical practice regarding intrapartum drug administration.

Experiential-Learning 14.3 : Drugs used in Sutika kaal

Activity (4 hours):

1. Enlist the common medications used during *Sutikakala* (postpartum care), including Vedanahar (analgesics), Krumihar (antibiotics), and Garbhashaya Sankochakar (uterotonics).
2. Observe and analyze the pharmacological properties of commonly used postpartum medications such as Vedanahar, Krumihar, and Garbhashaya Sankochakar.
3. Apply appropriate medications — Vedanahar, Krumihar, and Garbhashaya Sankochakar in the management of Sutika patients.
4. Maintain case sheets of five (5) Sutika (postpartum) patients, documenting their treatment charts, including the administration of Vedanahar (analgesics) and Garbhashaya Sankochakar (uterotonics).
5. Participate in small-group discussions to identify the indications, contraindications, and potential side effects of commonly used postpartum medications, emphasizing safe and effective usage.
6. Learn to monitor patients for adverse effects and complications associated with postpartum medications, such as excessive bleeding or infection.

7. Evaluate current research and clinical guidelines related to the use of postpartum medications to promote evidence-based practice in patient care.

Experiential-Learning 14.4 : Treatment strategies using Sutika Paricharyantargata Yogas

Activity : 3 Hours

Students will be assigned a minimum of five (5) real or simulated cases.

Students are expected to:

- A. Enlist the various indications of different Sutika Paricharyantargata Yogas.
- B. Apply the appropriate Sutika Paricharyantargata Yogas based on the diagnosis of minor ailments in Sutika (postpartum) patients.
- C. Record each case and reflect on the constituents of the Sutika Paricharyantargata Yogas, along with their mechanisms of action.
- D. Develop strategies to educate postpartum patients about their medications, including proper usage, possible side effects, and the importance of adherence.
- E. Apply knowledge to create individualized medication plans, taking into account the patient's medical history, breastfeeding status, and personal preferences.
- F. Understand the influence of cultural beliefs on medication acceptance and adherence among postpartum patients

Experiential-Learning 14.5 : Drugs in Navajat shishu (new born) care

Student demonstration - 2 hours

Station 1: Knowledge & Preparation

Format: Instructor-led interactive briefing and setup.

Activity:

Understanding Formulations & Safety:

Students examine samples of Kushtadi Taila and Chandanadi Churna.

Instructor highlights key ingredients:

Kushtadi Taila: Kushta (*Saussurea costus*), Bala, sesame oil base (Vata-balancing).

Chandanadi Churna: Sandalwood (cooling), Usheera (Vetiver, soothing).

Safety protocols: Avoid face/eyes/umbilical stump; patch testing; contraindications (preterm, infection, skin lesions).

Preparation Drill:

Students practice warming oil to body temperature (test on wrist).

Sieve powder to ensure lump-free consistency.

Set up sterile workstations with materials (oil, powder, cotton, diapers).

Station 2: Hands-On Application (60 minutes)

Format: Rotating small groups with demonstration dolls.

Activity 1: Abhyanga (Oil Massage) with Kushtadi Taila

Task: Perform full-body massage using sequenced strokes:

Limbs: Long strokes soles?thighs, palms?shoulders.

Abdomen: Clockwise circles for digestion.

Chest/Back: Outward strokes on chest; downward strokes on back.

Head: Gentle scalp circles.

Emphasis: Avoid umbilical stump; use gentle pressure; observe baby's comfort.

Activity 2: Udgharshana (Powder Application) with Chandanadi Churna

Steps:

Pour powder into palm away from doll's face.

Gently pat into neck, armpits, groin, buttock creases.

Brush off excess to prevent caking/inhalation.

Secure diaper.

Safety Focus: Never apply directly from container; thin layer only.

Station 3: Scenario-Based Challenges (40 minutes)

Format: Small group role-play and problem-solving.

Scenarios:

"The Fussy Newborn": Demonstrate abdominal massage to relieve gas.

"Summer Heat": Skip oil; use powder only in skin folds. Justify your approach.

"Redness in Folds": Decide whether to apply powder or refer.

Task:

Groups demonstrate techniques for their scenario.

Explain rationale using Ayurvedic principles (e.g., "Vata pacification for gas").

Identify red flags requiring referral (e.g., infection, fever).

Assessment & Debrief

Peer Feedback: Groups exchange constructive criticism on technique/safety.

Instructor Q&A: "What was the most challenging step?"

"How would you educate parents about these practices?"

Materials Needed:

Demonstration dolls, Kushtadi Taila, Chandanadi Churna.

Bowls, warm water, napkins, cotton, diapers.

Scenario cards, timers, feedback forms.

This structure ensures students actively practice skills while learning to adapt protocols to real-world scenarios.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C

4

.Long Answer Question (50 marks)

Describe in detail the Yogas used in Prasava Paricharya, Sutika Paricharya, and Navajata Shishu Paricharya. Explain their indications, ingredients, mode of action, and relevance in present-day practice.

- Prasava Paricharyantargata Yoga – 15
- Sutika Paricharyantargata Yoga – 15
- Navajata Shishu Paricharyantargata Yoga – 15
- Integrative relevance / conclusion – 5

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 6

Module 15 : Sutika Vigyan (Normal Puerperium)

Module Learning Objectives

(At the end of the module, the students should be able to)

Explain the normal physiological and psychological adjustments (Manasika Parivartan)changes during the postpartum period (Sutika avastha).

Discuss the principles of Sutika Paricharya (Ayurvedic postpartum care) for optimal recovery.

Identify dietary (Ahara), lifestyle (Vihara), and therapeutic (Chikitsa) recommendations for Sutika.
 Recognize signs of normal vs. abnormal puerperium and potential complications.
 Perform Stanya Pariksha (assessment of breast milk quality) as per Ayurvedic principles and identify Stanyadushti (vitiated breast milk) and its impact on the newborn.
 Demonstrate effective breastfeeding techniques, including proper latch and positioning.
 Counsel mothers on common breastfeeding challenges (e.g., low milk supply, engorgement).
 Discuss indications for alternative feeding methods (e.g., wet nursing, expressed milk, formula).

M 15 Unit 1 Sutika (Normal puerperium) Management of Sutika and Normal Puerperium

References: 1,2,3,4,25

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO8	Analyse the Ayurvedic approach to Sutika Paricharya (postnatal care), including its practical and scientific analysis, and explain the classical stages of Sutika Kala along with the dosha-based physiological changes in the postpartum mother.	1	Lecture	CAN	Knows-how	L&PPT ,P L,L_VC, BL,BS
CO1,CO8	Appraise the normal puerperium, including the physiological, psychological, and socio-cultural changes in the Sutika (postpartum mother), differentiate between normal and abnormal puerperium, and identify red flags that require prompt referral.	1	Lecture	CE	Knows-how	L,L_VC, DIS,L&P PT ,CBL
CO1,CO2,CO8	Analyze the recent advances and evidence-based perspectives in Sutika Paricharya (postpartum care), including its integration with modern obstetric protocols, enhanced formulations, and updated dietary recommendations.	1	Lecture	CAN	Knows-how	L&PPT , BL,IBL,BS,JC
CO1,CO2,CO4	Demonstrate Sutika Pariksha (postpartum assessment), formulation of individualized Sutika Ahara (postnatal diet), application of Pattabandhan, and administration of Sthanika Chikitsa during the Sutika Avastha (postpartum period).	6	Practical Training 15.1	PSY-GUD	Shows-how	D-M,CD, CBL,D-BED,RP

CO1,CO2,CO3,CO4	Perform hands-on evaluation of vital signs, uterine involution, and lochial characteristics in the Sutika (puerpera); assess Manovaha Srotas (emotional and psychological well-being); and participate in providing a positive postnatal care experience, including identifying situations that require referral.	7	Experiential-Learning 15.1	PSY-MEC	Does	DIS,RLE, SIM,CD, PSM
CO1,CO8	Discuss the role of postnatal yoga in promoting physical recovery, emotional well-being, and overall maternal health during the postpartum period.	1	Lecture	CAN	Knows-how	L&GD,BL,L&PPT,L_VC,B S
<p>M 15 Unit 2 Stanya utpatti (Lactation)Stana-stanya pareeksha, Lactation, Breast milk, Alternative milk, Counselling about the breast feeding and breast feeding techniques.</p> <p>References: 1,2,3,4,22</p>						
3A	3B	3C	3D	3E	3F	3G
CO1,CO4	Demonstrate various methods of Stanyaparikshan (Integrated breast and milk examination).	5	Practical Training 15.2	PSY-MEC	Shows-how	TBL,D-M, SIM,D-BED,DL
CO1,CO2	Analyse the role of Sutika Stana pariksha (examination of breasts) to facilitate early detection of complications and promote holistic care.	1	Lecture	CAN	Knows-how	BL,L_VC, L&GD,L &PPT ,L
CO1,CO2,CO8	Discuss the Stanya pariksha (Examination of Breast-milk) with recent advancement and its role in maternal and child health care.	1	Lecture	CAP	Knows-how	L,DIS,L&GD,EDU, BL
CO1,CO8	Evaluate the physiological processes involved in Stanyajanan (lactation) and identify the hormonal influences that regulate Stanyajanan.	1	Lecture	CE	Knows-how	BL,L&GD,L_VC, L&PPT ,L

CO6,CO7,CO8	Demonstrate the ability to provide comprehensive support and counseling to new parents on breastfeeding alternatives.	7	Experiential-Learning 15.2	AFT-CHR	Does	PL,DIS,B S,PSM,P BL
CO1,CO2,CO3,CO4,CO8	Perform Stana-Stanya Pareeksha (Examination of Breast and Breast milk), interpret lactation dynamics, and explore alternative feeds and counsel regarding effective breastfeeding techniques.	7	Experiential-Learning 15.3	PSY-MEC	Does	RLE,RP,S IM,REC, SDL
CO1,CO4	Demonstrate the breastfeeding techniques and effective counseling skills.	4	Practical Training 15.3	AFT-RES	Shows-how	CD,D-M, DIS,TBL, RLE

M 15 Unit 3 Stanyadushti (Lactation disorders) Diagnose and management of Stanya vriddhi, kshaya and dusti (Lactation disorders)

References: 1,2,3,4,5,22

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the causative factors of Stanya vriddhi, Kshaya and Dushti (Lactation disorders) and discuss the investigations in these conditions.	1	Lecture	CAP	Knows-how	TUT,L&GD,L,CB L,L&PPT
CO1	Appraise the application of the signs and symptoms of Stanya vriddhi, Kshaya and Dushti (Lactation disorders) and their management.	2	Lecture	CAP	Knows-how	L_VC,CB L,L,L&GD,BL
CO1,CO2,CO3,CO8	Demonstrate signs of Stanyadushti through simulated breast and milk examination, integrate Ayurvedic and modern perspectives, and effective management and counseling techniques.	5	Experiential-Learning 15.4	AFT-SET	Does	BS,CBL, DIS,TBL, PL
CO3	Demonstrate the diagnostic criteria, dosha-based interpretation, and management of Stanyadushti (Lactation Disorders)	5	Practical Training 15.4	PSY-GUD	Shows-how	DIS,SY, ML,GBL,

Practical Training Activity**Practical Training 15.1 : Clinical and Therapeutic Aspects of Sutika Paricharya (Postpartum Care)**

Activity-1: 4 hours

The teacher will:

1. Display essential clinical tools, including a stethoscope, blood pressure monitor, thermometer, and observation charts.
2. Ensure a clean, quiet, and private environment for conducting Sutika Pariksha (postnatal assessment) and Pelvic examination.
3. Demonstrate the steps of Sutika Pariksha (postpartum assessment), including obtaining informed consent and communicating respectfully with the patient.
4. Present key ingredients used in Sutika Ahara (postnatal diet), explaining their nutritional and Ayurvedic significance.
5. Demonstrate preparation and application techniques for Pattabandhan and Sthanika Chikitsa (such as Abhyanga, Lepa, and Parisheka), emphasizing Ayurvedic and clinical relevance.

Activity -2: 6 hours

The student will:

1. Gather and organize required instruments (stethoscope, BP apparatus, thermometer, charts) for postpartum assessment.
2. Prepare a clean, quiet, and private setting appropriate for Sutika Pariksha (postpartum assessment).
3. Perform or simulate Sutika Pariksha (postpartum assessment) on a model/manikin under supervision, including general and local examination, and maintain clinical records.
4. Examine and evaluate the characteristics of lochial discharges and explain their clinical significance.
5. Practice explaining the examination procedure, its purpose, and obtaining informed consent from a peer or simulated patient.
6. Identify and describe key ingredients and materials used in Sutika Ahara and local ayurvedic treatments.
7. Participate in small-group discussions on postpartum nutritional requirements and justify dietary choices based on Ayurvedic principles.
8. Demonstrate application of Sthanika Chikitsa and Pattabandhan on models or manikins using correct techniques.
9. Observe/Perform Pelvic examination in Sutika under the supervision.

Practical Training 15.2 : Stanyaparikshan (Integrated Breast and Milk examination)

Activity: 1: 1 hours

1. The teacher will demonstrate the various methods of Stanyaparikshan (Integrated Breast and Milk examination).

Activity: 1: 2 hours

Student will:

Observe and interpret physical characteristics of breast milk

Differentiate between the normal and abnormal findings of stanya parikshan.

Demonstrate the integrated techniques of breastmilk examination.

Gather a list of commonly required materials for breast milk testing.

Use provided templates to record findings (e.g., breast texture, milk properties, signs of infection), maintaining confidentiality.

Participate in small groups to identify signs that warrant medical referral or urgent care.

Role-play clinical counseling under the supervision and provide simulated advice on diet, rest, and medications/formulations based on findings.

Practical Training 15.3 : Breastfeeding techniques and model effective counseling skills.

Activities: 1 hour

The teacher will:

1. Demonstrate proper breastfeeding techniques using manikins or dolls, focusing on positions, latching, and burping.
2. Explain common breastfeeding issues, like poor latch and nipple pain, along with strategies to manage them.
3. Introduce empathetic communication and counseling strategies through role-play or video demonstrations.

Activities: 2 hours

The student will:

1. Practice breastfeeding techniques like positioning, latching, and burping on dolls or mannequins under supervision.
2. Demonstrate how to guide a mother in recognizing signs of poor feeding or discomfort in her baby.
3. Role-play counseling sessions with peers to educate a “new mother” about breastfeeding and address her concerns.
4. Identify red flags in breastfeeding, like inadequate milk intake, maternal pain, or infant weight loss, that require referral.
5. Participate in group discussions or reflections on the emotional, psychological, and cultural aspects of breastfeeding.

Practical Training 15.4 : Stanyadushti (Lactation Disorders): Diagnosis and Management Perspectives

Activities: 1 hour

The teacher will:

Demonstrate the diagnosis and management of Stanyadushti (Lactation Disorders), using manikins/ models, and discuss the sample cases involving different Stanyadushti types.

Activities: 3 hours

The student will:

Conduct a simulated clinical assessment of Stanyadushti (Lactation Disorders) under supervision.

Identify and highlight the signs of Stanya Vriddhi, Kshaya, and Dushti based on Ayurvedic descriptions.

Interpret clinical findings (e.g., color, consistency, smell, taste of milk) and correlate with Vata, Pitta, or Kapha dosha

Participate in small groups to diagnose and propose management plans for lactation disorders.

Identify herbs and formulations used in the management of different types of Stanyadushti, and explain their indications and contraindications.

Recognize and list modern clinical red flags (e.g., fever, localized pain, purulent discharge) in lactation disorders requiring prompt referral.

Experiential learning Activity

Experiential-Learning 15.1 : Comprehensive Care in Sutika Avastha (Postpartum period)

Activities: 10 hours

1. Perform clinical evaluation of vital signs, uterine involution, and lochial characteristics in a postpartum mother (Sutika)
2. Assess emotional and psychological well-being (Manovaha Srotas) in the postpartum period.
3. Support and contribute to safe, respectful, and culturally-sensitive postnatal care.
4. Identify clinical red flags and determine when referral is required.
5. Perform postpartum (Sutika) examination using Ayurvedic and modern clinical parameters.
6. Identify and interpret lochial changes and uterine involution as indicators of normal or abnormal puerperium.
7. Perform pelvic examination in Sutika.

8. Assess psychological health and communicate empathetically with postpartum women.
9. Plan and justify postpartum dietary and therapeutic support based on Ayurvedic principles.
10. Students will submit a brief reflective summary highlighting their experiences with patient interaction and the application of holistic care approaches.

Experiential-Learning 15.2 : Breastfeeding Alternatives.

Activities: 4 hours

1. Identify appropriate breastfeeding alternatives and educate new parents on their safe use through simulated counseling sessions.
2. Identify indications for breastfeeding alternatives such as formula feeding, donor milk, and animal milk in various clinical scenarios
3. Role-play parent education on formula, donor milk, and animal milk, ensuring clarity on preparation, hygiene, and when alternatives are medically indicated.
4. Compare types of alternative milk (formula, donor milk, cow/goat milk), evaluating nutritional value, risks, and cultural acceptability.
5. Role-play parental counseling sessions, focusing on empathy, clear communication, and addressing concerns (e.g., affordability, accessibility, guilt, or cultural beliefs).
6. Discuss hygiene practices and contraindications associated with alternative feeding methods.
7. Identify red flags (e.g., intolerance, allergies, infections) that warrant referral or a change in the feeding plan.
8. Review the ethical and social considerations of recommending breastfeeding alternatives through group discussions or reflective writing.

Experiential-Learning 15.3 : Stana-Stanya Pareeksha, Lactation, and Breastfeeding Counseling

Activities: 7 hours

1. Explain the Ayurvedic concept and methods of Stana-Stanya Pareeksha (examination of breasts and breast milk).
2. Perform simulated Stana-Stanya Pareeksha (breast and milk examination) using models and identify normal and abnormal findings.
3. Demonstrate understanding of lactation physiology, composition of breast milk, and Ayurvedic interpretation of Stanya Lakshanas.
4. Compare and evaluate different types of milk (mother's milk, animal milk, formula, donor milk) and discuss their properties and appropriate use.

5. Practice breastfeeding techniques (correct positioning and latching) using manikins or visual aids.
6. Role-play breastfeeding counseling, focusing on communication, empathy, and addressing common challenges (e.g., poor latch, sore nipples, low milk supply).
7. Identify red flags in breastfeeding and feeding practices that require referral or intervention.

Experiential-Learning 15.4 : Stanyadushti (Lactation Disorders)

Activities:5 hours

1. Diagnose and differentiate Stanya Vriddhi, Kshaya, and Dush?i through clinical simulation.
2. Identify key signs and symptoms of each lactation disorder through observation, history-taking, and breast/milk examination.
3. Differentiate the three conditions based on Ayurvedic diagnostic criteria (Doshic involvement, Nidana, Lakshanas) and correlate with modern lactation pathology.
4. Develop individualized management plans for lactation disorders, including herbal formulations, dietary guidance, lifestyle modifications, and local treatments (e.g., Sthanika Chikitsa).
5. Practice counseling techniques, focusing on empathetic communication, breastfeeding support, and maternal reassurance.
6. Recognize red flag conditions (e.g., mastitis, galactorrhea, stanya dushti with infection) and perform appropriate referral decision-making.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

OSCE 50 marks)

- Station 1 (10): Identify normal physiological changes in a puerperal woman from a list.
 Station 2 (10): Write 3 Sutika Paricharya practices for restoration of Agni & Vata shamana.
 Station 3 (10): Examine a given Stanya sample (scenario-based) & identify type of Stanyadushti.
 Station 4 (10): Demonstrate or describe correct breastfeeding position & latch.
 Station 5 (10): Counsel a mother with low milk output on supportive measures & alternatives.

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 16 : Sutikavyadhi (Puerperial disorders)

Module Learning Objectives

(At the end of the module, the students should be able to)

Demonstrate the Sutika vyapad (Puerperal disorders), Sutika vyadhi (Puerperal diseases), and Abnormal puerperium with their etiopathogenesis, Clinical features, preventive and management methods.

Analyse the diagnostic criteria, interpret the investigation reports and decision-making diagnosis of Sutika vyapad (Puerperal disorders) ,Sutika vyadhi (Puerperal diseases), and Abnormal puerperium.

Develop decision making clinical skills to treat Sutika vyapad (Puerperal disorders), Sutika vyadhi (Puerperal diseases), and Abnormal puerperium with integrate management (Emergency management and Ayurvedic protocols).

M 16 Unit 1 Sutika Vyapad (Puerperal disorders)Sutika Vyadhi- Samanya Nidana evam Chikitsa

Sutika Vyapad—Yonibhramsha, Yonikshata, Makkalla Shula, Raktavidradhi

References: 1,2,3,4,5

3A	3B	3C	3D	3E	3F	3G
CO1,CO3,CO8	Discuss the Nidana (etiology) and Lakshana (clinical features) of Sutika Rogas (puerperal disorders) and recent advances in the management of Sutika Vyadhi.	2	Lecture	CAN	Knows-how	BL,BS,L_V VC,DIS,P AL
CO1,CO7,CO8	Discuss the diagnostic criteria and integrative management of Sutika Vyadhi, including conditions such as Yonibhramsha, Yonikshata, Makkala Shoola, Raktavidradhi, and	4	Lecture	CAN	Knows-how	CBL,LRI, EDU,L_V

	Sutika Jwara.					C,L&PPT
CO1,CO2,CO3,CO5,CO8	Demonstrate the various examinations, diagnostic procedures, and integrative treatments for Sutika Vyadhi, including the conditions such as Yonibhramsha, Yonikshata, Makkala Shoola, Raktavidradhi, and Sutika Jwara.	10	Practical Training 16.1	PSY-MEC	Shows-how	D-M,D,PBL,D-BED,CD
CO1,CO4,CO7	Discuss effective management of Sutika vyadhi (puerperal disorders) along with referral management, cultural sensitivity and legal awareness.	7	Experiential-Learning 16.1	CAN	Does	SY,CD,PBL,RP,TBL
M 16 Unit 2 Abnormal Puerperium Diagnosis and management of Abnormal Puerperium References: 22						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Discuss the diagnostic criteria and management strategies for abnormal puerperium, emphasizing early recognition, clinical evaluation, and integrative therapeutic interventions.	4	Lecture	CAN	Knows-how	BS,L_VC,CBL,DIS,L&GD
CO1,CO2,CO4,CO8	Demonstrate the assessment and examination of abnormal puerperium, including the recognition of potential complications and the implementation of appropriate interventions.	10	Practical Training 16.2	PSY-GUD	Shows-how	D,D-M,D-BED,LR I,SIM
CO1,CO7,CO8	Evaluate the role of Ayurvedic drugs and sthanik chikitsa in Postpartum uterine subinvolution and rule out the obstetric postpartum conditions/ disorders for Sthanik chikitsa.	8	Experiential-Learning 16.2	CE	Does	D,RLE,DIS,SIM,LR I
CO1,CO2,CO7,CO8	Practice appropriate interventions for puerperal emergencies	6	Experiential-Learning 16.3	PSY-MEC	Shows-how	RP,RLE,CBL,D-M,SIM
CO1,CO2,CO3,CO6,CO7,CO	Assess Sutika Manasik Vyadhi using tools like the EPDS, review relevant maternal mental health policies, and integrate Ayurvedic interventions—including manovaha srotas	5	Experiential-Learning 16.	CAP	Does	RLE,CBL,RP,LRI

8	shuddhi, medhya rasayana, and satvavajaya—for comprehensive postpartum mental health care.	4			
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Practical Training Activity

Practical Training 16.1 : Diagnosis and Treatment of Sutika Vyadhi (Puerperal disorders)

Teacher demonstration + Student observation Time: 10 hours

Activity 1: 4 hours

Demonstrate the various examinations, assessments, diagnostic procedures, and treatment modalities for Sutika Vyadhi (Puerperal disorders)

Activity 2: 6 hours

Perform history taking and clinical examination of postnatal mothers to assess signs and symptoms of Sutika Vyadhi.

Demonstrate diagnostic procedures for conditions such as Yonibhramsha, Yonikshata, Makkala Shoola, Raktavidradhi, and Sutika Jwara.

Observe and document Ayurvedic and integrative treatment protocols applied in real or simulated cases.

Participate in case discussions and differential diagnosis exercises for various Sutika Rogas.

Conduct vaginal and perineal examination simulations to identify Yonibhramsha and Yonikshata.

Practice pulse examination and thermal assessment to identify Sutika Jwara.

Demonstrate local and systemic management techniques, including Sthanik Chikitsa, herbal formulations, and dietary interventions.

Observe the preparation and application of Ayurvedic formulations (e.g., oil massages, decoctions) used in postpartum disorders.

Demonstrate yoga or gentle exercises that can aid recovery.

Engage in role-play scenarios to explain diagnosis and treatment plans to patients and caregivers.

Maintain case records of at least three clinical conditions under Sutika Vyadhi for assessment and reflection.

Practical Training 16.2 : Assessment and examination of abnormal puerperium

Activity: 4 hours

The teacher will:

Demonstrate the assessment and examination of abnormal puerperium and recognition of potential complications.

Activity: 6 hours

Student will:

Evaluate vital signs, uterine tone, and lochia characteristics.

Gather patient history, including any complications during labor or delivery.

Conduct a thorough examination to identify signs of infection or hemorrhage.

Inform the patient about normal recovery signs and when to seek help.

Assess for signs of postpartum depression and provide support resources.

Enlist necessary lab tests, such as CBC or cultures, if indicated.

Review and prescribe pain, infection, or uterine atony medications as needed.

Schedule follow-up appointments to monitor recovery progress.

Experiential learning Activity

Experiential-Learning 16.1 : Competency Development in Research, Referral, Cultural, Legal, and Clinical Management of Sutika Vyadhi (puerperal disorders).

Activity: 10 hours

1. Organize case-based discussions on various types of Sutika Rogas, with emphasis on diagnosis and management.
2. Participate in role-plays and simulations to develop culturally sensitive patient communication skills and respond to legal and ethical scenarios.
3. Visit maternity wards and postnatal care centers for observation and patient interaction.
4. Present a seminar on referral systems and interdisciplinary coordination in maternal healthcare, or simulate a referral scenario to demonstrate understanding.
5. Receive hands-on training in research tools, literature review, and case documentation related to Sutika Vyadhi.
6. Engage in a small-scale research project focusing on a specific aspect of puerperal care, such as the effectiveness of Ayurvedic treatments or maternal health outcomes.
7. Maintain detailed records of five cases of Sutika Vyadhi encountered during clinical exposure.
8. Simulate referral scenarios, identifying cases that require specialized care and appropriate escalation.
9. Practice writing referral letters and coordinating with other healthcare professionals for effective patient management.
10. Conduct interviews with mothers from diverse backgrounds to understand cultural practices and beliefs surrounding postpartum care.
11. Review case studies involving legal issues in puerperal care, such as informed consent, patient rights, and medical negligence.
12. Collaborate with peers to discuss treatment plans and follow-up care strategies for Sutika Vyadhi.
13. Reflect on your learning experiences to identify personal areas for improvement and professional growth.

Experiential-Learning 16.2 : Ayurvedic Interventions for Postpartum uterine subinvolution

Activities: 8 hours

1. Identify and recognise the signs and symptoms of Postpartum Uterine Sub-involution and other puerperal disorders.
2. Differentiate between normal involution of the uterus and subinvolution after delivery.
3. Analyze case studies of women experiencing sub-involution after LSCS
4. Summarize the principles of Ayurveda related to reproductive health.
5. Discuss in a group and prepare a comparative chart of classical formulations vs modern uterotonics.
6. Simulated patient assessment for screening conditions contraindicating sthanik chikitsa.
7. Perform a role play for a Patient counseling session on when sthanik chikitsa is required and when it's not.
8. Discuss the mechanism of action of common ayurvedic drugs used for sub-involution of the uterus.
9. Present a seminar on puerperal disorders and their management.
10. Analyze and document the case studies of women experiencing sub-involution after LSCS.
11. Document the minimum 3-5 cases of postpartum subinvolution.
12. Discuss the advantages and limitations of each approach.
13. Perform the Sthanik chikitsa (local therapies) in a simulated scenario.
14. Practice techniques for administering poultices or compresses with Ayurvedic herbs
15. Use standardized scales to evaluate improvements in uterine involution.
16. Discuss the importance of empathetic communication in patient care.
17. Maintain a reflective journal documenting personal insights and feelings about the integration of Ayurveda into modern postpartum care.
18. Encourage open dialogue about cultural beliefs and their impact on treatment choices.

Experiential-Learning 16.3 : Puerperal emergencies

Activities: 4 hours

1. Enlist the Puerperal emergencies.
2. Identify key symptoms and signs of various puerperal emergencies (e.g., PPH, sepsis, eclampsia).
3. Emphasize decision-making under pressure in puerperal emergencies.
4. Use appropriate tools and techniques for vital sign monitoring and physical assessment.
5. Familiarize with institutional protocols for managing puerperal emergencies.
6. Engage in simulation exercises to practice emergency responses.
7. Discuss the importance of educating postpartum patients about signs of emergencies.
8. Role-play scenarios to practice providing information and reassurance.
9. Role-play scenario to manage the PPH, Eclampsia, Uterine atony, and other life-threatening postpartum emergencies.
10. Practice counseling postpartum patients on danger signs (e.g., excessive bleeding, fever, convulsions)

Experiential-Learning 16.4 : Postpartum psychological disorders (Sutika Manasik Vyadhi)

Activities: 4 hours

1. Enlist the Postpartum psychological disorders (Sutika Manasik Vyadhi).
2. Identify and recognize the signs and symptoms of each Postpartum psychological disorder.
3. Differentiate between baby blues, postpartum depression (PPD), and postpartum psychosis.
4. Identify key government initiatives and policies aimed at maternal mental health (e.g., NHM, RMNCH+A, and District Mental Health Program, Mental health awareness campaigns, and others).
5. Evaluate the accessibility and effectiveness of these policies in supporting postpartum women
6. Discuss the role of psychotherapy, medications (antidepressants, anxiolytics), and community support.
7. Learn to use standardized assessment tools (e.g., Edinburgh Postnatal Depression Scale) to evaluate mental health status.
8. Explore Ayurvedic concepts related to postpartum care, including the balance of doshas and the importance of specific herbs (e.g., Ashwagandha, Brahmi).
9. Discuss Ayurvedic treatments for mental health, including dietary recommendations, various combinations, and lifestyle practices.
10. Review and discuss case studies of women experiencing postpartum mental health issues.
11. Identify the approaches taken (both conventional and Ayurvedic) and evaluate outcomes.
12. Research local government policies on maternal mental health as a group activity.
13. Present findings on the effectiveness and gaps in these policies.
14. Conduct role-playing scenarios to practice the administration of mental health assessments.

15. Simulate patient interactions where participants must recognize symptoms and provide support.
16. Practice Ashtang yoga
17. Maintain a journal to reflect on personal attitudes towards postpartum mental health and the integration of Ayurveda into conventional care.
18. Facilitate discussions on cultural perceptions of postpartum mental health and how Ayurveda can play a role in holistic care.
19. Share personal experiences or observations regarding the stigma around postpartum mental health.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C

4

.Long Answer Question (50 marks)

Describe the common Sutika Vyapad with their Samanya Nidana and Chikitsa. Explain in detail the features, diagnosis, and management of Yonibhramsha, Yonikshata, Makkalla Shula, Raktavidradhi, and Sutika Jwara. Add a note on abnormal puerperium and its management.

- Introduction & concept of Sutika Vyapad: 5
- Nidana & Chikitsa (general): 10
- Yonibhramsha, Yonikshata, Makkalla Shula, Raktavidradhi, Sutika Jwara – description & management: 25
- Abnormal puerperium: 10

Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Paper No : 3 Stree Roga - Gynaecology						
Semester No : 3						
Module 17 : Artava Vyapad- Disorders of menstruation						
Module Learning Objectives (At the end of the module, the students should be able to)						
<p>Critically analyze the differential diagnosis and pathophysiology of Artava Vyapad (Asrigdara, Anartava, Kashtartava) Demonstrate clinical examination and formulate personalized integrative treatment protocols Apply chikitsa sutras and rational drug selection with evidence-based reasoning</p>						
M 17 Unit 1 Asrigdara (AUB) Diagnosis and management of - Artava vridi (hypermenorrhea) Asrigdara (abnormal uterine bleeding—menorrhagia, epimenorrhoea, metrorrhagia, Adenomyosis, Endometrial hyperplasia.)						
References: 1,2,15,16,18,24,34						
3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Discuss different samprapti's of Asrigdara and the role of structural, biological and psychological factors in understanding the cause of Asrigdara.	2	Lecture	CAP	Knows-how	L&PPT , L&GD,L, L_VC
CO2	Demonstrate physical examination, diagnostic procedure and analyze the cause of Asrigdara.	3	Practical Training 17.1	PSY-GUD	Shows-how	PBL,LRI, RP,CBL, CD
CO2,CO3,CO5,CO8	Identify the diagnosis, differential diagnosis, complications, investigative parameters, research scope and Integrated holistic treatment alternatives of Asrigdara.	6	Experiential-Learning 17.1	PSY-MEC	Does	DIS,CD, D,DA,JC

CO1,CO8	Discuss the investigations to identify the cause of Asrigdara (AUB) , describe the chikitsa of Asrigdara and correlate the sadhyasadhyatva of Asrigdara with complications of AUB .	2	Lecture	CAP	Knows-how	L&GD,L _VC,L,L &PPT
CO2,CO8	Discuss the principles of diagnosis of Asrigdara case and aushadha -panchakarma and sthanika chikitsa.	4	Practical Training 17.2	PSY-GUD	Shows-how	SY,DIS,R LE,JC,PE R

M 17 Unit 2 AnartavaDiagnosis and management of Anartava (Amenorrhea)
 Artava Kshaya (Oligomenorrhea and Hypomenorrhoea)- evaluation and management of Anartava (Primary and secondary amenorrhea)
 Artava Kshaya (oligomenorrhea and hypomenorrhea)

References: 1,2,3,4,5,13,18,20,24,34

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Analyse diagnosis, classification and clinical features of Anartava, Artava Kshaya, Ksheenartava, Arajaska and Nashtartava.	2	Lecture	CAP	Knows-how	L&PPT ,L_VC,L
CO2,CO5,CO8	Demonstrate the physical examination, diagnosis and analyze the cause of Anartava (Primary amenorrhoea) / Nashtartava (Secondary amenorrhoea).	5	Practical Training 17.3	PSY-GUD	Shows-how	CD,DL,L RI,PBL,I BL
CO3,CO8	Evaluate diagnosis and differential diagnosis of Anartava/ Nashtartava.(Amenorrhea)	6	Experiential-Learning 17.2	PSY-GUD	Does	RLE,D,C BL,CD,J C
CO3,CO5,CO7	Develop the management protocol of Anartava.,conduct sthanika and panchakarma chikitsa, and explore research scope and integrated holistic treatment alternatives .	8	Experiential-Learning 17.3	PSY-MEC	Does	DA,JC,C D,PSM
CO1,CO8	Analyze samprapti, samprapti vighatana and chikitsa based on nidana factors	2	Lecture	CAP	Knows-	L,L&PPT

	of Kashtartava and Rajahsrava purva Vyapad samuchchaya (PMS/PMDD, Menstrual migraine)				how	,L&GD,L _VC
CO2,CO8	Identify the clinical features of Anartava,Nashtartava,Ksheenartava ,Artava Kshaya, Arajaska and chikitsa including panchakarma and sthanika chikitsa	4	Practical Training 17.4	PSY-GUD	Shows-how	TBL,TP W,EDU, D- BED,PER

M 17 Unit 3 Kashtartava Diagnosis and management of Kashtartava (Dysmenorrhea)

References: 1,2,3,4,13,16,18,24,27

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Analyse different conditions causing Kashtartava with their Samprapti and management.	2	Lecture	CAP	Knows-how	L_VC,L& GD,L,L& PPT
CO2,CO3,CO5 ,CO8	Conduct comprehensive patient assessment by examination and investigations and demonstrate sthanika chikitsa, pancha karma.and aushadha yogas in krichrartava, Rajahsrava purva Vyapad samuchchaya (Premenstual syndrome, Premenstrual dysphoric disorder(PMS/PMDD, Menstrual migraine) with their samprapti and chikitsa.	4	Practical Training 17.5	PSY-GUD	Shows-how	CBL,DA, PBL,PSM ,D
CO1,CO2,CO3 ,CO6,CO8	Analyze samprapti, samprapti vighatana and chikitsa based on nidana factors of Kashtartava and Rajahsrava purva Vyapad samuchchaya (PMS/PMDD, Menstrual migraine)	6	Experiential-Learning 17.4	PSY-MEC	Does	SY,D,JC, DA,PSM

Practical Training Activity

Practical Training 17.1 : Asrigdara (Abnormal Uterine bleeding)

Teacher will Demonstrate-1 hour

Case based demonstration: How to perform abdominal, per speculum, and bimanual pelvic examinations. Include Per Rectal/Recto-vaginal examination and Evaluate the

case of Asrigdara by analyzing Nidana -Dosha- Dushya and clinical features by proper case taking.

Lab report interpretation: Investigations such as: CBC, thyroid profile, USG pelvis, hormonal assays, Pap smear, endometrial sampling. Also demonstrate Ayurveda diagnostic methods – Ashtavidha pareeksha, Yonivyapad Pareeksha, Artava Dushti Lakshanas.

Bed side Learning: History taking, clinical examination, provisional diagnosis and differential diagnosis of a case of Asrigdara.

The students are expected to-2 hours

Take full gynecological history of simulated or real patients with abnormal uterine bleeding, using structured proformas.

Perform supervised bimanual and speculum examination (on models or trained SPs), identify uterine size, tenderness, adnexal masses.

Interpret sample investigations: USG pelvis showing fibroid or PCOD, hormonal profiles, Pap smear reports, CBC.

Match history and clinical findings to dosha, dushya, srotas, samprapti. Identify the type of Artava Dushti or Yonivyapad involved.

Present a mini case – chief complaint, examination findings, investigations, Ayurvedic and modern diagnosis.

Practical Training 17.2 : Asrigdara chikitsa.(Menorrhagia)

The teacher will Demonstrate-2hours-case based demonstration

History taking and Nidan Panchaka evaluation in a patient with Asrigdara

Live or video demonstration of Virechana planning in a Pitta-predominant case

Yoni Pichu preparation and application technique

Integrate modern findings (TVS, Hormone panel, Endometrial biopsy) with Ayurvedic Nidana-lab demonstration

The students are expected to-2hours

Prepare and label Ashoka Ghana vati or Pradarantaka yoga practice counselling on ahara-vihara, stress management, iron-rich diet in a minimum of 3 patients.

Simulate Basti preparation and administration protocol

Conduct a community survey on abnormal bleeding & lifestyle factors

Practical Training 17.3 : Anartava analysis.

Teacher will Demonstrate- 2 hours

Simulation based learning-Simulate patient with primary and secondary amenorrhea history, vitals, USG reports; discuss diagnostic approach.

Demonstration how to assess secondary sexual development using anatomical charts or 3D models.

Demonstration on model-Use pelvic models to demonstrate imperforate hymen, vaginal agenesis.

Case based learning Dashavidha Pariksha, Artava Dushti Lakshanas, Srotorodha Evaluation-3 cases.

The students are expected to-3hours

Practice menstrual, dietary, lifestyle, psychological history taking from standardized patient-minimum 5 cases.

Map Dosha involvement based on symptoms (e.g.,Vata dominance in delayed puberty, Kapha in PCOS)-minimum 3 cases.

Examine breast development (model), assess height, weight, BMI, hirsutism, acne (PCOS signs)- minimum 2 cases.

Match abnormal values (e.g., High TSH, High Prolactin) with possible conditions-minimum 3 lab reports.

Practical Training 17.4 : Anartava,Nashtartava,Ksheenartava ,Artava Kshaya, Arajaska.

The teacher will Demonstrate-2hours-case based demonstration.

1. comprehensive case of Anartava or Nashtartava, focusing on diagnostic techniques (Nidan Panchaka), including history taking, physical examination, and modern investigation correlation (ultrasound, hormone tests).
- 2.Virechana and Basti, explaining the appropriate procedure and importance in the management of conditions like Artava Kshaya and Anartava.
- 3.preparation and application of Yoni Pichu and Vaginal Steaming for managing menstrual disorders like Ksheenartava and Nashtartava.
- 4.Present a patient with menstrual disorders, have students perform diagnosis and create an appropriate treatment plan. Include Ayurvedic reasoning (Dosha, Dushya, Srotas) in management.
- 5.Present a series of clinical vignettes representing Anartava, Nashtartava, Ksheenartava, Artava Kshaya, and Arajaska
- 6.Use a simulation model or video to illustrate steps in performing Matra Basti and Virechana specifically tailored for reproductive disorders.
- 7.Perform a live demonstration (using a gynecological dummy or anatomical model) of Yoni Pichu or vaginal dh?ra including oil selection, temperature checks, and application technique.

The students are expected to-2hours

- 1.present cases of Anartava or Ksheenartava based on sample case studies, including Nidan Panchaka (causal factors, dosha, dushya).-minimum 3 cases
- 2.Create a comprehensive treatment plan, incorporating both Aushadha, Panchakarma, and Sth?nika Chikitsa for a specific case of Nashtartava or Artava Kshaya.
- 3.Simulate Matra Basti (small oil-based enema) and Anuvasana Basti in a controlled environment, explaining its relevance in menstrual disorders.
- 4.Simulate counseling sessions where students advise patients on Ahara, Vihara, and lifestyle modifications to address Anartava or Ksheenartava
- 5.Students perform Yoni Pichu or Vaginal Steaming using herbal infusions on a model to understand its therapeutic application

Practical Training 17.5 : Krichartava and Premenstrual Disorders

Teacher will demonstrate-case based demonstration-2 hours

1. Present a case of PMDD with symptoms ? Ask students to assess dosha involvement, samprapti
2. Show procedure of Niruha and Anuvasana basti using models
3. Demonstrate Shirodhara setup, oil preparation, and posture
4. Demonstrate Yoni Pichu, oil heating, and aseptic technique

The students are expected to-2 hours

1. Conduct a full menstrual + psychological history in a role-play patient
2. Use prakriti and satva pariksha forms on each other
3. Prepare Dashamoola decoction + Bala taila combo (under guidance)
4. Create PMS-specific yoga module with Baddha Konasana, Supta Vajrasana
5. Practice rational Ayurvedic aushadhi selection and prescription
6. Create care plan integrating Shirodhara + Ashwagandha + OCPs (if needed)

Experiential learning Activity

Experiential-Learning 17.1 : Differential diagnosis of Asrigdara.(Abnormal uterine bleeding)

Scholar Demonstrates:

Show raw drugs like Ashoka, Lodhra, Nagakeshara — discuss their actions and classical references-1 hour.

Create flowcharts on combining Ayurveda and modern therapies for different types of AUB- 1 hour

Practice taking menstrual history with emphasis on Dosha-specific features- 2 hours, 3 cases.

Design a yogic and diet plan for a patient with Pittaja Asrigdara-30mts.

Present evidence-based reviews on Ayurveda management of AUB-30mts.

Experiential-Learning 17.2 : History Taking and Diagnosis of Anartava/nashtartava.(Amenorrhea)

1. Practice taking detailed patient histories, focusing on menstrual history, family background, physical development, and lifestyle factors.-2 cases minimum -1 hour
2. Conduct physical examinations on simulated patients, assessing for signs of developmental abnormalities (secondary sexual characteristics) and general health status, with an emphasis on abdominal and pelvic assessments.-1 hour
3. Use clinical scenarios to practice differential diagnosis. Students receive case studies with varying symptoms and discuss potential causes such as polycystic ovary syndrome (PCOS), thyroid disorders, congenital anomalies, or stress-related amenorrhea.-1 hour
4. Conduct a simulated Ayurvedic assessment, including:-1 hour
5. Doshha Analysis: Practice identifying doshic imbalances in case studies of amenorrhea.
6. Nadi Pariksha (Pulse Diagnosis): Learn the basics of pulse diagnosis to detect Vata imbalances linked to menstrual issues.
7. Srotas Analysis: Assess the Artava Vaha Srotas for signs of obstruction, weakness, or depletion.
8. Practice interpreting lab results for key tests, including:2hours
9. Hormonal Profiles: FSH, LH, estradiol, prolactin, thyroid function, and androgens.
10. Ultrasound Imaging: Interpret ultrasound images or reports to detect anatomical abnormalities .

Experiential-Learning 17.3 : Anartava management.(Amenorrhea)

1. Design a detailed treatment protocol that addresses Anartava from both Ayurvedic and modern medical perspectives
2. Perform administering Panchakarma treatments such as:
Basti (medicated enema)
Nasya (nasal therapy)
Virechana (purgation therapy)

3. Conduct Sthanika Chikitsa of following procedures on at least 2 cases minimum
Yoni Pichu (vaginal tampon with medicated oil)
Yoni Dhawan (herbal vaginal douche)
4. Review current literature on Anartava, analyzing the efficacy of traditional treatments like Panchakarma, herbal therapy, and lifestyle modifications. Identify gaps in research.
5. Prepare and present a real/simulated case study of Nashtartava (Amenorrhea)
6. Create follow-up protocols to assess the effectiveness of treatment over time. Emphasize the importance of evaluating symptom improvement, hormonal balance, and overall well-being.
7. Prepare a suitable diet chart for a given case of Anartava (amenorrhea)
8. Demonstrate yoga and pranayama in a given patient of Anartav

Experiential-Learning 17.4 : Clinical Reasoning and Integrated Management of Kashtartava and Rajahsrava Purva Vyapad.samuchaya (Dysmenorrhea and PMS)

1. Conduct case-based demonstration to evaluate patients with Kashtartava or PMS/PMDD, focusing on Nidana (etiological) factors like dietary choices, stress levels, and lifestyle.-1hour
2. Live demo of Basti / Kati Basti Demonstration of Vatahara therapy Case-based discussion PMS vs PMDD vs Endometriosis-1 hour
3. prepare herbal decoctions for Yoni Dhavana, focusing on maintaining hygiene and procedural steps.-1hour
4. Develop dietary guidelines for Kashtartava management, emphasizing Vata-pacifying foods and limiting cold, dry, and processed foods.-30mts
5. review current scientific literature on Ayurvedic treatments for menstrual disorders, identifying gaps and potential studies-1hour.
6. Study the role of Pranayama and meditation in managing stress-related aspects of PMS/PMDD and reducing the severity of menstrual migraines-1 hour
7. Consider an integrative approach involving Ayurvedic medicines for pain relief and hormonal support, while using modern medicine as needed for symptom control.-30mts

Modular Assessment

Assessment method

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.
Case-Based Discussion (50 marks)

Hour

4

Case Stem:

A 21-year-old female presents with severe lower abdominal pain during menstruation, associated with nausea and fatigue. Cycles are regular but painful.

Tasks:

- Diagnose the condition from Ayurvedic & modern view. (10)
- Describe possible Nidana & Samprapti. (10)
- Outline examination and investigations for confirmation. (10)
- Suggest Ayurvedic and modern management strategies. (15)
- Write preventive measures and counseling advice. (5)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

Module 18 : Yoni Vyapad -Epidemiology and general etiopathogenesis and management of Gynecological disorders**Module Learning Objectives**

(At the end of the module, the students should be able to)

Critically analyze the clinical features, dosha-dushya samprapti, and pathological basis of various Yoni Vyapads, including the impact of Bija Dushti (abnormalities of ovum/sperm).

Perform detailed case assessment of a patient with suspected Yoni Vyapad

Apply appropriate Chikitsa Sutras for each condition (e.g., Vataja Yoni Vyapad – Sneha, Swedana, Basti), and prescribe suitable formulations (e.g., Chandraprabha Vati, Pushyanuga Churna) with justification based on prakriti, desha, and vyadhi avastha.

M 18 Unit 1 Yonivyapad(Gynaecological disorders)Vataja,(Endometriosis) Aticharana, Prakcharana,(Pelvic Inflammatory Disease) Putraghni (recurrent pregnancy loss), Antarmukhi (acute anteversion), Shushka (vaginal dryness), Vamini Yoni vyapad,(Implanatation defects) Yonishula (pelvic pain), Yoni stabdha-Karkasa-kandu-daha chikitsa. (vulvovaginal pruritus, burning sensation).

References: 1,2,3,4,5,6,7,8,12,13,16,18,24,34

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Describe the etiopathology, clinical features of Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, Vamini Yoni vyapad	2	Lecture	CC	Knows-how	L&GD,L, L&PPT
CO1,CO8	Evaluate the management options and preventive strategies for Vataja, Aticharana, Prakcharana, Antarmukhi, Shushka, Putraghni, and Vamini Yoni Vyapad.	2	Lecture	CAP	Knows-how	L&PPT ,L&GD,L
CO2,CO8	Conduct gynecological examination, interpret investigations related to Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, Vamini Yoni vyapad.	4	Practical Training 18.1	PSY-GUD	Shows-how	IBL,DL,D ,CBL,PB L
CO2,CO8	Conduct clinical examination of Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, and Vamini Yoni Vyapad, analyze diagnostic findings, and formulate appropriate management strategies by correlating them with conditions of the female reproductive system.	6	Experiential-Learning 18.1	PSY-GUD	Does	D,IBL,D A,PBL,L RI
CO3,CO4,CO5 ,CO8	Identify and analyze management of Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, Vamini Yoni vyapad.	6	Experiential-Learning 18.2	PSY-MEC	Does	PBL,SDL ,D,CD,DI S
CO2,CO5,CO8	Develop clinical skills in Panchakarma, Sthanik, and Shamana Chikitsa for managing Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, and Vamini Yoni Vyapad	3	Practical Training 18.2	PSY-MEC	Shows-how	SDL,D,P SM,CBL, DA

M 18 Unit 2 Yonibhramsha(Pelvic organ prolapse)Diagnosis and management of Yoni bhramsa (Pelvic organ prolapse), Maha yoni, (Procidentia)

Prasramsini,(second degree uterine descent), and Phalini. (Cystocele).

References: 1,2,3,4,5,7,8,13,16,24,34

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Develop a comprehensive understanding of Yoni Bhramsa and its classification, describe its etiopathology, clinical features, prevention, and management protocols, and discuss conservative, surgical, and Ayurvedic treatment modalities for genital prolapse.	3	Lecture	CAN	Knows-how	IBL,L,L_V VC,L&PP T ,L&GD
CO2,CO8	Perform pelvic examination, perineal examination and assessment of the degree of displacement of reproductive organs (Mahayoni, Phalini, Prasramsini).	4	Practical Training 18.3	PSY-GUD	Shows-how	IBL,CBL, CD,D- M,PBL
CO2,CO5,CO6,CO8	Develop the skills on the management of Mahayoni, Phalini and Prasramsini (POP).	3	Practical Training 18.4	PSY-GUD	Shows-how	SIM,PSM ,CD,CBL
CO3,CO4,CO5,CO8	Analyze the causative factors and the scope of conservative management with sthanika chikitsa in pelvic organ prolapse. (Mahayoni, Prasramsini, Phalini)	8	Experiential-Learning 18.3	PSY-MEC	Does	CD,JC,D- M,TPW, D-BED

M 18 Unit 3 Beeja dushti(Chromosomal anomalies and congenital anomalies)Diagnosis and management of Beejadushti (chromosomal anomalies and congenital malformations of female genital tract and breast)

Intersex and ambiguous sex, sex chromatin, and Karyotype study.

References: 1,2,3,4,5,6,7,13,16,18,24,25

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Discuss the etiopathology and clinical features of Müllerian duct anomalies and congenital breast anomalies, describe genetic conditions leading to chromosomal abnormalities, interpret Ayurvedic textual references on intersex, and develop a comprehensive understanding of conditions such as Vandhya, Trinaputrika, Varta, Shandi, and Suchimukhi Yoni Vyapad.	3	Lecture	CC	Knows-how	L&GD,L, L&PPT ,L_V C

CO2,CO8	Develop skills in physical examination for assessing Bija Dushti and chromosomal anomalies, and interpret imaging, investigative reports, and hormonal assays related to Bija Dushti.	6	Practical Training 18.5	PSY-GUD	Shows-how	LRI,PBL, SIM,CD, CBL
CO3,CO5,CO8	Identify the causes of Bija Dushti and chromosomal anomalies, and explore current research on the preventive role of Garbhadana (preconception care) in reducing genetic disorders.	6	Experiential-Learning 18.4	PSY-GUD	Does	CBL,PS M,PBL,L RI,CD

Practical Training Activity

Practical Training 18.1 : Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, Vamini Yoni vyapad.

Teacher will Demonstrate-2 hours

Present sample cases of each Vyapad with symptoms, investigation reports.

Demonstrate speculum exam, bimanual pelvic exam

Interpret hormone reports, TVS images, and link to Ayurvedic Vyapads

Simulate Vamini Yoni vyapad case – explain psychosexual counseling techniques

The students are expected to-2 hours

Elicit full menstrual, sexual, and psychosocial history for different Vyapads

Practice speculum and bimanual examination on simulator models/real patients -minimum 5 cases

Prepare full case notes including diagnosis, reports, and chikitsa planning-minimum 5 cases

Identify relevant findings from mock TVS, hormonal assay, PAP smear results

Suggest lifestyle, yogasanas, and ahara-vihara per condition

Simulate Putraghni or Antarmukhi consultation and decision-making

Practical Training 18.2 : Vataja and Associated Yoni Vyapads with Panchakarma, Sthanika Chikitsa, Drug Evaluation, and Pathya-Apathya Guidance.

The teacher will Demonstrate

1. Show stepwise preparation, positioning, and administration of Matra Basti and Uttara Basti.
2. Prepare dough ring, apply medicated oil for Prakch?ra?a case
3. selection, preparation, and insertion technique
4. Simulate counseling for V?min? / Putraghn?

The students are expected to

1. Simulate Matra Basti on dummy
2. Design and Plan Panchakarma treatment plan in minimum 5 cases of different yonivyapad.

Practical Training 18.3 : Diagnostic Approach to Pelvic Organ Prolapse (POP): Identifying Causes, Types, Urinary Incontinence, and Case Presentation.

The teacher Demonstrate-2 hours

Pelvic examination on models or simulation mannequins to understand organ positions and identify displacements.

Conduct guided examinations, observing for displacement signs to refine examination techniques.

Examination techniques of eliciting utero vaginal displacement on simulation

Elicit urinary incontinence by examining a patient

How to Identify the displaced structure, Identify the fornices by vaginal examination

Evaluation of case-based scenarios with detailed descriptions of examination findings, categorizing the degree of prolapse (first-degree to third-degree) and displacement for each condition.

Integration of examination findings into a comprehensive treatment plan for managing Mahayoni, Phalini, and Prasramsini, perineal bulging, gaping, tissue tone

4. Stage descent of cervix/uterus during straining

Show insertion, visualization, manipulation

The students are expected to-2 hours

Learn palpation of cervix, uterus size & position

Insert speculum, visualize cervix

Observe for prolapse/cystocele signs
Practice identifying uterine descent on straining

Practical Training 18.4 : Prevention of Pelvic Organ Prolapse.

Teacher will demonstrate

1. Conduct a detailed lecture on Mahayoni, Phalini, Prasramsini with Nidana, Samprapti, Bheda, and Chikitsa.
 - Correlate with POP grades and pelvic floor dysfunction.
2. pelvic exam on mannequin or simulation model: show how to assess uterine position, degree of prolapse.
 - Use Cusco's & Sim's speculum to demonstrate perineal descent and prolapse grades.
 - Explain findings on real patient (under supervision and consent).
3. Yoni Abhyanga, Yoni Pichu (e.g., with Ashwagandha taila, Bala taila), Yoni Dhavana (e.g., with Triphala kashaya).
 - Show Yoni Varti preparation and insertion technique.
4. Basti chikitsa planning: Niruha (Dashamoola, Bala-Ashwagandhadi), Anuvāsana (Yapana Basti).
 - Explain how Basti improves Apana Vata sthana and pelvic floor tone.
5. Show images/videos of uterine prolapse surgeries (e.g., Manchester/Fothergill, vaginal hysterectomy).
 - Explain when Ayurvedic conservative methods fail.
6. Present real cases of prolapse in OPD/IPD and walk students through history, examination, diagnosis, and treatment.

The students are expected to

1. Present a comparison table between Ayurvedic & modern understanding of Pelvic Organ Prolapse
 - Participate in quizzes or oral discussion.
2. Practice examination on mannequin (2–3 supervised sessions).
 - Record observations: uterine axis, degree of descent, associated findings (cystocele, rectocele).
 - Submit examination reports on case sheets.
3. Prepare medicated oils and Varti under supervision.
 - Practice Pichu/Yoni dhavana using dummy models.
 - Record procedures in practical notebook
4. Observe 2–3 Basti administration cases.
 - Write and present one Basti chikitsa case discussion.
 - Participate in Basti preparation and post-care.
5. Attend minor OT sessions where pessary placement or vaginal repairs are done.
 - Prepare reflection reports on observations.
6. Take structured history and do symptom scoring using POP-Q chart.

- Create problem-based learning case studies with management plan.

Practical Training 18.5 : Bija Dushti

The teacher will Demonstrate-3 hours-case based demonstration

1. General & systemic examination focused on endocrine clues: obesity, hirsutism, testicular size, gynecomastia.
 - Teach Tanner staging, thyroid palpation, galactorrhea check, and genital exam.
2. Interpret WHO semen report criteria (motility, morphology, count).-lab demonstration
 - Show sample hormonal profiles (FSH, LH, Prolactin, Testosterone).
 - Correlate with Vataja/Kaphaja Shukra Dushti.
3. Show TVS/USG report indicating ovarian reserve (AFC, ovarian volume).
 - Explain HSG (tubal patency), AMH, FSH/LH, estradiol graphs.
 - Discuss PCOS or Turner's features.
4. Karyotype images (e.g., Klinefelter, Turner syndrome).
 - Demonstrate how to interpret karyotype tables (46,XX/XY/XXY, etc.).
 - Discuss genetic red flags in history taking.

The students are expected to- 3 hours

1. Practice structured clinical exam on peers/models:

BMI, waist-hip ratio

Tanner staging

Testicular palpation

Vulvo-vaginal inspection on mannequins.

2. Interpret 2 anonymized semen analysis & hormonal profiles.

- Match findings with Ayurvedic descriptions (e.g., Shukra alpata, picchila, phenila).

3. Practice reading 3 imaging reports:

PCOS on USG

AMH with AFC report

HSG film

- Fill structured interpretation sheet.

4. Match 5 karyotype images to their syndrome.

- Do a mock patient counseling session with congenital anomaly history.
- Fill out a pedigree chart.

Experiential learning Activity

Experiential-Learning 18.1 : Yoni Vyapad Clinical Skills and Management

1. Present patient cases for each Vyapad with pelvic exam findings-one case each
2. Demonstrate speculum and bimanual exam steps- on 3 patients
3. perform Uttara basti, Matra basti, Shirodhara on dummy
4. Identify signs of prolapse, dryness, and occlusion
5. Practice diagnosing based on dosha & symptomatology
6. Interpret TVS, hormonal assays with Vyapads
7. Integrate Aushadha, Panchakarma, Sthanika chikitsa

Experiential-Learning 18.2 : Yoni Vyapad Clinical, Diagnostic Insights, Panchakarma Practicum, and Personalized Ayurvedic Management.

1. Review real and hypothetical cases presenting with symptoms of Yoni Vyapad. Conduct thorough analyses, focusing on identifying Nidana (etiology), Laxanas (signs and symptoms), and Dosha predominance.
2. Develop treatment protocols based on the analysis, selecting appropriate Aushadha (medications), Panchakarma therapies, and dietary modifications.
3. Role-play scenarios involving patients with symptoms of Yoni Vyapad, practicing patient interviewing and diagnostic skills.
4. Practice presenting differential diagnoses, emphasizing symptom-specific approaches for Vataja, Aticharana, and Prakcharana Yoni Vyapads.-3 cases
5. Perform Sthanika Chikitsa practices such as Yoni Pichu (medicated tampon), Yoni Dhavana (vaginal wash), and Yoni Varti (vaginal suppositories) under supervision to understand the application and therapeutic effects.-minimum 3 cases
6. Conduct small-group research projects to explore the efficacy of treatment regimens and clinical case outcomes in Vataja, Aticharana, and Prakcharana conditions, enhancing clinical decision-making.

Experiential-Learning 18.3 : Pelvic Organ Prolapse (Mahayoni, Prasramsini, Phalini):

1. Review detailed case studies, identify causative elements contributing to POP, and categorize findings by severity. Discuss Vata-related imbalances, repetitive strain, and lifestyle contributions to each case.-3 cases
2. practice applying Yoni Pichu and Yoni Dhavana on mannequins or demonstration models. Learn appropriate oil selections, application methods, and discuss timing/frequency of treatments.- 3 cases
3. Demonstrate or observe guided applications of Sthanika Chikitsa alongside lifestyle modifications, dietary advice, and tailored physical exercises aimed at strengthening pelvic muscle-3 cases
4. Demonstrate the instruction techniques like Kegel exercises and other physical therapy-based movements designed to support pelvic structures. Develop simple instructional guides for patients to follow at home.
5. Review cases with varying symptoms and prolapse types, practice identifying Mahayoni, Phalini, and Prasamsini presentations, and propose appropriate Sthanika Chikitsa interventions.
7. Demonstrate POP-Q system
8. Utilize simulators designed for pelvic exams to palpate and identify displaced genital organs, simulating conditions like uterine prolapse or retroversion.
9. Demonstrate Differentiation of fibroid polyp/Chronic inversion from uterine prolapse
10. Present case of Yoni bhramsa along with suitable drugs specific to the particular case-Minimum 3 cases.

Experiential-Learning 18.4 : Bija Dushti (Chromosomal and congenital anomalies)

Students

1. Analyze 3 anonymized case records of patients with
 - Recurrent abortions
 - Congenital anomalies
 - Male infertility
2. Identify signs of Bija Dushti and chromosomal risks.
Review 2–3 papers on:
 - Folate/micronutrient therapy
 - Sperm oxidative stress
 - Rasayana/Detoxification impact preconceptionally
3. Design a Preconception Care Protocol including Panchakarma Rasayana
Vata-balancing diet
Lifestyle + Garbhadhana ritual steps.
4. Practice giving genetic + Ayurvedic preconception counseling:

Ayurvedic counselor

- Explain role of Shodhana, Rasayana, Satmya
- Educate on avoiding Garbhopaghatakara Bhavas.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

4

1.Integrative Essay (50 marks)

Critically analyze Yoni Vyapad from Ayurvedic classics. Explain Nidana, Samprapti, Lakshana, and Chikitsa of at least 5 major Yoni Vyapad. Correlate with modern gynecological disorders and highlight the role of integrative management including Panchakarma, Sthanika chikitsa, and evidence-based Ayurveda.

Marking Scheme:

- Introduction & classification – 5
- Nidana & Samprapti principles – 10
- Discussion of 5 Yoni Vyapad – 20
- Modern correlation & integrative management – 10
- Conclusion – 5

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

Semester No : 4

Module 19 : Samkramika and Aupasargika rogas (Infectious disorders of Reproductive system & STD)

Module Learning Objectives

(At the end of the module, the students should be able to)

Critically analyze Infectious and noninfectious disorders of Reproductive system in detail and differentiate the clinical variations.
 Conduct detailed clinical examination, interpret key signs and symptoms, and apply appropriate diagnostic tools.
 Apply appropriate chikitsa sutras and classical references to select the correct treatment principles.

M 19 Unit 1 Sankramika yoni rogas(Genital infections)Diagnosis and management of Pittaja, Kaphaja, Sannipataja, Acharana, Upapluta, and Paripluta Yoni Vyapad and sankramika yoni roga (genital infections).
 Overview of Shwetapradara (abnormal vaginal discharges), diagnostic tools, and treatment approaches.

References:

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Analyse the etiopathogenesis, diagnosis, and treatment of Pittaja, kaphaja, sannipataja, Acharana, Upapluta yoni vyapad (Genital infections)	3	Lecture	CAN	Knows-how	L,L&PPT ,L&GD
CO1,CO8	Analyse the etiopathogenesis, diagnosis, and treatment of Paripluta yoni vyapad (PID) and Shwetapradara (Abnormal vaginal discharges)	2	Lecture	CAN	Knows-how	L,L&PPT ,L&GD,L_V C
CO2,CO5,CO8	Develop the skills of examination and interpretation of investigations and relevant management procedures in Pittaja, kaphaja, sannipataja, Acharana, Upapluta yoni vyapad,(Genital infections)	5	Practical Training 19.1	PSY-GUD	Shows-how	DIS,PBL, CD,CBL, LRI
CO2,CO5,CO8	Develop the Proper examination and Interpretation of investigations and relevant management procedures in Paripluta, Vipluta Yonivyapad (PID)	5	Practical Training 19.2	PSY-GUD	Shows-how	LRI,CD, D,IBL,CB L

CO3,CO5,CO8	Identify the case of Pittaja (Pelvic inflammatory disease) kaphaja, sannipataja, ucharana, Upapluta,(abnormal vaginal discharges) and develop diagnostic reasoning and communication skills,laboratory skills and clinical skills along with management.	8	Experiential-Learning 19.1	PSY-ORG	Does	D,PBL,DIS,PSM,DA
CO3,CO5,CO8	Identify Paripluta, Vipluta yonivyapad and Swetapradara and develop diagnostic reasoning and communication skills, laboratory skills and clinical skills along with management	8	Experiential-Learning 19.2	PSY-MEC	Does	D,DIS,SDL,DA,RP
CO1,CO8	Discuss Upadamsa, Phirangi, and Puyameha in relation to their clinical features and transmission, emphasize the importance of contact tracing and partner notification, and analyze the management protocols for Aupasargika Rogas	3	Lecture	CC	Knows-how	L,L&PPT,DIS,L&GD

M 19 Unit 2 Oupasargika yoni rogas(Sexually transmitted infections) Diagnosis and management of Aupasargika rogas- Puyameha (Gonorrhoea, Chlamydisis), Phirangi (syphilis), upadamsa- Lymphogranuloma venerum, Chancroid, Granuloma inguinale, Herpes genitalis, Bacterial, vaginosis, Condyloma acuminata, AIDS

References: 2,3,4,5,15,17,22,24,25,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Discuss the etiopathology, clinical features, diagnosis, modes of transmission and preventive protocols of Aupasargika rogas (Sexually transmitted infections),	2	Lecture	CAN	Knows-how	L&GD,L,L&PPT,L_VC
CO2,CO4,CO8	Develop skills in physical, local, and pelvic examination for diagnosing Aupasargika Rogas (STIs), and demonstrate expertise in the collection of vaginal and cervical discharges for diagnostic evaluation.	5	Practical Training 19.3	PSY-GUD	Shows-how	CD,PBL,EDU,IBL,LRI
CO2,CO4,CO5,CO8	Demonstrate examination and management methods of Samkramika rogas (Genital infections).	5	Practical Training 19.4	PSY-GUD	Shows-how	D,CBL,DIS,RP,EDU
CO3,CO5,CO8	Identify cases of Aupasargika Vyadhi (STIs), analyze their signs and symptoms, and develop effective communication skills along with integrated management protocols.	10	Experiential-Learning 19.3	PSY-MEC	Does	LRI,EDU,CD,PBL,D-BED

Practical Training Activity

Practical Training 19.1 : Vaginal Discharges (Pittaja, Kaphaja, Sannipataja, Acharana, and Upapluta Yoni Vyapad)

The teacher will demonstrate -3 hours

clinical case orientation- 1–2 live or documented cases of Yoni Vyapad (e.g., Pittaja / Kaphaja). Discuss history-taking emphasizing yoni vedana, srava, daha, kandu, and menstrual correlation.

case Demonstrate per speculum & bimanual examination with aseptic precautions; explain signs of infection (discharge color, odour, local inflammation)

lab Demonstrate interpretation of vaginal smear, pH test, wet mount, Gram stain, Pap smear, and correlate with Do?hic lak?a?as

Case-based Integrative Management -Present integrative management protocol (?odhana + ?amana + local therapy + modern antibiotics/antifungals if needed). Discuss preventive measures & recurrence management..

students will-2 hours

Record detailed case history and identify probable Do?ha-dominance -1-2 live cases

Identify lab findings in 2 sample reports; correlate with Ayurveda diagnosis.

Develop an individualized management chart integrating both Ayurvedic and modern aspects.-2 cases

Practical Training 19.2 : Paripluta, Vipluta Yoni Vyapad, and Sweta Pradara.

The teacher will demonstrate-3 hours

Clinical Demonstration- 1–2 live cases (or case videos) of Paripluta / Vipluta Yoni Vyapad, explaining history-taking—focus on yoni shoola, yoni daha, katisoola, jwara, srava, sadyovra?a-lak?a?a for detailed case history, identify probable *Do?ha* involvement (mainly V?ta–Pitta or Trido?aja).

Demonstrate Per abdomen, Per speculum, and Bimanual examination techniques using dummy or real patient, showing tenderness, cervical motion pain, adnexal mass.

lab demonstration-Show reports of CBC, ESR, vaginal smear/culture, ultrasound pelvis, CRP, urine analysis, explain findings (raised ESR, pus cells, tubo-ovarian mass, etc.)

students are expected to-2 hours

1. Observe, record detailed case history, identify probable *Do?ha* involvement (mainly V?ta–Pitta or Trido?aja). Identify Ayurvedic diagnostic pattern in PID

2. Practice examination technique on model/simulation; prepare observation notes. Perform complete gynecological examination systematically.

3. Analyze sample reports, correlate modern findings with Ayurvedic Samprapti (e.g., Saama avasth?, ?varana, Vata-pitta dushti). Develop interpretative ability linking Ayurveda and modern pathology.

Practical Training 19.3 : Sexually transmitted infections related Yoni Vyapad.

The teacher will Demonstrate

1. On pelvic simulator or video module

Explain inspection of vulva, labia, clitoris, urethral opening, vaginal introitus

2. Demonstrate collecting vaginal smears, preparing, and staining slides to observe for cellular abnormalities and organisms.

3. Pelvic Examination (Bimanual + Speculum)- Stepwise with explanation

Use dummy/pelvic model

4. Vaginal/Cervical Discharge Collection- Use Ayre's spatula, cotton swab, cytobrush

- Show correct sites and technique.

5. Present 2 real cases (e.g., Trichomoniasis, HPV)

Ask students to identify key signs, suggest management

The students are expected to

1. Perform Physical & Local Genital Examination- On mannequin or simulation sheet

- Use flashlight, gloves-Identify erythema, swelling, discharge, ulcers, or papules.

2. On models perform pelvic examination of hand positioning, depth, movements o palpate uterus, adnexa; note cervical tenderness.

3. Perform Collection of Discharge Samples (Simulation or real)- Vaginal from posterior fornix

in cervical-using a brush or swab with Aseptic handling.

Labeling and sample storage

Chain of custody for STI tests-minimum 2 cases

4. Given mock reports (Gram stain, wet mount, pH, KOH test) Interpret discharge type with infection (frothy/yellow: Trichomonas, thick white: Candida)

Infer doshic imbalance (Pittaja – Daha; Kaphaja – Picchila, Shveta)

Practical Training 19.4 : Genital infections

The teacher will Demonstrate

1. Dhupana using antimicrobial herbs like Guggulu, Vacha, Haridra, Nimba, Rakta Chandan.

2. Present cases with varying symptoms like discharge, ulcers, warts, pain.

3. Demonstrate charting Ayurvedic + Modern protocols: Dhupana, Yonidhavana, antimicrobials, follow-up.

The students are expected to

1. Prepare Dhupana materials, ensure aseptic zone, simulate fumigation.-perform in minimum 3 cases.

2. Develop health education tools using both Ayurvedic and modern messages.
3. In given STI cases; identify infection, dosha, probable nidana, and plan diagnostic workup-minimum 3 cases.
4. Write full chikitsa plan including Dhupana, Yonipichu, herbal drugs, antibiotics, lifestyle advice- 1 case

Experiential learning Activity

Experiential-Learning 19.1 : Kaphaja and Pittaja Yoni Vyapad.(Abnormal vaginal discharges and pelvic inflammatory disease)

1. On 3 case vignettes (1 each of Pittaja, Kaphaja, and Upapluta)
Identify Dosha dominance based on Lakshana (e.g., Daha, Srava, Kandū, Vedana)
Correlate with modern diagnoses like candidiasis, cervicitis, PID, etc.
2. Perform vaginal swab collection
Prepare slide for microscopic examination (simulate Kaphaja candida-like discharge)-minimum 3 cases
Analyze CBC, CRP, vaginal pH, USG, and microscopic findings
Correlate with signs of Pittaja (fever, srava daha), Kaphaja (shweta srava, guruta), Sannipataja (combined features)-minimum 5 reports.
3. In minimum 3 cases (Pittaja/Kaphaja/Sannipataja):
Choose Ayurvedic medicines (Chandraprabha, Rajapravartini, Lodhrasava, etc.)
Decide if Sthanika/Panchakarma (e.g., Basti) needed
Correlate modern antibiotics if integrative plan required

Experiential-Learning 19.2 : Kaphaja and Pittaja Yoni Vyapad

1. Conduct a full patient evaluation, documenting physical and symptomatic findings relevant to Kaphaja and Pittaja Yoni Vyapad.-3 cases
2. Interpret laboratory and imaging results, identifying markers of infection, inflammation, and doshic imbalances.- 3 reports
3. Formulate treatment protocols for Kaphaja and Pittaja Yoni Vyapad, incorporating dietary guidelines, herbal medications, and lifestyle modifications.- 3 cases
4. Administer local therapies such as Yoni Dhavana and Yoni Pichu, using herbal solutions suited for Kapha or Pitta dosha imbalances.- 3 cases
5. Present case findings, including diagnostic process, treatment protocols, and expected outcomes.-3 cases
6. Analyze the pharmacological properties of herbs used for Kaphaja and Pittaja Yoni vyapad, focusing on anti-inflammatory, antimicrobial, and dosha-balancing effects.
7. Design lifestyle and dietary guidelines to prevent recurrence of Kaphaja and Pittaja Yoni vyapad, emphasizing routine, pathya (compatible foods), and apathya (incompatible foods).

Experiential-Learning 19.3 : sexually transmitted infections

1. Conduct sessions on distinguishing STIs with similar presentations, including hands-on practice with diagnostic criteria and interpretation of lab findings.
2. Prepare and present detailed STI case studies, covering patient history, examination findings, diagnosis, and chosen treatment.-minimum 2 real cases/scenarios
3. Analyze and compare standard STI management protocols, discussing strengths and areas for holistic integration.
4. Review WHO guidelines for STI management, including treatment, counseling, and follow-up care.
5. Observe or practice Panchakarma therapies appropriate for STI management, such as Virechana (purgation) or Basti (medicated enema), based on dosha imbalance.
6. Examine and analyze drugs used in both Ayurvedic and modern medicine for treating STIs, considering dosha alignment and therapeutic action.
7. Interpret laboratory and imaging results for STIs, practicing thorough and accurate analysis.
8. Practice prescribing medication, including dose, duration, and possible combinations with herbal remedies, under supervision.
9. Demonstrate and discuss safety measures and infection control practices in administering Sthanika Chikitsa.
10. Conduct mock counseling sessions and practice effective referral processes for cases needing additional care.
11. Case scenario presentation of signs and symptoms of STI
12. Review and present research article on integrated treatment approach in STI as journal club activity
13. Prepare research article on the different types of investigations carried out to diagnose STI

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

4

OSCE/OSPE (50 marks)

- Station 1 (10): Interpret a case vignette of Trichomoniasis and give Ayurvedic diagnosis.
- Station 2 (10): Demonstrate Yoni Prakshalana procedure with aseptic precautions.
- Station 3 (10): Match Ayurvedic formulations (Triphaladi kwatha, Darvyadi kwatha, etc.) to specific Yonivyapad.
- Station 4 (10): Reflect on STI counseling points (condom use, partner screening, safe practices).
- Station 5 (10): Write integrative management plan for recurrent genital herpes.

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

Module 20 : Artava vyapad samuchaya, Ashta nindita and Stree janananga arbuda (Reproductive endocrinology, polycystic ovarian syndrome, neoplasms of female reproductive system)

Module Learning Objectives

(At the end of the module, the students should be able to)

Analyze clinical features of Ashta Nindita, Artava Vyapad Samucchaya, and neoplasms, Rakta Gulma, Granthi, Arbuda, and Karkatarbuda with emphasis on endocrine and reproductive system disorders.

Conduct case examination, interpret diagnostic reports, perform screening procedures for malignancies, and organize awareness programs for early detection and prevention.

Identify nidana and samprapti, and apply appropriate chikitsa sutras including Shodhana and Sthanik Chikitsa.

M 20 Unit 1 Ashta nindita, artava vyapad samuchhaya(reproductive endocrinology and Polycystic ovarian syndrome)Diagnosis, evaluation and management of Ashta ninditas (relevant to reproductive endocrinology)

Artava vyapad samuchhaya (polycystic ovarian syndrome)- Polycystic ovarian syndrome related to Hirsutism with panchakarma and samana chikitsa

References: 1,2,3,4,5,7,22,24,29

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO8	Correlate Ashtanindita Purusha with clinical features of PCOS and endocrine disorders, discuss the pathophysiology, management of Artava Vyapad Samuchaya, investigation of Aartava Kshaya in hormonal dysregulation, and integrated treatment protocols	3	Lecture	CAN	Knows-how	L&PPT ,L_VC

	including Shodhana, Shamana, and lifestyle interventions.					
CO1,CO2,CO3	Evaluate different PCOS phenotypes and hormonal disorders by Dosha predominance, Avarana, and Dhatu Kshaya; diagnose using Ayurvedic and modern criteria; assess lifestyle factors influencing hormonal imbalances; and interpret Ashtanindita Purusha signs related to metabolic and endocrine dysfunction.	6	Practical Training 20.1	CAP	Shows-how	PBL,SIM
CO1,CO2,CO3,CO4,CO5,CO6,CO7,CO8	Develop the skills of designing treatment options of ashta nindita purusha and artava vyapad samuchya.	2	Practical Training 20.2	PSY-GUD	Shows-how	D,PBL,D L,LRI,SIM
CO1,CO2,CO3,CO4	Analyze PCOS cases with Ashta Nindita Lakshanas, compare Ayurvedic Samprapti with modern endocrine pathology, discuss Avarana's role in hormonal imbalance, design personalized Panchakarma protocols integrating modern adjuncts and propose innovative solutions for treatment-resistant PCOS.	10	Experiential-Learning 20.1	CAP	Does	PBL,CBL,RLE

M 20 Unit 2 Rakta gulma, Granthi, arbuda (benign neoplasms)Diagnosis and management of Rakta gulma, Granthi, Arbuda, yoniarsa, yoni kanda. (fibroid uterus, cervical erosion, cervical polyps, cervical neoplasia (CIN 1), VAIN, VIN, vaginal cysts, Vulval epithelial disorders ovarian Benign neoplasms)

References: 1,2,3,4,7,13,15,24,25

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO8	Analyze clinical features and differential diagnoses of Rakta Gulma, Granthi, Arbuda, Yoniyarsha, Yoni Kanda, and common benign gynecological conditions; evaluate modern diagnostic procedures; classify benign ovarian tumors by histopathology and imaging; and formulate a systematic diagnostic approach for benign pelvic masses	2	Lecture	CAP	Knows-how	L&PPT, L&GD,L_V C
CO1,CO8	Analyze Ayurvedic and modern management principles of Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda, evaluate the pathophysiology of Endometriosis and Adenomyosis in Ayurvedic context, formulate integrated treatment plans, compare prognostic factors of benign and malignant neoplasms, and apply Nidana Parivarjana and Panchakarma Chikitsa in clinical practice.	2	Lecture	CAP	Knows-how	L,L&GD, L&PPT,LS,Mnt

CO2,CO8	Differentiate clinical features of Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda, compare diagnostic approaches including Nidana Panchaka and Samprapti with modern findings and interpret symptoms to distinguish between benign and malignant conditions.	4	Practical Training 20.3	CE	Shows-how	PBL,LRI, RLE,CBL
CO3,CO4,CO8	Justify the Shodhana therapies in gynecological conditions, formulate individualized treatment plans, and demonstrate procedures such as Raktamokshana, Yoni Pichu, Uttara Basti, Kshara Karma, and Lepa application.	3	Practical Training 20.4	PSY-GUD	Shows-how	PBL,SIM, D-M
CO3,CO4,CO8	Evaluate Panchakarma interventions in gynecological conditions, treatment strategies based on clinical outcomes, therapeutic choices like Raktamokshana or Kshara Karma, diagnostic findings, and propose research-based integrative approaches for pre-malignant lesions.	10	Experiential-Learning 20.2	CE	Does	D-M,PBL ,RLE,JC, CBL

M 20 Unit 3 Karkatarbuda (malignant tumors)Referral understanding and diagnostic strategies of Rakta arbuda, Sannipataja artava vyapad, Putipuya, Kunapa, granthi artava vyapad (Malignant Genital Neoplasia of Ovary, Fallopian Tubes, Uterus, Cervix, Vagina, vulva)
Integrative application of Ayurvedic principles.
Basic knowledge of principles of radiotherapy and chemotherapy, immunotherapy, and Gene therapy in gynecological malignancies.

References: 2,3,4,13,15,17,22,24,30,31

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO8	Analyze the etiopathology and clinical features of gynecological malignancies and related Arbuda/Vyapad, distinguish between benign and malignant conditions, and formulate evidence-based Ayurvedic and integrative management strategies.	3	Lecture	CAN	Knows-how	L&PPT ,L_VC
CO2,CO8	Perform systematic gynecological examinations, interpret diagnostic findings to stage Karkatarbuda, and formulate integrated, patient-centered management and referral plans.	5	Practical Training 20.5	PSY-MEC	Shows-how	RLE,LRI, CBL,D-M
CO3,CO7,CO8	Design integrative, stage-specific oncology care plans using Shatkriyakala principles, incorporating Ahara, Vihara, and Rasayana, and critically evaluate their efficacy and ethical application alongside conventional therapies in multidisciplinary settings.	6	Experiential-Learning 20.3	PSY-SET	Shows-how	DIS,JC,L RI,CBL,P ER

Practical Training Activity

Practical Training 20.1 : Artava Vyapad Samuchaya (Polycystic Ovarian Syndrome).

Teacher will Demonstrate -4hours-case based learning

A case of Artava Vyapad Samuchaya (PCOS) including a detailed history, clinical findings, and diagnostic reports, explain how to Identify and discuss the treatment plan . Review and interpret laboratory results (e.g., hormone profiles, blood sugar levels, ultrasound findings) relevant to the case.

Demonstrate Panchakarma therapies suited to PCOS management, such as *Uttar Basti* (medicated enema) or *Vamana* (therapeutic emesis), under supervision.

Demonstrate how to Develop a tailored lifestyle and dietary plan for the given case, including exercise, stress management techniques, and diet adjustments according to Ayurvedic Pathya (wholesome) and Apathya (unwholesome) principles

Analyze the ashta nindita purusha lakshanas with suitable conditions relevant to reproductive endocrinology(thyroid/ adrenal/ pituitary dysfunction) and organize a seminar.

The students will understand the concepts of PCOS in Ayurveda and the management guidelines

Analyse the hormonal profile of PCOS patients and plan the lifestyle and dietary advice -2 hours

Practical Training 20.2 : Ashta Nindita Purusha Lakshanas (Endocrinological Abnormality)

the teacher will demonstrate-1 hour

case based learning - presents 2 case vignettes (e.g., *Medasvi Purusha with Artava Kshaya*; *Krishna Purusha with Nashta Artava*).

students are expected to

identify Samprapti, Doṣha, Dṛṣṭya, Srotas, Avastha and propose Chikitsā Sūtra-1 hour

at the end the teacher will summarize

Practical Training 20.3 : Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda

The teacher will demonstrate-2 hours

Case Demonstration (Virtual/Recorded/Real Case): 3 cases shown – uterine fibroid, ovarian cyst, cervical carcinoma. guides how to make differential diagnosis .Live demonstration of diagnostic approach. and Applying Nidana Panchaka to modern findings (USG, biopsy).

students are expected to -2 hours

1. Identify probable Ayurvedic diagnosis
2. Distinguish benign/malignant nature
3. Suggest initial chikitsā sūtra.

in a case vignette of female with foul discharge vaginally and contact bleeding.

Practical Training 20.4 : Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda.

the teacher will demonstrate-1 hour

case based Demonstration of Yoni Pichu and Lepa Kalpana on real patient/model or simulator).Demonstrate aseptic preparation, material selection (taila/ghrta), and application steps.

students are expected to-2 hours

practice preparation, positioning, and mock execution of the demonstrated procedures.

Practical Training 20.5 : Karkatarbuda (Premalignant and Malignant Lesions) in the Female Reproductive System.

Teacher will demonstrate -3 hours

1.case based Demonstration of Systematic Gynecological Examination On a simulator/mannequin or consenting patient, demonstrate: inspection, palpation, speculum and bimanual exam, rectovaginal exam.

2.Demonstration on Display Pap smear slides, USG images, colposcopy & biopsy reports; discuss how to interpret findings and correlate with stages (FIGO classification the students are expected to-2 hours

observe Examination sequence, professional conduct, aseptic technique,Diagnostic reasoning, staging.

Experiential learning Activity

Experiential-Learning 20.1 : Artava Vyapad Samuchaya (PCOS) and Ashta Nindita Lakshanas (Endocrinological Disorders).

1.Identify Prakṛti, Vikrṛti, and Aṛṛṇa Nindita features in given case sheets; record in observation sheet.-5 cases

2.create dual-column table: Ayurvedic vs Modern endocrine pathway correlation.

3.prepare Panchakarma flowchart with rationale based on Doḥa–Avasthṇ.

4.develop a complete management sheet including Pañchakarma, ṇamana, Ahṇra, Yoga, Counseling.

prepare and submit individualized Ayurvedic prescriptions with justification.

Experiential-Learning 20.2 : Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda.

1.Students perform detailed evaluation using Nidṇna Pañchaka, correlate with modern diagnostics (Pap smear, USG, colposcopy reports).-3 cases

2.plan ṇodhana–ṇamana strategy — selection of Raktamokṇaṇa, Kṇṇra Karma, Yoni Pichu, or Uttara Basti based on Avasthṇ.-3 cases

3.perform minimum 2 Panchakarma procedures , maintain observation notes on procedure steps, precautions, complications, and outcomes.

- .evaluate post-procedural outcomes — changes in discharge, pain, cycle regularity, and lesion regression.
- 5.prepares a comprehensive integrative plan combining Ayurvedic Panchakarma + modern adjuncts -3 cases.
- 6.presents one analyzed case, therapeutic logic, outcome interpretation, and proposed innovations to peers/faculty.

Experiential-Learning 20.3 : Malignancy Screening.

perform Case Analysis and Stagingin on oncology case vignett/real case (e.g., cervical, breast, or ovarian cancer) from hospital records. Apply Shatkriyakala framework to analyze disease evolution and classify stage.-minimum 2 case vignetts.

perfrom Case Outcome Documentation and Record clinical outcomes (symptom relief, QoL improvement, biochemical markers) after integrative care. If clinical data unavailable, use hypothetical analysis.-minimum 3 cases/scenarios.

Design Integrative Care Plan and Prepare *stage-specific* plan including:

- Panchakarma & Shamana
- Ahara, Vihara, Rasayana
- Modern oncological therapy integration

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

4

Structured Long Answer Case Analysis (50 marks)

- Case:**
A 24-year-old woman presents with oligomenorrhea, hirsutism, obesity, and infertility. Ultrasound shows polycystic ovaries.
- Tasks:**
- Identify the condition with Ayurvedic correlation (Artava Vyapad Samucchaya / Ashta Nindita – Sthoulya–Anartava). (10)
 - Explain the Nidana Panchaka and Samprapti from Ayurvedic and modern endocrinology views. (10)
 - Discuss differential diagnosis with menstrual irregularities and other gynecological disorders. (10)
 - Outline integrative management (Ahara, Vihara, Yoga, Panchakarma, Aushadhi + modern pharmacotherapy). (15)

- Preventive and fertility counseling aspects. (5)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

Semester No : 5

Module 21 : Vandhyatwa (Female and male Infertility)

Module Learning Objectives

(At the end of the module, the students should be able to)

- Analyze the Nidana and Samprapti of female and male infertility.
- Correlate Dosha imbalances with modern infertility diagnoses.
- Formulate individualized treatment plans combining Ayurvedic and modern therapies.
- Evaluate ART protocols and their integration with Ayurvedic principles.
- Critique ethical and sociocultural aspects of fertility treatments.

M 21 Unit 1 Stree vandhyatwa - Female InfertilityDetailed study of Stree Vandhyatwa (female infertility)—aetiopathogenesis, diagnosis, and management along with recent advances.

References: 1,2,3,4,5,13,15,30,33,36,38,39

3A	3B	3C	3D	3E	3F	3G
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CO1,CO4,CO5	Analyze the etiopathogenesis and categorize the types of Stree Vandhyatwa - Female Infertility.	1	Lecture	CAN	Knows-how	L&PPT ,L,L_VC
CO2	Demonstrate physical and pelvic examinations to evaluate the underlying causes of Stree Vandhyatwa	4	Practical Training 21.1	PSY-GUD	Shows-how	PBL,CBL ,CD
CO2	Perform the diagnostic procedures for female infertility, discuss the concept of Ritumati Lakshana as an Ayurvedic marker of ovulation, and develop clinical skills to assess and correlate indirect ovulation prediction methods with contemporary diagnostics.	4	Practical Training 21.2	PSY-GUD	Shows-how	PBL,CBL ,D-M,D-BED,LRI
CO1	Discuss risk factors such as age, lifestyle habits, and underlying medical conditions and their impact on female infertility.	1	Lecture	CAP	Knows-how	L&PPT , L_VC,IBL
CO1,CO8	Evaluate management protocols for Vandhyatva, and develop integrated treatment approaches based on the type and cause of infertility.	1	Lecture	CE	Knows-how	CBL,CD, DIS,L_VC, L&GD
CO1	Analyze recent diagnostic advancements in Vandhyatwa (female infertility) by correlating their indications with specific underlying etiological factors.	1	Lecture	CAN	Knows-how	DIS,SY,L _VC,L&PPT
CO1	Categorize the multifactorial causes of female infertility, including anatomical, hormonal, genetic, lifestyle-related, and psychosomatic contributors.	1	Lecture	CAN	Knows-how	IBL,SDL, CD,L_VC ,L&PPT
CO1	Plan a diagnostic protocol tailored to suspected types of infertility using both Ayurvedic and contemporary approaches.	1	Lecture	CAP	Knows-how	L_VC,CBL,CD,L&PPT ,LRI
CO1,CO8	Evaluate the effectiveness of different therapeutic approaches in managing Vandhyatwa, integrating Ayurvedic Chikitsa Sidhanta with evidence-based contemporary treatments.	2	Lecture	CAP	Knows-how	L&GD,L _VC,JC,CD,PBL
CO1,CO2	Apply classical Chikitsa Sutras to plan individualized management of Vandhyatwa,	5	Practical	CAP	Knows-	D,SIM,T

	perform and adapt Panchakarma procedures like Basti, Uttara Basti, and Virechana, and demonstrate Sthanik Chikitsa techniques relevant to female infertility.		Training 21.3		how	BL,CD,C BL
CO1,CO8	Advice appropriate oral Ayurvedic medications for infertility based on underlying causes such as Beeja Du??i, Artava Du??i, and Dh?tu K?haya, and demonstrate specific Yoga Asanas and Pr???y?ma techniques for female infertility.	5	Practical Training 21.4	CS	Shows- how	CD,CBL, PBL,IBL, DIS
CO1,CO2,CO3 ,CO4,CO5,CO 6,CO8	Analyze Stree Vandhyatva by performing diagnostic procedures and interpret investigation reports to formulate appropriate treatment strategies.	8	Experiential- Learning 21. 1	CAN	Does	PBL,CBL ,DIS,D- M,IBL
CO1,CO2,CO3 ,CO4,CO5,CO 6,CO8	Demonstrate case-based Chikitsa by formulating individualized infertility treatment plans integrating clinical findings and Doshic analysis, identify research gaps to propose evidence-based Ayurvedic studies, and evaluate integrative approaches in Assisted Reproductive Technologies.	8	Experiential- Learning 21. 2	CE	Does	IBL,RP,J C,D- BED,SY
CO1	Analyze recent advances in the diagnosis and management of Sukra Du??i	1	Lecture	CAN	Knows- how	L_VC,L& GD,L&P PT ,L,BS

M 21 Unit 2 Shukradushti(Male infertility)Shukra dushti (Male infertility): Shukra dushti, Diagnosis and management, Congenital factors, Seminal errors – pre-testicular, testicular, post testicular and drug-induced. Investigations and management of male infertility.

References: 1,2,3,4,5,17

3A	3B	3C	3D	3E	3F	3G
CO1	Analyze the etiopathogenesis, classification, and clinical features of ?ukra Du??i from Ayurvedic and modern perspectives, interpret factors affecting spermatogenesis, apply appropriate diagnostic protocols, and formulate evidence-based integrative treatment plans using Vajikarana, Rasayana, Panchakarma, and contemporary interventions.	3	Lecture	CAN	Knows- how	L,L_VC, L&PPT , L&GD,S Y
CO1,CO2,CO3	Perform systematic physical and genital examinations, interpret laboratory and clinical	6	Practical	PSY-	Shows-	PBL,PSM

,CO4,CO5,CO6,CO8	investigations to diagnose Shukra Dushti types, and plan integrative management protocols incorporating Ayurvedic and modern therapies.		Training 21.5	GUD	how	,SIM,D-M,X-Ray
CO1,CO2,CO3,CO4,CO5,CO6,CO7,CO8	Conduct and evaluate comprehensive history taking and physical examination for patients with seminal disorders, Interpret semen analysis and hormonal assay reports, and manage associated conditions such as erectile dysfunction and premature ejaculation	8	Experiential-Learning 21.3	PSY-ADT	Does	RP,Mnt,IBL,C_L,P rBL
CO1,CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate empathetic communication with male infertility patients, integrate Ayurvedic principles with modern diagnostics ethically, and differentiate Ayurvedic ?hukra Du??i classifications from corresponding contemporary infertility terms.	8	Experiential-Learning 21.4	PSY-ADT	Does	C_L,PAL, TBL,RLE ,TPW

M 21 Unit 3 Assisted reproductive technology procedures. Advanced Assisted Reproductive technology (ART) procedures,
References: 19,22,24,25,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1	Describe the various Assisted Reproductive Technology (ART) procedures, indications, contraindications, and potential complications used in female infertility.	1	Lecture	CC	Knows-how	IBL,L,L_V C,L&PPT ,DL
CO1,CO7	Discuss the ethical considerations and regulatory frameworks related to Assisted Reproductive Technologies (ART) and legal provisions governing adoption and surrogacy.	1	Lecture	CC	Knows-how	L_V C,IB L,L&PPT ,L
CO1	Discuss diagnostic procedures for evaluating patients for Assisted Reproductive Technologies using Ayurvedic and contemporary methods, and describe integrated management protocols for Vandhyatwa combining Ayurvedic and modern medical approaches.	1	Lecture	CAN	Knows-how	L&PPT ,IBL,L,L_V C

CO1,CO2,CO3	Observe and understand the sequential steps involved in Assisted Reproductive Technology (ART) procedures.	6	Practical Training 21.6	PSY-SET	Shows-how	CD,FV,SIM,W
CO1,CO2,CO3	Discuss Assisted Reproductive Technologies (ART) with its indications, procedures, ethical considerations, and integration with Ayurvedic approaches.	7	Experiential-Learning 21.5	AFT-VAL	Does	SIM,JC,W,SY

Practical Training Activity

Practical Training 21.1 : Stree Vandhyatwa - Female Infertility Diagnosis

Demonstration by Teacher (2 Hours)

1..Examination of Menstrual History (Rutuchakra Pariksha)

Demonstrate assessment of:

2.Rajasrava Kala (regularity, duration, flow), Rutukala (Proliferative phase), Artava Kala or Bijodgama kala (Ovulation), Rutuvyatita Kala

3.Rajaswala Kala vikruti (Eg: PMS, dysmenorrhea)

4.Correlate with modern conditions (PCOS, endometriosis, anovulation).

5.Pelvic Examination (Yoni Pariksha)

6.Use 3D pelvic models/ real cases to demonstrate:

7.Bimanual palpation (uterine position, adnexal masses)

8.Speculum examination (cervical os, discharge.

9.Demonstrate interpretation of:

Basal Body Temperature (BBT) charts.

Transvaginal ultrasound (follicle tracking, endometrial thickness)

Link findings to Dosha vikruit (e.g., Kapha in PCOS, Vata in thin endometrium).

10Nadi & Jihva Pariksha (Pulse & Tongue Diagnosis)

Identify Vata-Pitta-Kapha imbalances in infertility.

Compare with modern lab results (FSH, AMH, prolactin).

. Students are expected to(2 Hours)

1.perform Case-Based History Taking

2. interview real/simulated patients (or case sheets) to document:

3.Artava Dushti (menstrual irregularities)

4. Prakriti (constitution) and Vyadhi Avastha (disease stage).
5. Pelvic examination
6. Per vaginal examination - assess cervical os, vaginal walls
7. Bimanual palpation: Palpate fibroids/cysts on models or real cases
8. Hormonal Chart Interpretation
9. Analyze ultrasound reports, BBT charts.: Nadi Pariksha
10. Practice pulse diagnosis for Vataja/ Pittaja Artava Dushti.
11. Group Discussion & Feedback
12. Present findings and correlate:
13. Ayurvedic diagnoses (e.g., Vandhyatva due to Bijadushti, Abijata, Apana Vata dushti)
14. Role-play scenarios on:
Patient counseling (e.g., IVF vs. Panchakarma)
Sociocultural stigma around infertility.

Practical Training 21.2 : Female Infertility

The teacher demonstrate-2 hours

1. Present diverse infertility case scenarios with corresponding laboratory investigation reports:
Hormonal profiles (FSH, LH, TSH, Prolactin, AMH)
Ultrasonography findings
Hysterosalpingography (HSG)
Sonosalpingography (SSG)
Correlate with Ayurvedic diagnostic concepts like Artavavaha srotodushti, Vandhya, Beeja dushti, etc.
2. Basal Body Temperature (BBT) charting and how to interpret shifts.
3. Cervical mucus evaluation
4. Collection technique, timing, and aseptic precautions
5. Interpretation: Spinnbarkeit test, clarity, ferning pattern (microscopy), and viscosity.

6. live or video demo

Procedures explained with anatomical relevance and clinical utility:

HSG (Hysterosalpingography)

SSG (Sonosalpingography)

Postcoital Test

7. Guide the observation of minimally invasive diagnostic techniques (e.g., laparoscopy, hysteroscopy)

Explain visual findings (adhesions, endometriotic spots, blocked tubes)

Discuss relevance in infertility from both modern and Ayurvedic perspectives.

The students are expected to-2 hours. 1. assist in:

HSG / SSG procedures

Laparoscopy/hysteroscopy sessions (as permitted).

2. Perform Postcoital Test.

3. Collect cervical mucus samples (simulated or from patient sample when feasible)

Evaluate using:

Spinnbarkeit test

Ferning pattern under a microscope

Record viscosity and clarity

Chart BBT data and interpret the ovulatory phase

Practical Training 21.3 : Female Infertility.

The teacher demonstrate 2 hours

1. Present case types of Vandhyatwa (Beeja dushti, Artava dushti, Srotodushti, Garbhashaya vikruti).

Explain Chikitsa Sutras from Charaka, Sushruta, and Kashyapa.

Discuss Yukti-based individualized planning (e.g., Balya, Garbhasthapana, Rasayana, Shodhana).

2. Demonstrate preparatory procedures (Snehana & Swedana).

Show Virechana protocols and drug choices in Vandhyatwa (e.g., Trivrit lehya).

Basti & Uttara Basti preparation, drug selection (e.g., Phala Ghrita, Putrajivaka taila).

3. Facilitate observation of Panchakarma (Basti, Virechana) or Sthanika Chikitsa on patient (if available).

Emphasize procedural care, asepsis, patient comfort, and drug standardization.

The students are expected to-3 hours

1. Review sample case sheets and formulate individualized treatment plans using classical references.

Use Ayurvedic texts to justify the selected chikitsa sutra and drug.

Prepare 1 case-based treatment algorithm.

2. Prepare Basti dravya

Practice mock administration on simulators or dummy pelvic models (no live admin).

Prepare and label drug trays with correct dose, anupana, and timings.

3. Present 1 mini-case with proposed chikitsa plan, Panchakarma protocol, and sthanika therapy.

Submit practical write-up with procedural notes, classical references, and learning reflection.

Practical Training 21.4 : factors of infertility.

The teacher will Demonstrate.2 hours

2–3 infertility case scenarios (Beeja Dushti, Artava Dushti, Dhatukshaya).

– Explain diagnostic reasoning and selection of Ayurvedic formulations (e.g., Phala Ghrita, Ashwagandhadi Churna, Shatavari Kalpa, Rajapravartini Vati).

2.Show physical samples of classical and proprietary formulations.

Demonstrate preparation (powder, decoction, kalpa) and administration guidelines.

Discuss Grahyata Lakshanas (authenticity, quality).

3.yoga & Pranayama techniques beneficial in female infertility

summarizes how Ayurvedic oral drugs + Yoga + Pranayama work in synergy for different causes (Dhatukshaya, Artava dushti, etc.)

Present evidence-based updates on drug action and Yoga efficacy in female infertility.

the students are expected to-3hours

1.Interpret case scenarios and match appropriate drugs from Ayurvedic pharmacopeia.

Prepare a prescription chart listing,Present 1 rational drug plan in small groups.

2.Practice mock dispensing of classical formulations.

3.participate in Yoga-Asana session under guidance.

Practice and repeat each Asana with proper breathing and posture.

Practice 3 cycles of Pranayama techniques.

4.create an integrated care plan combining:

Drug protocol

Yoga schedule

Diet & lifestyle suggestions for 1 sample case.

5.Peer-review 1 case plan and provide feedback based on textual references and rationality.

Practical Training 21.5 : Evaluation and Treatment Protocols for Shukra Dushti (Male Infertility)

The teacher will demonstrate-2 hours

- 1.Signs of hormonal imbalance (gynecomastia, obesity, hair distribution).
 - 2.Pulse, BP, thyroid palpation.
 - 3.Positioning and privacy protocols.
 - 4.Inspection: size, shape of testes, varicocele, hydrocele.
 - 5.Palpation: testicular consistency, tenderness.
 - 6.Transillumination test.
 7. Interpretation 2–3 anonymized case reports including:
 - 8.Semen analysis (volume, sperm count, motility, morphology).
 - 9.Hormonal profiles (FSH, LH, testosterone, prolactin).
 - 10Scrotal ultrasound (varicocele, testicular pathology).
 - 11.Advanced tests (DNA fragmentation, anti-sperm antibodies).
 - 12.Formulation of Ayurvedic Chikitsa Plans based on Dosha predominance and Dhatu Kshaya features.
- Identification of suitable herbs (e.g., Ashwagandha, Kapikacchu, Shatavari).
Use of Rasayana therapy and Shodhana (if indicated).
Use of Rasabhasmas where needed.

The students are expected to-4 hours.

- 1.Perform mock general examination noting signs of hormonal imbalance.
- Systematic local genital examination
Fill examination sheets and identify at least 2 likely clinical signs linked to types of Shukra Dushti.
- 2.Interpret semen analysis reports (normal vs pathological).
Correlate findings with clinical symptoms.
Map investigations to Ayurvedic types of Dushti.
 3. prepares a treatment plan for a given type of Shukra Dushti, including:
Aushadha Yogas (at least 2 formulations with reasoning).
Panchakarma (e.g., Basti protocols if applicable).
Diet & lifestyle advice.

Indications for referral for ART if needed.

Practical Training 21.6 : ART Procedures

The teacher will show and discuss on-3hours

1. Flowchart-Based Teaching of ART Sequence

Indications for ART: Male factor, tubal block, unexplained infertility.

Contraindications and ethical considerations

2. Demonstrate Ovulation Induction Protocols(live or video)

Follicular study via transvaginal ultrasound.

Use of ovulation drugs (Letrozole, Clomiphene, FSH injections).

Monitoring follicular development and LH surge timing.

Patient counseling on IUI/IVF process with consent protocols.

3. Semen Washing Demonstration (video or live lab observation)

Techniques: Swim-up & density gradient.

Semen quality assessment after washing.

4. Overview of IVF-ET steps with visuals.

Controlled ovarian hyperstimulation (COH)

hCG trigger timing

Oocyte pickup via transvaginal aspiration

Embryo culture and scoring

Embryo transfer techniques.

5. Explain ICSI (Intracytoplasmic Sperm Injection) using animation/simulation:

Selection of sperm

Injection under micromanipulator

Embryo Grading & Freezing (Cryopreservation)

Day 3 vs Day 5 embryo grading

Vitrification technique
Discussion: Role of Ayurveda in ART Support
Use of Rasayana, Garbhasthapana, and stress-reducing interventions.
The students are expected to-3 hours
Observe live or recorded ART procedures (clinical + lab)
Ovulation induction monitoring
Semen processing
Oocyte retrieval (video if live not feasible).
Embryo transfer setup
Interpretation of given anonymized ART case scenarios:
History, hormone profiles, follicular study reports
Fill Protocol Sheets:
Ovulation induction charting
Semen analysis report interpretation
Plan ovulation induction and decide on IUI vs IVF.
Mini-Presentation (optional) on:
Steps of IVF/ICSI
Comparison of ART procedures
Ayurvedic adjuncts for ART support

Experiential learning Activity

Experiential-Learning 21.1 : Diagnostic Approaches in Female Infertility (Stree Vandhyatva):

1. Interview at least 3 real patients of infertility.
Elicit detailed history: Artava, sexual, medical, family, diet, lifestyle.
Perform general and systemic examination.
2. Practice pelvic and per vaginal examination on mannequins or in a simulation lab.

Identify uterine position, cervical mobility, tenderness, and discharge.
Assess signs of Yoni Vyapad.

3. Chart Basal Body Temperature (BBT) with patient records.
Assess cervical mucus using simulated samples (Spinnbarkeit, Ferning, Viscosity).

4. Assist in any one of the following:
Ultrasound (TVS) for follicle monitoring
HSG / SSG for tubal patency
Laparoscopy video review
Note structural findings.

5. Analyze 2–3 patient reports:
Hormonal profile (FSH, LH, TSH, Prolactin, AMH)
USG pelvis
HSG / SSG
Correlate with clinical findings.

6. Apply Nidana Panchaka to formulate Ayurvedic diagnosis:
Doshic imbalance
Dushti of Artava, Beeja, Srotas
Sthana, Srotas, Udbhava Sthana
Identify type of Vandhyatva: Nija/Agantuja/Karya/Karana/Upadravaja.

7. Create an individualized Chikitsa plan based on diagnosis:
Shodhana (Virechana/Basti/Uttara Basti)
Shamana (oral drugs)
Rasayana
Sthanika (Pichu, Dhupana), Justify with classical references.

8. Present complete case to peers/faculty including.
Modern + Ayurvedic diagnosis
Investigations
Treatment plan
Receive feedback & modify plan accordingly.

Experiential-Learning 21.2 : Integrative Treatment Protocols for Female Infertility (Stree Vandhyatva):

1. Select real cases of infertility (PCOS, tubal block, Dhatukshaya Vandhyatwa, etc.)

Analyze patient history, doshic status, and clinical findings..-minimum 3 cases

2. Individualized Chikitsa Planning

Based on the case, formulate a treatment plan using:

Drug, dose, Anupana, kala

Shodhana plan with rationale

Classical references used

Customization based on case

3. Identify gaps in Ayurvedic or integrative infertility management, Frame 1–2 research questions with:

Justification

Existing gap

Expected outcome

Feasible design (clinical trial/observational study, etc.)

4. Design a small proposal (outline) involving an Ayurvedic intervention in infertility (e.g., Basti for PCOS, Uttara Basti in ART cycles, etc.).

5. Identify where Ayurveda can support: before/after ovum pickup, during implantation phase, etc.

6. Review a real or published case where ART + Ayurveda were used

– Analyze what worked, challenges, and Ayurvedic contribution

7. Summarize findings from clinical case, treatment plan, research idea, and ART integration

– Reflect on how this changed clinical perspective.

Experiential-Learning 21.3 : Shukra Dushti

Students practice

1. Reproductive history (libido, coital frequency, timing)

2. Fertility history (conception attempts, partner's fertility)

3. Sexual history (erectile function, ejaculation timing, satisfaction)

4. General health (diabetes, stress, medications, addictions)-minimum 3 cases

5. Perform general and local genital examination on mannequins or simulated patients.

Focus

6. General exam: body habitus, hair distribution, thyroid

7. Genital exam: testicular size, varicocele, penile anomalies, epididymis

8. Neurological and vascular status (for ED-related issues)-3 cases
 9. Analyse multiple anonymized semen reports of varying patterns (oligospermia, asthenozoospermia, teratozoospermia, azoospermia).
 10. Interpret all parameters: volume, count, motility, morphology, liquefaction time, pH.
 11. Correlate findings with suspected Ayurvedic Shukra Dushti types (Ksheena, Asthira, Picchila, etc.)
- Given mock lab results for:
12. FSH, LH, Testosterone, Prolactin, TSH
 13. Identify patterns (e.g., hypergonadotropic hypogonadism, prolactinoma).
 14. Relate hormonal dysfunction to ED, low libido, poor semen quality.-minimum 3 patient reports
 15. Counseling practice on
Simulated patient with premature ejaculation
Student as physician performing counseling
Focus on lifestyle advice, stress factors, behavioral techniques.
 16. Observe/prepare classical formulations used in seminal disorders.
Discuss Rasayana & Vajikarana yogas (e.g., Vrishya Gutika, Shukrajanana Churna)

Experiential-Learning 21.4 : ?hukra Du??i:

- 1.Practice patient communication in minimum 3 cases
Explaining semen analysis results empathetically
Addressing lifestyle issues (e.g., smoking, stress)-3 hours
- 2.Match classical types (e.g., Ksheena, Tanu, Puti, Ruksha, Picchila) with modern terminology
Note key clinical features and possible causative factors (Ahara, Vihara, Vata vriddhi)
- 3.Document
Diagnosis (Ayurvedic + modern)
Underlying doshic imbalance
steps in management by interpreting
Semen analysis
Hormonal profile
Genital examination (e.g., varicocele)
Emotional support and lifestyle advice
- 3.Given a detailed case perform Case presentation + management plan.-3 hours
History (libido, lifestyle, stress)
Physical findings

Semen report
Hormone levels
make Ayurvedic diagnosis (Shukra Dushti type, Dosha, Dushya, Agni)
Formulate a 3-part management plan.
Aushadhi (Shukrajanana Rasayana yogas)
Pathya-apathya
Panchakarma if needed (e.g., Basti)

Experiential-Learning 21.5 : Assisted Reproductive Technologies

1. Students analyse given 3–4 anonymized clinical scenarios (e.g., PCOS, male factor infertility, unexplained infertility).
the Type of ART procedure preferred
Present reasoning and alternatives.
A written flowchart showing case summary ? indication ? ART choice.-1 hour

2. Watch recorded videos (or virtual lab tour) of.
Semen washing
Oocyte retrieval

IVF fertilization process
 Embryo grading and transfer-2 hours
 3. ART Counseling Simulation
 Scenarios:
 IVF in older women
 Donor gametes
 Embryo freezing
 Explore legal, ethical, and spiritual concerns.-1 hour
 4.. Visit to local IVF center-3 hours

Modular Assessment

Assessment method	Hour
<p>Instructions—Conduct a structured, modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.</p> <p>OSCE Assessment (75 marks)</p> <ul style="list-style-type: none"> • Station 1 (15): History taking for a female infertility case (Ayurveda + modern). • Station 2 (15): Demonstrate semen collection & assessment principles (Ayurvedic + modern). • Station 3 (15): Match Ayurvedic formulations (Ashwagandhadi churna, Shatavari ghrita, Kapikacchu, Phala ghrita) with indications in infertility. • Station 4 (15): Interpret IVF cycle flowchart and correlate with Ayurvedic K?trima Garbh?dh?na concept. • Station 5 (15): Counseling OSCE: address a couple with unexplained infertility focusing on emotional, social, and treatment perspectives. <p>Or</p> <p>Any practical in converted form can be taken for assessment. (45 Marks)</p> <p>And</p> <p>Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (30 Marks)</p>	6

Module 22 : Stana roga - Breast diseases

Module Learning Objectives
(At the end of the module, the students should be able to)

Analyze Stana Rogas (Breast diseases) and differentiate between benign and malignant conditions.

Conduct case examination and select appropriate Panchakarma and Sthanika Chikitsa procedures based on the type of Stana Roga, and explain the suitable line of treatment.

Identify the clinical condition through diagnostic methods, apply Chikitsa Sutra, prescribe suitable medicines, and counsel for referral or surgical intervention when needed.

M 22 Unit 1 Stana rogas (Benign neoplasms of breast) Diagnosis and medical management of Stana granthi, Stana arbuda (benign neoplasma of breast)

References: 2,3,4,13,15,17,22,24,28

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO4,CO5	Discuss the etiopathology, clinical features, classification of Stana Rogas.	1	Lecture	CAP	Knows-how	IBL,L_V C,L,L&PPT
CO1,CO2,CO3,CO4,CO5	Discuss clinical evaluation, etiopathology and management of galactorrhoea, and mastalgia.	2	Lecture	CAP	Knows-how	IBL,L_V C,L&PPT,L
CO1,CO2,CO3,CO4,CO5	Discuss the nidana,samprapti, lakshana and management of Stana Granthi and Stana Arbuda.	2	Lecture	CAP	Knows-how	L&PPT ,IBL,L,L_V C
CO1,CO2,CO3,CO4,CO5	Identify common benign breast diseases, analyze the risk factors associated with breast diseases, conduct and demonstrate clinical assessment by breast examination and interpret imaging studies.	5	Practical Training 22.1	PSY-GUD	Shows-how	PER,D-B ED,DL,L RI,CD
CO1,CO2,CO3	Compare various treatment matrix of Stana rogas (benign and malignant) along with	5	Practical	PSY-	Shows-	CBL,D-M

,CO4,CO5	nidana and samprapti.		Training 22.2	GUD	how	,RLE,D,D-BED
CO3,CO7,CO8	Identify the Stana roga with proper physical examination, interpret investigations, assist diagnostic procedures and conduct screening camps for awareness.	7	Experiential-Learning 22.1	PSY-GUD	Does	D,DL,SY,CD,D-BED
CO3,CO7,CO8	Identify the case of Stana roga, generate appropriate shodhan and shaman treatment protocol and compare conduct the adjuvant therapies in integration with contemporary therapies	6	Experiential-Learning 22.2	CAN	Does	JC,PSM,PER,DIS,PBL

Practical Training Activity

Practical Training 22.1 : Benign Breast Disorders:

The teacher will demonstrate -2 hours

1.Live Demonstration or Breast Model Practice

Inspection: symmetry, skin/nipple changes.

Palpation techniques: circular, wedge, and vertical strip.

Lymph node assessment

2.Demonstration of Self-Breast Examination

Best timing (5–10 days post-menses).

Standing vs lying down method.

Mirror inspection and palpation techniques.

3.Imaging Seminar or Case-Based Discussion

Mammogram basics: BI-RADS categories.

Ultrasound features: solid vs cystic masses.

Real or simulated cases (fibroadenoma, cyst, mastitis, BIRADS 1–3).

The students are expected to-3 hours

1.review anonymized patient histories and:

Identify risk factors (e.g., nulliparity, obesity, early menarche, OCP use).
Classify them as modifiable or non-modifiable.
Risk factor mapping chart for each case.
2.Practice on mannequins or standardized patients:
Correct positioning and sequence.
Lump detection, nipple discharge identification.
Axillary lymph node palpation
3.Imaging Analysis Practice.
Review 3–4 anonymized mammogram and USG images:
Match findings with patient symptoms.
Identify normal vs suspicious vs benign patterns.
Student-filled imaging interpretation form + peer-assessed SBE teaching score.

Practical Training 22.2 : Breast Disorders in Ayurveda.

The teacher will demonstrate -2 hours
1.Clinical Breast Examination (CBE)
Stepwise examination.
Local signs of inflammation, lumps, retraction, peau d'orange, lymphadenopathy
2.Sthanika Chikitsa:
Lepa,Parisheka,Sneha dharana or local application of Guggulu-based yogas.
3.Explore Different Treatment matrix for 5 common Stana Rogas (Ayurveda + Modern).
The students are expected to-3 hours.
1. Review simulated patient cases:
Case 1: Stana shotha with fever and pus.
Case 2: Painless firm lump – Granthi.
Case 3: Bleeding nipple, retracted nipple – Stanarbudha.
Identify Nidana, Samprapti, Dosha-Dushya, and suggest:
Ayurvedic Samprapti vighatana
Modern provisional diagnosis

Suitable investigations

2. Practice (on models or simulated patients):

Inspection, palpation, lymph node exam.

Communicating sensitively: reassuring language, empathy, and informed consent.

3. Students prepare integrated chikitsa plans for

Mastitis (Stanavidradhi)

Fibroadenoma (Granthi)

Breast cancer (Arbuda)

Must include:

Shamana + Sthanika + Rasayana + Modern interventions

Nutrition, lifestyle, and follow-up advice

Experiential learning Activity

Experiential-Learning 22.1 : Breast Examination.

1. Students perform inspection, palpation, and lymph node exam on simulators or volunteers under supervision.-5 cases

2. Take detailed patient histories of breast complaints (pain, lump, discharge). Identify possible Ayurvedic classifications (Granthi, Arbuda, Vidradhi). Document 3 case sheets with suspected diagnosis, Nidana, and Doshic analysis.

3. analyze reports: Ultrasound, Mammogram, FNAC, Hormonal assays. Correlate with clinical findings.

4. Create a Samprapti Ghataka table (Dosha, Dushya, Srotas) and formulate management protocol including Shamana, Shodhana, and Sthanika Upakrama. Submit 2 treatment plan reports with rationale

5. perform a complete CBE on a standardized patient or peer including patient consent, communication, inspection, and documentation.

6. Design leaflets/posters on Self Breast Exam (SBE), warning signs of cancer, Ayurvedic preventive tips, lifestyle advice.

7. In real or simulated setup, perform: - Breast screening - Patient education - Counseling for red-flag signs.

Experiential-Learning 22.2 : Stana Roga Management.

1. Select a clinical case or case file of Stana Roga (e.g., Granthi, Vidradhi, Stanavidradhi, Stanasotha, Galactorrhea, Fibroadenoma, etc.)

Analyze patient history, symptoms, and clinical findings.

Identify probable Ayurvedic diagnosis

2. Select appropriate oral medications based on doshic status and pathology .

3. Based on doshic assessment and Rogavastha, formulate appropriate Shodhana Chikitsa:

Snehapana, Virechana, Basti (if needed)

Write a customized protocol including drugs and schedule.

4. Identify and document suitable local therapies:

Stanapichu

Stanaprakshalana

Lepa

Dhupana or Parisheka (if applicable)

Note frequency and method of application.

5. Identify common modern interventions (e.g., antibiotics, hormonal therapy, FNAC/biopsy, surgery)

Analyze possible supportive or adjuvant Ayurvedic therapies that can enhance outcomes or reduce side effects.

6. Compile the case diagnosis, chikitsa plan, Panchakarma, Sthanika and integrative suggestions.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 25 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

2

Structured Long Answer (25 marks)

Question:

“Discuss Stana Roga with special reference to Stana Arbuda. Explain its Nidana, Samprapti (with Kapha-Meda involvement), Bheda (classification), Lakshana, and Chikitsa. Correlate with benign and malignant breast diseases in modern medicine. Highlight preventive strategies.”

Marking Scheme:

- Definition & Ayurvedic background – 5
- Nidana & Samprapti (dosha-dushya involvement) – 5
- Correlation with benign & malignant breast diseases – 5
- Management (Ayurveda + modern) – 5
- Preventive & counseling aspects – 5
- Or

Any practical in converted form can be taken for assessment. (25 Marks)

Or

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 6

Module 23 : Stree swasthya- Family welfare and demography

Module Learning Objectives

(At the end of the module, the students should be able to)

Describe national and international policies and programs related to RMNCAH+N (Reproductive, Maternal, Newborn, Child, and Adolescent Health + Nutrition), along with Rajaswala (menstruation care), Jara (geriatric phase), and contraceptive methods.

Conduct health education and awareness programs across different age groups of women, and demonstrate preventive and management strategies.

Identify individuals requiring specific reproductive or menopausal care; assist or conduct contraceptive and sterilization procedures.

M 23 Unit 1 Vital statisticsa. Vital Statistics - maternal and perinatal mortality, birth rate and fertility rate

b. National and state health policies and programs in relation to RMNCAH+N

c. Different acts related to Demography and population dynamics, POCSO act.

d. Contraception (fertility control)

e. Education regarding rights and confidentiality of women's health, specifically related to reproductive function.

References: 23,32,33,34,36,37,38

3A	3B	3C	3D	3E	3F	3G
CO6	Discuss vital maternal and perinatal statistics, national maternal and child health policies, fertility control measures, the POCSO Act, goals and benefits of RMNCAH+N,	3	Lecture	CC	Knows-how	L_VC,PE R,LS,L,F

	and key components of JSY, ASHA, PMSMA, Antara, and Chaya schemes.					V
CO6	Collect and analyze demographic data through surveys, including birth rate, fertility rate, sex ratio, age at first childbirth, and access to healthcare services in the local region/state.	5	Practical Training 23.1	CAN	Shows-how	LS,JC,SY ,FV,ML
CO6	Discuss the role of AYUSH in implementing government policies.	6	Experiential-Learning 23.1	CE	Does	FV,IBL,T BL,JC,DI S

M 23 Unit 2 Taruna awastha swastya rakshana(Adolescent women health care)a).Taruna avastha swasthya rakshana (Adolescent women health care)
b) Rajonivritti janya lakshana - Menopausal Syndrome, prevention and management geriatric health care of woman

References: 2,3

3A	3B	3C	3D	3E	3F	3G
CO1,CO6,CO8	Discuss common adolescent gynecological problems with their etiopathology, clinical features, diagnosis, and evaluate the role of <i>Rajaswala Paricharya</i> in their prevention.	2	Lecture	CC	Knows-how	L,L_VC, L&GD,L &PPT
CO1,CO6,CO7 ,CO8	Describe the physiological changes and health impacts of menopause, etiopathology, diagnosis, and management of <i>Rajonivrittija lakshanas</i> , and analyze common geriatric health problems with emphasis on nutritional needs of geriatric women.	2	Lecture	CAN	Knows-how	L&GD,L S,L&PPT ,L,L_VC
CO1,CO6,CO8	Develop the skills of physical examination of adolescent girls and counseling skills on rajaswala paricharya and the importance of diet and lifestyle.	3	Practical Training 23.2	PSY-GUD	Shows-how	TBL,DA,IBL,PER,P SM
CO2,CO6,CO8	Develop the skills of examination of a case of menopausal syndrome with management and counselling on importance of nutrition and physical activity, regular health check-ups and yoga practice.	4	Practical Training 23.3	PSY-GUD	Shows-how	DA,IBL,P BL,PER, LRI

CO3,CO6,CO8	Perform physical examination of adolescent girls, participate in health camps and awareness programs on <i>Rajaswala Charya</i> , and identify research scope in adolescent health problems.	6	Experiential-Learning 23.2	PSY-MEC	Does	CBL,DIS,CD,JC,PE R
CO3,CO6,CO8	Identify research scope, demonstrate Panchakarma and <i>sthanika chikitsa</i> , and discuss drug options for managing <i>Rajonivrittija vyadhi</i> (menopausal problems).	6	Experiential-Learning 23.3	CAN	Does	D-BED,C D,PBL,D, DIS

M 23 Unit 3 Garbha nirodha and garbhapatakara yoga (Contraceptive methods) Garbha nirodha and Garbhapatakara yogas (Contraceptive techniques including recent developments) -

- Temporary methods
- Permanent Methods
- Recent advances in contraceptive technology

References: 26,28,30,31,36,37

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Discuss the importance of <i>Garbhanirodha</i> , the role of the HPO axis, various male and female contraceptive methods including their mechanisms, advantages, disadvantages, recent advances, and critically appraise <i>Garbhapatakara yogas</i> from Ayurvedic texts in the context of present-day validity.	3	Lecture	CC	Knows-how	L_VC,SIM,W,L&GD,L&PPT
CO6,CO8	Develop the skills of examination of patients for selection of contraceptive method, counseling in the postpartum period of puerperium regarding spacing of birth.	4	Practical Training 23.4	PSY-GUD	Shows-how	W,D-BED,CBL,D-M,PBL
CO6,CO8	Demonstrate steroid contraceptive methods and permanent sterilization methods.	4	Practical Training 23.5	PSY-SET	Shows-how	CBL,CD,PBL,DA,

						W
CO6,CO8	Identify the suitable contraception technique and advise the method of usage.	8	Experiential-Learning 23.4	PSY-GUD	Does	CD,CBL, W,D-M,SIM

Practical Training Activity

Practical Training 23.1 : Family Welfare and Health Assessment Program

The teacher will update-2 hours
Interactive Lecture + Mind Mapping
1.Explain definitions and importance of:
Birth rate, Fertility rate, Sex ratio
Mean age at first childbirth
Access to maternal healthcare
Data Interpretation Workshop
2.Demonstrate how to interpret data from NFHS, SRS, census reports.
Demonstration + Template Discussion
3..Demonstrate how to prepare and pilot a survey tool/questionnaire on reproductive health and demographic data
Show how to conduct community-based interviews ethically and efficiently.
The students are expected to-3 hours
1.Practice designing a simple questionnaire on:
Age, parity, education, healthcare access, spacing
Consent, privacy, and ethics
Finalize the tool for field use
2.conduct simulated or real surveys
Interview 3–5 individuals from local community, campus, or simulated data
Use finalized demographic questionnaire.,Record notes on interviewer experience.
3.enter the collected data into an Excel/Google Sheet:
Variables: age, sex, birth order, healthcare access, delivery location, etc.,Generate simple tables and graphs:
4.interpret the trends and write observations:
Compare with NFHS/local data

Identify gaps in healthcare access or early marriage
Suggest areas for community awareness and policy action

Practical Training 23.2 : Holistic Health and Wellness Initiatives for Adolescent Girls.

The teacher will Demonstrate- 1 hour
Live Demonstration on peer / dummy
Video-assisted instruction, Bedside Clinical Teaching
Use of clinical photographs/charts
1. Anthropometry (Height, Weight, BMI)
Menstrual history-taking (age at menarche, cycle, flow, symptoms)
Assessment of signs of anemia, malnutrition, or hormonal imbalance.
Video demonstration + Debrief, Demonstration using models (e.g., uterus, pads)
2. how to conduct adolescent-friendly counseling
Topics: Rajaswala Paricharya, dietary do's & don'ts, lifestyle, exercise, hygiene
Use of models/flip charts/visual aids.
The Students are expected to-2 hours
1. Conduct peer/simulated physical assessments under supervision:
Use anthropometric tools
Practice menstrual history taking, Fill up standardized forms.-1 hour
2. Simulated or real practice of adolescent-friendly counseling.
Each student conducts 1-on-1 counseling with peers or volunteers (role-play)
Emphasis on empathy & communication
3. document 1 physical evaluation + 1 counseling session.- 1 hour

Practical Training 23.3 : Case Management and Counseling Skills for Menopausal Health.

The teacher will demonstrate-1 hour
1 Case-based learning (CBL). Present a case of menopausal syndrome with history, symptoms (hot flashes, insomnia, mood swings, etc.)
systemic and gynecological examination.

2. Flipped classroom approach Review typical investigations: CBC, thyroid profile, DEXA scan (if available), lipid profile, hormonal levels.

3. Concept-mapping exercise Explain individualized management using Dosha-Dushya-Sthana Vichara

Ayurvedic chikitsa: Rasayana, Medhya, Shamana Aushadhi

Modern adjuvants (HRT overview, supplements).

4. Video or live demo of Yoga & exercise patient-friendly counseling on nutrition (calcium-rich food), regular checkups, exercise, Yoga (e.g., Pranayama, Baddha Konasana).

The students are expected to-3 hours

1. Practice taking history of menopause-related symptoms

2. Analyze at least one case report with lab findings

Formulate an Ayurvedic and integrative treatment plan Perform general/systemic/gynecological exam on a mannequin or under supervision.

3. Conduct one peer-based or simulated counseling session focusing on:

Nutrition

Physical activity

Health checks

Yoga

4. Create/Practice a short Yoga module including:

Pranayama (Anuloma Viloma)

Asanas (e.g., Trikonasana, Setubandhasana).

Practical Training 23.4 : Contraceptive Device

The teacher will Demonstrate-1.5 hour

1. interactive Lecture + AV aid Overview of contraceptive methods (barrier, hormonal, IUCD, permanent, natural, Ayurvedic)

2. Clinical Demonstration- history-taking & physical examination for contraceptive eligibility (e.g., WHO MEC wheel)

the students will

1. perform history-taking and contraceptive assessment on simulated or OPD cases-minimum 5 cases-1 hour

2. perform individual counseling for postpartum women using a case template and Demonstrate selection of spacing method and provide clear, evidence-based information to "patient".-30 mts

3. Present cases handled and justify contraceptive method selection-30mts
4. Prepare leaflets/posters/videos for counseling in regional languages-30mts.

Practical Training 23.5 : Steroidal Contraception and Sterilization Techniques.

The teacher will Demonstrate-2 hours

1. Simulation-based demo

Show real-size contraceptive models (IUCD, implant, injection simulation) models or virtual AR tools for DMPA injections, implants.

2. Video-assisted surgery demo or animation-based teaching

Surgical sterilization techniques (Tubectomy, Vasectomy)

3. Case-Based Learning (CBL) Discussion of case scenarios (e.g., woman with contraindications to OCPs, postpartum patient etc.)

4. WHO MEC chart analysis Demonstrate how to use WHO medical eligibility criteria for choosing contraceptives.

students are expected to

1. Practice using contraceptive counseling flipcharts-30mts

2. Mock prescription writing for hormonal contraceptives Based on patient profile, medical eligibility, and compliance factors-30 mts

3. Interpret investigation reports relevant for hormonal use (CBC, LFTs, BP etc.)-30mts

4. Poster/chart preparation on “Permanent sterilization: Pros & Cons- 30mts

Experiential learning Activity

Experiential-Learning 23.1 : Maternal, Child Health, and Family Welfare Schemes and Programs.

1. Select and read any one key policy or scheme involving AYUSH (e.g., National AYUSH Mission, Ayushman Bharat, Poshan Abhiyaan).-1 hour

Understand objectives, target groups, and integration points with mainstream healthcare.

2. Visit or contact (if possible) a local PHC, CHC, AYUSH dispensary, or AYUSH Wellness Centre.-1 hours

Document their role in public health programs, immunization drives, NCD clinics, maternal health camps, etc.

3. Independently prepare a poster, leaflet, or infographic on any AYUSH-based government scheme (e.g., Geriatric Health Care, School Health Program, AYUSH Gram).-1 hour

4. Conduct a short interview with a real or simulated beneficiary of an AYUSH scheme or camp (e.g., free medical camp, AYUSH Aahar, or Prakriti Parikshan camp.- 1hour

5. Select and write a mini case study of a successful AYUSH-based public intervention (e.g., role of Ayurveda in anemia control, Siddha in lifestyle diseases, Yoga in

schools).-1 hour

6.Reflect on how AYUSH could improve its contribution to national health missions (e.g., COVID recovery, rural health access).

Write a short proposal to expand AYUSH in the area of obstetrics and Gynaecology .-1 hour

Experiential-Learning 23.2 : Adolescent Health Management and Awareness Program.

1.Practice height, weight, BMI, and menstrual history taking

Use of standard examination forms.-5 cases- 1 hour

2.Participation in an Adolescent Health Camp or Simulated OPD Setup ,Document 2 cases with physical exam, dietary history, menstrual profile.-2 hours.

3.Plan and Conduct a Micro-Awareness Activity on Rajaswala Charya,Design posters, conduct peer-to-peer awareness or create a short role-play or digital content.-1 hour

4.Identify Research Gaps in Adolescent Issues (Menstrual disorders, nutrition),Note 3–5 research questions from Ayurvedic/classical texts or modern studies.- 1hour

5.Prepare a Brief Proposal or Presentation on One Researchable Topic,Choose a focused topic like Dysmenorrhea, Early Menarche, Lifestyle & Menstruation.- 1hour

Experiential-Learning 23.3 : Menopausal Health: Awareness.

1.Review Charaka, Sushruta, Kashyapa, and modern journals

Identify 3–5 areas of research relevance (e.g., hot flashes, osteoporosis, mood changes).-1 hour

2. formulate one brief proposal or research question (e.g., "Effect of Ashokarishta on hot flushes").-1 hour

3.Choose any 1 case or symptom and draft suitable Panchakarma chikitsa (e.g., Matra Basti, Nasya for mood swings)

4. Perform or simulate local therapies for insomnia, joint pain, vaginal dryness (using mock materials or training dummies)-miimum3 cases.

5.List minimum 5 drugs from texts like Bhavaprakasha, Sahasrayoga for menopausal symptoms like mood instability, dryness, insomnia.

6.Given a case scenario (or choose from OPD), prepare a complete individualized chikitsa plan: dosha-dushya analysis + Panchakarma + drug + diet- 3 cases

Experiential-Learning 23.4 : Contraception Counseling and Management Skills.

1.Explain and counsel the patient for a specific contraceptive procedure who has just delivered a neonate/ newly married couple-5 cases -1.5 hours.

2. Counsel patients when she has developed an on toward complication due to some contraceptive measure-3 cases - 1 hour
3. Inform a patient about the management of particular month when she missed the pills for 2 consecutive days- 3 cases - 30 mts
4. Counsel the male partner about the myths and benefits of vasectomy.- 5 cases-1 hour
5. Explain the probable complications of IUCD insertion and explain the measures to be followed in such conditions-3 cases -1 hour
6. Prepare trolley with all the essential items for insertion of IUDs-15 mts
7. Demonstrate the insertion of IUCD in a patient-15 mts
8. Counsel the patient for tubectomy and explain benefits and drawbacks of Tubectomy/ Tubal ligation-30 mts
9. Assist the sterilization surgeries in Family planning hospital- 2hour

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Long Answer Question (50 marks)

Discuss women's health across different life stages with a focus on Tarunya Avastha Swasthya Rakshana (adolescent health), maternal and child health, and Rajonivritti Janya Lakshana (menopausal syndrome). Include preventive strategies, diagnosis, and integrative management. Highlight relevant government schemes and public health statistics.

Marking Scheme:

- Women's health across life stages: 10
- Adolescent health promotion & disease prevention: 10
- Maternal and child health strategies: 10
- Rajonivritti Janya Lakshana – diagnosis & management: 10
- Government schemes & public health statistics: 10
- Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 24 : Vishesha Adhyayana, recent advancements in gynecology and commonly used formulations in stree roga

Module Learning Objectives

(At the end of the module, the students should be able to)

Analyze Klaibya, Precision Medicine, Proteomics in Artava, Ovarian-Testicular Cryopreservation, Preimplantation Genetic Testing, Liquid Biopsy, HPV Vaccine, and drugs used in Stree Roga.

Conduct appropriate case examination and apply Panchakarma and Shamana Chikitsa for (Klaibya, Guhya roga, Jataharini).

Identify the underlying cause in given clinical conditions, apply appropriate Chikitsa Sutras, and formulate personalized treatment plans.

M 24 Unit 1 Commonly used formulations Commonly used drugs used in Stree roga-

Kumaryasava, Rajah pravartini vati, Ashokarishta, Dashamoolarishta, Pushyanuga churna, Pradarantaka lauha, Gokshuradi guggulu, Hingvadi churna, Phalasarpi, Maha kalyana ghruta, Maharasnadi Kashaya, Patrangasava, Pushpadhanva rasa, Nashta pushpantaka rasa

Satapushpa taila, Mahanarayan taila, Dhanwantaram taila, Sahacharadi tail, Bala tail, Kshara taila, Kaseesadi taila, Jatyadi taila

References: 1,2,3,4,5,6,7,8,10,11,12,13,15

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Define Klaibya and Discuss the causes, Clinical features, classification and treatment of Klaibya	3	Lecture	CAP	Knows-how	L_VC,L,L&GD,L

	Discuss the causes of Guhya Roga, Discuss the clinical features and management of Guhya Rogas. Explain the causes, types, clinical features and treatment of Jataharini					&PPT
CO2,CO8	Conduct the examination and relevant investigations and apply management protocols for Klaibya, Guhya Roga and Jataharini.	6	Practical Training 24.1	PSY-GUD	Shows-how	PSM,CBL,PBL,LRI,RLE
CO3,CO8	Identify Klaibya, Guhya Roga and Jataharini and demonstrate appropriate chikitsa.	8	Experiential-Learning 24.1	PSY-MEC	Does	CD,SIM,RP,PSM,RLE

M 24 Unit 2 Recent studiesRecent studies and advancement in the field of Stree Roga

References: 30,31,32,36,37,43

3A	3B	3C	3D	3E	3F	3G
CO1,CO7	Discuss precision medicine, ovarian and testicular cryopreservation, preimplantation genetic testing, and liquid biopsy, proteomics of menstrual blood, HPV infection, its vaccine, other viral preventive measures, and the role of viruses in infertility.	2	Lecture	CC	Knows-how	L_VC,L&PPT ,L
CO7	Discuss precision medicine ,proteomics in menstrual blood, cyto preservation, pre-implantation genetic test, Liquid biopsy and HPV vaccine.	4	Practical Training 24.2	CE	Shows-how	TUT,SY,DIS,W,L S
CO7	Illustrate recent advances in reproductive health including precision medicine, menstrual blood proteomics, ovarian and testicular cryopreservation, preimplantation genetic testing, liquid biopsy, and HPV vaccination.	4	Experiential-Learning 24.2	CE	Does	JC,DIS,PER,W,SY

M 24 Unit 3 Klaibyaa. Klaibya - bheda, Lakshana, Chikitsa

b. Guhya roga - Sankhya, Nidana, Lakshana, Chikitsa

c. Jataharini- Nidana, bheda and chikitsa

References: 1,2,3,4,5,6

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Describe the ingredients, indications and contra indications of the commonly used formulations in Stree roga Kumaryasava, , Ashokarishta, Dashamoolarishta, Patrangasava, Maha Rasnadi Kashaya, Pushyanuga Churna, Hinguadi Churna, Rajahpravartini Vati, Gokshuradi Guggulu,	2	Lecture	CC	Knows-how	L&GD,L, L&PPT
CO1,CO8	Describe the ingredients, indications and contra indications of the commonly used formulations in Stree roga- Phalasarpi, Maha Kalyanaka Ghruta, Pradarantaka Lauha, Pushpadhanva Rasa, Nashta Pushpantaka Rasa, Shatapushpa Taila, Mahanarayana Taila, Sahacharadi Taila, Dhanvantara Taila, Kshara Taila, Kasisadi Taila, Jatyadi Taila, Chandanabala Lakshadi Taila	3	Lecture	CC	Knows-how	LS,L&G D,L&PPT ,L
CO2,CO8	Analyze the clinical utility of the following drugs used in Stree roga- Kumaryasava, , Ashokarishta, Dashamoolarishta, Patrangasava, Maha Rasnadi Kashaya, Pushyanuga Churna, Hinguadi Churna, Rajahpravartini Vati, Gokshuradi Guggulu	5	Practical Training 24.3	CE	Shows-how	SY,CD,D IS,RLE,C BL
CO2,CO8	Analyze the clinical utility of the following drugs used in Stree roga- Phalasarpi, Maha Kalyanaka Ghruta, Pradarantaka Lauha, Pushpadhanva Rasa, Nashta Pushpantaka Rasa, Shatapushpa Taila, Mahanarayana Taila, Sahacharadi Taila, Dhanvantara Taila, Kshara Taila, Kasisadi Taila, Jatyadi Taila, Chandanabala Lakshadi Taila	5	Practical Training 24.4	CC	Shows-how	DA,SY,P BL,PSM, C_L
CO3,CO8	Identify the pharmacological actions of drugs in specific <i>Stree Roga</i> conditions and illustrate their additional therapeutic applications beyond those described in <i>Phala Shruti</i> .	7	Experiential-Learning 24.3	CAN	Does	SDL,SY, D,CBL,D A
CO3,CO8	Identify the pharmacological actions of formulations used in <i>Stree Roga</i> and illustrate their therapeutic applications in specific clinical conditions as well as other indications beyond those mentioned in <i>Phala Shruti</i> .- Phalasarpi, Maha Kalyanaka Ghruta,	7	Experiential-Learning 24.4	CE	Does	JC,PSM,S DL,DA,D- BED

Pradarantaka Lauha, Pushpadhanva Rasa, Nashta Pushpantaka Rasa, Shatapushpa Taila, Mahanarayana Taila, Sahacharadi Taila, Dhanvantara Taila, Kshara Taila, Kasisadi Taila, Jatyadi Taila, Chandanabala Lakshadi Taila					
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Practical Training Activity

Practical Training 24.1 : Klaibya Guhya Roga and jataharini :

The teacher will demonstrate -2 hours
Live case demonstration / Video module-presentation of Klaibya cases
Simulation on mannequin / patient demo-Demonstration of Anorectal Examination (for Guhya Roga).
Procedure demonstration-Panchakarma and Bahi Parimarjana Chikitsa
Student Activity-4 hours
Practice history taking for Klaibya/STI/Gudagata rogas-
Demonstrate Perianal examination skills
Interpret lab investigation reports
Formulate treatment plan with Chikitsa Sutras
the teacher will summarize the activity at the end.

Practical Training 24.2 : Precision Medicine and Reproductive Health.

The teacher will demonstrate-2 hours.
1.Interactive PPT + Concept Mapping-explain Precision Medicine, Cryopreservation, PGT, Proteomics in menstrual blood, Liquid Biopsy, and HPV vaccine.
2.Video modules/AR tools-Show video animations of:
- IVF + Cryopreservation process
- PGT procedure
- HPV vaccine administration
3.Specimen or simulation kit-types of cryopreserved material: embryos, oocytes, sperm; Explain PGT sample types
4.Lab Report Interpretation & Case-based Learning-Show sample genetic reports (PGT-A, PGT-M), Liquid biopsy reports, menstrual proteomic profiles
Student Activity

1. Critically review a scientific article (from PubMed or teacher-provided) on:

Cryopreservation success in IVF

PGT and embryo selection

Liquid biopsy in gynecological cancers-30mts

2. Given a case scenario (e.g., recurrent IVF failure, suspected hereditary disorder), students will:

Select appropriate modern tech

-Justify the use of PGT, cryopreservation, or proteomics-1 hour

3. create an infographic or diagnostic/treatment decision tree integrating Precision medicine & HPV vaccine with Ayurveda if relevant-30mts

Practical Training 24.3 : Herbal and Herbomineral Formulations in Streeroga:

Teacher Demonstration-2 hours

1. Drug display & raw material identification

Show classical samples of Kumaryasava, Ashokarishta, Pushyanuga Churna, etc. Discuss ingredients, classical references, and pharmacological actions.

2. Case based learning

patient /case scenarios of PCOS, AUB, PID, etc. to demonstrate how to select appropriate medicine based on dosha and vyadhi.

3. Demonstrate how to calculate dose, decide on Anupana (honey, warm water), administration time, and dietary advice with each medicine. case scenarios of PCOS, AUB, PID, etc. to demonstrate how to select appropriate medicine based on dosha and vyadhi.

students Activity

1. match the drug to case (e.g., Dashamoolarishta in postpartum PID, Rajahpravartini in secondary amenorrhea). Prepare a chart of disease–drug–dosha correlation.-minimum 5 cases-1 hour

2. selects one formulation and creates a therapy chart indicating.-1 hour

1. Dosha target

2. Condition (e.g., PCOS, AUB)

3. Expected response

4. Duration of treatment

5. Follow-up signs

3. Maintain log of 5 OPD/IPD patients with documentation of Ayurvedic drug used and reason for choice.-1 hour

Practical Training 24.4 : Herbal and Herbomineral Formulations Based on Prakriti, Desha, Kaala, and Agni.

Teacher Demonstration-2 hours

1. Drug introduction & clinical mapping.

Display all oils, Rasayanas, and Ghritas with their classical reference, dosage, and Matra. Correlate with conditions (like leucorrhoea, infertility, cervical erosion).

2. Clinical scenarios (case-based learning).

Present 3 brief cases:

1. PCOS with amenorrhea (Pushpadhanva + Nashta Pushpantaka)

2. Raktapradara (Pradarantaka Lauha + Jatyadi Taila)

3. Garbhasrava (Phalasarpi + Maha Kalyanaka Ghrita). Explain rationale and therapy plan.

Students activity

1. Identify ingredients of Maha Kalyanaka Ghrita, Phalasarpi, Pradarantaka Lauha. Observe Taila formulations and write guna-karma, dosha targeting, and shelf-life details.-1 hour

2. perform mock Abhyanga (e.g., Mahanarayana Taila) and simulate local application of Jatyadi Taila or Kshara Taila on a pelvic model or anatomical chart. Include hand hygiene, draping, and comfort positioning.-1 hour

3. Given 3 different case studies (e.g., infertility, PID, menorrhagia), students plan a treatment schedule using the appropriate Rasayana + Taila + supportive drugs. Justify their choices in group discussion.-1 hour

Experiential learning Activity

Experiential-Learning 24.1 : Klaibya, Guhya Roga, and Jataharini.

1. Interview OPD/IPD cases or simulated patients with symptoms of:

- Klaibya (e.g., erectile dysfunction, loss of libido)

- Guhya Roga (STI)

- Jataharini - 3 cases-2 hours

2. Perform physical exam procedures like:

- Genital and penile exam

- Perianal/rectal exam (on models or peers)

- Inguinal and systemic exam- 3 cases- 2 hours

3. Interpret hormonal profile (testosterone, prolactin).- 3 cases- 1 hour

4. formulate a line of treatment using:

- Chikitsa Sutra

- Internal medicines

- Panchakarma.

Uttara Basti procedure steps for Klaibya, Dhavana/Yoni Prakshalana for Jataharini-3 cases - 2 hours.

5. Identify supportive interventions like:

Counseling for Klaihya

Antibiotics/antifungals in STI where needed- 1 hour

Experiential-Learning 24.2 : Advancements in Precision Medicine:

1. Select a given case (e.g., advanced maternal age, PCOS with infertility, BRCA-positive woman, testicular atrophy, adolescent girl with HPV risk).

Identify and justify the appropriate interventions: PGT-A or PGT-M, Cryopreservation (oocyte/testis/embryo), HPV vaccine schedule, Precision medicine application

Design a diagnostic-treatment flowchart showing integration of modern tech and possible Ayurvedic supportive interventions-1 hour

2. Choose any two research papers (assigned or downloaded from PubMed/teacher's resource).

Extract and analyze:

Type of biomarkers detected (e.g., endometrial receptivity, inflammation markers)

Method of collection and analysis (ELISA, MS, microarrays, etc.)

Clinical significance (e.g., early endometriosis diagnosis, cancer screening)-1 hour

3. Analyze mock lab reports:

Cryo storage protocol

Genetic analysis output from PGT-A

Liquid biopsy showing circulating tumor DNA or exosomal proteins- 1 hour

4. Design an IEC poster, pamphlet, or short awareness script with visuals, key points, and call to action

Include Ayurvedic supportive advice if relevant (e.g., Rasayana post-cryopreservation)-1 hour

Experiential-Learning 24.3 : Herbal and Herbomineral Formulations in Streeroga.

1. Each student selects 2 formulations (one taila/ghrita + one rasa/lauha).

They prepare a clinical pharmacological table with the following:

Rasa, Guna, Virya, Vipaka, Prabhava

Pharmacological activity (e.g., emmenagogue, anti-inflammatory)

Targeted Srotas and Doshas

Indication (per Phala Shruti)

At least 1 modern analogous pharmacological effect (e.g., phytoestrogenic, antioxidant)-2 hours.

2. choose 2 conditions not mentioned in the Phala Shruti of their selected drugs.

Use case paper templates or OPD records to argue clinical applicability.

Fill out a “Beyond Phala Shruti Utility” form.,

Example:

Drug: Kasisadi Taila

Classical Use: Arsha

New Use: External application in Bartholin’s gland cyst

Rationale: Lekhana + Shothahara + Kapha-shamak properties- 1hour

3. given 3 clinical cases (e.g., PCOS, leucorrhoea, dysmenorrhea).

Identify primary dosha

Choose 1 classical formulation

Justify selection (with rationale)

Propose combination or supporting therapy if needed-2 hours

4.create a poster on.

Drug-to-disease map in Stree Roga

Drug usage beyond Phala Shruti

How to select proper formulation in PCOS, PID, or infertility-2 hours.

Experiential-Learning 24.4 : Case-Based Analysis of Herbal and Herbomineral Formulations in Streeroga

1. Select 2 formulations from the list and fill a structured chart covering -

Rasa, Guna, Virya, Vipaka, Prabhava

Dosha, Dhatu, and Srotas involved

Action mechanism (e.g., Rasayana, Agnideepana, Lekhana)

Classical indication + proposed extended indication- 2 hours

2. Given 3 different simulated clinical scenarios in Stree Roga:

a) Case of recurrent abortion

b) Case of leucorrhoea with anemia
 c) Case of PID with lower back pain
 Choose suitable formulations
 Justify based on pharmacological action
 Propose an integrative regimen-2hours
 3. Creates one of the following:
 Drug-to-disease map for 5 formulations in Stree Roga
 Taila selection flowchart for 5 Yonivyapad types
 Dosha-wise selection of Ghrita/Rasa preparation-2 preparations
 Comparison chart: Classical vs Extended Uses- 2 hours
 4.Demonstrate Kshara Taila application on uterine cervix -3 cases- 1 hour.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the modular grade point as per Table 6C.

4

Structured SAQs (50 marks)

- Write short note on recent innovations in gynecological imaging and diagnosis. (10)
- Discuss minimally invasive gynecological surgeries and robotic-assisted procedures. (10)
- Outline recent advances in infertility management, including ART and surrogacy. (10)
- List commonly used Ayurvedic formulations in gynecology with specific indications. (10)
- Highlight emerging trends in integrative gynecological care and future research directions. (10)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And

Any experiential assessment, such as a portfolio/reflection/presentation, can be taken as an assessment. (25 Marks)

Paper No : 4 Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology)

Semester No : 3

Module 25 : Shastrakarma Samanya Siddhanta –General principles of Gynaecological and Obstetrical Surgeries

Module Learning Objectives

(At the end of the module, the students should be able to)

- Explain the fundamental principles (Samanya Siddhanta) of surgical interventions in Stree Roga (gynecological disorders) and Prasuti Tantra (obstetrics).
- Classify anesthesia techniques (general, regional, local) for common gynecological surgeries (Yoni Karma, Garbhashaya Karma).
- Explain the anatomical and physiological considerations for gynecological and obstetric surgeries
- Compare traditional (Ayurvedic) and modern surgical approaches for common conditions (e.g., fibroids, ovarian cysts, obstructed labor).
- Apply integrative preoperative and postoperative care principles (Purva & Pashchat Karma) in surgical planning.
- Troubleshoot anesthesia-related complications (e.g., hypotension, Vata aggravation) and their mitigation.
- Evaluate ethical and cultural considerations in women's surgical care, including informed consent and Sattvavajaya Chikitsa (psychological support).

M 25 Unit 1 Shastrakarma Siddhanta Preoperative Care (Purva Karma):

- Patient assessment
- Informed consent & preparation (fasting, bowel prep)
- Intraoperative Principles
- Surgical approaches (abdominal, vaginal, laparoscopic)
- Hemostasis techniques (modern + Kshara/Jalauka)
- Postoperative Care (Pashchat Karma)
- Pain management (pharmacological + Pinda Taila)
- Recovery protocols (early ambulation, Sutika Paricharya)

Complications:

- Intraoperative (hemorrhage, organ injury)
- Postoperative (infection, adhesions)

References: 2,3,4,22,23,24

3A	3B	3C	3D	3E	3F	3G
CO1,CO4,CO5	Analyze the significance of preoperative care (Purva Karma) in Obstetrics and Gynecology. Elucidate the underlying principles of effective informed consent acquisition. Investigate the protocols for preoperative skin preparation, catheterization, and the administration of prophylactic antibiotics. Assess the Impact of Preoperative Care on Surgical Outcomes.	2	Lecture	CAP	Know	L&PPT , L&GD,L _VC
CO2,CO3,CO4	Analyze key components of the WHO Surgical Safety Checklist and adapt it for obstetric emergencies, evaluate risks and benefits of regional versus general anesthesia in cesarean deliveries, and apply evidence-based hemorrhage control strategies.	1	Lecture	CE	Knows-how	L_VC,L& PPT ,L
CO2,CO3,CO4	Identify evidence-based risk stratification tools, perform comprehensive preoperative evaluation including anemia optimization and VTE prophylaxis, interpret laboratory results to justify interventions, implement key ERAS protocol elements in simulated scenarios, and communicate informed consent effectively for OB/GYN procedures.	3	Practical Training 25.1	PSY-GUD	Shows-how	CBL,D-B ED,PBL, D-M,TBL
CO2,CO3,CO4	Identify evidence-based risk stratification tools to assess surgical risk in OB/GYN patients, prepare for obstetric emergencies, and evaluate preoperative case scenarios to identify gaps and propose evidence-based solutions.	4	Practical Training 25.2	PSY-GUD	Shows-how	SIM,CBL ,D-BED
CO2,CO3,CO4	Design interdisciplinary preoperative plans integrating Ayurvedic and modern approaches, adapt consent and surgical checklists for cultural considerations, demonstrate culturally-sensitive counseling, and apply IV iron therapy for anemia management.	5	Experiential-Learning 25.1	AFT-RES	Shows-how	D-BED,T BL,CBL

CO2,CO3,CO4	Apply ethical principles in patient care, demonstrate professional integrity, practice error-reporting, and collaborate effectively with interprofessional teams.	4	Experiential-Learning 25.2	AFT-VAL	Does	SIM,RP,TBL
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M 25 Unit 2 Analgesia and Anaesthesia in Obstetrics Analgesia and anesthesia in Obstetrics:

A. Basic Principles

- Introduction to Obstetric Anesthesia
- Pain Pathways in Obstetrics
- Pharmacology of Anesthetic Drugs in Pregnancy

B. Obstetric Anesthesia & Analgesia

- Labor Analgesia
- Anesthesia for Cesarean Delivery
- High-Risk Obstetric Scenarios

References: 22,23,24,35

3A	3B	3C	3D	3E	3F	3G
CO4,CO5	Categorize abdominal incisions based on anatomical landmarks and surgical relevance, compare indications, evaluate advantages and limitations, and justify incision selection by integrating patient factors and procedural demands.	1	Lecture	CE	Knows-how	L_VC,BL,L&PPT
CO4,CO5	Analyze influence of suture characteristics on clinical outcomes and identify suture selection by weighing indications and contraindications according to conditions.	2	Lecture	CAN	Knows-how	L&PPT,BL,L_VC
CO4,CO5	Analyze biomechanical principles of wound healing to guide suture technique selection, compare surgical instruments and justify their use for specific wounds, evaluate interrupted versus continuous sutures for tension, infection risk, and cosmetic outcomes,	1	Lecture	CAN	Knows-how	BL,L_VC,L&PPT

	and differentiate simple, vertical, and horizontal mattress sutures based on tissue approximation and anatomical location.					
CO4,CO5	Perform midline, paramedian, and transverse incisions using anatomical landmarks, justify incision selection based on patient and procedural factors, adapt techniques to reduce risks, select appropriate suture materials and instruments, and execute layered closure with various suturing methods ensuring knot security and tension control.	4	Practical Training 25.3	PSY-GUD	Shows-how	D-M,D-BED,CBL
CO4	Perform basic suturing techniques, including interrupted, continuous, and mattress sutures.	2	Practical Training 25.4	PSY-ADT	Shows-how	CBL,PSM,SIM
CO4	Classify sterilization methods, describe their principles with advantages and limitations, demonstrate correct techniques of autoclaving, chemical and dry heat sterilization, and identify common errors with their consequences.	6	Experiential-Learning 25.3	PSY-MEC	Does	TBL,PBL,D-M
CO4,CO5	Analyze suturing techniques and their applications, evaluate appropriate suture materials for different wound types and healing stages, apply correct techniques on simulation models, and create step-by-step suturing protocols.	6	Experiential-Learning 25.4	PSY-GUD	Does	CBL,SIM,RLE

M 25 Unit 3 Analgesia and Anaesthesia in Gynaecology Introduction to Pain Management in Gynecology:

- Importance of pain control in gynecological procedures
- Types of pain (acute vs. chronic, somatic vs. visceral)
- Local and Regional Anesthesia in Gynecology
- Local anesthetics (e.g., Lidocaine, Bupivacaine)
- Nerve blocks (e.g., Pudendal nerve block, paracervical block)
- Spinal and epidural anesthesia for gynecological surgeries
- General Anesthesia in Gynecological Procedures
- Indications and contraindications
- Commonly used agents (e.g., Propofol, Sevoflurane)
- Airway management and monitoring

References: 1,2,3,4,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO4,CO5	Analyze the impact of pregnancy-induced physiological changes on anesthetic pharmacokinetics and pharmacodynamics, compare maternal–fetal risks and benefits of regional versus general anesthesia for cesarean delivery, and adapt anesthesia protocols for high-risk obstetric scenarios.	1	Lecture	CE	Knows-how	L&PPT ,S Y,PER,L_ VC
CO4,CO5	Evaluate pharmacokinetic differences of anesthetic agents in pregnancy, compare maternal and fetal risks of opioids versus regional analgesia during labor, and apply pain pathway knowledge to justify pharmacological and non-pharmacological analgesia choices.	1	Lecture	CE	Knows-how	L_VC,BL ,L&PPT
CO4,CO5	Identify common complications of obstetric anaesthesia, discuss their pathophysiology and risk factors, and apply evidence-based strategies for their prevention and management.	1	Lecture	CAP	Knows-how	BS,L_VC ,L&PPT
CO4,CO5	Evaluate anesthetic techniques with their risks and benefits, apply advanced monitoring in high-risk obstetric cases, and synthesize multimodal analgesia plans for post-cesarean and post-hysterectomy pain management.	3	Practical Training 25.5	CE	Knows-how	D-BED,R LE,SIM
CO4,CO5	Justify the selection of anesthetic approaches, execute multimodal analgesic strategies for perioperative pain control, troubleshoot anesthesia-related complications, and design individualized post-anesthesia care plans through an integrated approach.	4	Practical Training 25.6	CS	Knows-how	D-BED,C BL,PBL
CO4,CO5	Describe the neurophysiology of pain pathways, compare pharmacological and regional analgesic techniques, assess risks and benefits of analgesic approaches in obstetrics, recognize complications with stepwise emergency management, and demonstrate effective teamwork and communication in crisis scenarios.	5	Experiential-Learning 25.5	CE	Does	SIM,PBL, TBL

M 25 Unit 4 Intensive Care in Obstetric and Gynaecology Obstetric Intensive care, Gynecology Intensive care, Critical Care Management, Guidelines and Protocols, Challenges and Controversies

References: 22,23,24,26,31

3A	3B	3C	3D	3E	3F	3G
Practical Training Activity						
Practical Training 25.1 : Pre-operative Care in Obstetrics and Gynaecology.						
<p>1.Introduction & Objectives (10 min) Teacher Demonstration: 3 Hours</p> <p>1. Briefly outline key preoperative principles using a visual flowchart (projected). (30 min) Highlight "5 Critical Pre-Op Steps": Risk assessment, ERAS protocols, anesthesia planning, consent, and emergency prep.</p> <p>2.Interactive Case-Based Demonstration (40 min) Activity: "Live Pre-Op Evaluation" Teacher Role-Play: Demonstrate a mock preoperative assessment with a "patient" (colleague/volunteer): Risk stratification: Calculate Caprini score for VTE risk. Lab interpretation: Analyze CBC/anemia management (show Hb 9.5 g/dL ? prescribe IV iron). ERAS protocols: Display a checklist (e.g., fasting times, carbohydrate loading). Audience Participation: Students suggest next steps; teacher corrects/explains.</p> <p>3.Hands-On Skill Stations (80 min) Rotating Mini-Demonstrations (4 stations, 20 min each): Anesthesia Planning: Show airway assessment tools (Mallampati classification) and spinal anesthesia positioning. Consent-Taking: Perform a live consent discussion for a hysterectomy, highlighting key medico-legal points. ERAS Protocols: Demonstrate LMWH injection technique and mechanical compression devices. Emergency Prep: Display a pre-op hemorrhage trolley (e.g., tranexamic acid, blood request forms). Teacher Role: Rotate to each station, demonstrating while students observe/ask questions.</p> <p>4.Group Problem-Solving (20 min) Activity: "What's Missing?" Present 3 flawed pre-op scenarios (e.g., diabetic patient with no glucose control, unassessed VTE risk). Students identify errors; teacher reveals evidence-based solutions.</p>						

Practical Training 25.2 : Intra and Post Operative Care in Obstetrics and Gynecology

Demonstration By Teacher-4 hours

1. Comparative Case Discussion (50 min)

Activity: Compare two post-cesarean cases—one managed with Sutika Paricharya (Ayurveda) and the other with ERAS (modern).

Outcome: Students list pros/cons of each approach.

2. Wound Care Demo (30 min)

Modern: Demonstrate antiseptic dressing.

Ayurvedic: Prepare Madhu (honey) + Turmeric paste, Kumari Swarasa+ Turmeric Paste; discuss antimicrobial properties, VranaDhupana-Guggulu, Shallaki, Haridra, Nimba

3. Pain Management Role-Play (60 min)

Scenario: A post-hysterectomy patient refuses opioids.

Task: Groups design a plan using Shallaki, ice packs, and breathing exercises. Vedanasthapana Dravya Prayoga.

4. Post-Partum Recovery Workshop (60 min)

Ayurveda: Prepare Jeera Water (cumin) for restoration of Agnibala vs. modern simethicone. Dietary Preparations- Yusha, Yavagu- Vedasthapana- Dashamoola, Panchakola Siddha Ghrita

Modern: Demonstrate perineal care with povidone-iodine vs. Panchavalkala Kwatha/Jatyadi Taila/Jatyadi Ghrita etc.

5. Complication Prevention Debate (40 min)

Topic: "Is Triphala + early ambulation better than laxatives alone for post-op constipation?"

Practical Training 25.3 : Incision and Suturing

Demonstration by Teacher

Session Structure (4 Hours)

1. Guided Demonstration (90 min)

Instructor-led live demo of incisions and suturing on simulators, emphasizing: Blade angle, depth control, and hemostasis during incisions.

Instrument handling (e.g., palm grip for needle drivers).

Suture economy (e.g., avoiding excessive throws).

2. Hands-On Stations (120 min)

Station 1: Incision Planning & Execution

Task: Mark and perform incisions on synthetic torso models, adjusting for "patient" factors (e.g., obesity, prior scars).

Station 2: Suture Selection & Layered Closure

Task: Close simulated midline incisions using Vicryl (fascia), Monocryl (subcuticular), and Prolene (skin), justifying choices.

Station 3: Complication Management

Task: Identify/fix intentional errors (e.g., uneven suture tension, misplaced knots) in pre-set models.

3. Debrief & Reflection (30 min)

Group discussion: "What was most challenging? How would you adapt for a contaminated wound?"

Peer feedback: Share one strength and one improvement observed.

Practical Training 25.4 : Incision methods, Suturing and Wound Dressing

Teacher demonstration 2-Hours

Part 1: Suture Techniques - The Modern Approach (60 Minutes)

A. Teacher Demonstration (20 Minutes)

Introduction & Asepsis (5 mins):

Briefly recap the indications for different incision types (linear, curved, etc.) using diagrams.

Emphasize the critical importance of aseptic technique: hand hygiene, gloving, and handling instruments without contamination.

Demonstrate the correct way to hold and load a needle in the needle holder (grasping at the junction of the posterior 1/3 and anterior 2/3).

Demonstration of Suture Techniques (15 mins):

The teacher will perform each suture on a simulator under a visualizer (or with small groups gathered closely), explaining each step clearly.

Simple Interrupted Suture:

Steps: Needle entry at 90°, following the needle's curve, equidistant bite from both wound edges, and proper instrument tie.

Key Points: Emphasize eversion of wound edges and consistent suture spacing.

Continuous (Running) Suture:

Steps: Begin with an initial interrupted suture but do not cut the tail. Continue a series of stitches in a line, locking every 3-4 stitches for security.

Key Points: Highlight speed and efficiency but also the risk of the entire line loosening if one stitch fails.

Vertical Mattress Suture:

Steps: Demonstrate the "far-far, near-near" technique: a deep, wide bite followed by a shallow, narrow bite on the return.

Key Points: Explain this is for maximum wound eversion and tension relief, useful for deeper tissues.

B. Student Practice (40 Minutes)

Setup: Students work in pairs at stations, each with a suture pad and kit.

Structured Practice:

Minutes 1-15: Practice Simple Interrupted sutures. Focus on mastering the instrument tie and achieving wound edge apposition without gaps.

Minutes 16-30: Practice the Continuous Suture. Focus on maintaining even tension and learning the locking technique.

Minutes 31-40: Attempt the Vertical Mattress Suture. This is the most complex; the goal is to understand the principle of the two-layered bite.

Teacher's Role: Circulate among students, providing real-time feedback on instrument handling, technique, and safety (preventing needle-stick injuries).

Part 2: Ayurvedic Wound Healing - The Traditional Science (60 Minutes)

A. Teacher Demonstration (25 Minutes)

Philosophy and Principles (5 mins):

Explain the Ayurvedic concept of wound healing (Vrana Ropana), focusing on balancing Doshas (especially Vata and Pitta at the wound site), removing Dushta Vrana (infected/unhealthy tissue), and promoting Shuddha Vrana (healthy granulation tissue).

Introduce the two key agents:

Panchavalakala Kwatha: A decoction of five barks (Ficus spp.), known for its Shodhana (cleansing), Ropana (healing), and anti-inflammatory properties.

Jatyadi Taila: A medicated oil famous for its Vrana Ropana (wound healing), Sothahara (anti-inflammatory), and Kushthaghna (antiseptic) effects.

Practical Demonstration of Wound Toilet (Prakshalana) (10 mins):

Using a simulated wound model (e.g., one with a "contaminated" surface),

Step 1 (Prakshalana): Demonstrate how to gently irrigate and cleanse the wound bed using a syringe filled with lukewarm Panchavalakala Kwatha. Explain that this removes debris and microbial load while promoting tissue health.

Step 2 (Drying): Gently pat the area dry with sterile gauze.

Practical Demonstration of Taila Dressing (5 mins):

Application: Show the correct method to apply Jatyadi Taila.

Option 1: Soak a sterile gauze pad in the oil and apply it directly to the wound.

Option 2: Apply a thin layer of oil directly onto the wound bed and then cover with a dry gauze pad.

Bandaging: Demonstrate a secure but non-constrictive bandaging technique.

Integration Discussion (5 mins):

Discuss how these Ayurvedic techniques can be integrated with modern wound care. For example, Prakshalana can be an excellent initial cleansing method, and Jatyadi Taila can be used for dressing clean, non-infected wounds or to promote granulation.

B. Student Practice (35 Minutes)

Setup: Students remain in pairs, exchanging their suture pads for a simulated wound model and Ayurvedic supplies.

Structured Practice:

Minutes 1-20: The Full Ayurvedic Protocol.

Each student pair will perform the entire sequence on their model: Prakshalana with Panchavalakala Kwatha -> Drying -> Application of Jatyadi Taila -> Bandaging.

They must verbally explain the purpose of each step to their partner as they perform it.

Minutes 21-35: Scenario-Based Application.

Provide different scenarios for students to problem-solve:

Scenario A: "A clean surgical incision." (Emphasize gentle Prakshalana and light Taila application).

Scenario B: "A contaminated, exudative wound." (Emphasize more vigorous Prakshalana and the potential need for more frequent dressing changes).

The teacher circulates, assessing technique and the students' ability to adapt the protocol to the clinical scenario.

Conclusion & Recap (5-10 mins within the 2 hours)

The teacher brings the group together for a quick recap.

Emphasizes the complementary nature of the skills learned: precise modern suturing to close wounds, and holistic Ayurvedic care to manage them and promote optimal healing.

Assigns a brief reflection: "Write one paragraph on a clinical situation where you would combine both the suture and Ayurvedic dressing techniques you learned today."

Practical Training 25.5 : Administration and Monitoring of analgesia and anaesthesia.

Practical Activities 3 Hours

1. Introduction & Case-Based Discussion (20 mins)

Interactive Poll: "What is your biggest fear when administering anesthesia in obstetrics?"

Case Vignette: Compare anesthetic considerations for elective cesarean vs. emergency peripartum hysterectomy.

2. Pharmacologic Considerations in Obstetrics (30 mins)

Activity: Small groups compare dosing adjustments for: Local anesthetics (hyperbaric vs. isobaric bupivacaine)

Opioids (fentanyl vs. morphine intrathecal), Vasopressors (phenylephrine vs. ephedrine).

3. Hands-On Stations (60 mins) (Rotate in small groups)

Station 1: Neuraxial Techniques in Obstetrics

Simulated epidural placement for labor analgesia (mannequin with lumbar spine anatomy).

Spinal anesthesia for cesarean delivery—practice drug dosing and baricity selection.

Station 2: Airway Management

Rapid-sequence induction in a pregnant patient (difficult airway cart available).

Supraglottic airway rescue in "can't intubate, can't oxygenate" (CICO) scenarios.

Station 3: Fetal-Maternal Monitoring

Interpret fetal heart rate tracings and correlate with maternal hypotension.

Practice invasive monitoring (arterial line setup) for preeclampsia.

4. Multimodal Analgesia & Postoperative Care (30 mins)

Jigsaw Activity: Design analgesia plans for:

Vaginal delivery with perineal tear

Cesarean delivery in an opioid-tolerant patient.

Integrated Analgesia Plan: Rectal Suppository, Oral Ayurveda Analgesics-Vedasthapana Dashemani

5. Crisis Simulation Scenarios (45 mins)

Simulation 1: "High spinal anesthesia with hypotension/bradycardia during cesarean delivery."

Simulation 2: "Uterine atony and hemorrhage post-delivery—coordinating with OB team."

6. Debrief & Clinical Pearls (15 mins)

Reflection: "What's one change you'll make in your practice after today?"

Key Takeaways:

Neuraxial anesthesia as the gold standard for cesarean delivery.

Importance of left uterine displacement and vasopressor protocols.

Practical Training 25.6 : Anesthesia and post analgesic management.

Practical Activities 4 Hours:

1. Introduction & Case-Based Learning (30 mins)

Interactive Poll: "Which factor most influences your choice of anesthesia technique?" (Surgery type, patient factors, resources)

Case Vignettes: Compare anesthesia selection for:

Laparoscopic cholecystectomy (healthy vs. COPD patient)

Total knee arthroplasty (regional vs. general anesthesia)

2. Anesthesia Technique Selection (60 mins)

Small Group Activity:

Teams assign anesthesia techniques to 5 surgical cases (e.g., cesarean section, open appendectomy, TURP)

Debate pros/cons of each choice (e.g., spinal vs. GA for hip fracture)

3. Hands-On Stations (60 mins) *(Rotate in groups of 4-5)*

Station 1: Regional Anesthesia

Ultrasound-guided peripheral nerve block demo (e.g., interscalene for shoulder surgery)

Station 2: General Anesthesia

Simulated induction with focus on analgesic adjuncts (e.g., lidocaine infusion, ketamine)

Station 3: Monitoring & Rescue

Interpret capnography for opioid overdose

Practice naloxone administration

4. Multimodal Analgesia Planning (40 mins)

Jigsaw Activity: Groups create pain management plans for:

Major abdominal surgery (incorporating epidural, acetaminophen, gabapentin)

Integrated Ayurveda Approach-Pain Relief(Dashamoola Kashaya, Bala Taila Mridu Abhyanga, Medhya Rasayana-Brahmi, Ashwagandha-Stress Relief)

5. Crisis Scenarios (50 mins)

Simulation 1: "Failed spinal anesthesia during urgent surgery"

Simulation 2: "Post-op respiratory depression in PACU"

6. Debrief & Implementation (15 mins)

Reflection: "One technique you'll adopt in your practice next week"

Takeaways:

ERAS protocols enhance recovery

Opioid-sparing techniques reduce complications

Experiential learning Activity

Experiential-Learning 25.1 : Pre-operative care in Obstetrics and Gynecology.

Activities: 5 Hours

1. Patient-Centered Decision-Making (1 Hour)

Role-play obtaining informed consent for a high-risk patient preferring Ayurvedic Shodhana (detox) over standard bowel prep.

Adapt pre-op counseling for diverse cultural/religious needs

2. Ethical Integration of Ayurveda & Modern Medicine (1 Hour)

Debate the ethical use of Rasayana herbs (e.g., Ashwagandha) vs. anxiolytics for pre-op anxiety.

Develop a safety checklist for herb-drug interactions

3. Risk Assessment & Optimization (1 Hour)

Compare Ayurvedic (Dosha imbalance evaluation) and modern (ASA/Caprini scores) risk stratification tools.

Design a pre-op optimization plan for anemia using both IV iron and Loha Bhasma.

4. Care Coordination (1 Hour)

Simulate a handoff between Ayurvedic and modern teams to ensure continuity

Audit a mock patient chart to identify gaps in interdisciplinary communication.

5. Safety & Protocol Adherence (1 Hour)

Practice WHO Surgical Safety Checklist modifications for Ayurvedic pre-op rituals

Sample Experiential Activities

MDT Simulation: Teams negotiate a pre-op plan for an obese diabetic patient requesting Triphala guggulu instead of antibiotics.

Case-Based Debate: Pre-operative painting with Triphala, Panchavalkala Decoction vs Betadine-Povidine.

Experiential-Learning 25.2 : Ethics, Safety, and Care Coordination in Clinical Practice.

Activity: Workshop for 4 Hours

Hands-On Ethics, Safety & Care Coordination in Clinical Practice

Session Outline

Hour 1: Ethics in Action (60 min)

Activity 1: Ethical Dilemma Role-Play (60 min)

Scenario: A patient refuses life-saving treatment due to cultural beliefs.

Groups: 3-4 learners role-play as nurse, physician, family member, and ethicist.

Task: Debate solutions using the Four-Box Method (medical indications, patient preferences, quality of life, contextual features).

Debrief: (30 min)

Key takeaways: How did biases affect decisions? What ethical principles were prioritized?

Transition: (10 min)

Quick poll: "Have you ever witnessed a safety lapse? What happened?"

Hour 2: Safety Simulation (60 min)

Activity 2: Medication Safety Challenge (30 min)

Setup: Mock medication cart with intentional errors (e.g., look-alike drugs, missing allergy flags).

Task: Teams race to identify and fix errors using the "5 Rights" framework (right patient, drug, dose, route, time).

Debrief: (20 min)

Discussion: How did system design contribute to risks? How would you report this in real life?

Transition: (5 min)

"How does poor communication worsen safety?" ? Segue to care coordination.

Hour 3: Care Coordination Simulation (60 min)

Activity 3: Interprofessional Discharge Planning (50 min)

Case: A homeless patient with diabetes and depression needs discharge.

Roles: Physician, nurse, social worker, pharmacist (assign or rotate).

Task:

Use a mock EHR to identify gaps (e.g., no follow-up appointment).

Create a plan addressing medical, social, and financial barriers.

Debrief: (10 min)

Reflection: What was hardest to coordinate? How could technology help?

Closing: (5 min)

One-word share: "What's one thing you'll apply tomorrow?"

Experiential-Learning 25.3 : Sterilization Techniques

Activities: 6 Hours

1. Interactive Lecture & Discussion (1 Hour)

Topics Covered:

Definition of sterilization vs. disinfection

Methods: Autoclaving, dry heat, ethylene oxide, hydrogen peroxide plasma, chemical sterilants

WHO/CDC guidelines for instrument processing

Activity:

Quiz (10 min) via Kahoot to test prior knowledge.

Group Discussion: "What would happen if sterilization fails in an OT?"

2. Hands-On Sterilization Demo (2 Hours)

Station Rotation (4 Stations, 30 min each):

Autoclave Operation

Load preparation, cycle settings, cooling/unloading

Practice wrapping instruments in sterilization pouches.

Dry Heat Sterilization

Demonstrate glass bead sterilizers and hot air ovens.

Chemical Sterilization

Prepare glutaraldehyde/Cidex solutions, soak instruments.

Plasma Sterilization (Demo Only if Equipment Available)

3. Quality Control Testing (1 Hour)

Activity 1: Use biological indicators (*Bacillus stearothermophilus* strips) to test autoclave efficacy.

Activity 2: Interpret chemical indicator strips (autoclave tape, Class 5 integrators).

Outcome: Groups present their results and analyze failures.

4. Error Identification & Troubleshooting (1 Hour)

Case Studies:

Wet packs after autoclaving

Corroded instruments due to chemical residues

Task: Groups brainstorm causes and solutions.

5. OSCE-Style Assessment (30 min)

Scenario: "Sterilize a set of surgical instruments for an emergency procedure."

Graded Steps:

Proper cleaning

Packaging

Method selection

Documentation

6. Wrap-Up & Certification (30 min)

Recap: Key takeaways via mentimeter word cloud.

Q&A: Address workplace-specific challenges.

Certificates: Award participation certificates (if applicable).

Experiential-Learning 25.4 : Mastering the Suturing Skills

Experiential Learning Activities (6 Hours Session)

1. Introduction & Case Analysis (60 min)

Activity: Small groups analyze video clips of different suturing scenarios (normal delivery tear vs. C-section closure) and discuss technique differences.

Tool: Guided worksheet with prompts (e.g., "Why would you choose a locking stitch here?").

2. Hands-On Skill Stations (3 hours) (Rotate every 60 min)

Station 1: Basic Suturing

Apply interrupted and continuous sutures on foam/episiotomy models.

Task: Close a simulated 2nd-degree perineal tear with timed practice.

Station 2: Advanced Techniques

Create a mattress suture on a uterine incision model (simulated C-section).

Challenge: Minimize tissue tension while ensuring hemostasis.

Station 3: Suture Material Evaluation

Evaluate 3 suture types (e.g., Vicryl, Chromic, Silk) on pros/cons for vaginal vs. abdominal wounds.

3. Simulation & Peer Assessment (1 hour)

Scenario-Based Role Play:

Teams simulate an emergency perineal repair with time constraints.

Peers assess using a checklist (knot security, spacing, tissue trauma).

Debrief: Discuss challenges and refinements.

4. Protocol Development & Reflection (60 min)

Create: Groups design a suturing algorithm for a chosen complication (e.g., cervical laceration).

Share: Quick presentations with rationale for technique choices.

Exit Ticket: "What would you do differently after today's practice?"

Experiential-Learning 25.5 : Pain pathways in Analgesia, management of complications in Obstetric Anaesthesia.

Demonstration by Students-Activities(5 Hours)

1. Case-Based Discussion & Simulation (2.5 Hours)

Activity: Small groups analyze real obstetric cases (e.g., failed epidural, severe hypotension post-spinal).

Task: Map pain pathways affected in the scenario.

1. Debate analgesic choices (e.g., CSE vs. remifentanyl PCA).

Role-play crisis management (e.g., simulated LAST scenario with mannequin).

2. Hands-On Skill Stations (1 Hour)

Station 1: Epidural Placement Simulator

Practice ultrasound-guided techniques with feedback.

Station 2: Resuscitation Drills

Run through ALSO/MOET protocols for maternal collapse.

3. Reflection & Debrief (1.5 Hour)

Group Discussion:

"What would you do differently?"

Peer feedback on performance in simulations.

Q&A: Clarify doubts on pain pathways/complications.

Modular Assessment

Assessment method	Hour
<p>Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.</p> <p>Structured SAQ (50 marks)</p> <ul style="list-style-type: none">• Explain modern surgical principles in gynecology and obstetrics. (10)• Describe perioperative care considerations: anatomy, physiology, infection prevention, and patient monitoring. (10)• Discuss integrative Vedana Nivarana strategies for perioperative pain relief. (10)• Outline dosha-specific interventions to optimize surgical outcomes. (10)• Highlight ethical considerations and patient safety in gynecological surgeries. (10) <p>Or</p> <p>Any practical in converted form can be taken for assessment. (25 Marks)</p> <p>And</p>	4

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 26 : Critical Care in Gynaecology and Obstetrics

Module Learning Objectives

(At the end of the module, the students should be able to)

- Describe the pathophysiology of shock (hypovolemic, septic, and cardiogenic) in the context of obstetrics and gynaecology and evaluate diagnostic criteria for early detection.
- Identify and apply appropriate resuscitation measures, including pharmacological interventions, fluid replacement, and advanced life support techniques in managing shock in obstetric emergencies.
- Explain indications for blood transfusion, cross-matching procedures, and management of transfusion-related complications such as haemolytic reactions and transfusion-associated infections.
- Assess clinical scenarios related to fluid and electrolyte imbalances (e.g., dehydration, hyponatremia, hyperkalaemia) and develop personalized fluid therapy plans for obstetric and gynaecological patients.
- Demonstrate knowledge of ICU-level care, including respiratory support, hemodynamic monitoring, and the management of critically ill obstetric patients, incorporating both medical and surgical interventions.

M 26 Unit 1 Shock management Shock and its management - Types, Clinical Presentation, Pathophysiology, Management, Initial Assessment

Fluid Resuscitation, Vasoactive Medications, Supportive Care, Specific Management, Complications

References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO1,CO4	Describe shock and its types (hypovolemic, cardiogenic, obstructive, distributive)	1	Lecture	CK	Knows-how	L&PPT , L_VC,L&GD
CO1,CO2,CO3,CO4	Identify causes and risk factors of shock, its pathophysiological changes, clinical signs and symptoms, and the importance of early recognition and management.	1	Lecture	CAP	Knows-how	L&GD,L&PPT

						,L_VC
CO2,CO3,CO4	Define the four main types of shock and their clinical features, demonstrate rapid systematic diagnosis, interpret bedside diagnostic tools to differentiate shock types, recognize urgent red flags, and apply the ABCDE framework to prioritize initial management.	2	Practical Training 26.1	PSY-GUD	Shows-how	RP,D-BED,TBL,SIM
CO2,CO3,CO4	Manage airway, breathing, and circulation in shock patients and perform bedside procedures such as central and arterial line placement.	2	Practical Training 26.2	PSY-MEC	Shows-how	SIM,CD,D-BED,PrBL
CO4	Apply the principles of immediate resuscitation and management of shock, including fluid resuscitation, use of vasopressors, blood transfusion, and addressing the underlying cause.	3	Experiential-Learning 26.1	PSY-MEC	Shows-how	TBL,CBL,SIM,D-BED
CO4	Describe the post-shock monitoring protocols, including hemodynamic stabilization, fluid balance, and preventing complications.	3	Experiential-Learning 26.2	CAN	Knows-how	CD,PBL,SIM,CBL
CO4,CO5,CO6	Demonstrate safe blood transfusion protocols including consent, verification, and monitoring, identify signs of acute transfusion reactions, and explain immediate management actions.	2	Practical Training 26.3	PSY-GUD	Shows-how	PBL,DL,SIM
<p>M 26 Unit 2 Raktadana - Blood TransfusionIndications, contraindications, and types of blood transfusion in obstetric and gynecological cases, including massive transfusion protocols for postpartum hemorrhage References: 22,23,24,25,26,27,35</p>						
3A	3B	3C	3D	3E	3F	3G
CO4	Describe blood physiology and components, identify indications for transfusion, different blood products, potential risks and complications, and blood typing and cross-matching procedures	3	Lecture	CAN	Knows-how	L_VC,L&GD,SIM,L&PPT
CO4	Identify major blood components and their functions, discuss the principles of blood fractionation and component preparation, interpret clinical indications for component	2	Practical Training 26.4	PSY-GUD	Knows-how	RLE,SIM,PrBL,D-

	therapy, and demonstrate proper storage and handling of blood products.					M,D-BED
CO3,CO4	Analyze principles of blood transfusion, safe administration protocols, and evaluate and manage transfusion reactions	3	Experiential-Learning 26.3	CAN	Does	SIM,D-BED
CO4	Discuss the clinical uses of different blood components in managing conditions related to Stree Roga and Prasutitantra.	3	Experiential-Learning 26.4	CAP	Knows-how	CBL,D-BED

M 26 Unit 3 Fluid and electrolyte balance and fluid therapy.Fluid Balance, Electrolyte Balance, Fluid Therapy types, Complications, Assessment, Calculation, Implementation.

References: 35

3A	3B	3C	3D	3E	3F	3G
CO1,CO4	Describe the mechanisms regulating fluid balance, major electrolytes and their physiological roles, interpret clinical signs of fluid and electrolyte disorders, and calculate fluid requirements for maintenance and replacement therapy.	3	Lecture	CE	Knows-how	L_VC,L&PPT ,L&GD
CO4	Identify indications for fluid therapy in obstetrics, discuss different fluid types, and perform clinical assessment of fluid and electrolyte imbalances, including interpretation of laboratory results and clinical signs in obstetric patients.	3	Practical Training 26.5	PSY-GUD	Shows-how	PBL,CBL ,D-BED,CD
CO4	Describe body fluid distribution, interpret laboratory values in clinical scenarios, demonstrate principles of IV fluid and electrolyte therapy, predict physiological responses to imbalances, and plan management.	3	Practical Training 26.6	CE	Knows-how	RLE,CBL ,SIM
CO1,CO2,CO4	Demonstrate management of fluid therapy by calculating requirements, selecting appropriate fluids, and correcting electrolyte imbalances in conditions such as postpartum hemorrhage and sepsis.	3	Experiential-Learning 26.5	CE	Does	D-BED,S IM,RLE
CO2,CO4	Determine indications for fluid therapy in obstetric emergencies, compare risks and benefits of crystalloids, colloids, and blood products, assess patient volume status,	3	Experiential-Learning 26.	PSY-MEC	Shows-how	CBL,SIM ,RLE

	interpret laboratory results to guide management, practice fluid resuscitation in simulated scenarios, and recognize and manage complications of fluid therapy.		6			
M 26 Unit 4 Intensive Care in Obstetric and Gynaecology Obstetric Intensive care, Gynecology Intensive care, Critical Care Management, Guidelines and Protocols, Challenges and Controversies References: 22,23,24,25,26,27,35						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO4	Identify critical gynecologic conditions requiring ICU care, explain their pathophysiology and clinical presentation, apply evidence-based protocols for stabilization and management, recognize the role of multidisciplinary teamwork, and interpret key laboratory and imaging findings in gynecologic critical care.	1	Lecture	CAP	Knows-how	L&PPT, L,L&GD, L_VC,TBL
CO1,CO2,CO4	Identify obstetric conditions requiring ICU admission, describe the pathophysiology of life-threatening complications, apply ABCDE principles to stabilize critically ill patients, interpret key monitoring data, manage obstetric emergencies using evidence-based protocols, and recognize ethical and legal challenges in obstetric critical care.	1	Lecture	CE	Knows-how	L_VC,L&PPT
CO1,CO3,CO4	Demonstrate initial assessment and resuscitation of critically ill gynecology patients, perform key ICU procedures, interpret hemodynamic monitoring, apply crisis resource management in emergencies, and discuss ethical dilemmas in gynecologic critical care.	4	Practical Training 26.7	CE	Knows-how	D-BED,PBL
CO4,CO5,CO7	Demonstrate stepwise management of obstetric hemorrhage using pharmacological, mechanical, and surgical techniques, perform critical ICU procedures, interpret hemodynamic monitoring, apply crisis resource management in obstetric emergencies, and discuss ethical dilemmas in critical obstetric care.	2	Practical Training 26.8	PSY-GUD	Shows-how	PSM,CBL
CO1,CO3,CO4,CO7	Assess critically ill gynecologic patients using the ABCDE approach, demonstrate proficiency in key ICU procedures, collaborate effectively in multidisciplinary teams, analyze and respond to dynamic patient changes using real-time monitoring, and reflect on challenges and ethical considerations in critical care.	4	Experiential-Learning 26.7	PSY-MEC	Shows-how	RLE,RP,SIM
CO1,CO3,CO4	Assess critically ill obstetric patients using the ABCDE approach, demonstrate time-sensitive interventions, collaborate effectively in multidisciplinary teams, interpret real-	4	Experiential-Learning 26.	PSY-MEC	Shows-how	BL,BS,RP

time monitoring to guide care, and reflect on challenges in obstetric ICU management.

8

Practical Training Activity

Practical Training 26.1 : Shock Diagnosis

Practical Activities (2-Hour Teacher Demonstration)

1. Introduction & Case-Based Overview (20 min)

Teacher Demonstration:

Present 3 clinical cases (e.g., septic shock, hemorrhagic shock, cardiogenic shock).

Highlight key differences in presentation (e.g., warm vs. cold shock, JVD, skin signs).

Learner Engagement:

"Which type of shock is this?" (Show images/vitals and ask for rapid responses).

2. Hands-On Diagnostic Stations (60 min, Rotating Small Groups)

Station 1: Physical Exam & Vital Signs

Teacher Demonstrates:

How to assess capillary refill, skin mottling, pulse quality.

Differences in BP, HR, and respiratory patterns across shock types.

Learner Practice:

Palpate pulses, check CRT on peers, and match findings to shock type.

Station 2: Bedside Tests (Lactate, ABG, US)

Teacher Demonstrates:

Lactate meter use (normal vs. >4 mmol/L).

ABG interpretation (e.g., metabolic acidosis in septic shock).

Focused cardiac ultrasound (FOCUS) to check for IVC collapsibility/EF.

Learner Practice:

Analyze mock ABG results and suggest shock type.

Station 3: Dynamic Monitoring (Case-Based)

Teacher Demonstrates:

Trending vitals (e.g., MAP <65 , rising HR) to predict decompensation.

Fluid responsiveness tests (e.g., passive leg raise simulation).

Learner Practice:

Predict next steps (e.g., fluids vs. pressors) based on trends.

3. Simulated Shock Scenario & Debrief (30 min)

Scenario: "65-year-old with undifferentiated hypotension" (e.g., could be sepsis or MI).

Teacher Demonstrates:

Step-by-step diagnostic approach (history ? exam ? tests ? diagnosis).

Pitfalls (e.g., missing tamponade in obstructive shock).

Debrief: Compare learner vs. teacher thought processes.

4. Takeaway Skills & Q&A (10 min)

Flash Quiz: 3 rapid-fire questions (e.g., "Which shock type has bounding pulses?").

One-Minute Reflection: "What's one diagnostic pearl you'll use tomorrow?"

Resources Needed:

BP cuffs, pulse oximeters, mock ABG results, US simulator (if available).

Low-resource option: Use paper charts with vital sign trends.

Group Size: 4–6 learners per station for hands-on practice.

Practical Training 26.2 : Safe Blood Transfusion Techniques

Teacher-Led Demonstration Activities (2-Hour Session)

1. Interactive Lecture & Video Demonstration (20 min)

Activity:

Overview of WHO/clinical guidelines for transfusion safety.

Short video (5-7 min) showing the transfusion process (from lab to bedside).

Discussion: "What are the three critical checks before transfusion?"

2. Live Demonstration: Pre-Transfusion Steps (30 min)

Teacher-Led Demo:

Patient Preparation:

Verify consent, ID wristband, and prescription.

Explain vital signs baseline recording (BP, pulse, temp).

Blood Bag Inspection:

Check label (patient ID, blood type, expiry), seals, and appearance (no clots/discoloration).

Bedside Compatibility Test:

Demonstrate final cross-match (e.g., reconfirming blood group at bedside).

3. Hands-On Practice: Simulated Transfusion Setup (30 min)

Station Rotation (Small Groups):

Station 1: Practice IV line setup (Y-set, filter use).

Station 2: Perform mock vital signs monitoring (pretend transfusion).

Station 3: Identify errors in a "faulty blood bag" (e.g., mismatched label).

4. Transfusion Reaction Management (30 min)

Case-Based Role Play:

Scenario 1: Patient develops urticaria (allergic reaction).

Scenario 2: Patient spikes a fever (febrile non-hemolytic reaction).

Teacher Guidance:

"What is your first action?" (Stop transfusion, maintain IV access).

"Which tests/labs would you order?" (Repeat cross-match, DAT, Hb urine).

5. Debrief & Q&A (10 min)

Recap key safety points using a mnemonic (e.g., "STOP": Symptoms, Turn off, Observe, Provide support).

Distribute quick-reference checklist for transfusion reactions.

Materials Needed:

Mock blood bags (labeled correctly/incorrectly).

IV transfusion sets (for demo).

Vital signs monitoring tools (BP cuff, thermometer).

Case cards for reaction scenarios.

Practical Training 26.3 : Shock Management

Teacher Demonstration with Integrated Student Simulation - 2 hours

Part 1: The ABCs of Shock - A Systematic Approach (50 Minutes)

Theme: "Fixing the Foundation: Rapid, Sequential Stabilization"

Teacher Demonstration Activities:

Demonstration 1: Scene Setter & Primary Survey (5 mins)

Setup: A high-fidelity manikin connected to a monitor simulating a tachycardic, hypotensive shock state (e.g., BP 70/40, HR 130, SpO2 88%).

Narrative: The teacher sets the scene: "This is a 40-year-old male with blunt abdominal trauma. He is lethargic, pale, and diaphoretic. We are in the resuscitation bay. Our first 5 minutes are critical."

Action: The teacher performs a rapid primary survey, verbalizing each step out loud:

A - Airway: "I'm assessing his airway. He has a gag reflex, but his Glasgow Coma Scale is dropping. We must protect his airway now to prevent aspiration."

B - Breathing: "I'm applying a non-rebreather mask at 15L/min. His SpO2 is not improving. He has diminished breath sounds on the left. I need to manage both oxygenation and potential tension pneumothorax."

C - Circulation: "I'm palpating a weak, thready radial pulse. I need large-bore IV access NOW and will initiate a balanced crystalloid bolus. I'm also looking for the source of bleeding."

Demonstration 2: Advanced Airway Management (15 mins)

Focus: Transition from basic to advanced airway.

Action: The teacher demonstrates Rapid Sequence Intubation (RSI) on the manikin.

Pre-oxygenation: "I'm using a bag-valve-mask with 100% O₂ for 3 minutes to denitrogenate the lungs."

Preparation: Shows the RSI drug kit (sedative + paralytic), correctly sized endotracheal tube, laryngoscope, stylet, and suction. "All equipment is checked and ready."

Procedure: Demonstrates proper laryngoscopy technique, visualizing the vocal cords and passing the tube. Confirms placement with end-tidal CO₂ detector. "Waveform capnography is the gold standard for confirmation. I'm securing the tube at [number] cm at the lips."

Demonstration 3: Managing Breathing Complications (15 mins)

Focus: Dealing with immediate life-threatening breathing problems in shock.

Scenario A: Tension Pneumothorax:

The instructor alters the manikin's status: "Now the patient has become acutely worse. BP 50/30, tracheal deviation, absent breath sounds on the left. This is a tension pneumothorax."

Action: Demonstrates needle decompression in the 2nd intercostal space, mid-clavicular line. Explains the "hiss of air" and immediate follow-up with a chest tube.

Scenario B: Inadequate Ventilation Post-Intubation:

"The tube is in, but the patient is still hypoxic and difficult to bag. What's wrong?"

Action: Demonstrates troubleshooting: checking tube depth, listening for breath sounds, using suction to clear the tube, and considering a mainstem intubation.

Demonstration 4: Hemodynamic Rescue (15 mins)

Focus: Aggressive circulation management.

Action:

Access: Demonstrates the placement of a large-bore (7-Fr) introducer sheath in the femoral vein using a Seldinger technique on a task trainer. "This is for rapid volume resuscitation and potential vasopressor infusion."

Resuscitation: "I'm initiating a 1-liter bolus of Lactated Ringer's wide open. I'm also sending stat labs: CBC, lactate, type and cross."

Monitoring: Connects the arterial line (to be placed in Part 2) to the transducer and zeroes it, showing the real-time blood pressure waveform. "This is essential for beat-to-beat monitoring during resuscitation."

Part 2: Bedside Procedures - The Tools for Precision Management (70 Minutes)

Theme: "From Macroscopic to Microscopic: Invasive Monitoring and Access"

Teacher Demonstration Activities:

Demonstration 5: Arterial Line Placement (30 mins)

Focus: Safe and precise placement for continuous BP monitoring and blood gas sampling.

Setup: Radial artery puncture task trainer.

Action: The teacher demonstrates the entire procedure with detailed commentary:

Pre-procedure: "I'm performing an Allen's test to ensure collateral ulnar circulation." Explains the equipment: 20-gauge catheter, guidewire, pressure tubing, transducer.

Technique: Demonstrates patient positioning, skin prep, and local anesthesia. Shows two techniques:

Seldinger (Guidewire) Technique: Palpating the artery, inserting the needle at a 30-45° angle, observing flashback, threading the guidewire, and then advancing the catheter over the wire.

Direct Cannulation (Catheter-Over-Needle): The standard approach.

Securing & Zeroing: Shows how to securely suture the line in place, dress it, and then zero the transducer to the level of the phlebostatic axis. "An inaccurate zero gives us inaccurate data, which is dangerous."

Demonstration 6: Central Venous Catheter Placement (30 mins)

Focus: Obtaining secure central access for vasopressors, monitoring CVP, and inotropes.

Setup: Central line placement task trainer (e.g., for Internal Jugular or Femoral vein).

Action: The teacher demonstrates a full sterile Seldinger technique:

Universal Precautions: Dons full sterile gown, gloves, mask, and cap. Performs a meticulous "sterile prep and drape" of the site.

Ultrasound-Guided Technique: Emphasizes this as the standard of care. Uses an ultrasound probe (on the task trainer) to:

Identify the target vein and adjacent artery.

Demonstrate vessel compressibility to distinguish vein from artery.

Perform real-time ultrasound-guided needle insertion, watching the needle tip enter the vessel lumen.

Wire Handling: Demonstrates safe guidewire handling ("never let go of the wire"), ensuring it passes smoothly.

Dilation & Line Placement: Shows how to dilate the tract and then thread the multi-lumen central line.

Confirmation & Completion: Explains that a post-procedure chest X-ray is mandatory to confirm placement and rule out pneumothorax. Secures and dresses the line.

Integration & Synthesis (10 mins)

The teacher returns to the original "shock" manikin, which now has a secured endotracheal tube, an arterial line, and a central line in place.

Narrative: "Now our patient is fully monitored. We have a definitive airway, we are monitoring blood pressure continuously via the a-line, and we have secure access for vasopressors through the central line. Our resuscitation can now be targeted and precise."

Practical Training 26.4 : Blood components - Blood transfusion

Teacher-Led Demonstration Activities (2-Hour Session)

1. Interactive Lecture with Visual Aids (30 min)

Activity:

Use diagrams/physical models to show:

Composition of whole blood (55% plasma, 45% cellular components).

Microscopic views of RBCs, WBCs, and platelets.

Engagement:

Quick quiz (e.g., "Which component carries oxygen?") via flashcards or digital poll.

2.Live Blood Fractionation Demo (30 min)

Demonstration:

Centrifuge demonstration (if lab equipment is available):

Show how whole blood separates into layers (plasma, buffy coat, RBCs).

Alternative: Use pre-separated blood tubes or interactive animations.

Discussion:

"Why is plasma yellow?"

"What diseases affect each component?"

3.Blood Component Storage & Handling (30 min)

Hands-On Demo:

Display blood bags (PRBCs, FFP, platelets) and explain:

Storage temps (e.g., platelets at 22°C, RBCs at 4°C).

Shelf life (e.g., platelets expire in 5 days).

Show safety protocols (e.g., checking labels, warming FFP).

Student Task: Inspect mock blood bags for errors (e.g., expired units).

4.Case-Based Transfusion Scenarios (20 min)

Teacher-Led Activity:

Present cases:

Case 1: A trauma patient with acute blood loss (needs PRBCs).

Case 2: A liver failure patient with coagulopathy (needs FFP).

Guided Discussion:

"Which component would you transfuse? Why?"

"What pre-transfusion checks are needed?"

5.Q&A + Summary (10 min)

Recap with a matching game (components vs. functions).

Distribute quick-reference charts (e.g., blood component indications).

Materials Needed:

Centrifuge (or demo videos)

Blood bags/tubes (real or mock)

Microscopes/slides (if available)

Practical Training 26.5 : Fluid therapy in Obstetrics

1. Case-Based Discussion (30 min)

Present 3 obstetric scenarios:

Postpartum hemorrhage (needs rapid crystalloids + blood)

Severe preeclampsia (fluid-restricted, avoid overload)

Hyperemesis gravidarum (needs electrolyte correction)

Group Task: Identify indications for fluids in each case.

Interactive Poll (15 min)

Use Mentimeter for live voting:

"Which patient gets NS vs. LR? Why?"

"When would you withhold fluids?"

2. Fluid Show-and-Tell (30 min)

Display IV bags of:

Crystalloids (NS, LR, Plasmalyte)

Colloids (albumin, hetastarch—if available)

Blood products (PRBCs, FFP)

Demo: Mix mock solutions to show viscosity differences.

Pro-Con Debate (20 min)

Divide class into teams to argue:

"Crystalloids vs. Colloids in obstetric hemorrhage."

Teacher summarizes evidence (e.g., WOMAN trial).

3. Live Lab Interpretation (40 min)

Project abnormal OB lab results:

Hyponatremia (Na⁺ 125, seizures)

Metabolic acidosis (pH 7.2, ↑lactate)

Guided Analysis:

"What fluids would you give? What's the risk?"

Simulated Patient Exam (30 min)

Teacher acts as a dehydrated OB patient:

Show sunken eyes, tachycardia, poor skin turgor.

Students practice:

Assessing JVP, capillary refill, urine output.

4. Wrap-Up (15 min)

Mnemonics Recap:

"4 D's" for fluid orders: Drug, Dose, Duration, De-escalation.

Q&A: Address real-world challenges (e.g., rural settings).

Materials: IV bags, lab printouts, BP cuffs, case cards.

Practical Training 26.6 : Fluid and electrolyte Balance

Teacher-Led Demonstration Activities (3-Hour Session)

1. Interactive Lecture with Visual Aids (45 min)

Activity:

Use animated diagrams/projections to show:

Fluid compartments (ICF vs. ECF)

Electrolyte gradients (Na⁺/K⁺ pump)

Hormonal regulation (ADH, aldosterone)

Engagement:

Pause for quick polls (e.g., "Where is most K⁺ stored?") via Mentimeter.

2. Live Lab Value Interpretation (30 min)

Demonstration:

Project real/fictitious lab reports (hyponatremia, hyperkalemia).

Think-aloud analysis by instructor:

"This Na⁺ is 120—what symptoms would you expect?"

"How would you correct this safely?"

Student Participation: Volunteers suggest next steps.

3. IV Fluid Prep & Electrolyte Calculation Demo (45 min)

Hands-On Demo:

Show different IV fluids (NS, LR, D5W) and their uses.

Calculate maintenance fluids for a 70kg adult (4-2-1 rule).

Demonstrate electrolyte replacement (e.g., KCl in IV bags—safety precautions!).

Student Task: Small groups solve practice problems with instructor feedback.

4. Case Study Role-Play (45 min)

Teacher-Led Scenario:

Present a dehydrated marathon runner (hypovolemia + hyponatremia).

Step-by-Step Guidance:

"What history questions would you ask?"

"Which fluid would you choose? Why?"

Debrief: Compare student responses with evidence-based protocols.

5. Q&A + Summary (15 min)

Recap key takeaways using a flowchart (e.g., "Approach to Hyperkalemia").

Address lingering doubts.

Practical Training 26.7 : Intensive care in Gynaecology

Activities: (4-Hour Teacher Demonstration Session)

1. Introduction & Case-Based Discussion (30 min)

Activity: Teacher presents 2-3 real ICU cases (e.g., septic abortion, peripartum cardiomyopathy, or hemorrhagic shock).

Student Task: Identify key clinical signs, propose immediate interventions, and predict complications.

2. Hands-On Skill Stations (90 min) (Rotating small groups)

Station 1: Hemodynamic Monitoring & Ventilator Management

Teacher Demo: How to interpret invasive BP, CVP, and ventilator settings.

Student Practice: Adjust FiO₂, PEEP, and recognize ventilator alarms on a simulation mannequin.

Station 2: Critical Procedures

Teacher Demo: Central line insertion (ultrasound-guided) and arterial line setup.

Student Practice: Ultrasound-guided vessel identification on models.

Station 3: Medication & Transfusion Protocols

Teacher Demo: Vasopressor dosing, massive transfusion protocols (MTP) for hemorrhage.

Student Practice: Calculate drip rates and simulate MTP activation.

3. High-Fidelity Simulation (60 min)

Scenario: Simulated eclamptic seizure or postpartum hemorrhage requiring ICU transfer.

Roles: Students act as code team (physician, nurse, anesthetist) while teacher guides/debriefs.

Focus: Team communication, timely interventions, and error analysis.

4. Ethical Debate & ICU Decision-Making (30 min)

Case Discussion: "A pregnant woman with metastatic cancer: Should she be intubated?"

Format: Small group debates followed by teacher-led consensus discussion.

5.Wrap-Up & Q&A (30 min)

Key Takeaways Quiz (5-10 MCQ questions on session topics).

Open Discussion: Challenges in gynecologic ICU care and recent advances.

Practical Training 26.8 : Intensive care in Obstetrics

Activities: 4-hour teacher demonstration session

1.Introduction & Case-Based Overview (30 min)

Activity: Teacher presents 2 high-risk cases (e.g., severe preeclampsia with HELLP syndrome and postpartum hemorrhage with DIC).

Demonstration:

Highlight key decision points (e.g., when to escalate to ICU, transfusion triggers).

Show videos/clips of real ICU interventions (e.g., Bakri balloon placement).

Learner Task: Identify 3 critical actions for each case.

2.Teacher-Led Skill Stations (90 min, Rotating Groups)

Station 1: Hemorrhage Control

Demonstration:

Uterine massage + medications (oxytocin, carboprost, tranexamic acid).

Bakri balloon insertion (using pelvic model).

Learner Practice: Simulate "time-pressure drill" for hemorrhage protocol.

Station 2: Ventilator & Hemodynamic Management

Demonstration:

Adjust ventilator settings for obstetric ARDS (low tidal volume, high PEEP).

Titrate vasopressors (e.g., norepinephrine) using simulated BP trends.

Learner Practice: Interpret ABGs and adjust FiO₂/PEEP accordingly.

Station 3: Procedure Lab

Demonstration:

Arterial line setup + central line placement (ultrasound-guided, if available).

Perimortem cesarean timing (4-minute rule) using mannequin.

Learner Practice: Mark incision sites and discuss team roles.

3.High-Fidelity Simulation (60 min)

Scenario: "Eclamptic Seizure ? Cardiac Arrest" with fetal distress.

Teacher Demonstrates:

Seizure management (MgSO₄, airway protection).
CPR with left uterine displacement.
Decision for perimortem cesarean.
Debrief: Compare learner vs. expert actions using checklist.
4. Ethical Role-Play & Debate (30 min)
Case: "28-week pregnant patient with brain death: Continue support for fetal viability?"
Format:
Teacher moderates debate (teams argue for/against continuation).
Discuss legal frameworks (e.g., state laws on maternal-fetal rights).
5. Wrap-Up & Competency Check (30 min)
Quiz: 5 rapid-fire questions (e.g., "First-line drug for uterine atony?").
Skill Validation: Learners demonstrate one procedure (e.g., balloon tamponade setup).
Feedback: "One thing I'll apply clinically" + teacher tips.
Logistics
Ideal Ratio: 1 teacher per 6–8 learners for hands-on coaching.
Resources Needed:
Pelvic models, hemorrhage simulators, ventilator/transfusion equipment.
Crisis scenario cards (e.g., AFE, septic shock).

Experiential learning Activity

Experiential-Learning 26.1 : Shock management

Time Allocation: 3 Hours

Mode: High-Fidelity Simulation, Case-Based Learning, and Structured Debriefing.

Hour 1: The "Code Shock" Simulation - Application Under Pressure

Theme: "From Chaos to Control: The First Hour Post-Stabilization"

Experiential Activities:

High-Fidelity Simulation Scenario (50 minutes)

Setup: A high-fidelity manikin is set up in a simulated ICU bed, connected to a monitor displaying vital signs (BP, HR, RR, SpO₂). A chart with initial lab values (ABG, Lactate, H/H, Creatinine) is provided.

Scenario: The patient is a 55-year-old male who has just been initially stabilized for septic shock. The initial fluid bolus is complete, and he is on a low-dose vasopressor.

The monitor shows: BP 98/60, HR 115, SpO₂ 92% on 4L NC, Lactate 3.5 mmol/L.

Student Task (Team of 4-5): The team's goal is to take over care and execute the first hour of the post-shock monitoring protocol. They must:

Assign Roles: Team Leader, RN/Monitor, Medication Nurse, Recorder.

Initial Assessment: Perform a primary survey and identify ongoing problems (e.g., persistent hypotension, hypoxia).

Hemodynamic Stabilization:

Decide on the next step for the vasopressor (titrate up/down?).

Interpret the CVP/other hemodynamic data provided by the instructor.

Order a focused echocardiogram (simulated - instructor provides findings).

Fluid Balance:

Calculate the patient's cumulative fluid balance from the chart.

Decide on ongoing fluid strategy (e.g., conservative vs. liberal) based on hemodynamics and lung sounds (instructor can add crackles to indicate fluid overload).

Initiate strict I/O monitoring.

Prevent Complications:

Recognize the low SpO₂ and initiate appropriate respiratory support (e.g., switch to high-flow nasal cannula).

Identify the risk of acute kidney injury (elevated Creatinine) and adjust monitoring accordingly.

Rapid Debrief & Protocol Co-Creation (10 minutes)

The instructor freezes the simulation.

The team quickly huddles with the rest of the class to answer: "What are the top 3 priorities in the FIRST HOUR after shock stabilization?"

Together, they create a "Golden Hour" checklist on a whiteboard, directly derived from their simulation experience.

Hour 2: The "Vigilance & Complications" Station Rotation

Theme: "Mastering the Systems: A Deep Dive into Monitoring and Prevention"

Experiential Activities (Station Rotation - 25 minutes per station with 5-min rotation):

Students rotate in small groups through three hands-on stations.

Station 1: The Hemodynamic Puzzle

Activity: Students are given 4-5 different patient profiles on tablets or cards (e.g., Cardiogenic Shock, Hemorrhagic Shock, Neurogenic Shock). Each profile has a set of hemodynamic parameters (MAP, CVP, SVR, Cardiac Output).

Task: Using a provided "Hemodynamic Matrix," the group must:

Interpret the data to determine the shock state.

Prescribe a targeted management plan (e.g., "For this low SVR profile, you need vasopressors X; for this low CO profile, you need inotropes Y").

Defend their choices to the station facilitator (instructor or senior student).

Station 2: The Fluid Balance Challenge

Activity: A complex case is presented with a 72-hour fluid balance chart, daily weights, vital signs, and lab trends (BUN/Creatinine, Sodium).

Task: The group must:

Analyze the data to determine if the patient is fluid-overloaded, fluid-depleted, or euvoletic.

Decide on a 24-hour fluid plan (e.g., fluid restrict to 1200ml, administer 40mg IV furosemide, continue maintenance fluids).

Anticipate the electrolyte imbalances (e.g., hypokalemia) that their plan might cause and prescribe prophylactic management.

Station 3: The "Prevent the Fall" Complication Scenario

Activity: An interactive computer simulation or a detailed written scenario where a patient in post-shock state begins to deteriorate.

Task: The group must race against the clock to:

Identify the developing complication (e.g., Ventilator-Associated Pneumonia (VAP), Deep Vein Thrombosis (DVT), Delirium).

Implement the correct evidence-based bundle to prevent it (e.g., for VAP: elevate HOB, perform oral care, sedate vacation).

Explain the physiological link between the shock state and the specific complication they prevented.

Hour 3: Synthesis & Clinical Reasoning

Theme: "Weaving it All Together: From Protocol to Personalized Patient Care"

Experiential Activities:

Progressive Case Study & "Fishbowl" Discussion (40 minutes)

Activity: The entire class works on a single, complex case that unfolds in three stages.

Stage 1 (Initial Stabilization): Review the case and initial resuscitation.

Stage 2 (The First 24 Hours): The instructor provides new data: evolving vitals, I/O, labs, and new symptoms (e.g., dropping urine output, fever).

Stage 3 (Days 2-3): The patient develops a new complication (e.g., atrial fibrillation with RVR).

"Fishbowl" Format:

An inner circle of 4-5 students discusses the case at each stage, making decisions aloud.

The outer circle observes and takes notes.

After each stage, the outer circle provides feedback, asks challenging questions, and suggests alternatives. Then, roles are swapped.

Create Your Own Protocol & Teach-Back (15 minutes)

Activity: In their groups, students are tasked with creating a "Post-Shock Monitoring Mnemonic" or a one-page visual algorithm.

Examples: "A.B.C.D.E. of Post-Shock Care" (Airway/Breathing, Balance Fluids, Circulation support, Prevent Complications, Evaluate End-Organs) or an infographic-style flowchart.

Teach-Back: Each group has 2 minutes to present their mnemonic or algorithm to the class, explaining the rationale behind their design choices. This solidifies their understanding and allows them to "teach" the core concepts.

Final Metacognitive Reflection (5 minutes)

Activity: Individual, quiet reflection.

Prompt: "On a notecard, write down:

One aspect of post-shock care you feel most confident about after today.

One aspect you need to review or practice further.

How your mental model of a 'stable' post-shock patient has changed."

These notecards are collected by the instructor to guide future teaching sessions.

This 3-hour plan ensures students not only describe the protocols but also apply, analyze, and synthesize them in a dynamic, engaging, and memorable way, firmly embedding the principles of post-shock care.

Experiential-Learning 26.2 : Shock diagnosis

A. Hour 1: The "Code Shock" Simulation - Application Under Pressure

Theme: "From Chaos to Control: The First Hour Post-Stabilization"

Experiential Activities: High-Fidelity Simulation Scenario (50 minutes)

Setup: A high-fidelity manikin is set up in a simulated ICU bed, connected to a monitor displaying vital signs (BP, HR, RR, SpO₂). A chart with initial lab values (ABG, Lactate, H/H, Creatinine) is provided.

Scenario: The patient is a 55-year-old male who has just been initially stabilized for septic shock. The initial fluid bolus is complete, and he is on a low-dose vasopressor.

The monitor shows: BP 98/60, HR 115, SpO₂ 92% on 4L NC, Lactate 3.5 mmol/L.

Student Task (Team of 4-5): The team's goal is to take over care and execute the first hour of the post-shock monitoring protocol. They must:

Assign Roles: Team Leader, RN/Monitor, Medication Nurse, Recorder.

Initial Assessment: Perform a primary survey and identify ongoing problems (e.g., persistent hypotension, hypoxia).

Hemodynamic Stabilization:

Decide on the next step for the vasopressor (titrate up/down?).

Interpret the CVP/other hemodynamic data provided by the instructor.

Order a focused echocardiogram (simulated - instructor provides findings).

Fluid Balance:

Calculate the patient's cumulative fluid balance from the chart.

Decide on ongoing fluid strategy (e.g., conservative vs. liberal) based on hemodynamics and lung sounds (instructor can add crackles to indicate fluid overload).

Initiate strict I/O monitoring.

Prevent Complications:

Recognize the low SpO₂ and initiate appropriate respiratory support (e.g., switch to high-flow nasal cannula).

Identify the risk of acute kidney injury (elevated Creatinine) and adjust monitoring accordingly.

Rapid Debrief & Protocol Co-Creation (10 minutes)

The instructor freezes the simulation.

The team quickly huddles with the rest of the class to answer: "What are the top 3 priorities in the FIRST HOUR after shock stabilization?"

Together, they create a "Golden Hour" checklist on a whiteboard, directly derived from their simulation experience.

B. Hour 2: The "Vigilance & Complications" Station Rotation

Theme: "Mastering the Systems: A Deep Dive into Monitoring and Prevention"

Experiential Activities (Station Rotation - 25 minutes per station with 5-min rotation):

Students rotate in small groups through three hands-on stations.

Station 1: The Hemodynamic Puzzle

Activity: Students are given 4-5 different patient profiles on tablets or cards (e.g., Cardiogenic Shock, Hemorrhagic Shock, Neurogenic Shock). Each profile has a set of hemodynamic parameters (MAP, CVP, SVR, Cardiac Output).

Task: Using a provided "Hemodynamic Matrix," the group must:

Interpret the data to determine the shock state.

Prescribe a targeted management plan (e.g., "For this low SVR profile, you need vasopressors X; for this low CO profile, you need inotropes Y").

Defend their choices to the station facilitator (instructor or senior student).

Station 2: The Fluid Balance Challenge

Activity: A complex case is presented with a 72-hour fluid balance chart, daily weights, vital signs, and lab trends (BUN/Creatinine, Sodium).

Task: The group must:

Analyze the data to determine if the patient is fluid-overloaded, fluid-depleted, or euvolemic.

Decide on a 24-hour fluid plan (e.g., fluid restrict to 1200ml, administer 40mg IV furosemide, continue maintenance fluids).

Anticipate the electrolyte imbalances (e.g., hypokalemia) that their plan might cause and prescribe prophylactic management.

Station 3: The "Prevent the Fall" Complication Scenario

Activity: An interactive computer simulation or a detailed written scenario where a patient in post-shock state begins to deteriorate.

Task: The group must race against the clock to:

Identify the developing complication (e.g., Ventilator-Associated Pneumonia (VAP), Deep Vein Thrombosis (DVT), Delirium).

Implement the correct evidence-based bundle to prevent it (e.g., for VAP: elevate HOB, perform oral care, sedate vacation).

Explain the physiological link between the shock state and the specific complication they prevented.

C. Hour 3: Synthesis & Clinical Reasoning

Theme: "Weaving it All Together: From Protocol to Personalized Patient Care"

Experiential Activities: Progressive Case Study & "Fishbowl" Discussion (40 minutes)

Activity: The entire class works on a single, complex case that unfolds in three stages.

Stage 1 (Initial Stabilization): Review the case and initial resuscitation.

Hour 1: The "Golden Hour" - Team-Based Shock Simulation

Theme: "From Chaos to Control: The First 30 Minutes of Shock Resuscitation"

Experiential Activity: High-Fidelity Shock Scenario (55 minutes)

Setup: A high-fidelity manikin in a simulated ER/ICU room. Monitors display deteriorating vitals. An "Nurse/RT" confederate is present. Students are divided into two teams: Team Alpha (Active) and Team Beta (Observing).

Scenario: A 65-year-old female presents with altered mental status and fever. Initial VS: BP 78/40, HR 135, RR 28, SpO2 89% on room air. Lactate is 5.0 mmol/L.

Team Alpha's Mission (30 minutes):

Primary Survey & Recognize Shock: Perform a rapid ABCDE assessment and verbalize the diagnosis of septic shock.

Initial Resuscitation Orders:

Airway/Breathing: Apply oxygen, prepare for possible intubation.

Circulation: Obtain large-bore IV access and initiate a 30ml/kg crystalloid bolus. Order initial labs and cultures.

Address Cause: Identify the need for broad-spectrum antibiotics and administer them.

Re-assessment & Escalation: After the fluid bolus, the patient's BP is now 85/50. The team must now:

Decide to initiate a vasopressor (e.g., Norepinephrine). The confederate will ask for the starting dose and titration parameters.

Re-check lactate and other vital signs.

Observer Team Beta's Task (30 minutes): Use a structured checklist to record Team Alpha's performance on timing of fluids, antibiotics, and vasopressor initiation. They also note team communication and decision-making processes.

Rapid Debrief (10 minutes): The instructor leads a 10-minute "hot debrief" focusing only on the sequence of actions: "Did we follow the Surviving Sepsis Campaign hour-1 bundle? What was the trigger for starting the vasopressor?"

Transition (5 minutes): Switch roles. Team Beta becomes the active team for the next scenario.

Hour 2: The "Pit Stop" - Station-Based Skill refinement

Theme: "Mastering the Tools: A Deep Dive into Resuscitation Modalities"

Experiential Activity: Rotating Skills Stations (55 minutes - 15 mins per station + 5 min rotation)

Students rotate in small groups through three hands-on stations.

Station 1: The Fluid & Transfusion Conundrum

Activity: An interactive computer simulation or a complex case study with dynamic vital signs.

Task: The team manages a patient with hemorrhagic shock.

They must decide on the type and volume of fluid resuscitation (crystalloid vs. colloid).

At a certain trigger (e.g., Hgb < 7g/dL), they must initiate a massive transfusion protocol, selecting the correct blood products (PRBCs, FFP, Platelets in a 1:1:1 ratio).

They must also identify and "simulate" stopping the bleeding (e.g., applying a tourniquet, calling interventional radiology).

Focus: Applying damage-control resuscitation principles.

Station 2: The Vasopressor Vault

Activity: A "gameified" station with drug vials, syringes, and infusion pumps.

Task: The team is presented with three different shock profiles:

Septic Shock (Low SVR)

Cardiogenic Shock (Low CO)

Neurogenic Shock (Bradycardic, Low SVR)

Challenge: For each profile, they must:

Select the correct first-line vasopressor/inotrope (e.g., Norepinephrine, Vasopressin, Dobutamine, Phenylephrine).

Program the infusion pump with the correct starting dose (e.g., mcg/kg/min).

Explain the pharmacological rationale for their choice to the station facilitator.

Station 3: The Diagnostic Dilemma

Activity: A "Mystery Shock" room with diagnostic tools: EKG, ultrasound machine, CXR images, lab results.

Task: The team must diagnose the underlying cause of shock in a rapidly deteriorating patient.

Clues: The ultrasound shows a large pericardial effangement (suggesting obstructive shock from tamponade). The EKG shows a massive PE (suggesting obstructive shock from PE). The history suggests an overdose (suggesting distributive shock).

Focus: Moving beyond "just stabilize" to "what are we stabilizing?" and initiating cause-specific therapy (e.g., pericardiocentesis, thrombolytics, antidotes).

Hour 3: The "Captain's Chair" - Synthesis & Clinical Command

Theme: "Weaving it All Together: Leading Resuscitation from Start to Finish"

Experiential Activities:

Progressive Case Study: "The Unfolding Storm" (30 minutes)

Activity: A single, complex case is presented to the entire class, but it evolves based on their decisions.

Narrative: A patient in septic shock from pneumonia.

Stage 1: They manage initial resuscitation (fluids, abx, levophed).

Stage 2: The patient develops refractory hypotension and worsening hypoxia. The instructor provides new data: a falling CVP, crackles on lung exam. "The patient is now in fluid overload and likely has developed ARDS."

Challenge: The teams must now de-escalate fluid therapy, consider diuretics, and adjust ventilator settings, all while maintaining perfusion. They are forced to manage competing priorities.

Stage 3: The patient has a drop in Hgb. "Now you have septic shock complicated by a potential GI bleed." They must integrate transfusion strategy without worsening fluid overload.

Peer-Led "After-Action Review" (20 minutes)

Activity: Instead of the instructor leading, the student teams who were observers in Hour 1 now facilitate the final debrief.

Structure: Using the DEBRIEF model:

Define the scenario goals.

Explore the team's performance.

Bridge the gap between performance and ideal.

Review the key learning points.

Inform about future resources.

Engage in final reflection.

Focus: The discussion is steered toward the integration of all principles: "How did your fluid strategy affect your need for vasopressors? How did identifying the cause change your entire management plan?"

Metacognitive "Clinical Pearl" Harvest (10 minutes)

Activity: Individual and group reflection.

Task: Each student writes down on a sticky note:

One clinical pearl they will take to their next shift (e.g., "The trigger for vasopressors isn't a specific BP number, but the failure of initial fluid resuscitation.").

One area for self-improvement (e.g., "I need to memorize the starting doses of common vasopressors.").

Experiential-Learning 26.3 : Blood transfusion

1. Activity-1:

Interactive Lecture (15 mins): Brief overview of blood groups, cross-matching, and transfusion guidelines.

Case-Based Discussion (15 mins): Small groups analyze a case (e.g., a trauma patient needing transfusion) and discuss key considerations.

2. Activity-2: Practice Safe Blood Administration (1 hour)

Learners will demonstrate the correct steps in blood product preparation, administration, and monitoring for adverse reactions.

3. Activity-3:

Simulation Lab (40 mins):

Hands-on practice with blood bags, IV setup, and transfusion monitoring.

Role-play scenarios (nurse, doctor, lab technician) to simulate real-world workflow.

Debrief & Discussion (20 mins): Reflect on challenges, safety checks, and error prevention.

4. Recognize and Manage Transfusion Reactions (1 hour)

Learners will identify signs of transfusion reactions and apply appropriate interventions.

Experiential-Learning 26.4 : Blood transfusion in Obstetrics and Gynecology

Activity: Student demonstration 3 hours

A. Hour 1: The Crisis Scenarios - Massive Hemorrhage & Coagulopathy

Theme: "The Clock is Ticking: Managing Life-Threatening Hemorrhage"

Experiential Activities:

Simulation 1: The Postpartum Hemorrhage (PPH) Triage (40 minutes)

Setup: A high-fidelity manikin simulating a postpartum patient. Monitor shows tachycardia and hypotension. A "blood bank" station is set up with cards representing different blood components (PRBCs, FFP, Platelets, Cryo).

Scenario: A patient with placental abruption has delivered but has ongoing, major hemorrhage. Initial labs show: Hb 7.0 g/dL, INR 1.8, Platelets 95,000/ μ L, Fibrinogen 150 mg/dL.

Team Task (Small Groups):

Stage 1 (Rescue): The team must activate the Massive Transfusion Protocol (MTP). They must physically go to the "blood bank" and request the initial MTP pack, justifying the use of a 1:1:1 ratio (PRBC:FFP:Platelets).

Stage 2 (Targeted Therapy): After the first round, new labs show: Fibrinogen 80 mg/dL. The team must now decide to add Cryoprecipitate to their transfusion strategy. They must explain the rationale: "We are replacing fibrinogen specifically, as it's the key coagulation factor consumed in obstetrical hemorrhage."

Debrief Focus: Why we use balanced transfusion in MTP vs. component-specific therapy later.

Interactive Lecture & Quick Poll: The Coagulation Cascade in Pregnancy (20 minutes)

Activity: A brief, highly visual presentation on pregnancy-specific changes in coagulation (increased fibrinogen, hypercoagulable state) and how they are disrupted in DIC.

Experiential Twist: Using a polling app (like Mentimeter or Kahoot!), the instructor presents real-time clinical vignettes:

"Patient with severe preeclampsia, HELLP syndrome. Platelets 40,000, normal INR. What component is most critical?" (Answer: Platelets for procedure safety and prevention of spontaneous bleeding).

"Patient with Amniotic Fluid Embolism, developing DIC. Bleeding from IV sites, INR 2.5, low fibrinogen. What two components would you prioritize after PRBCs?" (Answer: FFP and Cryoprecipitate).

B.Hour 2: The Elective & Chronic Scenarios - Anemia & Scheduled Surgery

Theme: "Precision Transfusion: Optimizing Patients Electively"

Experiential Activities (Station Rotation - 50 minutes, 20 mins per station with 5-min rotation):

Students rotate in small groups through two focused stations and one synthesis activity.

Station 1: The Antepartum Anemia Clinic

Activity: Role-playing as a consultant in a prenatal clinic.

Scenario: A patient at 32 weeks with fatigue. Hb is 7.5 g/dL despite oral iron. She is a Jehovah's Witness and has a documented history of severe postpartum hemorrhage with her last delivery.

Task: The team must:

Discuss the risks and benefits of IRON INFUSION vs. a potential PRBC transfusion.

Navigate the ethical and cultural conversation about blood transfusion, exploring alternatives like IV iron and Erythropoietin.

Create a multidisciplinary plan involving the hematologist, obstetrician, and patient advocate.

Station 2: The Gynecologic Oncology Tumor Board

Activity: A simulated pre-op planning meeting for a complex surgery.

Scenario: A patient with advanced cervical cancer for a radical hysterectomy. Pre-op labs: Hb 10 g/dL, Platelets 110,000/ μ L.

Task: The team must:

Decide if pre-operative transfusion is indicated (likely not for Hb 10, but must justify why).

Plan for intra-operative and post-operative needs. "Do we type and screen, or type and crossmatch 2 units? Why?"

Manage a Complication: A message arrives: "Intra-op, the surgeon reports diffuse oozing." The team must interpret a new set of labs (elevated INR, low platelets) and order the correct blood components from the "blood bank."

Synthesis Activity: The Transfusion Trigger Debate

Activity: The entire class participates in a facilitated debate.

Motion: "This house believes that a hemoglobin threshold of 7 g/dL is an appropriate transfusion trigger for a stable, asymptomatic pregnant patient."

Groups: Students are divided into "For" and "Against" teams. They must use evidence and clinical reasoning from the stations to argue their point, considering factors like fetal well-being, maternal symptoms, and volume expansion.

C. Hour 3: Complex Cases & Integrated Management

Theme: "Weaving the Threads: Managing Complex Cases from Start to Finish"

Experiential Activities:

Progressive Case Study: "The High-Risk Journey" (40 minutes)

Activity: A single patient's story unfolds through her pregnancy and delivery.

Stage 1 (Antepartum): Patient with Placenta Previa. The team must create a delivery plan: "Should we pre-emptively crossmatch 4 units of PRBCs? Why or why not?"

Stage 2 (Intrapartum): The patient undergoes a C-section and develops major PPH. The team manages the MTP, as practiced in Hour 1.

Stage 3 (Postpartum): The patient is now stable but anemic (Hb 6.8 g/dL), asymptomatic, and wants to breastfeed. The team must decide on post-partum transfusion strategy and counsel the patient on the risks (e.g., fluid overload) and benefits in the context of caring for a newborn.

"Blood Component Kardex" Creation (20 minutes)

Activity: In small groups, students create a one-page, visually engaging "Clinical Quick Reference Guide" or a table summarizing the key blood components.

Structure: The guide must include for each component (PRBCs, FFP, Platelets, Cryoprecipitate):

Indication: The primary OB/GYN use (e.g., FFP for coagulopathy with elevated INR).

Dose & Effect: (e.g., 1 unit of PRBCs should raise Hb by ~1 g/dL).

Key OB/GYN Consideration: (e.g., "Use Rh-Negative components for Rh-Negative women of childbearing age to prevent alloimmunization.").

Peer Teaching: Groups quickly present their most important or surprising "Consideration" to the class.

Final Reflection: "My Clinical Take-Home" (10 minutes)

Activity: Individual written reflection.

Experiential-Learning 26.5 : Fluid therapy

Activity: Student demonstrations 3 hours

A. Hour 1: The Foundation & The PPH Scenario

Activity 1: The "Fluid Prescription" Kick-Off (15 mins)

Student Task: A student team is given a baseline scenario: "A 70kg pregnant patient at term." They must quickly calculate her daily maintenance fluid requirement and

present the formula (e.g., 4-2-1 rule) to the class on a whiteboard.

Demonstration Focus: Rapid, accurate baseline calculation.

Activity 2: Postpartum Hemorrhage Simulation & Debrief (45 mins)

Setup: A manikin with simulated vital signs (Tachycardia, falling BP). A "Fluid Cart" with different IV fluids (LR, Normal Saline, Colloids) is available.

Student Demonstration:

Team A manages the simulated PPH patient.

They must calculate the initial 30ml/kg crystalloid bolus for the 70kg patient (? 2.1L) and select the appropriate fluid (e.g., Lactated Ringer's), justifying their choice over Normal Saline.

They "administer" the fluid and interpret the hemodynamic response.

Peer-Led Debrief: The observing students lead a 10-minute discussion on Team A's choices, focusing on the speed of resuscitation and fluid selection.

B. Hour 2: The Sepsis & Electrolyte Challenge

Activity 3: Sepsis Resuscitation Relay (30 mins)

Student Demonstration:

Team B takes over a new simulation: a septic obstetric patient.

They initiate the 30ml/kg bolus.

The Twist: After the bolus, the instructor provides new data: BP remains low, and a VBG shows a pH of 7.25 and lactate of 5.5.

Team B must demonstrate the decision to start vasopressors and decide on a continued fluid strategy (e.g., additional 500ml boluses vs. holding for potential overload).

Focus: Demonstrating the transition from initial fluid resuscitation to ongoing management.

Activity 4: Electrolyte Correction Station (30 mins)

Setup: Two tables: "Hyponatremia Station" and "Hyperkalemia Station." Each has lab slips and IV medication orders.

Student Demonstration:

Small groups rotate between stations.

At each station, they are given a specific electrolyte imbalance (e.g., K⁺ 6.0 in a patient with preeclampsia; Na⁺ 128 in a patient with excessive water intake).

They must demonstrate the corrective action: selecting the correct IV fluid/medication (e.g., D5W vs. 3% Saline; Insulin/Glucose vs. Calcium Gluconate) and explaining the rationale to the group.

Focus: Applying electrolyte correction protocols to OB-specific contexts.

C. Hour 3: Integration & Clinical Command

Activity 5: The Progressive Case - "The Unfolding Storm" (40 mins)

Student Demonstration:

A single complex case is given to Team C. It starts as PPH, but evolves into sepsis.

The team must manage the entire fluid timeline: initial boluses, ongoing maintenance, and adjusting for developing complications.

The Challenge: New data shows falling sodium and rising potassium. Team C must integrate fluid management with electrolyte correction, making real-time decisions and

orders.

Focus: Synthesizing all components in a dynamic, high-stakes scenario.

Activity 6: Peer-Led "Clinical Pearl" Synthesis (20 mins)

Student Task: The class forms small groups to create a one-page "Fluid & Electrolyte Cheat Sheet" for the labor ward.

They must include:

Quick reference formulas for bolus and maintenance.

"Go-To" fluids for PPH and Sepsis.

First-line actions for common OB electrolyte imbalances.

Demonstration: Each group presents one section of their cheat sheet, effectively teaching their peers the most critical takeaways.

Experiential-Learning 26.6 : Fluid therapy in Obstetrics

Activities: 3 Hours

1. Case-Based Small Group Discussion (45 min)

Activity:

Groups receive 3 obstetric case scenarios (e.g., postpartum hemorrhage, severe preeclampsia, septic abortion).

Tasks:

Identify fluid therapy goals (resuscitation vs. maintenance).

Choose appropriate fluids (NS, LR, blood) and justify.

Discuss pitfalls (e.g., fluid overload in preeclampsia).

Debrief: Teacher highlights key takeaways.

2. Hands-On Fluid Assessment Stations (60 min)

Station Rotation (15 min/station):

Clinical Signs of Hypovolemia

Practice assessing skin turgor, capillary refill, JVP, and urine output on manikins/simulated patients.

IV Fluid Preparation

Demonstrate mixing and administering NS, LR, and colloids (if available).

Lab Interpretation

Analyze ABGs, electrolytes, and Hb trends to guide therapy.

Transfusion Basics

Simulate blood product selection (e.g., PRBCs vs. FFP) for hemorrhage.

3. Simulation Drill: Obstetric Emergency (45 min)

Scenario:

A postpartum hemorrhage patient with falling BP and Hb.

Teams must:

Perform rapid assessment (ABCs, vitals).

Order appropriate fluids/blood.

Recognize transfusion reactions (e.g., fever, tachycardia).

Debrief: Video playback (if available) to critique performance.

4. Complication Management Role-Play (30 min)

Cases:

Pulmonary Edema in a preeclamptic patient after excessive fluids.

Hyponatremia in hyperemesis gravidarum.

Tasks:

Identify clinical signs (e.g., crackles, confusion).

Plan interventions (e.g., diuretics, fluid restriction).

5. Flashcard Challenge & Takeaways (15 min)

Quiz: Match obstetric conditions to ideal fluids (e.g., "Severe sepsis ? LR + albumin?").

Key Mnemonics:

"DRIP" for fluid overload: Diuretics, Restrict fluids, Investigate cause, Position upright.

Materials Needed:

IV fluids, blood bags (real/mock), manikins.

Lab result printouts, case cards.

BP cuffs, pulse oximeters, urine output charts.

Experiential-Learning 26.7 : Intensive care in Gynaecology

Activities: 4 hours

1. Interactive Case-Based Role Play (60 min)

Activity: Small groups are given realistic case cards (e.g., septic abortion, eclampsia, or massive hemorrhage).

Task:

Group 1: Perform initial assessment and prioritize interventions.

Group 2: Role-play as ICU nurses, anesthetists, or family members.

Debrief: Teacher facilitates discussion on decision-making and team dynamics.

2. Hands-On Skill Stations (90 min) (Rotating small groups)

Station 1: Airway & Breathing Management

Activity:

Bag-mask ventilation practice on mannequins.

Demonstration of intubation and ventilator settings adjustment.

Student Task: Simulate managing a patient with acute respiratory failure.

Station 2: Hemodynamic Stabilization

Activity:

IV fluid resuscitation challenge (crystalloids vs. colloids).

Vasopressor preparation and titration exercise.

Student Task: Respond to a simulated hypotensive patient.

Station 3: Monitoring & Interpretation

Activity:

Real-time analysis of ECG, BP, and SpO₂ trends.

ABG interpretation and corrective actions.

Student Task: Identify abnormalities and suggest interventions.

3.High-Fidelity Simulation (60 min)

Scenario: "Crash Call" for a postpartum hemorrhage with DIC.

Roles: Students assume roles (team leader, nurse, scribe, family liaison).

Phases:

0-10 min: Rapid assessment and stabilization.

10-20 min: Escalation (blood products, ICU transfer).

20-30 min: Debrief (what went well, gaps, and improvements).

4.Reflection & Ethical Discussion (30 min)

Guided Reflection:

"What was the most challenging part of the simulation?"

"How did teamwork impact the outcome?"

Ethical Scenario:

Case: A Jehovah's Witness with life-threatening hemorrhage.

Debate: Autonomy vs. beneficence in emergency care.

5.Takeaway Skills & Feedback (30 min)

Peer Teaching: Each group summarizes one key skill learned.

Feedback Circle: Students share one strength and one area for improvement.

Quick Quiz: 5 rapid-fire questions on session highlights.

Logistics Notes:

Ideal Group Size: 4-6 students per station for engagement.

Equipment Needed: Mannequins, simulation monitors, IV setup, crisis checklists.

Alternative if No Mannequins: Use peer role-play with vital sign cards.

Experiential-Learning 26.8 : Intensive care in Obstetrics

Activities: Hands-On Activities- 4 hours

1. Case-Based Role-Play & Team Assignments (45 min)

Activity:

Small groups receive obstetric crisis cards (e.g., "AFE with cardiac arrest," "Septic shock post-C-section").

Assign roles: Team leader, nurse, anesthetist, family communicator.

Task:

Perform 5-minute huddle to plan actions.

Simulate initial response (e.g., call for help, ABCDE assessment).

Debrief: Compare strategies across groups.

2. Skill Drills & Simulation Stations (90 min, Rotating)

Station 1: Hemorrhage Control

Task:

Manage simulated PPH (uterine atony):

Administer TXA/oxytocin.

Perform bimanual compression (on pelvic model).

Prepare blood products (mock transfusion).

Time Pressure: "Lose 500 mL blood every 2 minutes until controlled."

Station 2: Eclampsia & Airway Crisis

Task:

Stabilize a seizing patient (mannequin):

Give MgSO₄ (mock injection).

Secure airway (bag-mask ? intubation demo).

Left lateral tilt during CPR.

Station 3: Hemodynamic Monitoring

Task:

Interpret dynamic data (e.g., falling BP + rising lactate).

Choose between fluids, vasopressors, or blood.

3. High-Fidelity Simulation: "Double Crash" Scenario (60 min)

Scenario: "Postpartum hemorrhage ? Cardiac arrest" with concurrent fetal distress.

Phases:

0–5 min: Recognize hemorrhage ? activate massive transfusion protocol.

5–10 min: Patient arrests ? initiate CPR + perimortem cesarean decision.

10–15 min: Debrief with video playback (focus on teamwork gaps).

4. Ethical Dilemma & Reflection (30 min)

Case: "Maternal brain death at 24 weeks: Continue life support for fetal viability?"

Activity:

Jigsaw debate: Groups represent ethics committee, family, ICU team.

Vote on action ? justify using principles of autonomy/beneficence.

5. Takeaways & Peer Teaching (15 min)

Activity:

Each learner shares one skill they improved (e.g., "I now prioritize TXA before fluids in PPH").

Teacher highlights key protocols (e.g., CMQCC hemorrhage bundle).

Logistics

Group Size: 4–6 learners per station for engagement.

Resources:

Low-fidelity option: Use wrapped towels as "uterus" for compression drills.

No mannequin? Peer act as patient with symptom cards.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Integrative Reflection / Essay (50 marks)

Critically evaluate the management of critical conditions in obstetrics and gynecology, focusing on shock, fluid and electrolyte therapy, blood transfusions, and intensive care interventions. Discuss integrative approaches and strategies to ensure patient safety and improved outcomes.

Marking Scheme:

- Overview of OB/GYN critical conditions – 10

- Shock pathophysiology and management – 10
- Fluid, electrolyte, and transfusion management – 10
- Intensive care monitoring and interventions – 10
- Integrative approaches & patient safety – 10

Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 4

Module 27 : Medico-legal Aspects related to Stree Roga (Gynaecology) -Prasuti Tantra (Obstetrics)

Module Learning Objectives

(At the end of the module, the students should be able to)

- Apply knowledge of relevant Acts and Laws in gynecology and obstetrics practice.
- Maintain accurate and comprehensive patient records.
- Manage patient death situations legally and ethically.
- Integrate medico-legal principles into clinical decision-making.
- Communicate effectively with patients, families and legal authorities.
- Understand the principles, applications, and benefits of robotic-assisted surgeries in Gynecology and Obstetrics.

M 27 Unit 1 Knowledge and Application of Acts and Laws
 MTP Act indications and gestational limits.
 PCPNDT Act regulations and prohibited acts.
 Sterilization laws and informed consent.
 Medical ethics and professional conduct.
 Patient rights and medical negligence.

References: 22,23,24,25,26,27,31,32,33,35,36,37

3A	3B	3C	3D	3E	3F	3G
CO4,CO5,CO7	Analyze the provisions of the Medical Termination of Pregnancy (MTP) Act.	1	Lecture	CAN	Knows-how	L&PPT , L&GD,L _VC
CO4,CO5,CO7	Evaluate the legal and ethical aspects of obstetric practice by analyzing the MTP and PCPNDT Acts, assessing sterilization regulations, designing compliant medical records, formulating patient-centered counseling and consent protocols, and integrating relevant legal frameworks with Ayurveda guidelines.	2	Practical Training 27.1	CE	Knows-how	CBL,SIM
CO4,CO5,CO7	Apply legal and ethical principles in obstetric and gynecologic practice by integrating the MTP Act, sterilization regulations, and PCPNDT Act, demonstrating informed consent and patient counseling skills, and collaborating with healthcare teams to ensure compliance.	3	Experiential-Learning 27.1	AFT-RES	Does	W,SIM,C BL
CO1,CO2,CO3 ,CO4	Evaluate the legal and ethical frameworks governing female sterilization by explaining relevant national and international laws, analyzing human rights considerations, comparing regulations across jurisdictions, and assessing the roles of healthcare providers and policymakers in promoting lawful, informed, and ethical practices.	1	Lecture	CE	Knows-how	L&PPT , L_VC,CB L
CO6,CO8	Describe the provisions and penalties of the PCPNDT Act, identify stakeholder roles, analyze violation case studies, apply compliance principles in simulated scenarios, and evaluate the law's effectiveness with recommendations for improvement.	2	Practical Training 27.2	PSY-ADT	Shows-how	CBL,SY
CO1,CO2,CO3 ,CO7	Describe the legal framework of surrogacy in India, including the Surrogacy (Regulation) Act, 2021; explain eligibility criteria for intended parents and surrogate mothers; analyze ethical and legal issues in altruistic versus commercial surrogacy; evaluate rights and protections for surrogate mothers; and compare India's surrogacy laws with international regulations.	1	Lecture	CC	Knows-how	L_VC,L& GD,L&P PT
CO6,CO8	Describe the legal framework of surrogacy in India, compare altruistic and commercial surrogacy, evaluate the rights and protections of surrogate mothers and intended parents,	2	Practical Training 27.3	CE	Knows-how	RP,IBL,C BL,SIM

	apply legal knowledge to case studies, and debate the effectiveness of current laws and potential reforms.					
CO6,CO8	Discuss the objectives, provisions, and regulatory framework of the PCPNDT Act, analyze its ethical, social, and legal implications, evaluate the responsibilities of medical professionals and diagnostic centers, discuss implementation challenges, and compare India's approach with international laws on sex-selective practices	1	Lecture	CE	Knows-how	L_VC,TU T,L&GD, CBL,L&P PT
CO6,CO8	Discuss medical ethics and patient rights, professional conduct requirements, differentiate negligence and ethical breaches, analyze ethical dilemmas and landmark legal cases, and apply ethical reasoning to justify decisions in real-world clinical scenarios	1	Lecture	CAN	Knows-how	CBL,L_V C,L&PPT ,L&GD
CO1,CO2,CO3,CO4	Implement medical ethics principles and professional conduct in clinical scenarios, identify patient rights violations, analyze cases of potential negligence, and develop strategies to prevent ethical breaches and legal claims.	2	Practical Training 27.4	CE	Does	PL,PER,C BL,RP

M 27 Unit 2 Accurate Documentation in Patient Care Accurate Documentation

Essential components of patient records:

Importance of Accurate Documentation:

Documentation Standards, Documentation Methods, Challenges, Best Practices, Case Studies, Assessment Methods, Teaching-Learning Methods

References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO4,CO5,CO7	Analyze the impact of documentation errors on patient outcomes and legal accountability by identifying common mistakes, discussing their ethical and legal consequences and applying best practices for accurate and defensible obstetric record-keeping.	1	Lecture	CAN	Knows-how	L_VC,L& PPT ,CBL
CO1,CO2,CO3,CO4	Discuss safe and accountable gynecologic practice by explaining the impact of poor documentation on patient care and legal risk, identifying common errors, analyzing case failures, applying best documentation practices in clinical scenarios, and recognizing	1	Lecture	CAP	Knows-how	DIS,D-M, L&PPT

	ethical responsibilities in record-keeping.					
CO4,CO5,CO7	Demonstrate medicolegal safety in obstetric care by recognizing common documentation errors, analyzing case studies of legal disputes, practicing accurate and defensible note-taking, demonstrating effective communication in high-risk scenarios, and developing tools to minimize documentation errors.	2	Practical Training 27.5	PSY-GUD	Shows-how	D-M,SIM ,CBL,D-BED
CO3,CO4,CO7	Demonstrate appropriate documentation in gynecologic practice by identifying common pitfalls through chart audits, practicing accurate record-keeping in simulations, analyzing the impact of errors on clinical outcomes, developing corrective strategies, and demonstrating peer-review techniques to detect and address documentation gaps.	2	Practical Training 27.6	PSY-ADT	Shows-how	RP,SIM
CO1,CO2,CO3 ,CO4	Identify high-risk documentation pitfalls in obstetric cases through hands-on chart review. Simulate real-time documentation under pressure during obstetric emergencies. Analyze how documentation errors impact malpractice litigation using mock legal proceedings. Develop defensive documentation skills through peer-reviewed case exercises. Create actionable documentation improvement plans for their clinical practice.	3	Experiential-Learning 27.2	AFT-RES	Does	CBL,RLE ,SIM,TBL ,D-M
CO1,CO2,CO3 ,CO4	Identify documentation errors in gynecologic cases, perform accurate record-keeping under pressure, analyze the impact of poor documentation on patient care, defend documentation quality in peer-review or legal scenarios, and develop strategies to improve personal documentation practices.	3	Experiential-Learning 27.3	CS	Does	CBL,SIM ,D,D-BED,D-M

M 27 Unit 3 Systematic Documentation of Maternal foetal death Documentation and Reporting Requirements

Prompt action in maternal and fetal death.
Importance of documentation and reporting.
Conducting investigations and reviews.
Identifying causes and contributing factors.
Implementing corrective actions.
References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
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CO3,CO4,CO5	Describe robotic-assisted gynecologic surgery by explaining its principles and benefits over traditional methods, identifying robotic system components and their functions, listing common indications, outlining preoperative considerations, and describing key steps of procedures such as hysterectomy or myomectomy.	1	Lecture	CC	Knows-how	L_VC,L,L&PPT
CO3,CO4,CO5,CO7	Demonstrate proficiency in robotic-assisted gynecologic surgery by assembling and troubleshooting system components, performing docking, port placement, and basic instrument maneuvers on simulators, managing intraoperative challenges, and explaining team roles in the operative setting.	2	Practical Training 27.7	PSY-GUD	Shows-how	D-M,D,SIM
CO1,CO3,CO4	Demonstrate foundational competence in robotic-assisted gynecologic surgery by explaining its principles and advantages over traditional methods, identifying key system components and their functions, performing basic instrument control on a simulator, discussing clinical indications and limitations, and collaborating in team-based simulated tasks	3	Experiential-Learning 27.4	PSY-GUD	Shows-how	CBL,D-M
CO4,CO5,CO7	Analyze litigation-related OB/GYN documentation to identify critical failures and legal outcomes, integrate accurate and defensible documentation into practice, evaluate record completeness against standards, adapt practices for confidentiality compliance, and reflect on challenges to propose improvements.	3	Experiential-Learning 27.5	CAN	Does	D-BED,RP,PL,CBL,SIM
CO5,CO7	Analyze legal and institutional protocols for reporting maternal and fetal deaths, evaluate case studies to identify compliance gaps, and apply medico-legal guidelines in simulated death certification and disclosure scenarios.	1	Lecture	CAN	Knows-how	L&PPT ,L_VC,PER,L&GD
CO3,CO4,CO7	Analyze legal and institutional protocols for reporting maternal and fetal deaths to ensure compliance. Execute timely and accurate documentation, including death certification and incident reporting. Coordinate with multidisciplinary teams to notify stakeholders. Demonstrate dignified handling and storage of the deceased according to cultural/legal standards.	2	Practical Training 27.8	CC	Knows-how	CD
CO1,CO2,CO3	Identify documentation errors in contraceptive care, practice accurate record-keeping in	2	Practical	PSY-	Knows-	CBL,SIM

,CO4	simulated cases, analyze the impact of documentation gaps on clinical and legal outcomes, develop strategies to prevent errors, and apply peer-review techniques to enhance documentation quality		Training 27.9	GUD	how	
CO4,CO7	Analyze maternal and fetal death cases to identify legal and documentation failures, evaluate associated legal and ethical consequences, prepare proper death certification and notification procedures, and debate medico-legal implications in structured discussions.	4	Experiential-Learning 27.6	CAP	Knows-how	CBL,D-M,RP,SIM
CO1,CO4,CO5,CO7	Identify and analyse documentation errors in contraceptive consultations; develop and apply strategies and tools to prevent errors; and lead peer-review processes to enhance team documentation quality	2	Experiential-Learning 27.7	CS	Does	SIM,BS,CD,RP,D-BED

M 27 Unit 4 Robotic surgery in Gynecology and Obstetrics Introduction to Robotic surgery.

Robotic surgery in Gynecology.

Robotic surgery in Obstetrics.

References: 22,23,24,25,27,28,35

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Describe the principles and advantages of robotic obstetric surgery, indications and contraindications, procedural steps including patient positioning and trocar placement, and identify potential complications with strategies to mitigate risks.	1	Lecture	CAN	Knows-how	L_VC,L&GD,L&PPT ,L,PL
CO2,CO3,CO4,CO7	Perform essential robotic obstetric skills with proper patients and trocars position, manage intraoperative challenges, collaborate effectively within the surgical team, and apply safety protocols to minimize procedural risks.	2	Practical Training 27.10	PSY-GUD	Shows-how	PBL,RLE,SIM,W,CBL
CO1,CO3,CO4,CO5,CO7	Perform robotic systems on obstetric patients, demonstrate advanced robotic surgical skills, manage obstetric-specific complications, optimize team communication during emergencies, and analyze recorded surgeries to improve technique and prevent errors.	5	Experiential-Learning 27.8	PSY-GUD	Shows-how	RLE,CBL,PAL,SIM,D-BED

Practical Training Activity

Practical Training 27.1 : MTP Act

Teacher Demonstrates: Practical Activity (30 min):

Debate ethical dilemmas (e.g., minor's abortion request, coercive sterilization).

Compare MTP Act amendments (1971 vs. 2021) via group discussions.

PCPNDT Act in Prenatal Care

Practical Activity (30 min):

Role-play patient counseling on sex selection bans.

Audit mock ultrasound reports for legal violations.

Patient Documentation & Records

Practical Activity (25 min):

Correct flawed records (e.g., incomplete consent, incorrect MTP grounds).

Practice digital EMR entries with legal safeguards.

Informed Consent & Counseling

Practical Activity (25 min):

Simulate obtaining consent for sterilization from a hesitant patient.

Critique consent videos for gaps in communication.

Legal-Ethical Integration + Ayurveda Protocols

(e.g., Dashamoola for pain, Ashwagandha for recovery) to propose holistic post-anesthesia care plans."

Practical Activity (20 min):

Case Study: Design a recovery plan for a post-C-section patient using:

Pain relief: Dashamoola Kashayam + Yogaraja Guggulu.

Energy restoration: Ashwagandha + Chyawanprash.

Respiratory support: Trikatu tea + Nasya.

Group Presentation: Share and justify integrated care plans.

Session Flow (2 Hours)

Introduction (10 min) – Overview of legal/ethical-Ayurveda integration.

Rotating Stations (80 min) – Groups cycle through 5 activities (15-20 min each).

Debrief (30 min) – Discuss insights, Q&A, and resource sharing.

Practical Training 27.2 : PCPNDT Act

Practical Learning Activities (2-Hour Session)

1. Interactive Lecture & Discussion (30 min)

Activity: Brief presentation on the history, objectives, and key sections of the PCPNDT Act.

Engagement: Quick quiz (5 min) using Kahoot/Mentimeter to test basic understanding.

2. Case Study Analysis (30 min)

Activity: Divide students into groups and provide real-world case studies (e.g., raids on illegal clinics, court judgments).

Task: Each group identifies violations, legal consequences, and ethical issues.

Outcome: Groups present their findings (2-3 min each).

3. Role-Play Simulation (30 min)

Scenario 1: "A doctor is pressured by a family to reveal the sex of the fetus."

Scenario 2: "A clinic fails to maintain proper PCPNDT records—how should authorities respond?"

Task: Students role-play as doctors, patients, activists, or enforcement officers and debate the legal and ethical responses.

4. Debate: "Is the PCPNDT Act Effective?" (20 min)

Groups: Divide into For & Against the motion.

Arguments: Discuss implementation gaps, societal attitudes, and legal loopholes.

Conclusion: Instructor summarizes key takeaways.

5. Group Task: Draft a Compliance Checklist (10 min)

Activity: Students create a 10-point checklist for clinics to ensure PCPNDT compliance.

Example Points:

Proper registration of ultrasound machines.

Mandatory F-form submission.

Prohibition of sex disclosure.

Wrap-Up & Q&A (10 min)

Recap key learnings.

Open floor for doubts and discussion.

Assessment & Takeaways:

Formative: Quiz responses, case study presentations, role-play engagement.

Summative: Group debate and compliance checklist submission.

Real-World Application: Encourages critical thinking on law enforcement and medical ethics.

Practical Training 27.3 : Laws of Surrogacy in India

Practical Learning Activities (2-Hour Session)

1. Interactive Lecture & Quick Quiz (20 min)

Activity: Overview of the Surrogacy (Regulation) Act, 2021—key definitions, prohibitions, and eligibility criteria.

Engagement: 5-min quiz (e.g., "True/False" on surrogacy laws via Kahoot/Slido).

2. Case Study Analysis (30 min)

Activity: Groups analyze real cases (e.g., Baby Manji Yamada v. UOI, commercial surrogacy bans).

Task: Identify legal issues, parties' rights, and court rulings.

Outcome: Groups present key takeaways (2-3 min each).

3. Role-Play: "Surrogacy Agreement Negotiation" (30 min)

Scenario 1: A couple and a surrogate mother discuss terms under the Act.

Scenario 2: A clinic explains legal compliance to intended parents.

Roles: Students act as intended parents, surrogate, lawyer, or clinic administrator.

Focus: Consent, compensation (if any), and legal safeguards.

4. Debate: "Should India Allow Commercial Surrogacy?" (25 min)

Groups: Divide into proponents (economic benefits, reproductive rights) and opponents (exploitation risks).

Structure: 3-min opening statements, rebuttals, and concluding remarks.

Instructor: Summarizes ethical vs. legal perspectives.

5. Draft a Surrogacy Compliance Document (10 min)

Activity: Groups create a checklist for legal surrogacy agreements under the Act.

Example Clauses:

Proof of eligibility (infertility certificate, marriage duration).

Prohibition of monetary exchange (except medical costs).

Surrogate's right to health insurance.

Wrap-Up & Reflection (5 min)

Recap key takeaways.

Open Q&A on ambiguities in the law.

Practical Training 27.4 : Medical Ethics, Professional Conduct, Patient Rights & Medical Negligence

Practical Learning Activities (2-Hour Session)

1. Ethical Dilemma Role-Play (30 minutes)

Activity:

Divide participants into small groups

Provide each group with a different ethical scenario:

Case 1: Terminally ill patient requesting euthanasia

Case 2: Religious objections to life-saving treatment

Case 3: Conflict between patient autonomy and family wishes

Task:

Identify which ethical principles are in conflict

Role-play the physician-patient discussion

Propose ethically justifiable solutions

2.Patient Rights Violation Analysis (25 minutes)

Activity:

Show video clips/document excerpts of potential rights violations

Examples:

Failure to obtain proper informed consent

Breach of patient confidentiality

Discrimination in care provision

Task:

Identify which patient rights were violated

Discuss legal and professional consequences

Suggest preventive measures

3.Medical Negligence Case Study (30 minutes)

Activity:

Provide groups with real case summaries (e.g., wrong-site surgery, medication errors)

Include:

Jacob Mathew v. State of Punjab standards

Bolam test application

Task:

Determine if negligence occurred

Identify contributing factors

Propose systemic improvements

4.Professional Conduct Simulation (20 minutes)

Activity:

Conduct "Breaking Bad News" simulations:

Participants rotate as physician, patient, observer

Provide structured scenarios (cancer diagnosis, medical error disclosure)

Focus Areas:

Empathy and communication skills
Maintaining professional boundaries
Documentation requirements
5.Ethical Decision-Making Framework (15 minutes)
Activity:
Introduce structured ethical decision-making model
Apply to new complex case in small groups
Present and compare group solutions
Materials Needed:
Case study handouts
Video clips of doctor-patient interactions
Role-play scenario cards
Whiteboards/flipcharts for group work

Practical Training 27.5 : Consequences of incomplete/inaccurate documentation in Obstetrics

Practical Learning Session: Legal Consequences of Incomplete/Inaccurate Documentation in Obstetrics

Duration: 2 hours

Format: Interactive case analysis, role-playing, and group discussions

Session Activities

1.Case-Based Error Identification (30 min)

Activity: Small Group Discussion

Groups review redacted medical records (e.g., delivery notes, fetal monitoring strips, consent forms) with intentional errors (omissions, inconsistencies, illegibility).

Task: Identify errors, discuss potential legal consequences (malpractice risks, disciplinary action).

Facilitator debrief: Highlight critical documentation pitfalls.

2.Role-Playing Documentation Scenarios (45 min)

Activity: Simulated Clinical Situations

Scenario 1: A patient with postpartum hemorrhage where key details (e.g., timing of interventions, blood loss estimation) were poorly documented.

Scenario 2: A shoulder dystocia case with discrepancies between nursing and physician notes.

Task:

Participants role-play the clinician documenting in real-time.

Peers critique entries for clarity, completeness, and legal defensibility.

3.Best Practices Workshop (30 min)

Activity: Collaborative Checklist Development

Groups brainstorm essential elements for obstetric documentation (e.g., timing of events, informed consent, team communication).

Draft a standardized template or checklist for common procedures (e.g., delivery notes, emergency cesarean sections).

Share and refine with facilitator input.

4. Legal Expert Q&A (15 min)

Activity: Panel Discussion (if possible)

A medicolegal expert (or facilitator) answers participant questions.

Key topics:

How courts/juries interpret documentation gaps.

EHR pitfalls (copy-paste errors, auto-populated fields).

Strategies for defending documentation in litigation.

Assessment & Takeaways

Peer feedback during role-playing.

Group checklist submission for facilitator review.

Post-session quiz (optional) on documentation standards.

Materials Needed:

Sample medical records with errors.

Scenario cards for role-playing.

Whiteboard/flipchart for checklist drafting.

Practical Training 27.6 : Consequences of incomplete/in accurate documentation in Gynecology

Duration: 2 Hours

Format: Case-based simulations, peer review, and interactive exercises

1. "Spot the Error" Chart Audit (30 min)

Activity: Small-Group Forensic Review

Teams receive redacted gynecology records (e.g., hysterectomy operative notes, colposcopy reports) with intentional errors:

Missing timestamps

Unclear complication descriptions

Discrepancies between nursing/physician notes

Task: Highlight errors and predict potential clinical/legal consequences.

Debrief: Facilitator reveals real-world outcomes of similar cases.

2. "Live Documentation Challenge" (45 min)

Activity: Timed Clinical Simulations

Scenario 1: Documenting a postoperative complication (e.g., vaginal cuff dehiscence) with evolving symptoms.

Scenario 2: Recording informed consent for a laparoscopic myomectomy with specific risks omitted.

Roles:

Clinician: Documents in real-time (paper/EHR simulator).

Peer Reviewer: Identifies gaps using a checklist.

Pressure Element: Alarms/reminders simulate clinical distractions.

3. "Malpractice Mock Trial" (30 min)

Activity: Role-Playing Legal Consequences

Teams review a real gynecology malpractice case (e.g., missed ovarian cancer diagnosis due to incomplete imaging documentation).

Roles:

Defense: Argue documentation was adequate.

Plaintiff: Highlight omissions that delayed care.

Jury Vote: Peers decide which side proved their case.

4. "Fix This Note" Workshop (15 min)

Activity: Rapid Peer Feedback

Participants submit anonymized samples of their own documentation (e.g., clinic notes).

Peers critique using a 3-point rubric:

Completeness (all key elements present?)

Clarity (jargon-free? Chronology clear?)

Legal Defensibility (would this hold up in court?)

Takeaway Tools:

Gynecology-Specific Documentation Checklist (e.g., must-include elements for consents, op-notes).

Sample "Golden Standard" Notes for common procedures.

Error Prevention Quick Guide (e.g., "5 Questions to Ask Before Signing a Note").

Materials Needed:

Redacted problematic charts

EHR simulator/paper templates

Malpractice case summaries

Timer for pressure drills

Practical Training 27.7 : Robotic surgeries in Gynecology

Activities: Teacher demonstration Total Time: 2 hours

Audience: Medical students, residents, or surgical teams

Format: Interactive lecture + live/video demos + guided discussions

1. Introduction & Overview (15 min)

Teacher Demonstrates/Explains:

The robotic console: Show the surgeon's interface (live or via video), highlighting clutch use, camera control, and instrument swapping.

Patient-side cart: Point out instrument arms, endoscope, and safety features (e.g., collision detection).

Advantages: Compare robotic vs. laparoscopic views (show side-by-side clips of suturing).

Activity:

Poll learners: "Which gynecologic procedure benefits most from robotics? Why?" Discuss answers.

2. Live/Virtual Demo: System Setup & Docking (20 min)

Teacher Demonstrates:

Port placement: Use a pelvic model to mark optimal trocar sites for hysterectomy (emphasizing distance/angle rules).

Docking: Simulate aligning the patient cart (or show a video of docking pitfalls, like arm collisions).

Instruments: Load a bipolar grasper and scissors, explaining wristed vs. rigid tools.

Activity:

Learners sketch ideal port placements for a myomectomy; instructor critiques.

3. Core Skills Demo (30 min)

Teacher Demonstrates (Simulator or Video):

Camera navigation: Show how to optimize view (e.g., "up-down" vs. "left-right" inversion).

Instrument control: Perform basic tasks (peg transfer, cutting) to highlight precision.

Energy devices: Demo bipolar sealing vs. monopolar cutting on tissue models.

Activity:

"What's the error?" Show a clipped video of a misstep (e.g., instrument clash) and ask learners to diagnose.

4. Procedure-Specific Demo (30 min)

Teacher Demonstrates (Video/Live Simulator):

Robotic hysterectomy: Highlight key steps—uterine artery sealing, vaginal cuff closure—with narration.

Troubleshooting: Simulate a stuck needle or bleeding vessel, showing how to react.

Activity:

Pause video at critical points (e.g., bladder dissection) and ask: "What's the next move?"

5. Team Dynamics & Safety (15 min)

Teacher Demonstrates:

OR communication: Role-play surgeon-assistant commands (e.g., “Adjust camera to left ureter”).

Emergency undocking: Show the steps for rapid system shutdown (use a checklist).

Activity:

Split learners into “surgeon,” “nurse,” and “assistant” roles to rehearse a instrument exchange.

6. Q&A + Debrief (10 min)

Teacher Leads Discussion:

Recap pros/cons of robotics for specific cases (e.g., obesity, complex endometriosis).

Show a *1-minute suture comparison* (robotic vs. laparoscopic) to reinforce speed/accuracy trade-offs.

Activity:

Muddiest point: Learners write down one lingering question; instructor addresses top themes.

Key Teaching Tools

Visual aids: Side-by-side videos (robotic/lap), 3D anatomy software.

Physical models: Pelvic trainer with trocars, suture pads.

Simulator: If available, let learners briefly try the console post-demo.

Adaptations

No simulator? Use a free online da Vinci simulator (e.g., Touch Surgery app).

Large group? Rotate small groups to a live demo station while others discuss case studies.

Practical Training 27.8 : Managing Maternal and Fetal Deaths: Legal Compliance

Practical Activity-Teacher Demonstrates(2 Hours)

1. Introduction & Context (20 mins)

Hook: Share a real case of legal repercussions due to mishandled fetal death reporting.

Discussion: "What were the critical failures?"

Overview: Legal frameworks (e.g., MMRCs, fetal death certificates) and institutional policies.

2. Station-Based Rotations (80 mins, 20 mins/station)

Learners rotate through 4 interactive stations:

Station 1: Documentation & Legal Compliance

Activity: Complete a simulated death certificate and incident report for a stillbirth case.

Tools: Redacted medical records, checklist (e.g., cause of death, time of event).

Station 2: Multidisciplinary Coordination

Activity: Role-play notifying stakeholders (e.g., coroner, risk management, chaplain) using a standardized script.

Scenario: "The family requests an autopsy. How do you proceed?"

Station 3: Dignified Handling of the Deceased

Activity: Simulate body preparation (e.g., wrapping, labeling, storage) with mannequins.

Cultural Competency: Discuss variations (e.g., religious practices, photography requests).

Station 4: Case Study & Gap Analysis

Activity: Review a poorly documented maternal death case. Identify omissions and redesign the reporting process.

3. Group Debrief & Action Plan (20 mins)

Discussion: Share key takeaways from each station.

Reflection: "What systemic changes would improve compliance in your workplace?"

Exit Ticket: Submit one policy recommendation (e.g., "Mandatory staff training on death certification")

Practical Training 27.9 : Documentation Errors in Female Contraception

Format: Interactive case reviews, role-playing, and peer audits

Hands-On Activities

1. "Contraception Chart Audit" (30 min)

Activity: Small-Group Forensic Review

Teams receive redacted patient charts with intentional errors:

Case 1: IUD insertion without documented consent or parity check

Case 2: Combined oral contraceptive prescription for a smoker >35y without CVD risk documentation

Case 3: Implant removal note lacking reason/follow-up plan

Task:

Identify errors using a "5-Star Risk Rating" (1=minor ? 5=critical)

Predict potential consequences (e.g., unintended pregnancy, lawsuit)

Debrief: Facilitator reveals actual outcomes of similar cases

2. "Live Documentation Challenge" (45 min)

Activity: Timed Simulation Stations

Station 1: High-Risk Counseling

Document counseling for a patient with BMI 40 requesting DMPA (must address bone density/weight risks)

Station 2: Procedure Note

Record a difficult IUD insertion with complications (embedding, vasovagal reaction)

Station 3: EHR Pitfalls

Fix auto-populated errors in a contraceptive follow-up note (e.g., wrong device type)

Pressure Element: Alerts sound every 5 minutes to simulate clinic interruptions

3. "Peer Review Court" (30 min)

Activity: Role-Playing Quality Assurance

Participants submit de-identified personal documentation samples

Small groups:

Plaintiff: Finds flaws in peers' notes

Defense: Explains clinical rationale

Judge: Decides if documentation meets standards

Outcome: "Top 3 Documentation Lifesavers" list generated

4. "Error-Proofing Toolkit" (15 min)

Activity: Rapid Prototyping Solutions

Groups create:

Smart Phrases: EHR templates for LARC consent

Checklist: "5 Must-Document Items" for contraceptive visits

Alert Cards: For high-risk populations (e.g., anticoagulated patients)

Assessment & Takeaways

Pre/Post Quiz: Test knowledge of critical documentation elements

Peer Feedback: Rubric-based evaluation of simulated notes

Takeaway Kit:

LARC documentation flowchart

Sample "perfect" contraceptive counseling note

Medicolegal case summaries

Materials Needed:

Redacted problematic charts

EHR simulation (or paper templates with "auto-fill errors")

Timer for pressure drills

Sticky notes for rapid prototyping

Practical Training 27.10 : Robotic surgeries in Obstetrics

Duration: 2 Hours

Format: Hands-on simulations, case-based drills, and team-based scenarios

1. "Obstetric Setup Challenge" (30 min)

Activity: Team-Based Simulation

Task 1: Position a mannequin (pregnant abdomen) for robotic myomectomy, avoiding aortocaval compression.

Task 2: Plan trocar placements for a 24-week-sized uterus using anatomical landmarks.

Tools: Skin markers, ultrasound simulator (to "map" fibroids).

Debrief: Compare approaches with expert demonstration.

2. "Robotic Skills Obstetric Drills" (45 min)

Activity: Simulation Stations

Station 1: Vessel Sealing

Use energy devices on perfused placenta accreta models.

Station 2: Uterine Suturing

Close myomectomy beds on 3D-printed gravid uteri with hemorrhage control.

Station 3: Emergency Conversion

Rapid undocking drill for postpartum hemorrhage scenarios.

3. "Team Time-Out" Scenario (30 min)

Activity: Role-Playing High-Risk Case

Scenario: Robotic surgery for morbidly adherent placenta with sudden bleeding.

Roles:

Console Surgeon: Maintains control while calling for assistance.

Bedside Assistant: Manages suction/hemostatic agents.

Circulator: Coordinates blood products/anesthesia.

Focus: Communication, crisis checklists, and role clarity.

4. "Debrief & Safety Hacks" (15 min)

Activity: Group Discussion

Participants share key takeaways from simulations.

Co-create a "Robotic Obstetrics Safety Checklist" including:

Pre-op: Fetal radiation minimization steps.

Intra-op: Uterine manipulation limits.

Post-op: Pregnancy viability documentation.

Assessment Tools

Skill Checklists: Instrument navigation accuracy, suture integrity.

Team Performance Rubrics: Adapted from NOTSS (Non-Technical Skills for Surgeons).

Pre/Post Knowledge Quiz: Focused on obstetric-specific risks.

Materials Needed:

Pregnant abdomen mannequin/task trainers
Robotic surgery simulator (e.g., dV-Trainer, SimNow) or laparoscopic box trainers
Perfused placenta models (simulated vasculature)
Crisis scenario cards

Experiential learning Activity

Experiential-Learning 27.1 : Legal Literacy in Obstetrics and Gynaecology

Scholars to Demonstrate-Experiential Learning Activities(3 Hours)

1. Integrate Knowledge of MTP Act, Sterilization Regulations & PCPNDT Act into Practice

Activity: "Legal Compliance Escape Room" (60 min)

Setup: Teams solve a series of timed puzzles/case scenarios (e.g., "Can this 20-week pregnancy be terminated under MTP Act?") using legal documents.

Tasks:

Match patient scenarios to correct legal provisions.

Identify flaws in a mock sterilization consent form.

Decode a "violation" hidden in a PCPNDT clinic inspection report.

Debrief: Facilitator clarifies ambiguities and shares key takeaways.

2. Develop Skills in Applying Laws in OB/GYN Decision-Making

Activity: "Courtroom Simulation: The Case of Dr. X" (60 min)

Scenario: A doctor faces legal action for alleged MTP Act/PCPNDT violations.

Roles: Participants split into prosecution, defense, and jury.

Prosecution: Argue breaches of law using case evidence.

Defense: Justify actions using legal exceptions (e.g., fetal anomaly).

Jury: Deliberate and vote on guilt, citing legal clauses.

Outcome: Reflection on real-world consequences of legal missteps.

3. Demonstrate Understanding of Informed Consent & Counseling

Activity: "Empathy Lab: Consent Under Pressure" (60 min)

Stations:

Language Barrier Station: Counsel a "patient" using only pictograms/non-verbal cues.

Coercion Scenario: Handle a case where a husband demands sterilization for his wife.

Teen Counseling: Obtain consent for MTP from a minor with no guardian.

Feedback: Peers use a checklist (e.g., "Did the provider explain risks?") to assess each round.

4. Apply Ethical Considerations in Reproductive Health

Activity: "Ethical Dilemma Speed Dating" (60 min)

Format: Rotating 1-on-1 discussions (5 min each) on prompts like:

"A HIV+ patient requests sterilization—deny or prioritize autonomy?"

"Religious objections to MTP: Whose rights prevail?"

Output: Participants jot down insights on a shared "ethics wall" for group discussion.

5. Collaborate with Healthcare Teams for Legal Compliance

Activity: "Clinic Audit Challenge" (60 min)

Teams: Assume roles (doctor, nurse, admin, counselor) to audit a mock clinic's records.

Tasks:

Flag missing PCPNDT forms in ultrasound logs.

Spot consent form errors in sterilization cases.

Draft a corrective action plan for the "clinic."

Prize: Best audit team presents their findings to the group.

Experiential-Learning 27.2 : Incomplete/Inaccurate documentation in Gynecology

Activities: Duration: 3 Hours

Format: Immersive simulations, case-based learning, and interactive workshops

1.Documentation "Crime Scene Investigation" (45 min)

Activity: Small Group Forensic Chart Audit

Teams receive de-identified medical records from real malpractice cases (e.g., delayed C-section, APGAR score discrepancies)

Using highlighters and checklists, groups:

Mark missing/contradictory entries

Map how errors could be exploited in court

Facilitator reveals actual legal outcomes of each case

2.Live Documentation Simulation (60 min)

Activity: Obstetric Emergency Role-Play

Scenario 1: Shoulder dystocia with evolving fetal distress

Scenario 2: Postpartum hemorrhage with changing vital signs

Participants rotate through roles:

Clinician: Documents in real-time on EHR simulator

Legal Auditor: Identifies documentation gaps as scenario unfolds

Patient Actor: Provides conflicting clinical history to test accuracy

3. Mock Deposition (45 min)

Activity: Legal Pressure Testing

Participants face cross-examination by a "plaintiff's attorney" (facilitator/lawyer)

Sample challenges:

"Why isn't the decision-to-incision time documented?"

"How do you explain two different blood loss estimates?"

Groups strategize documentation fixes to withstand scrutiny

4. Documentation Hackathon (30 min)

Activity: Rapid Prototyping Solutions

Using insights from previous activities, teams:

Design smart EHR templates for delivery notes

Create time-stamping protocols for critical decisions

Develop peer audit systems for high-risk cases

Shark Tank-style presentations to judges (risk management experts)

Assessment & Debrief

Real-time feedback during simulations from legal/OB facilitators

Pre/post-documentation comparison showing quality improvement

Takeaway toolkit:

Sample litigation-proof note templates

10-point documentation safety checklist

Guide to testifying about medical records

Materials Needed:

Annotated malpractice case files

EHR simulation software (or paper charts with timed prompts)

Mock deposition question bank

Timer/buzzer for pressure drills

Experiential-Learning 27.3 : Consequences of incomplete/in accurate documentation in Gynecology

Duration: 3 Hours

Format: Immersive simulations, interactive case studies, and role-playing

1. "Code Red Chart Review" (45 min)

Activity: Small-Group Forensic Audit

Teams receive 3 real-world case packets (redacted):

Case 1: Omitted fibroid size in preoperative imaging led to surgical complications

Case 2: Unclear consent documentation for hysterectomy (patient later claimed misunderstanding)

Case 3: Discrepant OR notes about blood loss during cystectomy

Task:

Identify errors using a "5-Point Error Scale" (minor ? catastrophic)

Predict potential outcomes (lawsuit? Board complaint? Patient harm?)

Debrief: Facilitator reveals actual consequences for each case

2. "Live Documentation OR" (60 min)

Activity: Real-Time Simulation with Interruptions

Scenario 1: Emergency laparoscopy for ruptured ectopic pregnancy

Participants alternate roles:

Surgeon: Dictates op-note while managing "bleeding" (simulated stress)

Scrub Nurse: Calls out missing items (e.g., "You didn't document the suture type!")

Risk Manager: Flags medico-legally critical omissions

Scenario 2: Post-op note for vaginal mesh complication

Twist: EHR "glitches" force handwritten notes under time pressure

3. "Trial by Fire" Mock Deposition (45 min)

Activity: High-Stakes Role-Play

Participants defend their documentation from Activity 2 against:

"Plaintiff's Attorney" (facilitator): "Why is there no documentation of discussing mesh risks?"

"Expert Witness" (actor): "This note doesn't meet specialty standards"

Scoring: Peers vote on whether documentation would hold up in court

4. "Rewrite the Future" Workshop (30 min)

Activity: Peer-to-Peer Perfection

Step 1: Participants submit de-identified problematic notes from their practice

Step 2: Small groups rewrite them using:

SBAR (Situation-Background-Assessment-Recommendation) for clarity

"Legal Armor" Checklist (timestamps, witnesses, etc.)

Step 3: Groups present before/after versions with rationale

Takeaway Toolkit

"Never Again" Cards: Top 5 documentation pitfalls in gynecology

Templates: Court-proof op-note/consent frameworks

Digital Aids: EHR smart-phrases library for high-risk cases

Materials Needed:

Annotated malpractice case files

OR noise simulation audio (for stress testing)

"Plaintiff attorney" question bank

Stamped envelopes for confidential self-error submissions

Experiential-Learning 27.4 : Robotic surgery in Gynecology

Activities: 3 hours

1. Introduction & Overview (30 min)

Activity: Interactive Lecture & Case Discussion

Brief presentation on robotic surgery in gynecology (history, benefits, common procedures like hysterectomy, myomectomy).

Case-based discussion: Compare robotic vs. laparoscopic vs. open surgery outcomes.

Q&A session to address initial queries.

2. Hands-on Robotic System Familiarization (45 min)

Activity: Station-Based Learning

Station 1: Physical components of the robotic system (console, arms, instruments).

Station 2: 3D visualization and ergonomics (participants practice adjusting the console).

Station 3: Simulator tasks (e.g., peg transfer, suturing) to practice instrument control.

3. Simulation & Skill Practice (60 min)

Activity: Guided Simulation Exercises

Basic tasks on a robotic simulator (e.g., da Vinci Skills Simulator or VR platform).

Focus on camera navigation, clutching, and bimanual coordination.

Instructor feedback on precision and efficiency.

4. Team-Based Scenario (30 min)

Activity: Simulated OR Scenario

Roles: Surgeon (console), assistant (bedside), scrub nurse.

Task: Perform a simulated robotic hysterectomy step (e.g., uterine manipulation, vessel sealing).

Debrief on teamwork, communication, and troubleshooting errors.

5. Wrap-Up & Reflection (15 min)

Activity: Group Discussion & Reflection

Recap key takeaways.

Participants share challenges and insights from hands-on practice.

Future learning resources (courses, certifications) and open questions.

Assessment:

Informal feedback during simulations.

Peer and instructor evaluations in team scenarios.

Post-session quiz (optional) on key concepts.

Materials Needed:

Robotic surgery simulator (or VR setup).

Presentation slides, case studies.

Checklist for system components.

Evaluation forms.

Experiential-Learning 27.5 : Accurate Documentation in Clinical Practice

Experiential Learning-Scholar Demonstrates

1. Introduction & Case Context (30 mins)

Hook: Share a real malpractice case (e.g., a lawsuit due to missing fetal heart rate documentation).

Discussion: "What went wrong? How could proper documentation have prevented this?"

Key Principles: SOAP/CHART vs. narrative notes.

Critical elements (e.g., Bishop's score, consent forms, timing of interventions).

2. Stations (90 mins)

Rotate through 3 stations (30 mins each):

Station 1: Simulation & Application

Activity: Document a live standardized patient encounter (e.g., postpartum hemorrhage or abnormal uterine bleeding).

Tools: EHR/paper templates, timer (emulate clinic time pressure).

Task: Include all medicolegally required details (e.g., blood loss quantification, vital signs).

Station 2: Peer Audit & Evaluation

Activity: Swap notes from Station 1 and critique using a checklist (e.g., "Was LMP documented? Were differentials listed?").

Task: Identify 3 omissions and suggest corrections.

Station 3: Legal Role-Play

Activity: Mock deposition where learners defend their documentation choices.

Example: "Why didn't you document the time of cord clamping?"

Task: Justify clinical decisions using ACOG guidelines.

3. Group Debrief & Reflection (60 mins)

Case Study Analysis: Review a redacted malpractice case and identify documentation failures.

Task: Map errors to potential legal consequences (e.g., "Vague note ? Lost lawsuit").

Reflection Roundtable:

"What was hardest to document? How will you improve?"

Task: Draft one clinic policy change (e.g., "Mandatory timed entries for deliveries").

Experiential-Learning 27.6 : Navigating Legal Consequences: Case Studies in Patient Death

Experiential Activities: Scholar Demonstrates-(4 Hours)

1. Case Study Jigsaw Activity (45 mins)

Objective: Analyze and evaluate real-world litigation cases.

Groups of 4–5 each review a different redacted malpractice case (e.g., failure to report to the coroner, incomplete death certificates).

Tasks: Identify 3+ documentation/legal breaches.

Predict the legal outcome (e.g., lawsuit, fines, license suspension).

Present findings to the group.

Debrief: Instructor highlights key lessons (e.g., "No timestamp ? Lost defense in court").

2. Role-Play: Multidisciplinary Simulation (30 mins)

Objective: Simulate proper stakeholder coordination.

Roles: Clinician, coroner, risk manager, grieving family member.

Scenario: A maternal death with missing consent for autopsy.

Tasks: Clinician: Notify the coroner and document the discussion.

Risk manager: File an incident report with legal team.

Family member: Ask tough questions (e.g., "Why wasn't I told sooner?").

Peer Feedback: Did the team meet legal/ethical standards?

3. Gap Analysis & Policy Design (30 mins)

Objective: Propose systemic solutions.

Small groups review a poorly handled case study.

Tasks: List 3+ institutional failures (e.g., no staff training on death certificates).

Draft a 1-page policy memo to prevent recurrence (e.g., "Mandatory death reporting checklist").

Share Out: Groups present memos; vote on most actionable idea.

4. Mock Trial Lightning Round (15 mins)

Objective: Debate liability in a high-stakes setting.

Case: A fetal death where fetal monitoring strips were lost.

Roles: Prosecution, defense, jury (rest of class).

Task: Each side argues why the provider is/is not liable.

Outcome: Jury delivers a verdict based on evidence.

Experiential-Learning 27.7 : Documentation errors in contraceptive care.

Activities: Duration: 4 Hours

Format: Immersive simulations, live clinic scenarios, and peer-led quality improvement

Immersive Activities

1. "Clinic Chaos" Simulation (90 min)

Activity: Rotating Stations with Real-Time Documentation

Station 1: High-Stakes Counseling

Role-play: Patient with lupus requests estrogen-containing contraception

Challenge: Document contraindication discussion while managing EHR pop-up alerts

Station 2: Procedure Gone Wrong

Simulate: IUD insertion with vasovagal reaction

Task: Complete procedure note while addressing "patient's" complications

Station 3: Walk-In Crisis

Scenario: Emergency contraception consult for teen (privacy/consent documentation)

Twist: Parent arrives mid-encounter – document confidentiality measures

Tech Enhancement:

Use voice-to-text software to expose dictation errors

EHR "glitches" that erase entries if not saved properly

2. "Malpractice Theatre" (60 min)

Activity: Interactive Case Studies with Legal Experts

Case 1: Thrombosis on COCs – Inadequate risk documentation

Participants depose the "clinician" (actor)

Highlight where notes failed to protect provider

Case 2: Unintended pregnancy post-failed tubal ligation

Groups rewrite operative notes to withstand legal scrutiny

Debrief: Medico-legal expert scores documentation defensibility

3. "Quality Sprint" (60 min)

Activity: Rapid Clinic Improvement Project

Step 1: Mine real de-identified charts for recurring errors

Step 2: Design interventions:

EHR smart phrases for LARC consent

Visual alerts for high-risk populations

Staff training checklist

Step 3: Pitch solutions to "clinic board" (faculty judges)

4. "Peer Audit Live" (30 min)

Activity: Real Clinic Chart Review

Participants bring recent contraceptive visit notes (de-identified)

Structured peer review using WHO Safe Contraception Documentation Standards

Create "Wall of Errors/Wall of Excellence" with key takeaways

Assessment & Outcomes

Skills: Pre/post-audit of simulated notes using standardized rubric

Behavioral: 360° evaluations during team scenarios

Tangible Products:

Clinic-approved documentation templates

Error prevention poster for staff areas

Personal "cheat sheets" for high-risk cases

Materials Needed:

EHR training environment with intentional bugs

"Angry patient" actors for malpractice scenarios

Timers for pressure drills

Large boards for visual management

Tech Integration Options:

AI documentation assistant to compare human vs. machine errors

Tablets for real-time peer feedback during simulations

Experiential-Learning 27.8 : Robotic surgeries in Obstetrics

Activities: Duration: 5 Hours

Format: Immersive simulations, live case analysis, and team-based crisis management

1. "Obstetric Robotic Bootcamp" (90 min)

Activity: Progressive Skill Stations

Station 1: Gravid Uterus Docking

Practice docking with uterine displacement techniques using a pregnancy abdomen mannequin.

Station 2: Vascular Control Drills

Simulate vessel sealing in perfused placenta accreta models with pulsatile bleeding.

Station 3: High-Stakes Suturing

Robotic myomectomy closure on 3D-printed uteri with realistic tissue layers.

2. "Live Case Simulation: Crisis Mode" (90 min)

Activity: Immersive Team Scenario

Scenario 1: Robotic myomectomy with unexpected uterine rupture

Teams must:

Recognize signs of rupture on console

Convert to emergency laparotomy while maintaining robotic control

Document critical decisions in real-time

Scenario 2: Robotic PAS surgery with CO₂ embolism

Challenges:

Manage hemodynamic instability while undocking

Coordinate with anesthesia for emergent resuscitation

3. "Case Review Court" (60 min)

Activity: Video Analysis & Peer Debate

Step 1: Watch edited clips of real robotic obstetric cases (good/poor outcomes).

Step 2: Small groups:

Identify 3 technical/non-technical errors

Propose alternative approaches

Step 3: "Grand Rounds" presentation with expert panel feedback

4. "Future-Proofing Practice" (60 min)

Activity: Protocol Development Workshop

Groups create:

Checklist: "10 Must-Do's for Robotic Obstetrics"

Algorithm: When to abort robotic approach in pregnancy

Training Roadmap: For new adopters of obstetric robotics
 Assessment & Feedback
 Technical Skills:
 Docking time efficiency (obstetric-specific benchmarks)
 Hemostasis achievement in bleeding scenarios
 Non-Technical Skills:
 Team communication audits using validated tools (e.g., NOTECHS II)
 Individualized Reports: AI-assisted motion analysis (if using VR/advanced simulators)
 Materials Needed:
 Pregnancy-specific robotic simulators (e.g., Mimic dV-Trainer with obstetric modules)
 Perfused pelvic trainers with pulsatile blood flow
 OR black box recordings (or simulated cases) for debrief
 360° video setup for immersive case reviews
 Special Features:
 Obstetric Anesthesia Integration: Joint drills with MFM anesthesia colleagues
 Medicolegal Spotlight: Invite malpractice attorney to discuss documented vs. actual events
 Global Health Adaption: Include tele-robotics discussion for remote locations

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Structured SAQ(50 marks)

- List and briefly explain critical acts and laws relevant to OB/GYN practice. (10)
- Write short notes on accurate medical documentation and its medico-legal significance. (10)
- Explain the procedures to be followed in the event of patient death in a gynecological or obstetric setting. (10)
- Discuss the introduction and medico-legal considerations of robotic surgeries in OB/GYN. (10)
- Describe ethical dilemmas and risk management strategies in gynecological practice. (10)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

And
Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 28 : Stree Roga Sambandhita Shastrakarmani- Operative Gynaecology - Part-I

Module Learning Objectives

(At the end of the module, the students should be able to)

Understand Indications and Techniques for Minor Cervical Surgeries- Learners will describe the indications, techniques, and outcomes of minor cervical surgeries such as cervical biopsy (cone biopsy, LEEP), cervical cauterization, cryosurgery, and amputation of the cervix, focusing on preoperative and postoperative care.
Evaluate and Perform Minor Gynaecological Procedures- Learners will demonstrate knowledge of performing minor surgeries such as polypectomy, dilatation and curettage (D&C), and marsupialization of Bartholin cysts, and assess the appropriate clinical contexts for these interventions.
Understand and Manage Genital Prolapse with Surgical Interventions- Learners will explain the pathophysiology of genital prolapse and outline surgical techniques such as anterior and posterior colporrhaphy and pelvic floor repair, evaluating patient outcomes and post-surgical recovery protocols.

M 28 Unit 1 Upashastra karma - Minor surgeries Garbhashaya mukhagata Shastrakarma - Operations on Cervix: Cervical biopsy- cone biopsy
LEEP, Garbhashaya mukha dahana (Cervical cauterization), Cryo surgery
Garbhashaya mukha chedana (Amputation of Cervix)

References: 22,23,24,25,26,35

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze indications (Yogya) and contraindications (Ayogya) of cervical cauterization based on Ayurvedic and modern criteria; compare materials, techniques (Prakriyas), and types of cauterization in Ayurveda (Agni, Kshara) and modern methods (thermal, cryo, laser); summarize integrated preoperative (Poorva Karma), intraoperative (Pradhana Karma), and postoperative (Paschat Karma) care including diet (Pathya-Apathya), medications (Vrana Ropana), and lifestyle modifications; and diagnose complications (Upadrava) with appropriate Ayurvedic management.	1	Lecture	CAN	Knows-how	L&PPT ,L,L_VC

CO2,CO3	Analyze indications (Yogya) and contraindications (Ayogya) for cervical procedures (amputation, cone biopsy, LEEP); design integrated preoperative (Poorva Karma), operative (Pradhana Karma), and postoperative (Paschat Karma) care plans; diagnose complications (Upadrava) and manage them; and incorporate Ayurvedic perioperative care including Rasayana therapy, dietary (Pathya-Apathya), and lifestyle (Dinacharya) guidelines alongside standard postoperative management.	1	Lecture	CAN	Knows-how	L&PPT, L_VC, L
CO3,CO4,CO5	Discuss the types, indications, and contraindications of cervical cautery; demonstrate pre-procedural preparation including counseling, consent, and aseptic techniques; perform cervical cautery; identify and manage potential complications; and adhere to ethical and safety protocols.	2	Practical Training 28.1	PSY-GUD	Shows-how	PBL, D-M
CO3,CO4,CO5	Analyze patient history, colposcopy, and biopsy findings; evaluate risks and benefits of cervical amputation (Garbhashaya Greeva Chedana), cold knife cone biopsy, and LEEP; perform preoperative (Poorva Karma) assessments; and demonstrate precise operative techniques while managing complications and postoperative care.	2	Practical Training 28.2	PSY-GUD	Shows-how	D-BED, SIM, CBL
CO3,CO4,CO5	Perform cervical procedures (Chedana, LEEP, cold knife cone) with precision, adapting to complications. Integrate Dosha-based assessment into surgical planning. Troubleshoot hemorrhage, incomplete excision, and infection using integrated approach. Design post-op care combining Paschat Karma (e.g., Yoni Pichu) and modern protocols.	3	Experiential-Learning 28.1	AFT-RES	Shows-how	TBL, SIM, D-BED, BL
<p>M 28 Unit 2 Upashastra karma - Minor surgeries Garbhashayagata Arsha Nirharana (Uterine and Cervical Polypectomy) Garbhashaya Mukha Vistrutikarana and Lekhana karma (Dilatation and Curettage) Marsupialization of Bartholin Cyst References: 2,3,4,22,23,24,25,26,27,35</p>						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Define Yoni Arsha (polyps) and classify types, its epidemiology, clinical features Identify diagnostic tools-Clinical examination, Imaging, Hysteroscopy and Interpret histopathological findings.	1	Lecture	CK	Knows-how	CBL, L_V C, L&PPT

	Describe (Pre-Operative, Intra and Post -Operative) hysteroscopic polypectomy, blind avulsion/D&C polypectomy, laser/electrosurgical excision and their complications. Evaluate Ayurvedic interventions (Lekhana, Agnikarma, Kshara application).					
CO1,CO2,CO3	Define Yoni Granthi (Bartholin's cyst/abscess) and explain its anatomical, pathological, and clinical significance. Compare the Ayurveda and modern surgical approaches. Describe the pre-operative, Intra- Operative and post -operative Procedures. Evaluate integrated approach in post-operative care.	1	Lecture	CC	Knows-how	L_VC, PERR, L&PPT
CO1,CO2,CO3	Identify Indications, Contraindications and Complications for diagnostic and therapeutic D&C. Evaluate the Pre-Operative, Intra and Post -Operative Procedures. Differentiate between mechanical vs pharmacological techniques. Justify the D&C versus alternative procedures. (Integrated approach).	1	Lecture	CAP	Knows-how	L&GD, L_VC, L&PPT
CO3,CO4,CO5	Demonstrate the indications and contraindications of Yoniarsha Chedana (polypectomy); perform the procedure; manage associated complications; and provide integrated preoperative and postoperative care.	3	Practical Training 28.3	PSY-GUD	Shows-how	CBL, D, SIM
CO3,CO4,CO5	Demonstrate cervical dilatation on real cases or simulation models; perform systematic uterine curettage using sharp and suction curettes; and compare the outcomes of mechanical versus pharmacological cervical priming.	2	Practical Training 28.4	PSY-ADT	Shows-how	D-BED, CBL, RLE
CO3,CO4,CO5	Compare Ayurvedic and modern surgical techniques; demonstrate preoperative, intraoperative, and postoperative skills; evaluate complications and their management in both approaches; and formulate individualized postoperative care plans incorporating Ayurvedic principles such as Rasayana and Vrana Ropana.	3	Experiential-Learning 28.2	CAN	Does	SIM, CBL, TBL
CO3,CO4,CO5	Compare the indications, contraindications, and complications of dilatation and curettage (D&C) in Ayurveda and modern medicine; demonstrate its preoperative, operative, and postoperative procedures; evaluate ethical and clinical decision-making scenarios; and justify the integration of Sthanika Chikitsa in perioperative care.	3	Experiential-Learning 28.3	CAN	Does	D, SIM, D-M, TBL

M 28 Unit 3 Operations for Genital prolapse Garbhashayasya svasthanasya sthapanam (Surgical procedures for Genital prolapse) – Anterior colporrhaphy, Posterior colporrhaphy, Pelvic floor repair, Fothergills Operation, Cervicopexy operation

Operation for inversion of uterus- Haultains operation, Kustner operation

References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Analyze the etiopathogenesis of Yoni Bhramsha (pelvic organ prolapse) and pelvic floor dysfunction; compare the indications and contraindications for anterior/posterior colporrhaphy and pelvic floor repair; and evaluate Ayurvedic and modern preoperative, operative, and postoperative procedures, including associated complications and risks.	1	Lecture	CAN	Knows-how	L&GD,L &PPT ,L_VC
CO1,CO2,CO3	Compare Fothergill's and Cervicopexy operations by evaluating their indications, contraindications, procedural steps (vaginal vs. abdominal approach), complications, advantages, and disadvantages.	1	Lecture	CC	Knows-how	L&PPT ,L_VC
CO1,CO2,CO3	Evaluate the indications, contraindications, and biomechanical efficacy of Haultain's hydrostatic reduction versus Kustner's posterior colpotomy; and discuss the preoperative, intraoperative, and postoperative care—including Ayurvedic and modern approaches—as well as potential complications.	1	Lecture	CE	Knows-how	L&PPT ,L_VC
CO2,CO3,CO4	Demonstrate the surgical principles, indications, contraindications, and complications of anterior colporrhaphy, posterior colporrhaphy, and pelvic floor repair; perform these procedures on models or simulators while maintaining aseptic technique.	2	Practical Training 28.5	PSY-GUD	Shows-how	SIM,RLE, D-M
CO1,CO2,CO3,CO4	Demonstrate key steps of Fothergill's operation, Cervicopexy operation on simulators. Evaluate indications, contraindications, procedure, and complications. Appraise Fothergill's vs. Cervicopexy for Garbhashaya Shaithilya (prolapse).	2	Practical Training 28.6	PSY-GUD	Knows-how	RP,W,TB L,RLE,SI M
CO3,CO4,CO5	Demonstrate preoperative, operative, and postoperative procedures for Haultain's operation; perform Kustner's operation; and practice critical surgical steps including identification of the inversion ring and fundal dimple, uterine incision and reinversion (Haultain's), and cervical incision with manual reduction (Kustner's).	2	Practical Training 28.7	PSY-GUD	Shows-how	D-M,SIM

CO3,CO4,CO5	Demonstrate preoperative, intraoperative, and postoperative steps for anterior colporrhaphy, posterior colporrhaphy, and pelvic floor repair; perform these procedures in simulation; and integrate Ayurvedic Rasayana protocols for postoperative care and complication management	3	Experiential-Learning 28.4	PSY-GUD	Shows-how	SIM,RLE, D-M
CO3,CO4,CO5	Evaluate intraoperative decisions, design a modified Fothergill's operation for high-risk patients, and formulate a postoperative rehabilitation protocol to minimize recurrence and enhance pelvic floor function.	4	Experiential-Learning 28.5	PSY-GUD	Shows-how	PL,RLE, CBL,SIM

M 28 Unit 4 Operations on ovary Operations on ovary - Oophorectomy, Ovarian Cystectomy, Ovariectomy, Wedge resection, Laparoscopic ovarian drilling
References: 2,3,4,5,28,29,38

3A	3B	3C	3D	3E	3F	3G
CO1,CO5,CO6	Discuss indications, contraindications, procedures, perioperative care, complications, and comparative advantages of key ovarian surgeries, including oophorectomy, ovarian cystectomy, ovariectomy, wedge resection, and laparoscopic ovarian drilling.	2	Lecture	CAN	Knows-how	L&PPT , CBL,L_V C
CO1,CO4,CO5	Demonstrate key steps in ovarian surgeries—including identification of anatomical landmarks, instrumentation, patient preparation, surgical techniques (open and laparoscopic), and intraoperative complication management	5	Practical Training 28.8	PSY-GUD	Shows-how	SIM,RLE, D-BED
CO1,CO4,CO5	Apply anatomical knowledge to safely perform ovarian surgeries on simulators/cadaveric models. Demonstrate proficiency in step-by-step surgical techniques for: Oophorectomy (laparoscopic & open) Ovarian cystectomy (laparoscopic approach) Wedge resection (for PCOS) Laparoscopic ovarian drilling (for infertility) Recognize and manage intraoperative complications (bleeding, adhesions, ureteric injury).	10	Experiential-Learning 28.6	AFT-RES	Know	D-BED,S IM,D-M

Practical Training Activity

Practical Training 28.1 : Garbhashaya Greeva Mukha Dahana (Cervical Cautey)

Practical Activities-Teacher Demonstrates the Scholars (2 Hours)

1. Introduction & Demonstration (30 min)

Ayurveda Perspective (15 min)

Discuss Garbhashaya Greeva Mukha Dahana as a form of Agni Karma (thermal cautey) in Ayurveda.

Explain indications and contraindications.

Showcase traditional instruments (e.g., Suvarna-Rajata-Loha-Shalaka, Pancha Dhatu) and medicated preparations (e.g.,KashtaVarti, Kshara, Haridra).

Modern Perspective (15 min)

Compare with electrocautey/cryocautey – principles, advantages, and limitations.

Demonstrate colposcopy-Guided cautey (if available) for precision.

2. Hands-on Skill Stations (60 min)

(Divide participants into small groups for rotational practice)

Station 1: Agni Karma Simulation (20 min)

Practice on cervical models (or banana peel/moistened clay for texture simulation).

Use a heated probe (simulating Shalaka) to demonstrate controlled thermal application.

Discuss post-procedure care (Yoni Pichu with Jatyadi Taila).

Station 2: Modern Electrocautey Simulation (20 min)

Train on low-voltage cautey machines (or simulators).

Practice spot cauterization on cervical models with proper grounding techniques.

Highlight post-op care: antibiotics (if needed), hygiene, and follow-up.

Station 3: Case-Based Discussion (20 min)

Analyze real cases (e.g., chronic cervicitis, cervical erosion) to decide:

When to choose Ayurveda vs. modern cautey.

How to integrate post-procedure Ayurveda supportive care (e.g., Haridra-Kumari Lepa, Jatyadi Taila for Wound Healing).

3. Debrief & Q&A (30 min)

Complications & Troubleshooting (15 min)

Manage bleeding (modern: electrocautey seal vs. Ayurveda: Raktastambhana Oushadha).

Address infection risks (modern antibiotics vs. Ayurveda-Nimbadi Guggulu or Triphala Guggulu).

Ethical & Safety Considerations (10 min)

Consent, patient comfort, and sterile protocols in both systems.

Open Discussion (5 min).

Practical Training 28.2 : Cervical amputation cone biopsy and LEEP

Teacher Demonstrates to Scholars(2 Hours)

1. Pre-Procedural Planning (30 min)

Activity 1: Case-Based Analysis

Groups analyze mock patient files (history, colposcopy images, biopsy reports).

Example: A 35-year-old with HSIL (CIN III) and Pradara (Ayurveda diagnosis of excessive bleeding).

Task: Compare Ayurveda (Dosha imbalance, Srotodushti) and modern (CIN grade, HPV status) risk factors.

Select the optimal procedure (e.g., LEEP for focal lesions vs. cold knife cone for glandular involvement).

Activity 2: Pre-Op Assessment (Poorva Karma)

Rogi Pariksha Station:

Practice Nadi Pariksha (pulse diagnosis) and DoshaDushya Sammorhana to assess Tridosha dominance (linked to tissue fragility/bleeding risk).

Colposcopy Station:

Hands-on colposcope use to identify transformation zones and lesion margins.

2. Operative Techniques (60 min) (Rotating Stations)

Station 1: Cervical Amputation (Garbhashaya Greeva Chedana)

Ayurveda Focus: Use a Shastrakarma (surgical) simulator to practice Chedana (excision) with traditional scalpels.

Discuss Raktastambhana (hemostatic) Oushadha (Yashtimadhu, Lodhra, Sphatika) for intraoperative bleeding.

Modern Crossover: Compare with cold knife cone biopsy techniques (depth/angle of incision).

Station 2: LEEP Procedure

Skills Practiced: Adjust electrosurgical settings (cut/coagulation) on cervical models.

Case Challenge: Manage a simulated intraoperative hemorrhage with hemostatic measures vs. Ayurveda measures.

Station 3: Hemostasis Strategies

Options Compared: Modern: Suturing (figure-of-8 stitch) vs. electrocautery.

Ayurveda: CandrakalaRasa/Triphala tablets vs. Sphatika Bhasma (alum powder) topical use.

3. Post-Procedural Care & Complication Management (30 min)

Activity 1: Prioritization Exercise

Groups debate post-op steps for:

A diabetic patient (infection risk ? like Triphala + antibiotics).

A fertility-seeking patient (cervical stenosis prevention ? Phala Ghrita vaginal pichu).

Activity 2: Simulation Drill

Scenario: A patient presents with post-LEEP bleeding (Rakta pradara).

Actions: Apply Jatyadi Ghrita gauze (Ayurveda) vs Tranexamic acid (modern).
Justify choices based on Dosha status.

Practical Training 28.3 : Yoni Arsha Chedana-Polypectomy.
Yoni Granthi Bhedana/ Chedana-Marsupialization of Bartholin Cyst.

Practical Activities: Teacher Demonstrates to Scholars-3 Hours

1. Pre-Procedure Briefing (30 min)

Format: Interactive Lecture + Video Demonstration

Review anatomy, indications, and contraindications.

Discuss instrument selection:

Polypectomy: Hysteroscope, graspers, resectoscope.

Marsupialization: Scalpel, forceps, absorbable sutures (2-0 Vicryl).

Watch recorded surgeries with expert commentary.

2. Hands-On Simulation (2 Hours)

Station 1: Yoni Arsha Chedana (Polypectomy)

Model: Hysteroscopic simulator/uterine phantom with polyp mimics.

Tasks: Insert hysteroscope or on simulator and identify polyp.

Resect polyp using cold scissors/electrocautery.

Retrieve specimen and confirm complete removal.

Manage simulated bleeding with bipolar coagulation.

Station 2: Yoni Granthi Bhedana (Marsupialization)

Model: Synthetic Bartholin's cyst model (latex/silicone).

Tasks: Incision: Make a 1.5 cm vertical stab on the cyst.

Drainage: Evacuate contents and irrigate cavity.

Marsupialization:

Evert edges with forceps.

Suture cyst wall to vaginal mucosa (interrupted stitches).

Troubleshoot: Handle cyst rupture or excessive bleeding.

Station 3: Complication Management

Scenarios:

Polypectomy: Uterine perforation ? Demonstrate laparoscopic repair.

Marsupialization: Recurrent cyst ? Practice catheter insertion.

3. Case-Based Discussion & Debrief (30 min)

Format: Small Groups + Faculty Feedback

Analyze real cases:

"Parous Women, 32 F with recurrent polyps: Hysteroscopic resection vs. hysterectomy?"

"Parous Women, 28 F with bilateral Bartholin's abscesses: Marsupialization vs. excision?"

Review participant videos/photos for technique refinement.

Q&A: Tips for minimizing recurrence and optimizing healing.

Practical Training 28.4 : Garbhashayamukha Vistriteekarana evam Lekhana-Dilatation and Curettage.

Practical Activities: Teacher Demonstrates Scholar- 2 Hours

Session Flow with ?yurveda Integration

1. Theoretical Recap (20 min)

Discuss Ayurveda perspectives-Lekhana (scraping) vs. Bhedana (incision).

2. Hands-On Stations (80 min)

Station 1: Ayurveda Cervical Preparation

Practice Yoni Pichu with Ksheera Bala Taila for Garbhashayamukha Shaithilya (cervical softening).

Demonstrate Uttara Basti using Dashamoola Taila in models.

Station 2: Hybrid D&C Technique

Perform cervical dilatation using Hegar dilators.

Collect scraped tissue for Dosha analysis.

Station 3: Complication Management

Simulate Agantuka Shophya (infection) treated with Nimba-Haridra Lepa.

3. Case-Based Viva (20 min)

Scenario: Women 35, F with Asrgdhara (AUB) and Pitta-Kapha Prakrti. Justify Ayurveda interventions for D&C.

Practical Training 28.5 : Yoni Bhramsha Shastra Karma – Anterior colporrhaphy, Posterior colporrhaphy, Pelvic floor repair.

Practical Activities Teacher Demonstrates On Model/Simulator/ Patients.

1. Demonstration of Incision, Dissection, and Suturing Techniques (30 mins)

Teacher demonstrates:

Correct incision techniques (location, depth, and angle).

Safe dissection methods (identifying tissue planes, avoiding bladder/rectal injury).

Suturing techniques (interrupted vs. continuous sutures, knot-tying, appropriate suture material selection).

Students observe and note:

Precision in handling tissues.

Importance of hemostasis during dissection.

2. Simulation of Anterior & Posterior Colporrhaphy (45 mins)

Step-by-step demonstration:

Anterior Colporrhaphy:

Identification of cystocele and marking incision lines.

Plication of pubocervical fascia with absorbable sutures.

Trimming excess vaginal epithelium and closure.

Posterior Colporrhaphy:

Identification of rectocele and perineal body defects.

Dissection of rectovaginal septum.

Plication of rectovaginal fascia and perineorrhaphy.

Students practice under supervision:

Correct tissue handling and suture placement.

3. Proper Use of Surgical Instruments (30 mins)

Teacher demonstrates handling of:

Allis forceps (grasping vaginal edges).

Needle holders (suture placement techniques).

Retractors (exposure of surgical field).

Electrocautery (if applicable for hemostasis).

Students practice:

Safe and efficient instrument use.

4. Layered Closure Techniques for Pelvic Floor Repair (15 mins)

Teacher demonstrates:

Deep layer closure (approximation of fascia/muscle).

Superficial layer closure (vaginal epithelium and perineal skin).

Tension-free suturing to prevent dehiscence.

Practice integrated Ayurveda Sthanika Upakrama for Pre-operative and Post Operative Care.

Practical Training 28.6 : Surgical procedures for Genital prolapse –Fothergill's Operation,Cervicopexy operation

Teacher to demonstrate Scholars and involve them in practical activities(2 Hours)

1. Pre-Procedure Discussion & Case Analysis (20 mins)

Present two clinical cases (e.g., a Vataja Prakriti patient with 3rd-degree uterine prolapse vs. a post-hysterectomy vault prolapse).

Team Based Learning:

Analyze which surgery (Fothergill's/Cervicopexy) is suitable.

Debate Ayurveda pre-op optimization (e.g., Abhyanga, Swedana and MatraBasti for Vata).

Outcome: Groups justify their surgical choice based on Dosha involvement and modern criteria (e.g., age, fertility needs).

2. Simulation-Based Surgical Training (60 mins)

Station 1: Fothergill's Operation (Manchester Repair)

Task: On a pelvic model/simulator, students: Perform cervical amputation (identify Marma regions).

Practice cardinal ligament fixation using absorbable sutures.

Simulate anterior/posterior colporrhaphy.

Station 2: Cervicopexy (Sacrospinous Fixation/Mesh Repair)

Task: On a laparoscopic trainer (or model), students to Demonstrate sacrospinous ligament anchoring.

Practice mesh placement.

Complication Drill: Role-play mesh erosion.

Outcome: Peer feedback on precision, Marma awareness, and adherence to aseptic protocols.

3. Live Demonstration & Critical Appraisal (30 mins)

Watch a live/video demonstration of Fothergill's/Cervicopexy by faculty.

Pause at key steps to: Evaluate anatomical landmarks (Ayurveda: Guda-Sronigata Marma).

Compare various suture techniques.

Outcome: Students propose Dosha-specific modifications (e.g., Madhura-Sheeta diet post-op for Vata patients).

4. Complication Management & Viva (10 mins)

Scenario-Based Q&A: "A patient develops urinary retention post-Fothergill's. How would you manage it using Ayurveda (Vata pacification) and modern methods?"

Practical Training 28.7 : Surgical interventions for uterine inversion-Haultain's operation, Kustner's operation.

Teacher Demonstrates and involve them in Practical activities(2 Hours)

1. Pre-Procedure Case Discussion & Planning (20 mins)

Activity: Present two cases:

Acute inversion (post-delivery, hemorrhagic shock – Pittaja dominance).

Chronic inversion (fibroid-related, Vataja symptoms – pain, dryness).

Groups analyze and justify the choice of surgery (Haultain's vs. Kustner's) based on:

Modern criteria (severity, cervical ring constriction).

Outcome: Students formulate a pre-op plan (e.g., Mahanarayana Taila Abhyanga for tissue strength in chronic cases).

2. Simulation Lab: Surgical Techniques (70 mins)

Station 1: Haultain's Operation (Posterior Approach for Chronic Inversion)

Task: On uterine inversion simulators, students:

Identify the posterior cervical incision site.

Perform uterine repositioning + posterior cervical lig. release.

Practice layered closure.

Complication Drill: "Uterine atony post-repositioning" ? Plan Ayurveda management (Dashamoola/Dhanwantara Kwatha for Vata).

Station 2: Kustner's Operation (Vaginal Approach for Acute Inversion)

Task: On pelvic trainers, students:

Simulate vaginal incision + manual uterine reinversion.

Secure the uterus with sutures (emphasize Ojovardhaka drugs post-op).

Integration: Compare Sushruta's Yoni Samvahana (vaginal support) with modern pessary use.

Outcome: Peer assessment of surgical precision and Dosha-specific modifications.

3. Live Demonstration & Critical Debrief (20 mins)

Activity: Watch video/live demo of Haultain's/Kustner's (key steps highlighted).

Pause to discuss: Ayurveda analogs for cervical relaxation (e.g., Ashwagandha vs. nitroglycerin). Post-op Ahara (diet): Madhura-Sneha for Vata, Tikta for Pitta. Outcome:

Students propose integrative pain management (e.g., Nirgundi Patra Pinda for inflammation).

4. Complication Viva & Reflection (10 mins)

Scenario: "A patient develops sepsis post-Kustner's. How would you combine Panchakarma (Anulomana and antibiotics?) "Justify avoiding Haultain's in a Vataja patient with tissue fragility."

Practical Training 28.8 : Operations on Ovaries

(5-Hour Teacher Demonstration)

1. Introduction & Instrument Familiarization (30 min)

Activity: Teacher demonstrates and explains:

Laparoscopic vs. open surgical instruments

Energy devices (bipolar, monopolar, ultrasonic)
Trocar placement and safe entry techniques
2. Demonstration of Surgical Techniques (3 hours)
Activity 1: Oophorectomy (Open & Laparoscopic – 60 min)
Step-by-step demonstration of clamping, cutting, and securing the infundibulopelvic ligament
Management of ovarian vessels and ureteric safety
Activity 2: Ovarian Cystectomy (60 min)
Demonstration of cyst wall dissection, hemostasis, and ovarian preservation
Handling of endometriotic/dermoid cysts
Activity 3: Wedge Resection & Laparoscopic Ovarian Drilling (60 min)
Demonstration of ovarian cortical incision and thermal drilling techniques
Discussion on PCOS management
3. Complication Management & Troubleshooting (45 min)
Activity:
Simulated scenarios (bleeding, bowel injury) and corrective steps
Use of hemostatic agents and suturing techniques
4. Postoperative Care & Follow-up (30 min)
Activity:
Discussion on pain management, antibiotic protocols, and discharge criteria
Case-based discussion on when to intervene postoperatively
5. Interactive Q&A & Skill Assessment (15 min)
Activity:
Participants summarize key steps and ask clarifying questions
Quick quiz on instrument names and surgical steps

Experiential learning Activity

Experiential-Learning 28.1 : Garbhashaya Greeva-Shastra Karma- Operations on Cervix

Scholar Demonstrates Experiential Learning Activities:(3 Hours)
Pre-Procedural Mastery (45 min)
Activity 1: Case-Based Rogi Pariksha (20 min)
Groups analyze 2 cases:

Case 1: A Pitta-dominant patient with Raktapradara (HSIL/CIN III).

Case 2: A Vata-dominant patient with Garbhashaya Greeva Arbuda (early benign lesions).

Tasks: Correlate PareeshyaBhava and Doshas findings with colposcopy/biopsy reports.

Debate procedure choice: Shastrakarma (scalpel) vs. LEEP vs. cold knife cone.

Activity 2: Colposcopy & Dosha Mapping (25 min)

Hands-on stations:

Station A: Colposcopic lesion mapping (acetic acid/Lugol's iodine).

Station B: Dosha assessment to predict bleeding risk (Pitta) or poor healing (Vata).

2. Surgical Skills Rotation (90 min) (3 Stations, 30 min each)

Station 1: Garbhashaya Greeva Chedana

Task: Perform amputation on a plantain/cervical model using a triangular incision (mimicking Shastrakarma).

Focus:Marma awareness (avoiding excessive Apana Vata disturbance).

Hemostasis with Sphatika Bhasma (alum) vs. Agnikarma.

Station 2: LEEP with Agni Karma Principles

Task: Use electrosurgical unit to excise "HSIL" from simulator, adjusting settings to minimize Dhatukshaya (tissue charring).

Challenge: Manage "bleeding" with Candrakala Rasa,Sphatika Bhasma (Ayurveda hemostatic) and electrocautery.

Station 3: Cold Knife Cone and Ropana Karma.

Task: Excise a 1cm cone from a model cervix, preserving squamocolumnar junction.

Integration: Apply Madhuyashti paste to wound bed to test Ropana (healing) vs. silver nitrate.

3. Complication Drills & Post-Op Planning (45 min)

Activity 1: Hemorrhage Simulation (20 min)

Scenario: A Pitta patient bleeds profusely post-LEEP (Raktapradara).

Teams:Group 1: Use modern methods (sutures, other measures).

Group 2: Apply Kshara (alkaline ash).

Debrief: Compare outcomes (tissue damage, rebleeding risk).

Activity 2: Paschat Karma Design (25 min)

Case: A Vata-dominant patient post-cone biopsy with Sankocha (stenosis) risk.

Deliverables:Modern: Cervical dilation schedule.

Ayurveda: Uttara Basti with Dashamoola taila.

Integrative: Phala Ghrita vaginal suppositories and pelvic floor therapy.

Experiential-Learning 28.2 : YoniArsha Chedana (Polypectomy).

Yoni Granthi Bhedana/Chedana (Marsupialization of Bartholin Cyst).

Scholar Observes/Demonstrates Experiential Activities- 3 Hours

1. Pre-Procedure Discussion & Case Analysis (30 mins)

Activity: Small groups analyze case vignettes (e.g., a 35-year-old multiparous women with Yoni Granthi).

Outcome: Groups defend their decision for surgery vs. Shastra Karma.

2. Simulation & Hands-On Skill Lab (90 mins)

Activity: On anatomical models/simulators, students perform in teams:

Yoni Arsha Chedana (polypectomy with electrocautery/scalpel).

Yoni Granthi Bhedana (marsupialization: incision, drainage, suturing).

Outcome: Peer assessment of technique, sterilization, and precision.

3. Live Demonstration & Debrief (60 mins)

Activity: Observe faculty executing the procedure (live/video), followed by Q&A.

4. Complication Management & Viva (30 mins)

Activity: Role-play scenarios (e.g., excessive bleeding, infection).

Outcome: Students devise mitigation strategies integrating Sthanika Chikitsa and modern protocols.

Experiential-Learning 28.3 : Garbhashayamukha Vistritekarana evam Lekhana (Dilatation and Curettage).

Scholar Demonstrates Experiential Activities- 3 Hours

1. Pre-Procedure Case-Based Discussion (30 mins)

Activity: Groups debate case scenarios.

Outcome: Students defend their choice of D&C vs. Ayurveda Lekhana.

2. Simulation & Hands-On Skill Lab (90 mins)

Activity: On pelvic trainers/simulators, students:

Perform cervical dilatation and curettage.

Practice tissue identification (endometrial hyperplasia).

Outcome: Peer assessment of instrument handling, and aseptic technique.

3. Live Demonstration & Critical Appraisal (60 mins)

Activity: Observe faculty performing D&C (live/video), followed by structured critique.

Outcome: Students in team to propose modifications to align with Ayurveda.

4. Complication Management & Viva (30 mins)

Activity: Role-play complications (e.g., uterine perforation, infection).

Experiential-Learning 28.4 : Yoni Bhramsha Shastra Karma – Anterior colporrhaphy, Posterior colporrhaphy, and Pelvic floor repair.

Scholar Demonstrates Experiential Learning Activities: 4 Hours

1. Pre-Surgical Case Analysis & Ayurveda Correlation (45 min)

Activity:

Scholars analyze real patient case sheets (de-identified) of Yoni Bhramsha (POP-Q graded) and correlate with Ayurveda dosha-dushya involvement (Vata-Kapha, Mamsa-Meda Dhatu).

Group discussion on Sushruta's principles (Ashtavidha Shastra Karma, Vrana Ropana) vs. modern surgical indications.

2. Anatomical & Surgical Simulation (60 min)

Activity: Pelvic Model Workshop – Hands-on dissection to identify:

Anterior vaginal wall (cystocele repair) and posterior compartment (rectocele repair).

Pelvic floor muscles (levator ani, perineal body) for reconstruction.

Suturing Drill – Practice Sushruta's suturing techniques.

3. Live Surgical Observation (45 min)

Activity: Observe a recorded/real-time surgery (if available) of anterior/posterior colporrhaphy.

Scholars note: Steps aligning with Ayurveda Shastra Karma (e.g., Chhedana, Sivana).

Modern modifications (mesh vs. native tissue repair).

4. Postoperative & Rehab Planning (30 min)

Activity: Role-play as Ayurveda surgeons designing:

Dinacharya (Yoga for Apana Vayu – Malasana, Mula Bandha).

Aushadha (Phala Ghrita, Dahamoola/Dhanwantara Kwatha for tissue healing).

Panchakarma (Yoni Prakshalana, Matra Basti to prevent recurrence).

Experiential-Learning 28.5 : Fothergill's operation, Cervicopexy operation

Scholar Demonstrates Experiential Learning Activities: 4 Hours

1. Surgical Simulation Lab

Activity:

Hands-on cadaveric/pelvic model training for:

Fothergill's (anterior colporrhaphy + Mackenrodt's ligament shortening).

Cervicopexy (suturing cervix to sacrospinous ligament/Utero-sacral ligament).

Tools: Simulated ligaments, uterus-cervix models, suturing kits.

Outcome: Mastery of ligament identification, suture placement, and tension adjustment.

2. Live Case Observation + Debrief

Activity:

Observe live/recorded surgery (Fothergill's or cervicopexy) with structured checklist:

Pre-op: Patient positioning, catheterization.

Intra-op: Ligament fixation, haemostasis.

Post-op: Complication mitigation.

Debrief: Group discussion on critical steps and alternatives.

3. Case-Based Decision Making

Provide Experiential Learning activities in Precise form for above topic-4 hours

Here's a structured 4-hour experiential learning plan for Sthanavichyuta Yoni Shastra Karma (Fothergill's Operation & Cervicopexy), optimized for active skill development:

Experiential Learning Plan (4 Hours)

Objective: Develop surgical decision-making, technical skills, and critical analysis of genital prolapse procedures.

1. Pre-Session Preparation (30 min | Asynchronous)

Activity: Watch pre-recorded videos of Fothergill's and Cervicopexy surgeries.

Task: Identify 3 critical steps in each procedure and note potential complications.

2. Interactive Case Discussion (45 min | Small Groups)

Activity:

Case 1: 45-year-old with Stage III uterovaginal prolapse (uterine preservation desired).

Case 2: Recurrent prolapse post-hysterectomy.

Tasks:

Analyze: Choose between Fothergill's vs. cervicopexy; justify.

Evaluate: Debate pros/cons of sacrospinous fixation vs. uterosacral ligament suspension.

Tool: Digital polling for real-time consensus.

3. Simulation Lab (90 min | Hands-On)

Station 1: Fothergill's Operation

Task: Perform on pelvic trainer:

Anterior colporrhaphy + Mackenrodt's ligament plication.

Correct suture tension to avoid urethral kinking.

Station 2: Cervicopexy

Task: Simulate sacrospinous fixation:

Identify sacrospinous ligament (using trainer landmarks).

Practice non-absorbable suture placement.

Assessment: Peer feedback on anatomical accuracy.

4. Complication Management Drill (45 min | Role-Play)

Scenarios:

Intra-op: Bladder injury during Fothergill's.

Post-op: Buttock pain post-cervicopexy (nerve entrapment).

Task:

Teams create a step-by-step rescue protocol.

Simulate cystoscopy for injury verification.

5. Surgical Video Critique (30 min | Facilitator-Led)

Activity:

Review edited clips of expert vs. trainee surgeries.

Tasks:

Evaluate: Spot errors in ligament fixation or suture technique.

Propose: Modifications for improved outcomes.

6. Reflection & Action Plan (30 min)

Activity:

Individual written reflection:

"One technical skill I improved today..."

"One complication I feel unprepared for..."

Group shares key takeaways.

Output: Personal learning goals for next session.

Experiential-Learning 28.6 : Operations on ovary

1.Pre-Session Briefing & Simulation Setup (1 Hour)

Activity:

Interactive Lecture (30 min): Recap of anatomy, indications, and surgical steps.

Simulator Familiarization (30 min): Participants explore laparoscopic trainers, VR simulators, and synthetic/cadaveric models.

2.Hands-On Surgical Techniques (6 Hours)

Activity 1: Laparoscopic Oophorectomy (2 Hours)

Task: Perform step-by-step dissection of ovarian ligaments while preserving ureter.

Debrief: Discussion on energy device use and avoiding thermal injury.

Activity 2: Ovarian Cystectomy (2 Hours)

Task: Simulate cyst wall dissection without rupture (using fluid-filled synthetic cysts).

Complication Drill: Manage simulated cyst rupture and spillage.

Activity 3: Wedge Resection & Ovarian Drilling (2 Hours)

Task: Perform cortical incisions on ovarian models for PCOS.

Comparison: Open vs. laparoscopic techniques.

3. Complication Management & Crisis Scenarios (2 Hours)

Activity:

Bleeding Control: Use of sutures, clips, and hemostatic agents in a high-fidelity model.

Ureteric Injury Simulation: Identify and repair in a cadaveric/tissue model.

Adhesiolysis Practice: Dissect adhesions using laparoscopic tools.

4. Postoperative Care & Multidisciplinary Planning (1 Hour)

Activity:

Case-Based Discussion: Plan postoperative care for a patient with complications.

Role-Play: Counsel a "patient" (actor) on recovery expectations.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

OSCE Assessment (50 marks)

Minor & Major Gynecological Surgeries

Station 1 – Cervical Procedures (Minor Surgery) – 10 Marks

Task: Demonstrate or explain on a model/simulator:

- Cervical biopsy or cone biopsy

- LEEP / cryosurgery procedure

- Station 2 – Polypectomy, D&C, and Bartholin’s Cyst Marsupialization – 10 Marks

Task:

- Demonstrate steps using models or describe procedure
- Identify instruments and explain perioperative precautions
- Station 3 – Genital Prolapse Surgery (Major Surgery) – 10 Marks

Task:

- Explain or demonstrate anterior/posterior colporrhaphy, Fothergill's operation, or cervicopexy
- Discuss patient preparation, positioning, and intraoperative considerations
- Station 4 – Uterine Inversion Surgery – 10 Marks

Task:

- Explain Haultain's or Kustner's operation
- Identify steps to reduce inversion and repair uterus

• Station 5 – Ovarian Surgery & Laparoscopic Techniques – 10 Marks

Task:

- Explain oophorectomy, cystectomy, ovariectomy, wedge resection, or laparoscopic ovarian drilling
- Describe perioperative preparation and postoperative management

Or
Any practical in converted form can be taken for assessment. (25 Marks)
And
Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 5

Module 29 : Stree Roga Sambandhita Shalyakarmani - Operative Gynaecology–Part-II

Module Learning Objectives

(At the end of the module, the students should be able to)

Understanding of Various Gynaecological Surgeries: Gain comprehensive knowledge of procedures such as salpingotomy, salpingectomy, myomectomy, hysterectomy and tubal ligation.

Surgical Techniques: Study the detailed anatomy, indications, contraindications, and techniques of gynaecological surgeries.

Reconstructive Surgeries: Develop theoretical knowledge of reconstructive surgeries for the uterus (Metroplasty), vagina (Hymenoplasty, Neovagina construction, Vaginoplasty), and other related procedures.

Application of Knowledge in Surgical Skills: Apply theoretical knowledge to perform major gynaecological surgeries such as abdominal, vaginal, or laparoscopic hysterectomy or myomectomy in a supervised clinical setting.

Skill Development in Reconstructive Procedures: Perform and practice reconstructive surgeries of the uterus and vagina, focusing on developing expertise in procedures like metroplasty, hymenoplasty, neovagina construction, and vaginoplasty.

Simulation-Based Learning: Enhance surgical skills through simulation training, focusing on the precision and technique of gynaecological and reconstructive surgeries.

Hands-On Experience with Cases: Apply skills in real-life clinical scenarios under expert supervision, allowing the integration of knowledge and practical skills.

Develop Problem-Solving Abilities: Experience complex surgical cases and learn how to make informed decisions in both elective and emergency operative conditions.

M 29 Unit 1 Operations on Fallopian TubeTypes, Clinical Presentation, Pathophysiology,Surgical Approach, Indications, techniques, and post-operative care for each procedure.

Operations on fallopian tube-

Salpingectomy, Salpingostomy, surgical removal of Tubo-ovarian mass, recanalization of fallopian tube.

Focus on managing ectopic pregnancies,hydrosalpinx, tubal malignancies.

Infections leading to Tubal factor infertility and its surgical interventions.

Surgical sterilization Procedures.

Patient preparation.

Post operative care of these procedures.

References: 2,22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO2,CO4,CO5	Describe salpingectomy and its types with indications and contraindications, describe laparoscopic and open procedural steps, and identify major complications with strategies for prevention.	1	Lecture	CC	Knows-how	L_VC,L&PPT
CO1,CO2	Describe the surgical principles and techniques for tubal reanastomosis, including indications and contraindications.	1	Lecture	CC	Knows-how	L,L_VC,L&PPT
CO1,CO2	Discuss the surgical techniques and indications for salpingostomy, including patient selection and preoperative preparation.	1	Lecture	CC	Knows-how	L_VC,L&PPT ,L
CO4,CO5	Prepare surgical trays for laparoscopic and open salpingectomy, demonstrate tissue handling and dissection, identify critical pelvic structures, and manage intraoperative complications.	3	Practical Training 29.1	PSY-GUD	Shows-how	RLE,CBL ,SIM,D-M
CO5	Demonstrate salpingostomy procedures by applying knowledge of surgical instruments and techniques.	3	Practical Training 29.2	PSY-GUD	Shows-how	TBL,D
CO4,CO5	Demonstrate proficiency in laparoscopic and open removal of tubo-ovarian masses by applying pelvic anatomy knowledge and surgical principles while developing advanced technical skills.	2	Practical Training 29.3	PSY-GUD	Shows-how	SIM,PAL,D
CO4,CO5	Demonstrate techniques in performing surgical sterilisation procedures	3	Practical Training 29.4	PSY-GUD	Does	D,SIM,D-M
CO1,CO2,CO3	Describe the indications, contraindications, and complications of fallopian tube recanalization; compare laparoscopic, open, and balloon tuboplasty techniques; explain its role in infertility treatment; and outline postoperative care and follow-up.	1	Lecture	CAP	Knows-how	L_VC,PE R
CO2,CO4	Develop observational and assisting skills for laparoscopic and open recanalization	6	Experiential-	CAN	Knows-	CBL,L&

procedures, analyze surgical team roles, and reflect on patient care and safety considerations.	Learning 29.1	how	GD,BL,D,RLE
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M 29 Unit 2 Surgeries related to Uterus Myomectomy- Myomectomy-Indications, Types, Procedure, Complications.
 Surgical removal of endometriosis/Adenomyosis-Indications, Types, Procedure, Complications.
 Abdominal and Vaginal Hysterectomy.
 Robotic Assisted Hysterectomy-Indications, Types, Procedure, Complications.
References: 2,22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Describe the indications, contraindications, and complications of myomectomy, and its surgical steps along with preoperative and postoperative management.	1	Lecture	CAP	Knows-how	L_VC,PER,L,L&PPT
CO1,CO2,CO4	Describe the indications, contraindications, types and complications pre and post operative management associated with hysterectomy	1	Lecture	CAP	Knows-how	L&GD,L,PER,L&PPT
CO4,CO5	Demonstrate proficiency in open and laparoscopic myomectomy by applying pelvic anatomy knowledge, surgical principles, and advanced technical skills.	3	Practical Training 29.5	PSY-GUD	Shows-how	D-M,D,SIM
CO4,CO5	Demonstrate proficiency in abdominal, vaginal, and laparoscopic hysterectomy by applying pelvic anatomy knowledge, surgical principles, and advanced technical skills.	3	Practical Training 29.6	PSY-GUD	Shows-how	SIM,D,D-M
CO4,CO5	Demonstrate proficiency in laparoscopic and open surgical removal of endometriosis by applying pelvic anatomy knowledge and developing advanced technical skills.	3	Practical Training 29.7	PSY-GUD	Shows-how	D-M,SIM,D
CO4	Discuss indications and contraindications, analyzing team roles, demonstrating knowledge of pelvic anatomy and surgical principles, and reflecting on patient care and safety considerations. in Hysterectomy	6	Experiential-Learning 29.2	CAN	Does	RLE,SDL,TUT

M 29 Unit 3 Reconstructive surgeries of female reproductive tractReconstructive surgeries of Uterus – Metroplasty-Indications, Types, Procedure, Complications
References: 1,2,3,4,22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO2,CO4,CO8	Describe the indications, contraindications, and complications of metroplasty, the pathophysiology of uterine anomalies, discuss diagnostic methods for uterine evaluation, compare metroplasty techniques and analyze surgical outcomes with follow-up care.	2	Lecture	CC	Knows-how	TBL,L&GD,JC,DIS,L_VC
CO4	Describe the indications and contraindications for metroplasty, develop observational skills in uterine reconstruction techniques, and reflect on patient care and safety considerations.	6	Experiential-Learning 29.3	CAP	Knows-how	PBL,L&GD,TBL,BL

M 29 Unit 4 Reconstructive surgeries of vaginaReconstructive surgeries of Vagina – Hymenoplasty, Neovagina construction, Vaginoplasty.

Indications, Types, Procedure, Complications.

References: 2,22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO2	Describe the indications, contraindications, and complications of hymenoplasty, the pathophysiology of hymenal damage, discuss diagnostic methods for hymenal evaluation, compare hymenoplasty techniques and analyze surgical outcomes with follow-up care.	1	Lecture	CC	Knows-how	TUT,L&GD,L_V C,L&PPT
CO5	Identify the indications and contraindications for hymenoplasty, develop observational skills in vaginal reconstruction, analyze surgical team roles, and reflect on patient care and safety considerations.	4	Experiential-Learning 29.4	CAN	Knows-how	CBL,C_L ,TUT,RL E
CO1,CO2	Describe pelvic anatomy and embryology, explain the pathophysiology and diagnosis of vaginal abnormalities, compare vaginoplasty techniques, discuss their indications, contraindications, and complications, and analyze surgical outcomes with follow-up care.	1	Lecture	CAN	Knows-how	L_VC,PB L
CO4	Develop skills for neovagina construction, discuss their indications and contraindications, analyze surgical team roles, demonstrate knowledge of pelvic anatomy and embryology, and reflect on patient care and safety considerations.	4	Experiential-Learning 29.5	PSY-GUD	Shows-how	TUT,L_V C,RL E

Practical Training Activity

Practical Training 29.1 : Salpingectomy

1. Introduction & Case Presentation (20 mins)

Activity: Teacher presents a real case (e.g., ruptured ectopic pregnancy) requiring salpingectomy.

Demonstration:

Reviews preoperative imaging (ultrasound, hCG levels).

Explains decision-making (why salpingectomy vs. salpingostomy).

Learner Participation: Students suggest next steps before teacher reveals the plan.

2. Laparoscopic Salpingectomy Demonstration (60 mins)

Live/Video Demonstration: Teacher performs (or shows recorded) laparoscopic salpingectomy on a simulator/cadaver.

Key Teaching Points:

Trocar placement and safe entry.

Identification of fallopian tube, ovarian vessels, and ureter.

Proper use of instruments (graspers, bipolar, clip applier).

Hemostasis techniques.

Interactive Element: Teacher pauses to ask, "What's the next step?" or "What could go wrong here?"

3. Open Salpingectomy Demonstration (40 mins)

Live/Model Demonstration: Teacher demonstrates open technique on a pelvic model or cadaver.

Focus Areas:

Incision planning (Pfannenstiel vs. midline).

Ureter identification and avoidance.

Tube dissection and vessel ligation.

Learner Task: Students sketch the surgical steps in real-time.

4. Complication Management (30 mins)

Scenario Demonstration: Teacher simulates complications (e.g., bleeding, ureteral injury).

Discussion:

How to recognize and troubleshoot issues.

When to convert to open surgery.

Learner Practice: Small groups brainstorm solutions before teacher demonstrates fixes.

5. Q&A + Guided Hands-On Practice (30 mins)

Activity: Students rotate through stations to practice specific skills (e.g., clipping, suturing) with teacher feedback.

Wrap-Up: Teacher summarizes key takeaways and distributes a checklist for self-review.

Assessment & Feedback

Quiz: 5-question verbal quiz (e.g., "Where is the ureter in relation to the infundibulopelvic ligament?").

Peer Teaching: Students explain one step to a partner in their own words.

Outcome: Learners gain visual and tactile familiarity with salpingectomy, bridging theory to practice.

Practical Training 29.2 : Salpingostomy Simulation and Suturing Workshop

1. Demonstrate performing salpingostomy procedures.
2. Apply knowledge of surgical instruments and techniques.

Time Allocation

1. 0:00-0:30 (30 minutes)
 1. Introduction and review of salpingostomy procedures.
 2. Review of surgical instruments and equipment.
2. 0:30-1:15 (45 minutes)
 1. Simulation Station 1: Salpingostomy on a simulated model.
 2. Demonstrate proper incision and dissection techniques.
 3. Practice fallopian tube reconstruction.
3. 1:15-2:00 (45 minutes)
 1. Simulation Station 2: Suturing and Knot-Tying.
 2. Practice suturing techniques (e.g., continuous, interrupted).
 3. Demonstrate knot-tying skills (e.g., square knot, surgeon's knot).
4. 2:00-2:45 (45 minutes)
 1. Simulation Station 3: Instrument Handling and Tissue Manipulation.
 2. Handle surgical instruments correctly.
 3. Demonstrate proper tissue manipulation.
5. 2:45-3:00 (15 minutes)
 1. Debriefing and feedback.
 2. Review procedure performance.

Practical Activities

1. Salpingostomy simulation on a model.
2. Suturing and knot-tying exercises.
3. Instrument handling and tissue manipulation.
4. Surgical technique demonstrations.
5. Peer review and feedback.

Assessment Criteria

1. Technical skills (suturing, knot-tying, instrument handling).
2. Procedure accuracy and efficiency.
3. Knowledge of surgical techniques and instruments.
4. Communication and teamwork.

Practical Training 29.3 : Surgical Removal of Tubo-Ovarian Mass: Practical

1. Introduction and review of tubo-ovarian mass resection.
2. Review of surgical instruments and equipment.)
 1. Simulation Station 1: Laparoscopic Approach.
 2. Perform laparoscopic tubo-ovarian mass resection on a simulated model.
 3. Demonstrate proper trocar placement and instrument handling.
 1. Simulation Station 2: Open Approach.
 2. Perform open tubo-ovarian mass resection on a simulated model.
 3. Demonstrate proper incision and tissue manipulation.
 1. Simulation Station 3: Dissection and Reconstruction.
 2. Practice dissecting and removing the mass.

3. Demonstrate ovarian reconstruction techniques.

1. Debriefing and feedback.

2. Review procedure performance.

Practical Activities

1. Laparoscopic and open surgical simulations.

2. Instrument handling and tissue manipulation.

3. Dissection and reconstruction techniques.

4. Surgical team dynamics and communication.

5. Patient safety and care considerations.

Assessment Criteria

1. Technical skills (laparoscopic and open surgery).

2. Knowledge application.

3. Communication and teamwork.

4. Patient safety and care.

Evaluation Tools

1. OSCE (Objective Structured Clinical Examination) checklist.

2. Practical skills assessment rubric.

3. Peer review and feedback.

Practical Training 29.4 : Surgical Sterilization techniques

Student demonstrations 3-Hours

Surgical Sterilization Procedures

1. Tubal ligation (laparoscopic and open)

2. Clip application (e.g., Filshie clip)

3. Tubal occlusion (e.g., Essure)

4. Salpingectomy (laparoscopic and open)

Surgical Skills

1. Trocar placement and management

2. Instrument handling and manipulation

3. Tissue dissection and ligation

4. Clip application and tubal occlusion

5. Patient safety and care considerations

Activities

1. Introduction and review of surgical sterilization procedures.
2. Review of surgical instruments and equipment.
 1. Simulation Station 1: Laparoscopic Tubal Ligation.
 2. Perform laparoscopic tubal ligation on a simulated model.
 3. Demonstrate proper trocar placement and instrument handling.
1. Simulation Station 2: Open Tubal Ligation.

Perform open tubal ligation on a simulated model.

Demonstrate proper incision and tissue manipulation.
1. Simulation Station 3: Clip Application and Tubal Occlusion.

Practice clip application and tubal occlusion techniques.

Demonstrate proper clip placement and tubal occlusion.
1. Debriefing and feedback.
2. Review procedure performance.

Assessment Criteria

1. Technical skills (laparoscopic and open surgery).
2. Knowledge application.
3. Communication and teamwork.
4. Patient safety and care.

Practical Training 29.5 : Myomectomy

Prerequisites

Basic knowledge of pelvic anatomy, surgical principles and gynecologic surgery. Activities

Activity

1. Introduction and review of myomectomy procedures.
2. Review of surgical instruments and equipment.
 1. Simulation Station 1: Open Myomectomy.
 2. Perform open myomectomy on a simulated model.
 3. Demonstrate proper uterine incision and fibroid removal.
1. Simulation Station 2: Laparoscopic Myomectomy.

2. Perform laparoscopic myomectomy on a simulated model.
3. Demonstrate proper trocar placement and instrument handling.

1. Debriefing and feedback.
2. Review procedure performance.

Practical Activities

1. Open, laparoscopic myomectomy simulations.
2. Uterine incision and fibroid removal techniques.
3. Suturing and uterine reconstruction.
4. Instrument handling and tissue manipulation.
5. Surgical team dynamics and communication.

Assessment Criteria

1. Technical skills (suturing, tissue manipulation).
2. Knowledge application (indications, contraindications).
3. Communication and teamwork.
4. Patient safety and care considerations.

Evaluation Tools

1. OSCE (Objective Structured Clinical Examination) checklist.
2. Practical skills assessment rubric.
3. Peer review and feedback.

Learning Resources

1. Surgical manuals and guidelines.
2. Simulation models and equipment.
3. Video tutorials and online resources.
4. Expert instructors and mentors.

Target Audience

Resident physicians, fellows and practicing surgeons.

Practical Training 29.6 : Hysterectomy

Activities: Demonstration on simulator/live cases 3 hours

Surgical Skills

1. Uterine removal and vaginal cuff closure
2. Suturing and tissue manipulation
3. Instrument handling and pelvic anatomy identification
4. Trocar placement and laparoscopic technique
5. Patient safety and quality care considerations

Activities

1. Introduction and review of hysterectomy procedures.
2. Review of surgical instruments and equipment.

Simulation Station 1: Abdominal Hysterectomy.

1. Perform abdominal hysterectomy on a simulated model.
2. Demonstrate proper uterine removal and vaginal cuff closure.

Simulation Station 2: Vaginal Hysterectomy.

1. Perform vaginal hysterectomy on a simulated model.
2. Demonstrate proper vaginal approach and uterine removal.

Simulation Station 3: Laparoscopic Hysterectomy.

1. Perform laparoscopic hysterectomy on a simulated model.
2. Demonstrate proper trocar placement and instrument handling.

Debriefing and feedback.

Review procedure performance.

Practical Activities

1. Abdominal, vaginal and laparoscopic hysterectomy simulations.
2. Uterine removal and vaginal cuff closure techniques.
3. Suturing and tissue manipulation.
4. Instrument handling and pelvic anatomy identification.
5. Surgical team dynamics and communication.

Assessment Criteria

1. Technical skills (suturing, tissue manipulation).
2. Knowledge application (indications, contraindications).
3. Communication and teamwork.
4. Patient safety and care considerations.

Evaluation Tools

1. OSCE (Objective Structured Clinical Examination) checklist.

2. Practical skills assessment rubric.
3. Peer review and feedback.

Practical Training 29.7 : Endometriosis Excision and Ablation

Prerequisites

Basic knowledge of pelvic anatomy, surgical principles and gynecologic surgery.

Surgical Techniques

1. Laparoscopic endometriosis excision
2. Open endometriosis ablation
3. Advanced laparoscopic techniques (e.g., retroperitoneal dissection)
4. Uterine and ovarian preservation techniques
5. Management of endometriosis-related complications

Acivity

1. Introduction and review of endometriosis surgery.
2. Review of surgical instruments and equipment.

1. Simulation Station 1: Laparoscopic Endometriosis Excision.
2. Perform laparoscopic endometriosis excision on a simulated model.
3. Demonstrate proper trocar placement and instrument handling.

1. Simulation Station 2: Open Endometriosis Ablation.
2. Perform open endometriosis ablation on a simulated model.
3. Demonstrate proper uterine and ovarian preservation techniques.

1. Simulation Station 3: Advanced Laparoscopic Techniques.
2. Practice advanced laparoscopic techniques (e.g., retroperitoneal dissection).
3. Demonstrate proper management of endometriosis-related complications.

1. Debriefing and feedback.
2. Review procedure performance.

Practical Activities

1. Laparoscopic and open endometriosis excision and ablation simulations.
2. Instrument handling and tissue manipulation.
3. Uterine and ovarian preservation techniques.
4. Advanced laparoscopic techniques (e.g., retroperitoneal dissection).
5. Management of endometriosis-related complications.

Assessment Criteria

1. Technical skills (laparoscopic and open surgery).
2. Knowledge application (endometriosis pathology).
3. Communication and teamwork.
4. Patient safety and care considerations.

Evaluation Tools

1. OSCE (Objective Structured Clinical Examination) checklist.
2. Practical skills assessment rubric.
3. Peer review and feedback.

Learning Resources

1. Surgical manuals and guidelines.
2. Simulation models and equipment.
3. Video tutorials and online resources.
4. Expert instructors and mentors.

Experiential learning Activity

Experiential-Learning 29.1 : Recanalization of Fallopian Tube

Activities 6 hours

1. Review fallopian tube anatomy and demonstration of recanalization procedures.
2. Discuss observation objectives and guidelines.

Assessment Method

1. Observe fallopian tube recanalization procedure in operation theatre.
2. Record observations and reflections.

Post-Observation

1. Reflect on observed procedure.
2. Discuss with instructor/surgeon.

3. Document reflections and insights.

Follow-up

1. Case study analysis and discussion.
2. Reflective journaling submission.
3. Group discussion.

Evaluation Criteria

1. Observation skills.
2. Reflection and analysis.
3. Knowledge application.
4. Communication and teamwork.

Experiential-Learning 29.2 : Hysterectomy Procedures

Hysterectomy Techniques

1. Total abdominal hysterectomy (TAH)
2. Total vaginal hysterectomy (TVH)
3. Laparoscopic-assisted vaginal hysterectomy (LAVH)
4. Robotic-assisted hysterectomy

Surgical Skills

1. Instrument handling and tissue manipulation
2. Suturing and hemostasis
3. Patient safety and quality care considerations
4. Surgical team dynamics and communication

Pre-Observation

1. Review female pelvic anatomy.
2. Discuss observation objectives and guidelines.

Observation

1. Observe hysterectomy procedure in operation theatre.
2. Record observations and reflections.

Post-Observation

1. Reflect on observed procedure.
2. Discuss with instructor/surgeon.
3. Document reflections and insights.

Follow-up

1. Case study analysis and discussion.
2. Reflective journaling submission.
3. Group discussion.

Participation

1. Assist in hysterectomy procedure under supervision.
2. Perform tasks assigned by instructor/surgeon.

Evaluation Criteria

1. Observation skills.
2. Reflection and analysis.
3. Knowledge application.
4. Communication and teamwork.
5. Patient safety and care considerations.

Learning Resources

1. Surgical manuals and guidelines.
2. Operation theatre access.
3. Expert instructors/surgeons.
4. Case studies and reflective journaling templates.
5. Video tutorials and online resources.

Duration

6-8 hours (2-3 hours observation, 1 hour pre/post-observation, 2-3 hours participation)Target Audience

Experiential-Learning 29.3 : Reconstructive Surgeries of Uterus – Metroplasty

Demonstration of Metroplasty Techniques - 6 hours

1. Strassman metroplasty
2. Jones metroplasty
3. Tompkins metroplasty
4. Uterine reconstruction with myometrium

Surgical Skills

1. Instrument handling and tissue manipulation
2. Uterine reconstruction techniques
3. Suturing and hemostasis

4. Patient safety and quality care considerations

Pre-Observation

1. Review uterine anatomy and metroplasty procedures.
2. Discuss observation objectives and guidelines.

Observation

1. Observe metroplasty procedure in operation theatre.
2. Record observations and reflections.

Post-Observation

1. Reflect on observed procedure.
2. Discuss with instructor/surgeon.
3. Document reflections and insights.

Follow-up

1. Case study analysis and discussion.
2. Reflective journaling submission.
3. Group discussion.

Evaluation Criteria

1. Observation skills.
2. Reflection and analysis.
3. Knowledge application.
4. Communication and teamwork.
5. Patient safety and care considerations.

Experiential-Learning 29.4 : Reconstructive Surgeries of Vagina – Hymenoplasty

Demonstration of Hymenoplasty Techniques - 4 hours

1. Simple hymenoplasty
2. Complex hymenoplasty
3. Hymenal reconstruction with vaginal mucosa
4. Alloplastic materials in hymenoplasty

Surgical Skills

1. Instrument handling and tissue manipulation
2. Vaginal surgical techniques
3. Suturing and hemostasis

4. Patient safety and quality care considerations

Pre-Observation

1. Review vaginal and hymenal anatomy.
2. Discuss observation objectives and guidelines.

Observation

1. Observe hymenoplasty procedure in operation theatre.
2. Record observations and reflections.

Post-Observation

1. Reflect on observed procedure.
2. Discuss with instructor/surgeon.
3. Document reflections and insights.

Follow-up

1. Case study analysis and discussion.
2. Reflective journaling submission.
3. Group discussion.

Evaluation Criteria

1. Observation skills.
2. Reflection and analysis.
3. Knowledge application.
4. Communication and teamwork.
5. Patient safety and care considerations.

Experiential-Learning 29.5 : Neovagina Construction

Activity: Student demonstration under teacher supervision - 4 hours

Hour 1: The Foundation - Science, Ethics, and Indications

Theme: "The Blueprint: Understanding the 'Why' and 'Who'"

Experiential Activities:

Interactive Anatomy & Embryology Viva (30 mins)

Activity: In small groups, students use a pelvic model, anatomical charts, and embryology diagrams (e.g., Mullerian duct development).

Task: Each group must demonstrate and explain the relevant pelvic anatomy (bladder, rectum, urethra, levator ani, potential space) and the embryological basis of vaginal agenesis (Mullerian agenesis) to the class.

Teacher's Role: Ask probing questions: "What is the most critical structure to avoid during dissection? What embryological failure are we correcting?"

The Ethics & Indications Council (30 mins)

Activity: A facilitated, case-based debate.

Task: Students are given three patient profiles:

A 19-year-old with MRKH syndrome seeking reconstruction.

A transgender woman seeking gender-affirming vaginoplasty.

A patient with unrealistic expectations, requesting the procedure for a partner.

Challenge: For each case, students must discuss and defend whether the procedure is indicated or contraindicated, focusing on ethical, psychological, and medical rationale.

Hour 2: The Procedure - Simulation and Teamwork

Theme: "The Hands-On Craft: Technique and Team Dynamics"

Experiential Activities:

Simulated Dissection Lab (45 mins)

Activity: Hands-on skills station using specialized anatomical trainers or realistic models (e.g., foam blocks within a pelvic model).

Task: Student pairs demonstrate the creation of a neovaginal space using a blunt dissection technique (simulating a McIndoe or Vecchietti procedure). The focus is on correct plane identification, depth, and avoiding vital structures.

Teacher's Role: Provide real-time feedback on technique, tissue handling, and spatial orientation.

Surgical Team Role-Play & "Time-Out" (15 mins)

Activity: A simulated pre-operative briefing.

Task: Students are assigned roles: Surgeon, Assistant, Scrub Nurse, Circulating Nurse, Anesthesiologist. They must perform a pre-procedure "time-out," verbally confirming patient identity, procedure, consent, allergies, antibiotic prophylaxis, and availability of special equipment (e.g., custom stent).

Focus: Analyzing the specific responsibilities of each team member to ensure patient safety and procedural efficiency.

Hour 3: Management - Complications and Post-Op Care

Theme: "When Plans Change: Anticipating and Managing Challenges"

Experiential Activities:

Complication Management Scenarios (40 mins)

Activity: Table-top exercises and simulated responses on trainers.

Task: Student groups are presented with escalating complications:

Scenario 1 (Intra-op): "You encounter significant bleeding during dissection. Demonstrate your steps." (Students must show application of pressure and simulated cautery on the model).

Scenario 2 (Early Post-op): "The patient presents with foul-smelling discharge and fever on day 5. What is your differential and management plan?"

Scenario 3 (Late Post-op): "The patient returns with vaginal stenosis despite being instructed to dilate. How do you counsel them and manage this?"

Goal: To develop critical thinking and problem-solving skills under pressure.

Post-operative Care & Counseling Practice (20 mins)

Activity: Structured role-playing.

Task: Students pair up, with one acting as the surgeon and the other as a post-operative patient. The "surgeon" must effectively teach the dilation protocol, manage pain expectations, and address psychosocial concerns, demonstrating empathy and clear communication.

Hour 4: Synthesis - The Complete Journey and Reflection

Theme: "From Technician to Healer: Integrating Skill with Care"

Experiential Activities:

The "Full-Cycle" Case Study (30 mins)

Activity: A comprehensive, progressive case discussion.

Task: The entire class works through a single patient's journey from initial consultation to long-term follow-up. They must make collaborative decisions at each stage: patient selection, surgical planning, managing an intra-op complication, and designing a follow-up plan.

Structured Group Reflection (20 mins)

Activity: A facilitated debriefing session.

Task: The teacher guides a discussion using prompts:

"What was the most challenging aspect of today's learning, technical or non-technical?"

"Reflect on a potential ethical dilemma you might face in this field."

"How will you ensure patient safety and autonomy in your future practice?"

Goal: To solidify learning and develop a habit of reflective practice.

Developing a Personal Safety Pledge (10 mins)

Activity: Individual and group commitment.

Task: Each student writes down one personal commitment to patient safety and ethical care based on the day's learning. These are shared anonymously and compiled into a "class pledge."

Modular Assessment

Assessment method	Hour
Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Practical OSCE Assessment (50 Marks) Station 1 – Tubal and Uterine Surgeries – 10 Marks <ul style="list-style-type: none">• Task: Demonstrate or explain:<ul style="list-style-type: none">• Salpingectomy, tubal ligation, myomectomy (abdominal/laparoscopic), and hysterectomy (abdominal/vaginal/laparoscopic)• Include indications, surgical steps, and perioperative precautions	4

- Station 2 – Reconstructive Uterine Surgery – 10 Marks
- **Task:** Explain Metroplasty (uterine reconstruction) using model/simulation
- Discuss indications, techniques, and expected outcomes
- Station 3 – Vaginal Reconstructive Surgery – 10 Marks
- **Task:** Explain or demonstrate:
 - Hymenoplasty, Neovagina construction, Vaginoplasty
- Station 4 – Laparoscopic / Minimally Invasive Skills – 10 Marks
- **Task:** Demonstrate understanding of laparoscopic hysterectomy or myomectomy techniques using simulation
- Discuss patient positioning, port placement, and instrument handling
- Station 5 – Clinical Integration & Case-Based Discussion – 10 Marks
- **Task:** Given a patient scenario requiring reconstructive or major surgery, discuss:
 - Surgical plan, perioperative care, postoperative rehabilitation, and patient counseling.

Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 30 : Stree Roga Sambhandhita Shalyakarma -Part-III -Garbhashaya Nirmana & Yoni Nirmana Shalyakarma (Reconstructive Surgeries of the Uterus and Vagina)

Module Learning Objectives

(At the end of the module, the students should be able to)

- Master surgical anatomy of the Uterus and Vagina.
- Perform step-by-step reconstructive techniques with hands-on training.
- Address fertility preservation and psychosocial aspects of care.
- Navigate ethical and cultural sensitivities in procedures like hymenoplasty.

M 30 Unit 1 Garbhashaya Punarnirmana Shalyakarma (Reconstructive Surgeries of the Uterus) Garbhashaya Punarnirmana Shalyakarma (Metroplasty):
 Surgical correction of uterine anomalies (e.g., septate uterus, bicornuate uterus).
 Techniques for restoring uterine anatomy to improve fertility and reduce miscarriage risk.
 Preoperative imaging, surgical approaches (hysteroscopic vs. abdominal), and postoperative care.
References: 22,23,24,25,35

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze the embryological and pathophysiological basis of uterine anomalies to determine surgical candidacy and interpret diagnostic imaging, and explain surgical steps, potential complications, and technique selection for metroplasty based on patient-specific factors.	2	Lecture	CAN	Knows-how	L_VC,SIM,L&PPT ,PBL
CO4,CO5,CO8	Perform simulated metroplasty in septum resection and cavity reconstruction, adapt techniques for concurrent pathologies, integrate minimally invasive tools, manage intraoperative complications, design individualized postoperative care plans, evaluate emerging fertility-sparing innovations, and collaborate with multidisciplinary teams for holistic patient management.	5	Practical Training 30.1	PSY-GUD	Shows-how	D,SIM,CBL
CO1,CO4,CO5	Explain the embryology, indications, and types of metroplasty, demonstrate step-by-step septum resection and cavity reconstruction, troubleshoot common intraoperative complications, and design individualized postoperative care plans integrating modern and Ayurvedic approaches.	6	Experiential-Learning 30.1	CAP	Does	L&PPT

M 30 Unit 2 Yoni Punarnirmana Shalyakarma (Reconstructive Surgeries of the Vagina) Yoni Punarnirmana Shalyakarma:
 Neovagina Construction: Surgical creation of a functional vagina for conditions like MRKH syndrome (Mayer-Rokitansky-Küster-Hauser).
 Vaginoplasty: Repair of vaginal stenosis, trauma, or post-obstetric injuries (e.g., fistula repair).
References: 22,23

3A	3B	3C	3D	3E	3F	3G
CO1,CO4,CO5	Discuss the anatomical and physiological basis of vaginal agenesis, compare neovagina	2	Lecture	CAN	Knows-	CBL

	construction techniques with their indications and complications, evaluate preoperative assessment and counseling, and analyze intraoperative and postoperative risks with mitigation strategies.				how	
CO1,CO4,CO5	Demonstrate step-by-step neovagina creation, identify critical anatomical landmarks and pitfalls, practice proper instrument handling, and evaluate graft materials for procedural suitability.	2	Practical Training 30.2	PSY-GUD	Shows-how	PBL,CD,CBL
CO1,CO4,CO5	Perform key steps of neovagina construction, assess critical anatomical landmarks and tissue planes for safe dissection, and compare surgical techniques through practice of different approaches.	4	Experiential-Learning 30.2	PSY-GUD	Does	SIM,D,D-M
CO5	Explain the etiology and clinical presentation of vaginal stenosis, traumatic injuries, and obstetric fistulas; compare surgical approaches for vaginoplasty and fistula repair; and analyze preoperative considerations to optimize outcomes.	2	Lecture	CAN	Knows-how	SIM
CO5	Demonstrate step-by-step repair of vaginal stenosis, perform careful dissection to protect adjacent structures, compare flap options for complex reconstructions, and practice postoperative dilation and suture techniques to minimize recurrence.	3	Practical Training 30.3	PSY-GUD	Shows-how	L&PPT
CO1,CO4,CO5	Perform vaginoplasty for stenosis and layered obstetric fistula repair with proper tissue handling and suturing, and troubleshoot intraoperative challenges such as bleeding and flap viability.	6	Experiential-Learning 30.3	PSY-GUD	Does	SIM
M 30 Unit 3 Bhagadvara Sandhanakarma(Hymenoplasty) Bhagadvara Sandhanakarma (Hymenoplasty): Ethical considerations, techniques for hymen reconstruction, and patient counseling. References: 22,23,24,25,26,27,31,35						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3	Describe the anatomical, cultural, and psychosocial indications for hymenoplasty, compare surgical techniques with outcomes and complications, analyze ethical considerations including autonomy and cultural sensitivity, and identify key anatomical landmarks to minimize intraoperative risks.	2	Lecture	CAN	Knows-how	L&PPT ,L_VC

CO4,CO5,CO8	Demonstrate step-by-step hymenoplasty techniques, identify critical anatomical landmarks to minimize risks, practice tissue handling and suturing, and evaluate ethical and cultural considerations in patient selection and counseling.	6	Practical Training 30.4	PSY-GUD	Shows-how	PBL
CO4,CO5	Perform edge approximation and flap reconstruction techniques, assess tissue viability to select appropriate surgical approaches, demonstrate hemostasis and wound closure, and develop culturally sensitive counseling strategies for hymenoplasty patients.	5	Experiential-Learning 30.4	PSY-GUD	Shows-how	D,CBL,SIM

M 30 Unit 4 Fistula RepairFistula Repair (Obstetric & Surgical Fistulas):

Vesicovaginal fistula (VVF) & rectovaginal fistula (RVF) repair

Surgical approaches (vaginal, abdominal, laparoscopic)

References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO1,CO4,CO5	Perform RVF repair using correct techniques, differentiate surgical approaches, demonstrate interposition graft use in complex cases, and troubleshoot intraoperative challenges.	1	Experiential-Learning 30.5	PSY-GUD	Does	CBL,SIM,D-M
CO1,CO4,CO5	Discuss vesicovaginal fistula and its etiology, explain clinical presentation and diagnostic workup, compare surgical approaches with indications, discuss principles of fistula repair, and identify potential complications with prevention strategies.	2	Lecture	CC	Knows-how	L&PPT
CO1,CO4,CO5	Describe key steps of VVF repair, demonstrate fistula closure suturing, discuss case-based surgical approach selection, and recognize common errors and complications	2	Practical Training 30.5	PSY-GUD	Shows-how	CBL,D,SIM
CO1,CO4,CO5	Perform simulated transvaginal VVF repair with proper suturing techniques, collaborate in managing complications, evaluate surgical approach choices, and practice patient counseling addressing psychosocial impacts.	4	Experiential-Learning 30.6	PSY-MEC	Does	PBL,D-BED
CO2,CO3,CO4	Describe key steps of RVF repair, compare surgical approaches, demonstrate fistula closure suturing, and recognize indications for fecal diversion and interposition grafts.	2	Practical Training 30.6	PSY-GUD	Shows-how	D,SIM,CBL

Practical Training Activity

Practical Training 30.1 : Garbhashaya Punarnirmana Shalyakarma (Metroplasty)

Activities Breakdown (8 hours)

1. Surgical Proficiency & Technical Skills (3 Hours)

Demo 1: Live Hysteroscopic Septum Resection (90 min)

Setup:

3D-printed uterus model with color-coded septa (blue = thin, red = thick).

Simulated hysteroscopy tower with fluid management system.

Teacher Actions:

"Think-aloud" narration:

"I'm using a 26Fr resectoscope at 80W cutting current – note how I angle away from the fundal myometrium."

Demonstrate depth markers:

Cervical os as reference point.

Progressive resection in layers (video overlay shows "safe zone").

Learner Tasks:

Annotate procedural steps on a safety checklist.

Predict fluid deficit thresholds (pause at 500ml, 1000ml).

Demo 2: Laparoscopic-Adhesiolysis-to-Metroplasia Transition (90 min)

Setup:

Laparoscopic box trainer with:

Synthetic adhesions (elastic bands + fibrin glue).

Septum model attached to "uterus."

Teacher Actions:

Show instrument selection logic:

"I switch from monopolar scissors to bipolar forceps when near bowel adhesions."

Demonstrate energy device settings:

30W coagulation for vascular pedicles.

Learner Engagement:

Sketch the surgical roadmap with rationale for each transition.

Hands-on practice: Trainees alternate between adhesiolysis and septum identification.

2. Complication Management & Innovation (3 Hours)

Demo 3: Hemorrhage Crisis Simulation (90 min)

Setup:

Uterine model with pressurized "blood vessels" (red dye + pump system).

Scenarios:

Controlled Bleeding:

Teacher demonstrates figure-8 suturing with 2-0 Vicryl.

Torrential Hemorrhage:

Apply Floseal® matrix vs. Bakri balloon insertion.

Conversion to Laparotomy:

Simulate decision-making with vital sign changes (BP drop on monitor).

Learner Participation:

Vote on interventions via audience response system.

Practice balloon tamponade on benchtop models.

Demo 4: Post-op Plan Design (90 min)

Comparative Whiteboard Session:

Modern Approach Ayurvedic-Integrated

Hyaluronic acid gel Madhu-Ghrita (honey-ghee) dressing

COCP for 3 cycles Pushyanug Churna (uterine tonic)

Follow-up hysteroscopy Basti (medicated enema) schedule

Evidence Discussion:

Review studies on adhesion prevention (e.g., *Fertil Steril 2023 meta-analysis*).

Analyze Ayurvedic pharmacopeia for wound healing.

Learner Output:

Draft a hybrid care plan for a patient refusing hormonal therapy.

3. Multidisciplinary Collaboration (2 Hours)

Demo 5: Live Tumor Board (120 min)

Roles:

Surgeon (Teacher): Presents a complex case (septum + endometriosis).

Radiologist (Co-Instructor): Interprets 3D MRI reconstructions.

Ayurvedic Consultant (Guest): Proposes preoperative Shodhana (purification) regimen.

Learner Tasks:

Group Discussion:

Debate surgical timing relative to Panchakarma cycles.

Consensus Building:

Create a unified treatment calendar integrating:

Hysteroscopy date.

Pre-op Ayurvedic diet (e.g., Vatanulomana diet).

Post-op physiotherapy.

Materials List

High-Fidelity Models:

Perfused uterine simulator (for hemorrhage training).

Lap trainer with modular pathology attachments.

Integrative Medicine Kits:

Madhu-Ghrita preparation station.

Practical Training 30.2 : Neovagina Construction: Surgical creation of a functional vagina for conditions like MRKH syndrome (Mayer-Rokitansky-Küster-Hauser).

Activities: Teacher demonstration - 2 hours

1.Introduction & Overview (15 min)

Activity: Brief lecture with 3D anatomical models/videos highlighting vaginal agenesis in MRKH and surgical goals.

Interactive Q&A: Learners identify key anatomical challenges.

2.Step-by-Step Surgical Demonstration (45 min)

Teacher Demonstration:

McIndoe Procedure (Primary Focus):

Skin graft harvesting (demonstration on synthetic skin/pigskin).

Creation of neovaginal space using a dilator/mold.

Suturing techniques for graft placement.

Laparoscopic Vecchietti/Davydov (Video Demonstration + Live Commentary).

Learner Participation:

Small groups palpate anatomical landmarks on pelvic models.

Assist in mock graft placement under supervision.

3.Hands-On Instrument & Material Handling (30 min)

Station Rotation:

Station 1: Practice handling dilators with correct pressure/angle.

Station 2: Compare graft materials (synthetic skin vs. biologic mesh).

Station 3: Laparoscopic tool simulation (if available).

Guided Feedback: Teacher corrects technique in real-time.

4. Complication Management & Postoperative Care (20 min)

Case-Based Discussion:

Teacher presents a complication scenario (e.g., stenosis, granulation tissue).

Learners problem-solve management steps in pairs.

Role-Play:

One learner acts as surgeon, another as patient—counseling on dilation adherence.

5. Debrief & Reflection (10 min)

Group Discussion:

"What would you modify for a transgender patient vs. MRKH?"

"How would you address a patient's anxiety about surgery?"

Exit Ticket: Each learner writes one key takeaway and one remaining question.

Materials Needed:

Pelvic models, synthetic grafts, dilators, suturing kits, laparoscopic simulators (if available).

Video clips of live surgeries (optional).

Practical Training 30.3 : Vaginoplasty: Repair of vaginal stenosis, trauma, or post-obstetric injuries (e.g., fistula repair).

Practical Demonstration Activities (2 Hours)

1. Introduction & Case Overview (20 min)

Teacher Demo:

Present 3D models/videos of vaginal anatomy and pathology (stenosis, fistulas).

Highlight key principles: tension-free closure, vascular supply, layered repair.

Audience Engagement:

Learners identify high-risk zones (e.g., bladder neck in fistula repair) on models.

2. Live Technique Demonstrations (60 min total)

Station 1: Stenosis Repair (30 min)

Teacher Demonstrates:

Fenton's Procedure: Posterior vaginal wall incision and transverse closure.

Z-plasty: Deepithelialization and flap rotation to widen the canal.

Learner Practice:

Pairs simulate suture placement on foam/pigskin models (emphasizing depth/spacing).

Station 2: Fistula Repair (30 min)

Teacher Demonstrates:

Latzko Technique: Partial colpocleisis with layered closure.

Martius Graft Harvest: Labial fat pad mobilization (demo on model).

Learner Practice:

Use blue dye on models to "locate fistula," then simulate layered closure.

3. Complication Drills (30 min)

Scenario 1: Excessive bleeding during dissection.

Learners practice hemostatic suturing with instructor feedback.

Scenario 2: Flap dehiscence post-op.

Teams revise suture technique and discuss reinforcement options.

4. Postoperative Care & Dilation (10 min)

Teacher Demo:

Correct use of graduated dilators; emphasize patient education.

Role-Play:

One learner acts as patient reluctant to dilate; another counsels.

Assessment & Feedback

Real-Time Feedback: Instructor evaluates learner techniques during simulations.

Debrief Quiz (5 min):

"What suture material would you choose for a radiation-induced stenosis? Why?"

Materials Needed:

Pelvic models, fistula simulation kits (e.g., perforated silicone), suture kits, dilators.

Hemostatic agents (simulated), flap models (e.g., felt for Martius graft).

Practical Training 30.4 : Bhagadvara Sandhanakarma (Hymenoplasty)

Activities:

Practical Learning Activities (4-Hour Session)

1. Introduction & Pre-Brief (30 min)

Teacher-Led Lecture (15 min):

Overview of hymen anatomy, indications, and surgical techniques.

Ethical and cultural considerations in patient counseling.

Case Discussion (15 min):

Present a case (e.g., *"A 22-year-old patient requests hymenoplasty for cultural reasons—how would you proceed?"*).

Learners discuss patient selection, informed consent, and technique choice in small groups.

2. Teacher Demonstration (60 min)

Live Demonstration on Anatomical Models (40 min):

Edge Approximation Technique:

Teacher demonstrates incision, tissue approximation, and suturing.

Highlights critical landmarks (e.g., hymenal remnants, vascular supply).

Flap Reconstruction Technique:

Teacher shows how to create and mobilize local flaps for reconstruction.

Emphasizes tension-free closure to prevent dehiscence.

Q&A Session (20 min):

Learners ask questions about technique nuances, complications, and patient counseling.

3. Hands-On Practice (90 min)

Station 1: Edge Approximation (30 min)

Learners practice incision and suturing on synthetic or biological models.

Teacher provides real-time feedback on suture placement and tension.

Station 2: Flap Reconstruction (60 min)

Learners simulate flap creation and mobilization under supervision.

Focus on avoiding excessive trimming to prevent stenosis.

Station 3: Complication Management (30 min)

Bleeding Control: Practice hemostatic techniques (e.g., electrocautery simulation).

Infection Prevention: Discuss and demonstrate proper wound care and dressing.

4. Postoperative Care & Counseling (60 min)

Role-Play Activity:

One learner acts as the surgeon, another as the patient seeking postoperative advice.

Focus on abstinence counseling, wound care, and managing expectations.

Debrief: Teacher summarizes key takeaways and addresses lingering questions.

5. Assessment & Feedback (60 min)

Skills Checklist: Teacher evaluates learners' suturing and flap techniques.

Case-Based Quiz:

"A patient returns with postoperative bleeding—what are your next steps?"

Self-Reflection: Learners write one strength and one area for improvement.

Materials Needed

Anatomical models (synthetic or biological) for hymenoplasty simulation.
Suturing kits (fine absorbable sutures, needle holders, forceps).
Electrocautery simulators (if available).
Case scenarios and role-play prompts.

Practical Training 30.5 : Repair of Vesicovaginal fistula

Activities: 2 hours - teacher demonstrations and interactive activities

Session Outline (2 Hours)

1.Introduction & Overview (15 min)

Activity: Brief interactive lecture (whiteboard/flipped classroom)

Recap VVF etiology, diagnosis, and principles of repair.

2.Teacher Demonstration (30 min)

Activity: Live/video demonstration of transvaginal VVF repair (e.g., Latzko technique).

Key steps highlighted:

Patient positioning (lithotomy) and exposure.

Fistula tract identification (dye injection if simulated).

Mobilization of vaginal flaps, layered closure, and catheter placement.

3.Hands-on Simulation (45 min)

Activity: Small-group stations with feedback:

Station 1: Suturing practice on fistula models (e.g., foam/pig bladder simulators).

Focus: Interrupted vs. continuous suturing, tension-free closure.

Station 2: Flap dissection demo (e.g., Martius flap setup on anatomical model).

LOs covered: 6, 7

4.Case Discussion & Complications (20 min)

Activity: Small-group case scenarios with debrief:

Example case: "A 32-year-old with post-hysterectomy VVF: Abdominal or vaginal approach?"

Groups discuss, then teacher critiques rationale.

LOs covered: 10, 11, 13

5.Q&A and Reflection (10 min)

Activity: Open discussion on psychosocial aspects (e.g., counseling patients with recurrent fistulas).

Materials Needed

Simulation models: Vaginal fistula simulators (e.g., foam with artificial fistula tracts), suture kits.

Visual aids: Video clips of abdominal vs. vaginal repairs, cystoscopy images.
Assessment: Checklist for suturing technique (e.g., knot security, flap alignment).

Practical Training 30.6 : Repair of Rectovaginal fistula

Activities: 2-hour teacher demonstration plan for "Repair of Rectovaginal Fistula (RVF)

1. Introduction & Case Presentation (20 min)

Activity: Interactive mini-lecture with case vignette

Show a clinical scenario (e.g., "28F with post-obstetric RVF").

Discuss: Etiology, classification (LO1), and diagnostic workup (LO3).

Visual aid: MRI/endoanal ultrasound images.

2. Teacher Demonstration (40 min)

Activity: Live/video demonstration of transvaginal RVF repair (e.g., advancement flap technique).

Key steps:

Patient positioning (lithotomy).

Fistula tract identification (methylene blue dye).

Flap mobilization and layered closure.

Decision-point: "When to divert? (LO4)."

3. Hands-On Simulation (45 min)

Activity: Rotating stations with feedback (small groups):

Station 1: Suturing practice on RVF simulators (e.g., silicone rectum/vagina models).

Task: Perform interrupted vs. continuous closure.

Station 2: Martius flap setup on anatomical model.

Focus: Graft harvesting and positioning.

4. Complication & Troubleshooting Drill (10 min)

Activity: "What Would You Do?" scenarios (e.g., recurrent RVF, Crohn's-related fistula).

Groups propose solutions; teacher critiques.

5. Debrief & Q&A (5 min)

Activity: Recap key takeaways and address learner questions.

Materials Needed

Simulation models:

RVF simulators (e.g., foam/silicone with tract).

Martius flap model (labia majora analog).

Surgical tools: Needle drivers, 3-0 Vicryl, weighted speculum.
Visuals: Video clips of transanal/abdominal approaches.

Experiential learning Activity

Experiential-Learning 30.1 : Garbhashaya Punarnirmana Shalyakarma (Metroplasty)

Experiential Learning Activities 6 hours

Hour 1: Foundations & Live Demonstration

Activity 1: Interactive Lecture (60 min)

Content:

Embryology of Müllerian anomalies.

Principles of metroplasty (Strassman, Tompkins, hysteroscopic).

Engagement:

Q&A with case vignettes (e.g., "Which approach for a 3cm septum?").

Activity 2: Teacher Demonstration (60 min)

Instructor performs a hysteroscopic metroplasty on a 3D-printed model.

"Think aloud" narration of critical steps (resection depth, energy device settings).

Learners annotate a surgical checklist.

Hour 2: Simulation Lab (Technical Skills)

Activity 3: Hands-On Simulation (3 hours)

Stations:

3D Model Resection: Trainees practice septum resection with hysteroscopic simulators.

Suturing Practice: Abdominal metroplasty suturing on uterine phantoms.

Assessment:

Peer feedback using a competency checklist (e.g., "Achieved 80% resection accuracy").

Hour 3: Complication Management

Activity 4: Crisis Scenario Drills (60 min)

Simulated Cases:

Hemorrhage: Manage bleeding with hemostatic techniques.

Perforation: Convert to laparoscopic repair.

Debrief:

Compare strategies using a complication management algorithm.

Hour 4: Postoperative Care & Innovation

Activity 5: Case-Based Design (60 min)

Task: Develop a post-op care plan for:

Group 1: Modern (barriers + hormones).

Group 2: Integrative (Ayurvedic Vrana Ropana + physical therapy).

Output: Poster presentation with evidence justification.

Hour 5: Multidisciplinary Role-Play

Activity 6: Interdisciplinary Consultation (60 min)

Roles:

Surgeon, radiologist, Ayurvedic Stree Roga expert, fertility specialist.

Scenario:

Plan treatment for a patient with a septate uterus and recurrent pregnancy loss.

Deliverable: Consensus treatment pathway with rationale.

Assessment Tools:

Skills: Simulation checklists (e.g., "Suturing precision").

Knowledge: MCQs on embryology/complications.

Teamwork: Rubric for role-play collaboration.

Materials Needed:

Low-cost: 3D-printed models, box trainers.

High-tech: VR hysteroscopy simulators (if available).

Experiential-Learning 30.2 : Neovagina Construction: Surgical creation of a functional vagina for conditions like MRKH syndrome (Mayer-Rokitansky-Küster-Hauser).

1. Pre-Brief & Case Discussion (30 min)

Teacher-Led Overview:

Quick recap of surgical options (McIndoe, Vecchietti, Davydov).

Case scenario: *19-year-old MRKH patient seeking neovagina creation—how would you approach?*

Small Group Brainstorming:

Learners discuss surgical plan, graft choice, and consent points in pairs.

2. Student-Led Surgical Simulation (120 min)

Activity 1: McIndoe Procedure (Skin Graft Technique)

Student Demonstration (Rotating Roles):

Team 1: Mark and dissect neovaginal space on pelvic model.

Team 2: Harvest "skin graft" (synthetic material) and fixate to stent.

Team 3: Insert stent and suture graft in place (supervised by instructor).

Teacher Guidance:

Correct improper technique (e.g., excessive tension on graft).

Highlight critical errors (e.g., rectal injury risk).

Activity 2: Vecchietti/Davydov Technique (Laparoscopic Simulation)

Video Demonstration (20 min): Watch key steps of laparoscopic approach.

Hands-On Practice:

Use laparoscopic trainers (if available) to simulate traction device placement.

Teams compete to achieve proper tension on mock neovagina.

3. Complication Management Drill (40 min)

Role-Playing Stations:

Station 1: Graft Detachment ? Learners revise suturing technique.

Station 2: Excessive Bleeding ? Apply hemostatic agents (simulated).

Station 3: Post-op Stenosis ? Practice dilation techniques on models.

Debrief: Each team presents their solution to the class.

4. Postoperative Care & Counseling Practice (30 min)

Small Group Activity:

Scenario: Patient returns at 6 weeks with poor dilation adherence.

Learners role-play surgeon-patient counseling (peer feedback).

Checklist Grading:

Teacher assesses communication skills (e.g., empathy, clarity).

5. Reflection & Peer Feedback (40 min)

Structured Reflection:

"What was the most challenging step? How would you improve?"

Peer Teaching:

Each student explains one key concept to the class (e.g., graft selection).

Teacher-Led Wrap-Up:

Address lingering questions; highlight clinical pearls.

Assessment Tools:

Skills Checklist: Teacher evaluates technique during simulations.

Peer Assessment: Learners rate each other's communication/counseling.

Self-Reflection: Written submission of "biggest takeaway and uncertainty."

Materials Needed:

Pelvic trainers, synthetic skin/stents, suturing kits, laparoscopic simulators.

Hemostatic agent props (e.g., gelatin foam), dilation kits.

Checklist rubrics for grading.

Experiential-Learning 30.3 : Vaginoplasty: Repair of vaginal stenosis, trauma, or post-obstetric injuries (e.g., fistula repair).

Activities: Experiential Learning Activities (6 Hours)

1. Pre-Brief & Skill Stations Setup (1 hour)

Case-Based Warm-Up (30 min):

Small groups review two clinical cases (e.g., post-radiation stenosis vs. obstructed labor fistula).

Discuss surgical approach, graft needs, and consent points (teacher clarifies misconceptions).

Station Orientation (30 min):

Teacher quickly demonstrates key techniques at each station before rotations.

2. Rotating Skill Stations (90 min, 30 min/station)

Station 1: Stenosis Repair (Fenton's/Z-plasty)

Task:

Students mark incision lines on vaginal models, perform depth-controlled dissection, and suture.

Challenge:

Instructor introduces "scar tissue" (thickened rubber sheets) to simulate fibrosis.

Station 2: Fistula Repair (Latzko + Martius Graft)

Task:

Identify "fistula" (dyed hole in model), close in 3 layers, then harvest/place a "Martius graft" (labial fat pad simulation).

Challenge:

Instructor punctures the "bladder" (water-filled balloon) to test repair integrity.

Station 3: Complication Management

Bleeding Control: Practice figure-8 sutures on bleeding vessels (simulated with tubing/red dye).

Flap Failure: Revise a dehisced suture line with reinforcement (e.g., interrupted vs. continuous).

3. Simulated Patient Scenarios (1 hour)

Role-Play 1:

Student acts as surgeon counseling a fistula patient on success rates and postoperative restrictions.

Role-Play 2:

Student manages a stenosis patient refusing dilation; peers suggest motivational strategies.

Feedback:

Peers rate clarity/empathy using a checklist; teacher summarizes best practices.

4. Reflection & Competency Challenge (60 min)

Speed Drill:

Teams compete to complete a fistula repair + graft in <10 mins (graded on technique/safety).

Debrief:

One-word reflections: "What skill felt most precarious? Why?"

Assessment Tools

Skills Checklist: Teacher scores suturing, dissection, and graft handling at stations.

Peer Evaluation: Role-plays rated for communication effectiveness.

Self-Assessment: Learners submit a "confidence score" (1–5) for each technique pre/post session.

Materials Needed Per Station:

Stenosis Station: Foam vaginal models, scalpel blades, suture kits, scar simulators.

Fistula Station: Silicone fistula models, labial fat pad analogs (felt/fabric), dyed water for "urine leak."

Complication Station: Bleeding vessel simulators (tubing + red dye), dehiscence models.

Adaptations for Limited Resources:

Replace Martius graft with local flap simulation (e.g., vaginal wall advancement).

Use low-cost materials: Stuffed gloves for "bladder," colored thread for suture practice.

Experiential-Learning 30.4 : Bhagadvara Sandhanakarma (Hymenoplasty)

Activities: Session Structure (5 Hours)

1.Foundation Building (30 minutes)

Activity 1: Anatomy Review & Case Analysis (15 min)

Small groups examine 3D pelvic models to identify hymenal structures

Case-based discussion: "Nulliparous 23yo vs multiparous 30yo - how does your approach differ?"

Activity 2: Ethical Debate (15 min)

Role-play: Divide into "patient advocates" and "ethics committee" to debate:

Cultural pressures vs patient autonomy

Truthfulness in postoperative expectations

2.Technical Skill Stations (120 minutes)

Station 1: Basic Technique Lab (60 min)

Step-by-step guided practice on:

Edge approximation with 5-0 absorbable sutures

Local flap development using microsurgical instruments

Real-time video feedback using document cameras

Station 2: Complication Management (60 min)

Bleeding scenario: Identify and ligate "bleeding vessels" (red-dyed tubing)

Dehiscence scenario: Repair failed closure with reinforcement techniques

Infection scenario: Demonstrate wound care and antibiotic selection

3. Integrated Practice (90 minutes)

Activity 3: Full Procedure Simulation

Learners complete timed procedures on high-fidelity models

Assessment criteria:

Tissue handling (30%)

Anatomical precision (30%)

Time management (20%)

Aesthetic outcome (20%)

Activity 4: Postop Counseling OSCE

Standardized patient encounters:

Managing unrealistic expectations

Addressing cultural concerns

Recognizing psychological distress

4. Assessment & Reflection (90 minutes)

Performance Evaluation

Objective Structured Assessment:

Suture technique on synthetic tissue

Flap design on anatomical model

Complication management scenario

Group Debrief

"What surprised you about the technical challenges?"

"How will you approach patient selection differently?"

Materials List

High-fidelity vaginal models with vascular simulation

Microsurgical instrument sets (x10)
Absorbable suture practice boards
Simulated blood system (pump + tubing)
Standardized patient scripts (x5 scenarios)
3D anatomy visualization software

Experiential-Learning 30.5 : Repair of Rectovaginal fistula

Activities: Session Plan (3 hours)

1.Pre-Brief & Case Assignment (30 min)

Activity: Team formation (3-4 learners) and case distribution

Each team receives:

A unique RVF case card (post-obstetric/Crohn's/radiation-induced)

Relevant imaging (MRI/endoanal US printouts)

Task: Analyze case and select surgical approach (LO2)

2.Simulation Stations (90 min total, 30 min/station)

Station 1: Basic RVF Repair

Task: Perform layered closure on silicone RVF model

Focus skills:

Fistula margin identification

Tension-free closure technique

Catheter placement verification

Tools: Vaginal retractors, 3-0 Vicryl, fistula probes

Station 2: Complex Case Management

Scenario: "Recurrent RVF with tissue loss"

Tasks:

Harvest Martius flap on anatomical model

Position flap between rectal/vaginal layers

Justify need for diverting stoma

Tools: Flap model, stoma marking kit

Station 3: Complication Drill

Scenario: "Intraoperative bleeding at fistula site"

Tasks:

Identify bleeding source

Apply appropriate hemostasis

Modify surgical plan

Tools: Bleeding simulator, hemoclips, cautery pen

3.Team Presentations (30 min)

Each team presents:

2-min summary of their case approach

Key challenges encountered

Modifications made during simulation

Faculty provide focused feedback (LO4, LO5)

4.Reflection & Wrap-up (30 min)

Activity: "One Skill, One Insight" sharing

Each learner states:

One technical skill they improved

One clinical pearl learned

Materials required:

Physical simulators: RVF models with varying complexity, Martius flap trainer (labia majora/rectum)

Bleeding simulation setup

Surgical instruments: Fistula probes, Needle drivers, Electrocautery trainer

Assessment materials: Laminated case cards, Evaluation rubrics, Timer for station rotation

Experiential-Learning 30.6 : Repair of Vesicovaginal fistula

3-Hour Experiential Learning Activities

1.Pre-Session Preparation (15 min)

Activity: "Fistula Knowledge Warm-Up" (Individual)

Learners complete a 5-question quiz (e.g., "List 3 causes of VVF") and review a 1-page infographic on surgical principles.

2.Simulation Lab: Hands-On Repair (90 min)

Activity 1: Guided Practice on Fistula Models (Small groups)

Task: Perform a simulated transvaginal repair (e.g., foam bladder/vagina models with artificial fistulas).

Focus:

Identifying fistula edges.

Mobilizing flaps + layered closure with 3-0 Vicryl.

Catheter placement confirmation.

Role-play: Rotate roles (surgeon, assistant, anesthetist).

Activity 2: Complication Stations (Rotation)

Station A: "High Fistula" – Practice apical exposure with weighted speculum.

Station B: "Recurrent Fistula" – Use scarred tissue model to practice Martius flap interposition.

3. Case-Based Competitive Challenge (45 min)

Activity: "VVF Olympics" (Teams of 4)

Teams race to solve 3 clinical scenarios (e.g., post-radiation fistula, obstetric fistula with urethral involvement).

Deliverables:

Surgical plan sketch (whiteboard).

2-minute pitch on approach (vaginal/abdominal) + rationale.

Judges: Faculty score on technique, safety, and creativity.

4. Patient Counseling Role-Play (20 min)

Activity: "Breaking Bad News" (Pairs)

One learner plays a patient with recurrent VVF; the other explains surgical options and emotional support.

Debrief: Faculty highlight empathetic communication techniques.

5. Reflection & Feedback (10 min)

Activity: "One-Minute Paper"

Learners write:

"One skill I improved today."

"One question I still have."

Materials Needed

Physical simulators: Fistula models (e.g., silicone bladder/vagina with replaceable fistula tracts).

Surgical kits: Needle drivers, Vicryl sutures, catheters, weighted speculums.

Visual aids: Timer, scoring rubrics, laminated case cards.

Modular Assessment

Assessment method	Hour
Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Practical OSCE Assessment (50 Marks)	4

Station 1 – Uterine Reconstruction (Metroplasty) – 10 Marks

- **Task:** Demonstrate or explain on a model:
- Indications for metroplasty
- Stepwise surgical procedure
- Preoperative preparation and postoperative care
- Station 2 – Vaginal Reconstruction (Neovagina Construction) – 10 Marks

- **Task:** Explain or simulate:
- Indications and patient selection
- Surgical technique for neovagina construction
- Postoperative rehabilitation
- Station 3 – Hymenoplasty & Cosmetic Reconstruction – 10 Marks

- **Task:** Demonstrate or explain:
- Indications for hymenoplasty
- Surgical steps & postoperative care
- Ethical considerations in reconstructive surgery
- Station 4 – Trauma and Functional Repair – 10 Marks

- **Task:** Discuss:
- Reconstruction for traumatic injuries (vaginal lacerations, fistulae)
- Restorative techniques to preserve function
- Station 5 – Integrative Case-Based Discussion – 10 Marks

- **Task:** Given a patient with congenital vaginal agenesis and uterine anomaly, plan comprehensive reconstructive surgery, including:
- Surgical approach (uterus & vagina)
- Pre- and postoperative care
- Functional and psychological counseling

Or
Any practical in converted form can be taken for assessment. (25 Marks)
And
Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Semester No : 6

Module 31 : Prasava Sambandhita Shalyakarmani- Operative Obstetrics – Part-I

Module Learning Objectives

(At the end of the module, the students should be able to)

Describe the indications, contraindications, and steps involved in the dilatation and evacuation procedure manual removal of placenta, safe abortion techniques, suction evacuation, MVA, and medical termination, emergency surgeries in cases of septic or criminal abortion, ensuring ethical and evidence-based care. Perform critical obstetric procedures like dilatation and evacuation, manual removal of placenta, cervical encircage, and perineal tear repair with competence. Integrate knowledge from modern and ayurvedic medical approaches in the management of obstetric surgeries.

M 31 Unit 1 Minor surgeries 1Dilatation and evacuation – types, indications, contraindications, risks, complications, procedure and post procedure care. Manual Removal of placenta-Indications, contraindications, preparation, technique, complications, procedure, post procedure management.

References: 24,38

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Discuss dilatation and evacuation (D&E) with its indications, preoperative assessment and preparation, step-by-step surgical technique, appropriate gestational age, and recognize potential complications with risk-minimization strategies	2	Lecture	CAP	Knows-how	L&PPT ,L&GD
CO2,CO3,CO4 ,CO5	Perform the correct technique for Garbhashaya Mukha Vistruteekarana (cervical dilatation) and Nishkasana (evacuation), analyze procedural challenges, and evaluate clinical decision-making in different scenarios	4	Practical Training 31.1	CAP	Knows-how	D-BED,CB L
CO2,CO3,CO4 ,CO5	Perform cervical dilatation and uterine evacuation with correct technique, evaluate patient-specific factors to adapt the procedure, troubleshoot complications, design post-procedure care plans, and appraise ethical and safety considerations in low-resource settings	6	Experiential-Learning 31.1	PSY-MEC	Shows-how	SDL,PAL ,PBL,CB L,RP
CO2,CO3,CO4	Analyze the indications and contraindications for manual removal of placenta, pre-operative preparation and procedural steps, evaluate post-procedure care, and formulate	3	Lecture	CAN	Knows-how	L_VC,L&PPT

	management strategies for low-resource settings					,L&GD
CO3,CO4,CO5	Demonstrate manual removal of placenta, correlate indications and contraindications with real-time decisions, critically assess pre- and post-procedure care, and propose adaptations for low-resource settings.	6	Practical Training 31.2	PSY-ADT	Shows-how	CBL,CD, D-BED
CO3,CO4,CO5	Perform manual removal of placenta on simulators with correct technique, prioritize preoperative steps, troubleshoot complications, adapt procedures for low-resource settings, and reflect on team communication and ethical decision-making during emergencies.	6	Experiential-Learning 31.2	PSY-GUD	Shows-how	SIM,CBL, D-M

M 31 Unit 2 Minor surgeries 2Cervical encircage –Indications,Types, Procedure, Timing and post procedure management.
Perineal tear repair-Pre Operative evaluation, Classification, Timing, Techniques, Post repair Care, Complications and management.
References: 23,24,28,29,30,31,34,35,36,37,38,40

3A	3B	3C	3D	3E	3F	3G
CO3,CO4,CO5	Analyze indications and contraindications for cervical cerclage, compare different cerclage types and justify selection based on patient-specific factors, and evaluate preoperative preparation for optimal outcomes	3	Lecture	CAN	Knows-how	L&GD,L _VC,L&P PT
CO5	Perform McDonald cervical cerclage with correct suture placement, differentiate elective and emergency scenarios, troubleshoot intraoperative challenges, design postoperative monitoring protocols, and debate ethical dilemmas in cerclage decision-making.	4	Practical Training 31.3	PSY-GUD	Shows-how	DIS,PAL, CBL,TUT ,SIM
CO3,CO4,CO5	Perform McDonald cerclage with procedural accuracy, differentiate elective and emergency scenarios, manage intraoperative complications, and design patient-specific postoperative care plans.	6	Experiential-Learning 31.3	PSY-MEC	Shows-how	PAL,PSM ,SIM,PER ,W

M 31 Unit 3 Safe abortion servicesAbortion: selection of cases, technique and management of complications

Medical termination of pregnancy-

- i) Suction Evacuation / MVA –Indications, Contraindications, Procedure, Complications, Pre and Post Procedure Care, Equipments, Advantages, Disadvantages.
- ii) Extra amniotic instillations – Indications, Contraindications and procedure, Complications, Drugs used for Medical abortions.

Newer methods like medical abortion-Laminaria Tent, Balloon Tamponade, Uterine Aspiration- Procedure, Complications and Procedure.

References: 24,38

3A	3B	3C	3D	3E	3F	3G
CO3,CO4,CO5	Discuss clinical indications and contraindications for colpocentesis, analyze relevant anatomical landmarks for procedural safety, and evaluate step-by-step technique including positioning, needle insertion, and fluid aspiration.	2	Lecture	CE	Knows-how	L_VC,L&GD,L&PPT ,PER
CO6	Perform colpocentesis with correct landmark identification and needle technique, interpret aspirated fluid to differentiate pathologies, and troubleshoot procedural challenges using alternative approaches.	6	Practical Training 31.4	PSY-GUD	Shows-how	CBL,CD,D-BED,SIM,TUT
CO3,CO4,CO5	Perform colpocentesis on simulators with procedural accuracy, differentiate clinical indications through fluid analysis and case scenarios, manage complications using protocol-driven responses, and communicate risks and benefits empathetically during consent.	8	Experiential-Learning 31.4	PSY-GUD	Shows-how	CBL,PBL ,SIM

M 31 Unit 4 Surgical management of Septic abortion / Criminal abortionColpocentesis –Indications and Procedure.

Colpotomy-Indications and Procedure.

Laparotomy for septic abortion-Indications and Procedure.

Post Operative care of each procedure and management of complications.

References: 23,24,28,38

3A	3B	3C	3D	3E	3F	3G
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Practical Training Activity

Practical Training 31.1 : Cervical dilatation and Evacuation

Activities:

1. Simulation-Based Demonstration (2 hours)

Activity:

Teacher-led live/simulated demonstration of:

Cervical dilatation (correct instrument handling, stepwise dilation techniques).

Uterine instrumentation (safe insertion, tactile assessment of uterine cavity).

Evacuation procedure (suction techniques, tissue identification, complication recognition).

Use of high-fidelity pelvic trainers or virtual reality simulators (if available).

2. Hands-On Practice (90 min)

Activity:

Structured skill stations (rotations in small groups):

Station 1: Dilatation practice on cervical models (assess resistance, gradual dilation).

Station 2: Evacuation simulation (mock uterine cavity with synthetic tissue, suction device handling).

Station 3: Live case observation (if ethically permissible) or recorded case analysis.

teacher feedback on technique, ergonomics, and safety.

3. Debriefing & Reflection (30 min)

Activity- Structured discussion on -

Challenges encountered (e.g., cervical stenosis, hemorrhage simulation).

Decision-making (when to pause, modify technique, or escalate care).

Low-resource adaptations (e.g., manual vacuum aspiration if electric suction is unavailable).

Reflective writing (5-min individual notes on key takeaways).

Practical Training 31.2 : Aparā Hasta Nishkarshana - Manual Removal of placenta

Manual Removal of Placenta: 6 hours Sessions

1. Introduction & Case Context (60 min)

Activity:

Brief lecture recap (30 min):

Revisit key indications (e.g., retained placenta >30 mins, hemorrhage) and contraindications (e.g., coagulopathy, unstable patient).

Highlight pre-op prep (IV access, analgesia, consent) and post-op care (monitoring for hemorrhage/infection).

Case presentation (30 min):

Instructor shares a real/scenario-based case (e.g., "28-year-old with PPH, placenta not delivered after 40 mins").

Learners predict steps ("What would you do first?") and justify choices.

Tools: Whiteboard, case vignette handout.

2. Live/Simulated Demonstration (2 hours)

Activity:

Step-by-step demonstration on a high-fidelity pelvic model or live case (if ethically feasible):

Pre-op prep: Hand hygiene, draping, anesthesia review (emphasize asepsis).

Procedural steps:

Hand placement: Sterile glove technique, entering uterus.

Placental detachment: Systematic separation (show counter-traction).

Complication management: Simulated hemorrhage control (uterine massage, meds).

Post-op care: Inspection of placenta, monitoring vitals, counseling points.

Pause-and-discuss: Instructor pauses at critical steps (e.g., "Why do we avoid excessive traction?") for learner input.

Tools: Pelvic model, sterile pack, gloves, simulated blood/placenta, checklist.

3. Debrief & Low-Resource Adaptations (1 hour)

Activity:

Structured debrief (30 min):

"What were the 3 most critical safety steps observed?"

"How would you modify this if you lacked oxytocin/sterile gloves?"

Small-group exercise (30 min):

Groups design an MRP protocol for a rural clinic (e.g., using oral misoprostol, clean vs. sterile technique).

Peers critique proposals ("Will this reduce infection risk?").

Tools: Flipchart, low-resource scenario cards.

4. Assessment & Reflection (2 hour)

Activity:

Skill validation (60 min):

Learners list steps in correct order on whiteboards (timed).

Instructor performs deliberate errors (e.g., skipped hand hygiene); learners "spot the mistakes."

Reflective discussion (60 min):

"What aspect of the procedure made you most anxious? How would you overcome it?"

Pledge: One actionable takeaway (e.g., "I'll always double-check anesthesia before starting").

Tools: Error checklist, reflection worksheet.

Practical Training 31.3 : Cervical encirclage

Activities: Teacher demonstration:

1. Introduction & Case Context (30 min)

Lecture Recap (15 min):

Briefly review indications (history of 2nd-trimester loss), contraindications (active labor, infection), and cerclage types (McDonald vs. Shirodkar).

Highlight key anatomical landmarks (cervico-vaginal junction, bladder reflection).

Case Presentation (15 min):

Present a real/vignette case (e.g., "24-year-old with prior 20-week loss, now 14 weeks").

Ask learners: "Would you offer cerclage? What pre-op tests are needed?"

Discuss answers and clarify misconceptions.

Tools: PowerPoint slides, cervical anatomy diagram, case handout.

2. Live/Simulated Demonstration (1.5 hours)

Teacher Activities:

Step-by-Step Demonstration on high-fidelity cervical model:

Pre-op Prep: Show proper positioning (lithotomy), sterile draping, and anesthesia setup.

Instrumentation: Identify and name tools (e.g., vaginal retractors, Mersilene tape, needle driver).

Suture Placement:

Demonstrate McDonald technique:

"First bite at 12 o'clock, 5 mm depth, avoiding vessels."

Emphasize tactile feedback ("Feel the dense cervical stroma").

Compare with Shirodkar (if time permits).

Complication Simulation:

Deliberately "rupture membranes" (simulated with saline-filled condom) and show rescue maneuvers.

Pause-and-Explain:

Freeze at critical steps (e.g., "Why do we start at 12 o'clock?") for learner input.

Tools: Pelvic trainer, synthetic cervix, suture materials, simulated membranes.

3. Guided Hands-On Practice (1 hour)

Teacher Activities:

Structured Skill Stations (rotate learners in small groups):

Station 1: Suture Placement

Instructor demonstrates one suture bite, then learners replicate with 1:1 feedback.

Station 2: Complication Drill

Teacher triggers "bleeding" (simulated gel); learners practice compression/suture adjustment.

Station 3: Emergency Cerclage

Demonstrate amnioreduction (needle decompression) + cerclage on bulging membrane model.

Real-Time Feedback:

Correct grip techniques, suture tension, and instrument handling.

Tools: Practice cervix models, hemorrhage gel, 22-gauge needles (for amnioreduction).

4. Debrief & Clinical Integration (1 hour)

Teacher Activities:

Case Discussion (30 min):

Present a failed cerclage case (e.g., preterm delivery despite cerclage).

Lead discussion: "Was this a technique error or patient selection issue?"

Protocol Design (30 min):

Instructor outlines a post-op care template, then learners adapt it for:

Low-resource settings (e.g., no ultrasound for cervical length monitoring).

High-risk patients (e.g., twins).

Share and compare group outputs.

Tools: Whiteboard, printed case studies, post-op care checklist.

Practical Training 31.4 : Colpocentesis

Activities:

Session Breakdown

1. Introduction & Anatomy Review (1 hour)

Teacher Demonstration:

Lecture-Demo Hybrid (30 min):

Use a sagittal pelvic model to show:

Needle trajectory through posterior fornix into pouch of Douglas.

Relationship to rectum/uterus (avoidance zones).

Project real ultrasound images of fluid collections in cul-de-sac.

Landmark Palpation Drill (30 min):

Learners palpate cervix/fornix on pelvic models while instructor corrects hand positioning.

Tools: Pelvic models, ultrasound images, pointer laser.

2. Live Demonstration (2 hours)

Teacher Demonstration:

Full Procedure Demo (60 min):

Pre-procedure:

Simulate consent discussion with "patient" (actor).

Show sterile setup (draping, speculum insertion, tenaculum use).

Needle Insertion:

Use transparent vaginal model to visualize needle path in real-time.

Aspirate colored fluid (red=blood, yellow=pus) while verbalizing findings.

Complication Simulation:

Deliberately "miss" the pouch, then demonstrate correction.

Simulate vasovagal reaction (pause procedure, manage ABCs).

Learner Participation (60 min):

Guided Hands-On Segments:

Each learner practices:

Speculum placement (on model).

One-handed needle stabilization (foam pad).

Instructor provides real-time feedback.

Tools: Transparent simulator, colored fluid syringes, foam pads.

3. Complication Scenarios (1.5 hours)

Teacher Demonstration:

Staged Demos with Debrief (90 min):

Dry Tap (30 min):

Demo alternative approaches: Repositioning vs. ultrasound guidance.

Learners brainstorm solutions in pairs.

Bowel Injury (30 min):

Show warning signs (fecal aspirate, sudden pain) and immediate actions (stop procedure, NPO, surgery consult).

Team Response Drill (30 min):

Simulate hypotension post-procedure; learners role-play nurse/physician roles.

Tools: Fecal-simulated fluid, BP cuff simulator.

4. Skill Stations with Supervision (1 hour)

Teacher-Led Rotations:

Station 1: Fluid Interpretation

Instructor aspirates "unknown" fluids; learners diagnose (e.g., "Serosanguinous = ?").

Station 2: Consent Role-Play

Teacher models empathetic consent, then observes learners counseling standardized patients.

Station 3: Needle Accuracy

Blindfolded learners palpate model fornix while instructor guides needle angle.

Assessment: Checklist feedback for each station.

5. Synthesis & Assessment (30 min)

Teacher Demonstration:

Video Review (15 min):

Compare expert vs. novice colpocentesis clips (learners identify 3 differences).

Competency Quiz (15 min):

5 rapid-fire questions (e.g., "Name one absolute contraindication").

Experiential learning Activity

Experiential-Learning 31.1 : Cervical dilatation and evacuation

1. Pre-Session Preparation (30 min)

Activity:

Pre-test quiz (10 min, MCQs on anatomy/indications).

Video demonstration (20 min, expert performing D&E with narration).

Purpose: Activate prior knowledge and prime for hands-on learning.

2. Simulation-Based Skill Stations (3 hours) (Rotate in small groups)

Station 1: Cervical Dilatation

Task: Practice gradual dilatation on 3D-printed cervical models with varying resistance.

Focus: Tactile feedback, minimizing trauma, managing stenosis.

Station 2: Uterine Evacuation

Task: Use suction cannulas on uterine models with synthetic "products of conception."

Focus: Instrument handling, cavity assessment, complete evacuation.

Station 3: Complication Management

Scenario: Simulated hemorrhage/asynclitism; learners apply compression techniques or decide to escalate.

Tools: Hemorrhage simulation gel, role-play (nurse/patient).

Station 4: Low-Resource Adaptations

Task: Practice manual vacuum aspiration (MVA) if electric suction is unavailable.

Debate: "How would you modify consent/counseling in limited-settings?"

3. Live Case Observation/Debrief (1 hour) (If ethically feasible)

Observe a real/proctored case (e.g., recorded surgery with consent).

Structured Q&A on decision-making (e.g., "Why was osmotic dilator used?").

4. Role-Play & Reflection (1 hour)

Activity 1: Patient Counseling Role-Play

Scenario: Explain the procedure, risks, and post-care to a "patient" (actor/peer).

Feedback: Peers rate clarity/empathy using a checklist.

Activity 2: Group Reflection

Guided questions:

"What was your most critical error today, and how would you rectify it?"

"How would you prioritize steps in a high-volume, low-resource clinic?"

5. Assessment & Closure (30 min)

OSCE-style assessment (10 min per learner):

Perform dilatation on a model + verbalize steps.

Answer a "complication" prompt (e.g., "The patient has a fever post-procedure. Your next steps?").

Group pledge: Each shares one safety practice they'll commit to (e.g., "I'll always confirm cavity emptiness by visual inspection").

Materials Needed:

Pelvic trainers, 3D-printed cervix/uterus models, suction devices, MVA kits, hemorrhage simulators.

Checklists, reflection worksheets, timer.

Experiential-Learning 31.2 : Manual removal of placenta

1. Pre-Brief & Case Assignment (30 min)

Activity:

Team formation (4–5 learners) + case cards (e.g., "PPH with retained placenta in a rural clinic").

Knowledge warm-up:

Each team lists indications/contraindications on flipcharts.

Instructor clarifies doubts using a "What If?" Q&A (e.g., "What if the patient has a fever?").

Tools: Case cards, timers, flipcharts.

2. Simulation Stations (4 hours)

(Rotate teams every 60–120 min)

Station 1: Core Skill Drill

Task: Perform MRP on a pelvic trainer with synthetic placenta.

Focus: Hand placement, controlled traction, placental inspection.

Twist: Instructor introduces sudden "hemorrhage" (red dye release); learners must respond.

Station 2: Low-Resource Challenge

Scenario: "No IV oxytocin available" – teams use bimanual compression + oral misoprostol.

Debate: "Is clean technique acceptable if sterile gloves are unavailable?"

Station 3: Team Emergency Scenario

Case: "Patient deteriorates post-MRP" (simulated hypotension/sepsis).

Roles:

Operator: Leads procedure.

Nurse: Administers meds/timekeeping.

Counselor: Explains to "family" (actor).

Assessment: Peer feedback using a checklist (e.g., "Did the team reassess vitals post-procedure?").

3. Live Case Observation (2 hour, if feasible)

Activity:

Observe a proctored live case (or video) with expert commentary.

Guided note-taking:

"How did the clinician confirm complete placental removal?"

"What pain management was used?"

4. Reflection & Protocol Design (1 hour)

Activity 1: "What Went Wrong?"

Teams review a complication case (e.g., uterine inversion) and identify 3 avoidable errors.

Activity 2: Design Your Own Protocol

Groups create a 1-page MRP flowchart for a specific setting (e.g., home birth, district hospital).

Gallery walk: Peers vote on "most adaptable protocol."

5. Assessment & Commitment to Practice (30 min)

Activity:

OSCE-style stations:

Skill check: Perform placental inspection + document findings.

Verbal case: "A patient refuses MRP due to pain. How do you respond?"

Closing circle: Each learner shares one change they'll make in practice (e.g., "I'll double-check analgesia before starting").

Materials Needed

High-fidelity pelvic models, synthetic placentas, hemorrhage simulators (red dye/water balloons).

IV/medication props, low-resource kits (MVA, misoprostol tablets).

Timers, role cards, flipcharts, sticky notes.

Experiential-Learning 31.3 : Cervical encirclage

Activities:

1.Pre-Session Preparation (30 min)

Activity: Pre-test quiz (10 min): 5 clinical questions (e.g., "Which patient is NOT a cerclage candidate? A) 16 weeks with funneling, B) 24 weeks in active labor").

Video annotation task (20 min): Watch a cerclage video while labeling key steps on a schematic cervix (e.g., "Mark where the 1st suture bite should be placed").

Tools: Digital quiz, annotated cervix diagrams.

2.Simulation Stations (2.5 hours) - (Rotate small groups every 50 min)

Station 1: Core Skills

Task: Perform McDonald cerclage on 3D models (normal vs. short cervix).

Instructor twist: Mid-procedure, reveal "cervical tear" (red dye leak); learners must adapt technique.

Assessment: Peer-evaluate using a 10-item checklist (e.g., "Bladder reflected? Suture depth 5-7mm?").

Station 2: Emergency Decision-Making

Case: "22 weeks, 3cm dilated, membranes visible."

Actions:

Simulate amnioreduction (needle decompression of saline-filled condom).

Place rescue cerclage under time pressure (10-min timer).

Debrief: "What would you do if membranes ruptured during suturing?"

Station 3: Ethics & Communication

Role-play: Learner counsels a "patient" (actor) who refuses cerclage due to fear of miscarriage.

Use shared decision-making tools (visual aids on risks/benefits).

Feedback: Peers rate clarity/empathy on a 5-point scale.

3.Post-Simulation Protocol Design (45 min)

Activity: Jigsaw groups create cerclage care bundles for different settings:

Group 1: Tertiary hospital (ultrasound surveillance).

Group 2: Rural clinic (no operating room, limited meds).

Gallery walk: Groups critique peers' plans using sticky notes ("Strength: Clear activity restrictions. Gap: Missing infection signs").

4.OSCE-Style Assessment & Reflection (15 min)

Activity: Timed skill test (5 min/learner):

Place one perfect suture bite on a model while verbalizing steps ("I'm checking for membrane bulge before my 7 o'clock bite").

Reflective one-word close: Each learner shares a word summarizing their biggest insight (e.g., "Anatomy!" or "Ethics!").

Materials Needed - Simulation: Cervix models (normal/friable), Mersilene tape, needle drivers, vaginal retractors, saline-filled condoms (membranes), hemorrhage gel.

Assessment: Procedural checklists, timing devices, empathy rating scales.

Counseling: Visual aids (cerclage success rate graphs, complication risks).

Why This Works?? Aligns with Kolb's Cycle:

Concrete experience (simulation) ? Reflective observation (debrief) ? Abstract conceptualization (protocol design) ? Active experimentation (OSCE).

Targets Competencies:

Medical expertise (technique), communication (counseling), professionalism (ethics).

Experiential-Learning 31.4 : Colpocentesis

1. Pre-Session Preparation (2 Hour)

Activity 1: Knowledge Baseline (30 min)

Pre-test quiz (30 min):

20 MCQs (e.g., "Which finding contraindicates colpocentesis? A) Hemoperitoneum, B) Coagulopathy").

Anatomy lab (60 min):

Small groups dissect/palpate preserved pelvic specimens to identify posterior fornix, pouch of Douglas.

Tools: Quiz, anatomical models, prosected specimens.

2. Simulation Stations (3 Hours)

(Rotate groups every 1 hour)

Station 1: Core Procedure

Task: Perform colpocentesis on a fluid-filled vaginal simulator (water-based dye in concealed pouch).

Instructor twists:

Mid-procedure, reveal "unexpected fluid" (e.g., clear ? bloody) to prompt real-time interpretation.

Assessment: Peer-evaluate using a 10-item checklist (sterility, landmark ID, needle angle).

Station 2: Complications

Scenario 1: "Dry tap" ? Switch to transvaginal ultrasound guidance (simulated probe available).

Scenario 2: "Bowel perforation" (aspirate brown fluid) ? Role-play surgical consultation.

Debrief: "What vital signs would you monitor post-procedure?"

Station 3: Low-Resource Adaptations

Challenge: Perform colpocentesis without tenaculum/speculum (using digital guidance only).

Discussion: "How would you sterilize equipment if no sterile kit is available?"

3. Live Case Integration (1 Hour)

Activity:

Observe a proctored live case (or high-definition video) with expert commentary.

Guided note-taking:

"How did the clinician confirm needle placement before aspiration?"

"What pain management was used?"

4. Team-Based Scenario (1 Hour)

Activity: "Code Culdocentesis" Simulation

Case: Unstable patient with suspected ruptured ectopic pregnancy.

Roles:

Operator: Performs colpocentesis.

Nurse: Administers IV fluids, monitors vitals.

Counselor: Updates "family" (actor) on findings.

Debrief: Focus on team dynamics and time-sensitive decisions.

5. OSCE Assessment & Reflection (60 min)

Activity 1: Timed Skill Test

Task: Aspirate "blood" from a simulator within 3 minutes while verbalizing steps.

Grading: Pass/fail based on safety-critical steps (e.g., sterile technique).

Activity 2: Reflective Discussion

Prompt: "What personal bias (e.g., fear of complications) might affect your performance?"

Action plan: Each learner writes one procedural improvement goal.

Materials Needed

Simulation: High-fidelity vaginal trainers, 18G spinal needles, colored fluids (red/yellow/brown), ultrasound simulators.

Modular Assessment

Assessment method

Hour

Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.

4

Practical OSCE Assessment (50 Marks)

Station 1 – Uterine Evacuation Techniques – 10 Marks

- **Task:** Demonstrate or explain on a model:
- Dilatation and Evacuation (D&E)
- Suction Evacuation / Manual Vacuum Aspiration (MVA)
- Manual Removal of Placenta (MRP)

• Station 2 – Preventive Obstetric Procedures – 10 Marks

- **Task:** Explain or simulate:
- Cervical cerclage (indications & steps)

- Perineal tear repair (classification, repair technique, suture selection)
- Station 3 – Safe Abortion Services – 10 Marks
- **Task:** Explain:
 - Medical abortion protocols
 - Techniques for surgical abortion: Suction Evacuation, MVA
 - Counseling, legal and ethical considerations
- Station 4 – Management of Complicated / Septic / Criminal Abortions – 10 Marks
- **Task:** Discuss:
 - Surgical management including Colpocentesis/Colpotomy, Laparotomy
 - Complication recognition and stabilization
- Station 5 – Integrative Case-Based Discussion – 10 Marks
- **Task:** Given a patient scenario with a retained placenta and post-abortal sepsis, plan:
 - Immediate obstetric surgical intervention
 - Perioperative stabilization & monitoring
 - Preventive measures for future pregnancies

Or
 Any practical in converted form can be taken for assessment. (25 Marks)
 And
 Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)

Module 32 : Prasava Sambandhita Shalyakarmani - Operative Obstetrics – Part-II

Module Learning Objectives

(At the end of the module, the students should be able to)

- Demonstrate proficiency in understanding, selecting, and performing key procedures related to operative obstetrics, including instrumental delivery like forceps, vacuum extraction.
- Demonstrate Caesarean section.
- Develop decision-making clinical skills for Caesarean section, hands on procedure critical analysis and integrate management in Caesarean section.
- Understand the indications, contraindications, and complications of caesarean hysterectomy. Explain the surgical anatomy relevant to caesarean hysterectomy.

Demonstrate Caesarean hysterectomy while adhering to best practices for patient safety and surgical technique, identify different approaches and techniques used in caesarean hysterectomy.

Decision-making during different risks and complications during Caesarean hysterectomy.

Explain the indications, contraindications, risks, and procedural steps involved in a hysterotomy. Demonstrate the correct surgical technique for performing a hysterotomy on a simulated or real patient under supervision. To communicate effectively with the surgical team and patient, ensuring informed consent and compassionate care during the procedure.

M 32 Unit 1 Instrumental delivery Forceps Delivery -Indications, Contraindications, Complications, Types, Risks and Benefits.

Vacuum Delivery -Indications, Contraindications, Complications, Types, Risks and Benefits.

References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO6,CO7,CO8	Compare the outlet, low, and mid-cavity forceps applications, describe key design features and uses of common forceps types, and summarize the risks and benefits compared to vacuum extraction and cesarean delivery.	2	Lecture	CAN	Knows-how	SY,PL,L_VCL,PA L
CO5,CO7,CO8	Analyze clinical scenarios to determine indications and contraindications for forceps delivery, demonstrate correct assembly, blade orientation, and application techniques on a pelvic model, compare biomechanics of different forceps types, and evaluate simulated deliveries to identify technical errors	4	Practical Training 32.1	PSY-GUD	Shows-how	X-Ray,PSM,PBL,D L,SIM
CO5,CO6,CO7,CO8	Describe indications, contraindications, and risks of forceps delivery, demonstrate correct placement and maneuvers on a simulator, practice teamwork with the obstetric team, and reflect on errors to improve technical and clinical judgment.	5	Experiential-Learning 32.1	CAP	Does	RLE,TBL
CO6,CO7,CO8	Compare vacuum extraction with forceps and cesarean delivery regarding indications, success rates, and complications; classify vacuum cup types with their clinical applications; and explain the biomechanical principles of vacuum-assisted delivery.	2	Lecture	CAN	Knows-how	SY,L&PP T ,L,JC,L _VC
CO5,CO6,CO7	Demonstrate assembly and application of various vacuum cups on a pelvic trainer,	4	Practical	PSY-	Shows-	SIM,D-M

	execute proper traction aligned with the pelvic axis, and adjust techniques for challenging delivery scenarios.		Training 32.2	GUD	how	,PBL,RL E,X-Ray
CO2,CO3,CO4 ,CO5	Analyze clinical scenarios to determine indications and contraindications for vacuum delivery, demonstrate correct cup selection, placement, and traction on simulators, troubleshoot complications, collaborate effectively in interprofessional teams, and reflect on performance through structured debriefing.	5	Experiential- Learning 32. 2	PSY- MEC	Does	TPW,W,T BL,TUT, X-Ray

M 32 Unit 2 Major surgeries-1Shalyakruta Prasava -Caesarean Section- Pre-operative, Types, Surgical Techniques, Post Operative Care, Complications, Risks and Benefits.

References: 22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4 ,CO5	Describe anatomical landmarks for Pfannenstiel and midline incisions, identify key indications for Caesarean section, explain step-by-step surgical procedures including abdominal entry, bladder separation, uterine incision, fetal delivery, and closure, and evaluate intraoperative interventions such as uterine exteriorization and cord clamping.	2	Lecture	CAP	Knows- how	JC,LS,CD ,ML,REC
CO1,CO2,CO3 ,CO4,CO5,CO 7,CO8	Demonstrate step-by-step C-section surgery including abdominal entry, bladder dissection, uterine incision, fetal delivery, and closure; apply safe techniques to minimize complications, evaluate intraoperative interventions, avoid critical structures, and execute proper uterine and abdominal closure.	4	Practical Training 32.3	PSY- GUD	Shows- how	D,DL,D- M,PrBL, D-BED
CO1,CO2,CO3 ,CO4,CO5,CO 6,CO7,CO8	Identify indications, contraindications, and preoperative preparations for C-section, demonstrate step-by-step surgical techniques including incision, fetal extraction, and closure, apply emergency protocols for hemorrhage and fetal distress, and practice postoperative care including pain management and infection prevention.	5	Experiential- Learning 32. 3	PSY- MEC	Does	FV,PSM, RLE,D- M,W

M 32 Unit 3 Major surgeries-2Emergency obstetric hysterectomy, relevant anatomical considerations and surgical steps, subtotal versus total hysterectomy techniques

References: 1,2,3,4,22,23,24,25,26,27,35

3A	3B	3C	3D	3E	3F	3G
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CO2,CO4,CO5,CO6	Describe indications and contraindications for emergency obstetric hysterectomy, relevant anatomical considerations and surgical steps, compare subtotal versus total hysterectomy techniques, and identify potential complications with preventive strategies.	2	Lecture	CAN	Knows-how	L,L&PPT, L&GD, L_VC
CO1,CO2,CO3,CO4,CO5	Demonstrate preoperative preparation including consent and team briefing, perform systematic surgical hysterectomy approaches with devascularization, bladder dissection, and ureter identification, manage intraoperative complications, practice postoperative care, and communicate effectively during high-stakes scenarios	4	Practical Training 32.4	PSY-GUD	Shows-how	D-BED, C D,C_L,Pr BL,PL
CO2,CO3,CO4,CO5	Analyze surgical plans for complex obstetric cases in team discussions, perform key hysterectomy techniques including bladder dissection and ureter identification, and manage hemorrhage using techniques such as B-Lynch and uterine artery ligation	5	Experiential-Learning 32.4	PSY-ADT	Does	W,RLE,S IM,RP

M 32 Unit 4 Major surgeries -3Garbhashaya Patana-Hysterotomy- Pre-operative, Types, Surgical Techniques, Post Operative Care, Complications, Risks and Benefits
References: 22,23,24,25,26,27,28

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO4,CO7	Discuss indications for hysterotomy, relevant surgical anatomy, compare surgical approaches with their advantages and disadvantages, and identify potential complications with prevention and management strategies.	2	Lecture	CAP	Knows-how	L_VC,L&PPT, L&GD
CO1,CO2,CO4,CO6,CO8	Identify indications and contraindications for hysterotomy, demonstrate preoperative assessment and patient positioning, perform simulated step-by-step hysterotomy including abdominal entry, uterine incision, extraction, and closure, manage intraoperative complications, and discuss postoperative care and potential complications.	4	Practical Training 32.5	PSY-GUD	Shows-how	PL,CD,D-M,PER,T BL
CO5,CO7,CO8	Plan hysterotomy approaches for complex obstetric cases, perform key procedural steps on simulators, and manage intraoperative complications such as hemorrhage, bladder injury, and uterine rupture	6	Experiential-Learning 32.5	PSY-MEC	Does	RLE,W,P SM,JC,RP

Practical Training Activity

Practical Training 32.1 : Forceps delivery

1. Introduction & Indications (30 min)

Teacher Demonstration:

Compare forceps, vacuum, and C-section outcomes using real case data (whiteboard).

Simulate a clinical decision: Show how to assess fetal position, station, and pelvis adequacy on a mannequin.

Learner Engagement:

Think-Pair-Share: "Would you choose forceps for this scenario? Justify."

2. Live Forceps Application (90 min)

Teacher Demonstration:

Break down the procedure into 5 steps with intentional pauses for questions:

Prep: Asepsis, anaesthesia, bladder emptying (demonstrate catheterization).

Examination: Confirm fetal position (hands-on mannequin + ultrasound simulation).

Application: Show correct/incorrect blade placement (let learners palpate differences).

Traction: Demonstrate axis-specific pulls with force gauge (safe vs. excessive force).

Delivery: Slow-motion delivery of mannequin baby, emphasizing controlled movements.

Learner Engagement:

Spot the Error: Teacher deliberately misplaces blades; learners interrupt when they notice.

3. Complication Simulations (60 min)

Teacher Demonstration:

Model 3 high-risk scenarios with complications:

Failed traction: Switch to Kielland's for rotation.

Maternal laceration: Demonstrate repair techniques.

Neonatal resuscitation: Integrate forceps delivery with NRP steps.

Learner Engagement:

Pause-and-Predict: "What would you do next?" before revealing the teacher's action.

4. Guided Hands-On Rotation (60 min)

Structured Practice:

Learners rotate in groups of 3 to practice one skill each under teacher observation:

Station 1: Forceps assembly and blade orientation.

Station 2: Palpating fetal position on a mannequin.

Station 3: Simulated traction with feedback from force gauge.

Teacher Role:

Provide real-time feedback using a 5-point checklist (e.g., "Blades aligned with occiput? Yes/No").

Practical Training 32.2 : Vacuum Delivery

Teacher Demonstration Activities (2 Hours)

1.Live Expert Demonstration (60 min)

Model the 5-Step Vacuum Delivery Sequence:

Pre-procedure checks (fetal position, cervix, anesthesia)

Cup selection/placement (emphasizing flexion point)

Controlled traction with force measurement

Handling "pop-offs" and reapplication

Post-delivery neonatal/maternal assessment

Think-Aloud Technique: Verbalize decision-making during simulated complications (e.g., fetal bradycardia).

2.Deliberate Error Demonstration (30 min)

Intentionally perform incorrect techniques:

Misplaced cup (lateral flexion) ? Show scalp swelling

Excessive traction ? Demonstrate cup detachment

Engage Learners: "Pause-and-Identify" errors in real-time.

3.High-Fidelity Simulation (30 min)

Simulate an emergent vacuum delivery for fetal distress:

Teacher plays the obstetrician; learners observe and document steps.

Post-scenario debrief: Compare learner notes with expert approach.

Hands-On Practical Activities (2 Hours)

1.Skills Stations Rotation (90 min)

Station 1: Cup Application & Placement

Task: Apply cups correctly on fetal head models; use ultrasound simulators to verify position.

Station 2: Traction Force Calibration

Task: Use dynamometer-equipped trainers to practice safe traction limits (<0.8 kg/cm²).

Station 3: Complication Management

Task: Resolve simulated pop-offs, scalp injuries, or shoulder dystocia post-vacuum.

2.Team-Based Scenario (30 min)

Role-Play:

Scenario: "38-week patient, +3 station, late decelerations."

Roles: Operator, assistant, nurse, patient advocate.

Deliverables:

Time-limited vacuum delivery on mannequin

Post-procedure debrief using WHO safe delivery checklist

Assessment Tools

OSCE Checklist: Evaluates cup placement, traction angle, and communication.

Peer Assessment: Learners score each other's techniques using standardized rubrics.

Reflective Write-Up: "How would you modify your approach for a preterm delivery?"

Practical Training 32.3 : Shalyakruta Prasava -Caesarean Section

Teacher-Led Demonstration Activities (5 Hours)

Format: Live/recorded surgery demo (simulated or real), interspersed with pauses for Q&A, skill drills, and team scenarios.

1. Preoperative Prep & Planning (60 min)

Activity:

Live Demo: Teacher performs preoperative steps on a mannequin/simulated patient:

Patient positioning (supine with left tilt)

Foley catheter insertion

Skin marking (Pfannenstiel vs. vertical incision)

Time-out protocol (team briefing)

Interactive Element:

Learners predict potential challenges (e.g., obesity, adhesions) and suggest modifications.

Quiz: "Which antibiotic is given pre-incision? Justify your choice."

2. Surgical Technique Demo (90 min)

Activity:

Step-by-Step Live Demo (Simulated abdomen/fetal model):

Incision: Skin ? subcutaneous ? rectus sheath (highlight blunt vs. sharp dissection).

Uterine Entry: Lower segment vs. classical incision (show consequences of poor placement).

Fetal Delivery: Controlled head delivery + cord clamping timing.

Closure: Uterine suturing (single vs. double layer), fascial closure.

Pause Points: Teacher freezes action to:

Ask: "What's the next step?"

Show Errors: Deliberate mistakes (e.g., uneven suture tension) for learners to spot.

3. Complication Management (60 min)

Activity:

Simulated Crisis Scenarios (Teacher acts as surgeon):

Hemorrhage: Demonstrate uterine artery ligation/B-Lynch suture.

Bladder Injury: Show repair techniques.

Fetal Distress: Rapid delivery drill (stopwatch timed).

Debrief: Compare learner-suggested solutions to standard protocols.

4. Postoperative & Recovery (60 min)

Activity:

Live Demo: Teacher performs:

Wound dressing + drain placement (if needed).

Post-op orders (pain control, ambulation, thromboembolism prophylaxis).

Role-Play:

Learners practice patient counseling on recovery, breastfeeding, and warning signs.

Teacher provides feedback on clarity/empathy.

5. OSCE-Style Assessment (30 min)

Activity:

4 Mini-Stations (Observed by teacher):

Incision Planning: Mark Pfannenstiel on a mannequin.

Suture Tie: Practice uterine closure knots on a pad.

Complication Drill: React to simulated hemorrhage.

Documentation: Complete a op-note for the case.

Tools & Innovations

Low-Cost Simulators: Use layered foam pads for abdominal wall practice.

Video Playback: Record key steps for slow-motion error analysis.

Team Training: Assign roles (surgeon, assistant, scrub nurse) during demos.

Practical Training 32.4 : Shalyakruta Prasavottara Garbhashaya Nirharana - Caesarean Hysterectomy

Practical Activities Breakdown

1. Preoperative Planning & Team Roles (1 Hour)

Activity:

Simulation Drill:

Divide into teams (surgeon, anesthetist, nurses, hematologist).

Role-play "time-out" checklist for placenta accreta.

Case Discussion:

Review MRI/ultrasound images to predict surgical challenges.

2. Surgical Technique Workshop (2 Hours)

Activity:

Cadaveric/Synthetic Model Practice:

Step-by-step hysterectomy on a high-fidelity pelvic model (e.g., with simulated placenta accreta).

Focus on:

Bladder flap creation.

Uterine artery ligation (demonstrate with colored sutures).

Decision-making: subtotal vs. total hysterectomy.

Video-Guided Skill Stations:

Suturing uterine arteries on foam/pork belly models.

3. Complication Management (1.5 Hours)

Activity:

Emergency Scenarios (Simulated):

Station 1: "Sudden hemorrhage" – practice B-Lynch suture, packing, and internal iliac ligation.

Station 2: "Ureteric injury" – identify and repair using stent simulation.

Debrief: Video playback of team performance with feedback.

4. Postoperative & Follow-Up (1 Hour)

Activity:

Mock Ward Round:

Manage a simulated patient with fever (sepsis workup) or leg swelling (DVT prophylaxis).

Suture Removal & Wound Care:

Practice on synthetic skin with infected vs. clean wounds.

5. OSCE Assessment & Reflection (0.5 Hour)

Activity:

OSCE Stations:

Consent for Caesarean hysterectomy (standardized patient).

Identify ureter in a surgical video clip.

Group Reflection:

"What would you do differently?" (Case-based discussion).

Materials Needed:

High-fidelity pelvic trainers (e.g., Gaumard models with hemorrhage simulation).

Surgical instruments (vascular clamps, monopolar/bipolar devices).

Ureter stents, colored sutures for artery labeling.

VR/3D anatomy software (optional).

Outcome:

Learners will gain confidence in performing Caesarean hysterectomy safely, managing crises, and optimizing interdisciplinary teamwork.

Practical Training 32.5 : Garbhashaya Patana-Hysterotomy

Practical Learning Activities (4-Hour Session)

1. Introduction and Theory Recap (30 min)

Activity: Interactive lecture with case-based discussion.

Outcome: Participants review indications, contraindications, and anatomical landmarks.

2. Live or Video Demonstration (60 min)

Activity: Instructor performs a hysterotomy on a cadaver/simulator (or shows a recorded surgical video).

Outcome: Participants observe surgical steps, instrument handling, and decision-making.

3. Hands-On Simulation (90 min)

Activity: Participants practice on surgical simulators or animal tissue models (e.g., pig uterus).

Perform abdominal incision and uterine entry.

Practice suturing techniques for uterine closure.

Outcome: Gain tactile experience in tissue handling and suturing.

4. Complication Management Drill (45 min)

Activity: Simulated scenarios (e.g., hemorrhage, bladder injury) using mannequins.

Outcome: Participants apply problem-solving skills to manage complications.

5. Debriefing and Q&A (15 min)

Activity: Group discussion on challenges faced, alternative techniques, and postoperative care.

Outcome: Reinforce key learning points and clarify doubts.

Experiential learning Activity

Experiential-Learning 32.1 : Forceps delivery

Activities:

1.Pre-Session Knowledge Check (30 mins)

Activity: Case-Based Discussion

Small groups review 2–3 scenarios (e.g., prolonged second stage, fetal distress).

Debate: "Forceps vs. Vacuum vs. C-section" for each case.

Objective: Reinforce theoretical foundations and decision-making.

2.Simulation Lab: Forceps Application (90 mins)

Activity: Structured Stations

Station 1: Pelvic anatomy review + forceps types (e.g., Simpson, Kielland).

Station 2: Step-by-step forceps placement on a high-fidelity birth simulator.

Station 3: Complication scenarios (e.g., shoulder dystocia, maternal injury).

Debrief: Video playback of attempts with feedback on hand positioning/traction.

3.Team-Based Role-Play (60 mins)

Activity: "OB Emergency Simulation"

Teams manage a simulated delivery with time pressure, fetal distress, and nurse/midwife communication.

Rotate roles (operator, assistant, communicator).

Objective: Integrate technical skills with crisis resource management.

4.Peer Assessment & Reflection (60 mins)

Activity: "Fishbowl Feedback"

One participant performs forceps delivery while peers observe and critique using a checklist.

Structured reflection: "What would you do differently?"

Deliverable: Each participant writes a "Lessons Learned" memo for their portfolio.

5.Live Demonstration (30 mins) (if feasible)

Activity: Observe an expert performing forceps delivery (live or recorded) with narrated technique.

Discussion: Q&A on nuances (e.g., rotational deliveries, maternal effort coordination).

Experiential-Learning 32.2 : Vaccum Delivery

1. Simulation-Based Mastery Learning (2 Hours)

Activity 1: Low-Fidelity Skill Stations (60 min)

Station 1: Cup Selection & Placement

Use 3D-printed fetal heads to practice:

Correct: Flexion point over posterior fontanelle

Incorrect: Placement over sutures/lambda

Tools: Ultrasound simulator to verify placement

Station 2: Traction Mechanics

Attach a spring scale to vacuum devices to:

Measure force during pulls (safe range: 10-15 kg)

Practice "traction-sync-with-contractions" timing

Station 3: Complication Drills

Pop-off scenarios: Reapply cup within 30 seconds

Scalp avulsion: Switch to forceps/C-section decision

Activity 2: High-Fidelity Scenario (60 min)

Simulation: "Fetal distress at +2 station, BMI 40"

Learner Tasks:

Perform time-limited vacuum delivery

Manage postpartum hemorrhage post-delivery

Debrief: Video playback with error analysis

2. Interprofessional Team Training (1.5 Hours)

Activity 3: Role-Play Emergency (45 min)

Roles: OBGYN (operator), nurse (traction assistant), pediatrician (neonatal resuscitation), anesthetist

Scenario: "Vacuum delivery ? shoulder dystocia ? neonatal resuscitation"

Assessment Focus:

Closed-loop communication

Role clarity under stress

Activity 4: "Stop the Line" Simulation (45 min)

Teacher injects critical errors during live demo:

Wrong cup size for preterm fetus

Traction against contraction

Learners must verbally interrupt errors

3. Reflection & Competency Assessment (1.5 Hours)

Activity 5: Structured Debrief (45 min)

Guided Questions:

"What would you do differently with an OP position?"

"How did team dynamics affect outcomes?"

Tool: Plus-Delta feedback forms

Activity 6: OSCE-Style Assessment (45 min)

4 Mini-Stations:

Informed consent counseling

Rapid cup application on mannequin

Complication management (e.g., cup detachment)

Documentation & handoff

Experiential-Learning 32.3 : Caesarian section

Session Breakdown (6 Hours)

1. Introduction & Theory (1 Hour)

Activity:

Lecture: Overview of C-section (history, types—elective vs. emergency).

Case Discussion: "When is a C-section necessary?" (Group debate on maternal/fetal indications).

Quiz: MCQ on C-section basics (e.g., WHO guidelines, risks vs. benefits).

2. Preoperative Preparation (1 Hour)

Activity:

Hands-on: Sterilization, draping, and positioning on a mannequin.

Role-play: Anaesthesia consultation (spinal vs. general anesthesia).

Team Exercise: Surgical safety checklist (WHO standards).

3. Surgical Procedure – Step-by-Step (1.5 Hours)

Activity:

Live Demo/Virtual Simulation: Surgeon demonstrates Pfannenstiel vs. vertical incision.

Hands-on Practice:

Suturing practice on synthetic skin/fetal delivery simulation models.

Uterine closure techniques (double-layer vs. single-layer).

Video Analysis: "Common mistakes in C-section" (group discussion).

4. Emergency Scenarios & Complications (1 Hour)

Activity:

Simulation Drills:

Postpartum hemorrhage (PPH) management (B-Lynch suture, uterine artery ligation).

Fetal distress extraction (forceps/vacuum simulation).

Debriefing: "What went wrong?" (Case-based learning).

5. Postoperative Care & Recovery (1 Hour)

Activity:

Mock Ward Round: Pain management, infection signs, breastfeeding support.

Suture Removal Practice (on synthetic models).

Group Discussion: "Reducing C-section rates—myth or necessity?"

6. Recap & Assessment (0.5 Hour)

Activity:

OSCE Stations:

Incision planning (marking on mannequin).

Emergency response (PPH scenario).

Feedback Session: Peer review of surgical techniques.

Q&A + Certification.

Materials Required:

C-section simulation mannequins (with replaceable uterus/baby).

Surgical instruments (scalpel, forceps, retractors, sutures).

VR/3D surgery software (if available).

Case study handouts, WHO surgical safety checklist.

Experiential-Learning 32.4 : Garbhashaya Nirharana - Caesarean Hysterectomy

Experiential Activities Breakdown

1. Interactive Case Discussion (1 Hour)

Activity:

Team-Based Learning (TBT):

Groups analyze 3 real cases (placenta accreta, uterine rupture, unresponsive PPH).

Present their surgical plan and defend their approach.

Anatomy Quiz:

Label structures on a 3D pelvis model (ureters, uterine arteries, bladder).

2. Surgical Simulation Lab (2 Hours)

Activity:

Station Rotation (4 stations, 30 min each):

Cadaveric/Fresh Tissue Lab:

Perform subtotal vs. total hysterectomy steps.

Practice bladder dissection and ureter identification.

Bleeding Control Drills:

Use uterine artery ligation, B-Lynch suture, and hemostatic packing.

Ureteric Injury Repair:

Simulate stent placement on a ureter model.

VR Simulation (if available):

Perform virtual Caesarean hysterectomy with haptic feedback.

3. High-Fidelity Crisis Scenarios (1.5 Hours)

Activity:

Simulated OR Emergencies:

Scenario 1: Cardiac arrest post-hysterectomy (team roles, ACLS protocols).

Scenario 2: Unexpected bowel injury during adhesiolysis (repair techniques).

Debrief: Video review with focus on communication errors.

4. Postoperative Care & Ethics Debate (1 Hour)

Activity:

Mock Multidisciplinary Meeting:

Groups design a postoperative plan (VTE prophylaxis, hormones, counseling).

Ethics Role-Play:

Debate: "Performing hysterectomy in a 25-year-old with placenta percreta."

5. Skills Assessment & Feedback (0.5 Hour)

Activity:

OSCE-Style Assessment:

10-minute stations:

Consent a standardized patient.

Identify surgical anatomy on a model.

Peer Feedback:

Participants critique each other's techniques using a rubric.

Materials Required:

Simulation: Pelvic trainers, hemorrhage models (e.g., Blue Phantom), VR.

Surgical Tools: Bipolar forceps, vascular clamps, ureter stents.

Assessment: Checklists, video recording equipment.

Adaptations:

For Novices: Focus on anatomy and basic steps.

For Experts: Add complex cases (e.g., hysterectomy with bowel resection).

Experiential-Learning 32.5 : Garbhashaya Patana-Hysterotomy

1. Case-Based Preoperative Planning (45 min)

Activity: Small groups analyze real case scenarios (e.g., second-trimester loss with hemorrhage, maternal comorbidities).

Outcome: Participants justify hysterotomy vs. alternatives and plan surgical steps.

2. Cadaver/Simulator Lab – Surgical Technique (2.5 hours)

Activity: Hands-on practice in pairs using:

Task 1: Abdominal entry and uterine exposure (simulated tissue/cadaver).

Task 2: Uterine incision and controlled extraction (balloon/simulated fetus).

Task 3: Suturing the uterine wall (emphasis on hemostasis and layered closure).

Outcome: Muscle memory development for incision, extraction, and closure.

3. Complication Simulation Drills (1.5 hours)

Activity: Rotating stations with timed scenarios:

Station 1: Massive hemorrhage – apply compression sutures or vessel ligation.

Station 2: Bladder injury – identify and repair with Vicryl sutures.

Station 3: Uterine rupture – decision-making for hysterectomy vs. repair.

Outcome: Confidence in managing high-stakes complications.

4. Postoperative Care Role-Play (45 min)

Activity: Simulated patient handoff and postoperative round:

Groups create a monitoring plan (vitals, labs, imaging) and address "patient" complaints (fever, bleeding).

Outcome: Holistic understanding of post-hysterotomy care.

5. Debrief & Reflection (30 min)

Activity: Structured discussion:

"What was the most challenging step?"

"How would you adapt in a low-resource setting?"

Outcome: Critical self-assessment and peer learning.

Assessment Methods

Skill Checklists: Instructor evaluates technique (incision accuracy, suturing, complication response).

Scenario-Based OSCE: Timed test on a simulated hysterotomy with a complication.

Peer Feedback: Participants assess each other's communication and teamwork.

Modular Assessment	
Assessment method	Hour
<p>Instructions—Conduct a structured, modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.</p> <p>Practical OSCE Assessment (50 Marks)</p> <p>Station 1 – Instrumental Delivery (Forceps & Vacuum Extraction) – 10 Marks</p> <ul style="list-style-type: none"> • Task: Demonstrate or explain on a patient/ simulator: • Correct selection of instrument (forceps vs vacuum) • Indications, contraindications, and procedural steps • Safety measures and fetal/maternal monitoring <p>Station 2 – Caesarean Section – 10 Marks</p> <ul style="list-style-type: none"> • Task: Perform or simulate: • Indications and contraindications • Types of incisions and surgical steps • Perioperative care and prevention of complications. <p>Station 3 – Caesarean Hysterectomy – 10 Marks</p> <ul style="list-style-type: none"> • Task: Discuss: • Indications (placenta accreta, hemorrhage, uterine rupture) • Surgical approaches & intraoperative decision-making • Complication prevention <p>Station 4 – Hysterotomy – 10 Marks</p> <ul style="list-style-type: none"> • Task: Explain: • Indications for hysterotomy (e.g., pregnancy termination, obstetric emergencies) • demonstrate Stepwise procedure and safety considerations on patient/simulator <p>Or</p> <p>Any practical in converted form can be taken for assessment. (25 Marks)</p> <p>And</p> <p>Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)</p>	4

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)		
Practical No*	Practical name	Hours
1.1	Diagnosis of Early Pregnancy	2
1.2	Garbhakalina Matrigata Parivartana(physiological and anatomical changes in the body of pregnant woman).	2
1.3	Abnormalities of placenta, amniotic fluid,and umbilical cord.	3
1.4	Garbhasanskar for Shareyshi Praja	3
1.5	Garbhavakranti (embryonic growth and development)	4
1.6	Prenatal and preimplantation genetic screening and diagnosis techniques.	3
1.7	Placental hormones and their importance.	3
2.1	Garbhini parichrya (Antenatal care)	2
2.2	Antenatal Immunization .	2
2.3	Clinically assessment of fetal wellbeing.(late pregnancy).	4
2.4	Yamalgarbha examination	2
2.5	Conjoined Twins .	3
2.6	Labor of Yamal Garbha .	2
2.7	USG and PCPNDT act.	3
2.8	PCPNDT Prescription and Regulations	2
3.1	Diagnosis of Garbhini Pandu	3
3.2	Garbhini chardi.	3

3.3	Complication and Management of Garbhini Chardi	3
3.4	Diagnostic criteria of Hypertensive disorders during pregnancy	2
3.5	Garbhini shotha (Preeclampsia, eclampsia)	3
3.6	Garbhini sotha	3
3.7	Signs of Eclampsia ,Pre-eclampsia	3
4.1	Garbhastrava and Garbhapata	5
4.2	Garbhastrava and garbhapata.	3
4.3	Recurrent pregnancy loss	2
4.4	Gharbhashayetar garbhadhan	3
4.5	conservative treatment Associated Complications	3
4.6	Haemolytic diseases of the Fetus	4
5.1	Intra uterine growth restriction.	4
5.2	Upavishtak (IUGR).	4
5.3	Jarayu(Placenta).	3
5.4	Jarayu dosh(placental Abnormalities) and Molar pregnancy.	4
5.5	Antarmrita garbha (Intra uterine fetal death)	5
6.1	Medical, Surgical, and Gynecological Complications in Pregnancy.	6
6.2	Elderly Primi gravida, Breech presentation	6
6.3	Garbhini makkala (Anti Partum haemorrhage)	8
7.1	Therapeutic Applications in Pregnancy.	6

7.2	Garbhiniyapadhar kalpas	8
7.3	Emergency Conditions in Pregnancy Using Ayurvedic Interventions.	6
8.1		6
8.2	Uterine fibroids and ovarian tumors during pregnancy.	8
8.3	pregnancy with genital prolapse	6
9.1	Prasava parikshana (Monitoring of labour)	2
9.2	Prasava pragati - progress of labour	3
9.3	Obstetric High Dependency Unit and Obstetric Intensive Care Unit	3
9.4	Prasava Vidhi (Mechanism of normal labour)	4
9.5	Vitapachedana - Episiotomy	2
9.6	Prasava vidhi -Mechanism of labour	2
9.7	Anagata-prasava paricharya (Management of foetal descent failure)	4
10.1	Evaluation of Garbha avasada (Fetal Distress)	2
10.2	Management of Garbha avasada (Fetal Distress)	2
10.3	Diagnostic method of Garbhakaleena Garbhamriti - Intrapartum fetal death - stillbirth	3
10.4	Management of Prasavakaleena Garbhamrita (Still birth).	3
10.5	Obstetric management of Eclampsia	3
10.6	Obstetric management of abruptio placenta	4
10.7	Obstetric management of Gestational Diabetes	3
11.1	Diagnosis of Akala-prasava (Preterm labour).	3

11.2	Management of Akala-prasava (Preterm labour)	3
11.3	Diagnosis of Kalateeta Prasava (Post term labour).	4
11.4	Prevention and management of Kalateeta Prasava (Post term labour)	4
11.5	Diagnosis of Aparasanga (Retained Placenta) – Ayurveda & Modern Approach	3
11.6	Management of Aparasanga (Retained Placenta)	3
12.1	Diagnosis of Garbha Sanga –Mudhagarbha (Obstructed labour)	4
12.2	Management of Garbha Sanga –Mudhagarbha (Obstructed labour)	4
12.3	Shalyakarma in Mudhagarbha.(Obstructed labour)	4
12.4	Diagnosis of Vilambita Prasava (Delayed labour /Prolonged labour)	4
12.5	Management of Vilambita Prasava (Delayed/Prolonged labour)	4
13.1	Jatamatra shishu parikshana (examination of neonate)	2
13.2	Jatamatra shishu paricarya (Neonatal resuscitation)	4
13.3	Infection Prevention and Control (IPC) in the Neonatal Ward (Kumaragara)	4
13.4	Navajatha Shishu paricharya (New born care)	5
13.5	Birth Asphyxia management	5
14.1	Prasava Paricharyantargata Yoga	5
14.2	Prasava Paricharyantargata Yogas	5
14.3	Sutika Paricharyantargata Yoga	4
14.4	Preparation and Application of Sutika Paricharyantargata Yogas	3
14.5	Drugs used in navajata shishu (newborns) care	3

15.1	Clinical and Therapeutic Aspects of Sutika Paricharya (Postpartum Care)	6
15.2	Stanyaparikshan (Integrated Breast and Milk examination)	5
15.3	Breastfeeding techniques and model effective counseling skills.	4
15.4	Stanyadushti (Lactation Disorders): Diagnosis and Management Perspectives	5
16.1	Diagnosis and Treatment of Sutika Vyadhi (Puerperal disorders)	10
16.2	Assessment and examination of abnormal puerperium	10
17.1	Asrigdara (Abnormal Uterine bleeding)	3
17.2	Asrigdara chikitsa.(Menorrhagia)	4
17.3	Anartava analysis.	5
17.4	Anartava,Nashtartava,Ksheenartava ,Artava Kshaya, Arajaska.	4
17.5	Krichrartava and Premenstrual Disorders	4
18.1	Vataja, Aticharana, Prakcharana, Putraghni, Antarmukhi, Shushka, Vamini Yoni vyapad.	4
18.2	Vataja and Associated Yoni Vyapads with Panchakarma, Sthanika Chikitsa, Drug Evaluation, and Pathya-Apathya Guidance.	3
18.3	Diagnostic Approach to Pelvic Organ Prolapse (POP): Identifying Causes, Types, Urinary Incontinence, and Case Presentation.	4
18.4	Prevention of Pelvic Organ Prolapse.	3
18.5	Bija Dushti	6
19.1	Vaginal Discharges (Pittaja, Kaphaja, Sannipataja, Acharana, and Upapluta Yoni Vyapad)	5
19.2	Paripluta, Vipluta Yoni Vyapad, and Sweta Pradara.	5
19.3	Sexually transmitted infections related Yoni Vyapad.	5
19.4	Genital infections	5

20.1	Artava Vyapad Samuchaya (Polycystic Ovarian Syndrome).	6
20.2	Ashta Nindita Purusha Lakshanas (Endocrinological Abnormality)	2
20.3	Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda	4
20.4	Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda.	3
20.5	Karkatarbuda (Premalignant and Malignant Lesions) in the Female Reproductive System.	5
21.1	Stree Vandhyatwa - Female Infertility Diagnosis	4
21.2	Female Infertility	4
21.3	Female Infertility.	5
21.4	factors of infertility.	5
21.5	Evaluation and Treatment Protocols for Shukra Dushti (Male Infertility)	6
21.6	ART Procedures	6
22.1	Benign Breast Disorders:	5
22.2	Breast Disorders in Ayurveda.	5
23.1	Family Welfare and Health Assessment Program	5
23.2	Holistic Health and Wellness Initiatives for Adolescent Girls.	3
23.3	Case Management and Counseling Skills for Menopausal Health.	4
23.4	Contraceptive Device	4
23.5	Steroidal Contraception and Sterilization Techniques.	4
24.1	Klaibya Guhya Roga and jataharini :	6
24.2	Precision Medicine and Reproductive Health.	4

24.3	Herbal and Herbomineral Formulations in Streeroga:	5
24.4	Herbal and Herbomineral Formulations Based on Prakriti, Desha, Kaala, and Agni.	5
25.1	Pre-operative Care in Obstetrics and Gynaecology.	3
25.2	Intra and Post Operative Care in Obstetrics and Gynecology	4
25.3	Incision and Suturing	4
25.4	Incision methods, Suturing and Wound Dressing	2
25.5	Administration and Monitoring of analgesia and anaesthesia.	3
25.6	Anagesia and post analgesic management.	4
26.1	Shock Diagnosis	2
26.2	Safe Blood Transfusion Techniques	2
26.3	Shock Management	2
26.4	Blood components - Blood transfusion	2
26.5	Fluid therapy in Obstetrics	3
26.6	Fluid and electrolyte Balance	3
26.7	Intensive care in Gynaecology	4
26.8	Intensive care in Obstetrics	2
27.1	MTP Act	2
27.2	PCPNDT Act	2
27.3	Laws of Surrogacy in India	2
27.4	Medical Ethics, Professional Conduct, Patient Rights & Medical Negligence	2

27.5	Consequences of incomplete/inaccurate documentation in Obstetrics	2
27.6	Consequences of incomplete/in accurate documentation in Gynecology	2
27.7	Robotic surgeries in Gynecology	2
27.8	Managing Maternal and Fetal Deaths: Legal Compliance	2
27.9	Documentation Errors in Female Contraception	2
27.10	Robotic surgeries in Obstetrics	2
28.1	Garbhashaya Greeva Mukha Dahana (Cervical Caustery)	2
28.2	Cervical amputation cone biopsy and LEEP	2
28.3	Yoni Arsha Chedana-Polypectomy. Yoni Granthi Bhedana/ Chedana-Marsupialization of Bartholin Cyst.	3
28.4	Garbhashayamukha Vistriteekarana evam Lekhana-Dilatation and Curettage.	2
28.5	Yoni Bhramsha Shastra Karma – Anterior colporrhaphy, Posterior colporrhaphy, Pelvic floor repair.	2
28.6	Surgical procedures for Genital prolapse –Fothergill's Operation,Cervicopexy operation	2
28.7	Surgical interventions for uterine inversion-Haultain's operation, Kustner's operation.	2
28.8	Operations on Ovaries	5
29.1	Salpingectomy	3
29.2	Salpingostomy Simulation and Suturing Workshop	3
29.3	Surgical Removal of Tubo-Ovarian Mass: Practical	2
29.4	Surgical Sterilization techniques	3
29.5	Myomectomy	3
29.6	Hysterectomy	3

29.7	Endometriosis Excision and Ablation	3
30.1	Garbhashaya Punarnirmana Shalyakarma (Metroplasty)	5
30.2	Neovagina Construction: Surgical creation of a functional vagina for conditions like MRKH syndrome (Mayer-Rokitansky-Küster-Hauser).	2
30.3	Vaginoplasty: Repair of vaginal stenosis, trauma, or post-obstetric injuries (e.g., fistula repair).	3
30.4	Bhagadvara Sandhanakarma (Hymenoplasty)	6
30.5	Repair of Vesicovaginal fistula	2
30.6	Repair of Rectovaginal fistula	2
31.1	Cervical dilatation and Evacuation	4
31.2	Apara Hasta Nishkarshana - Manual Removal of placenta	6
31.3	Cervical encirclage	4
31.4	Colpocentesis	6
32.1	Forceps delivery	4
32.2	Vacuum Delivery	4
32.3	Shalyakruta Prasava -Caesarean Section	4
32.4	Shalyakruta Prasavottara Garbhashaya Nirharana - Caesarean Hysterectomy	4
32.5	Garbhashaya Patana-Hysterotomy	4

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)		
Experiential learning No*	Experiential name	Hours
1.1	Diagnosis of pregnancy	2
1.2	Garbhakalina matrigata Parivartana((physiological and anatomical changes during pregnancy.))	2
1.3	Garbha poshana .(fetal circulation-nutrition)	2
1.4	Research proposal to study factors affecting fetal growth	2
1.5	Shreyasipraja(Healthy baby)	3
1.6	Garbhavakranti, Matrijadi Bhava factors	4
1.7	Normal and Abnormal Fetal Growth of Garbha	3
1.8	Prenatal and pre implantation genetic screening and ethical considerations.	2
1.9	Garbhanga Vikruti(Genetic abnormalities)	3
1.10	Level of different hormones in healthy pregnancy and maternal immunity.	3
2.1	Garbhini Paricharya,	3
2.2	Antenatal Care.	3
2.3	Comprehensive Care Plans for Pregnant Women	3
2.4	Antepartum fetal surveillance.	3
2.5	Clinical diagnosis of Yamala Garbha	4
2.6	Zygoty and chorionicity	2
2.7	Assessment of labour of yamal garbha	4

2.8	Objectives and record maintenance	3
2.9	Genetic Counselling	1
3.1	Diagnosis and management of garbhini pandu	4
3.2	Management of garbhini pandu and referral	4
3.3	Counselling in garbhini pandu	4
3.4	Garbhini Chardi	4
3.5	Hyperemesis progress chart.	4
3.6	Garbhini shoth (Hypertensive disorders-(Pregnancy induced hypertension, Pre-eclampsia, Eclampsia)	2
3.7	management of garbhini shotha	4
4.1	Ateiology of garbhastrava and garbhapat	3
4.2	Ama and niram awastha of garbhastrava and garbhapata	3
4.3	Garbhasrava (threatened miscarriage) and Garbhapata (abortion).	4
4.4	Varanabandha and Masanumasik chikitsa for preventing garbhastrava and garbhapat	3
4.5	Examination of pregnant woman with gharbhashayetar garbhadhan	4
4.6	Counselling of Gharbhashayetar garbhadhan (ectopic pregnancy) and prospect of fertility	4
4.7	Rh incompatibility and Haemolytic diseases of the Fetus	5
5.1	Upavishtak (IUGR) .	4
5.2	upavishtak	5
5.3	Examination of Jarayu (placenta)	4

5.4	Jarayu dosha (placental abnormalities) and molar pregnancy .	4
5.5	Antarmrita Garbha (Intra uterine fetal death).	4
5.6	IUFD counselling.	5
6.1	Comprehensive Clinical Training in High-Risk Obstetrics and Maternal Emergencies	6
6.2	Integrated Management of Medical, Surgical, and Gynecological Disorders Complicating Pregnancy.	6
6.3	Garbhini makkala (Antipartum haemorrhage)	8
6.4	Placenta praevia ,Abruptio placenta .	6
7.1	Garbha vridhikar kalpa and dravyas.	8
7.2	Ayurvedic Kalpas in Garbhini Vyapadas.	6
7.3	Garbhini Vyapadahar Kalpas.	6
7.4	emergency drugs in pregnancy.	6
8.1	Counselling	6
8.2	research scope	8
8.3	pregnancy associated wiyth genital prolapse	6
8.4	research scope	6
9.1	Monitoring of progress of labour	3
9.2	Prasavapurva Paricharya (pre-labour care)	3
9.3	Obstetric High Dependency Unit	5
9.4	Prasava Vidhi (Mechanism of normal labour)	5
9.5	Steps and techniques of Episiotomy procedure	4

9.6	Prasava Paricharya - Management of labour.	3
9.7	Application of Sthanika chikitsa.in labour	3
10.1	Management of Garbha avasada (Foetal Distress)	6
10.2	Prasavakaleena Garbhamriti (Still birth)	4
10.3	Active management,documentation, legal and ethical consideration. of Prasavakaleena Garbhamriti (Still birth) .	4
10.4	Obstetric management of Eclampsia	6
10.5	Obstetric management of abruptio placenta	3
10.6	Obstetric management of Gestational Diabetes	3
11.1	Diagnosis of Akala-prasava (Preterm labour).	5
11.2	Management of Akala-prasava (Preterm labour)	5
11.3	Diagnosis of Kalateeta Prasava (Post term labour)	4
11.4	Prevention and management of Kalateeta Prasava (Post term labour)	4
11.5	Diagnosis of Aparasanga (Retained placenta)	4
11.6	Prevention and management of Apara Sanga (Retained placenta)	4
12.1	Diagnosis of Garbha Sanga- Mudhagarbha (Obstructed labour)	6
12.2	Management of Garbha Sanga – Mudhagarbha (Obstructed Labour)	6
12.3	Mudhagarbha Shalyoddhara karma	6
12.4	Diagnosis of Vilambita Prasava (Delayed labour/ Prolonged labour)	5
12.5	Management of Vilambita Prasava (Delayed labour/ Prolonged labour)	3

13.1	Jatamatra prana pratyagamana kriya (neonatal resuscitation)	5
13.2	Navajata Shishu parikshana (Neonatal examination)	5
13.3	Jatamatra shishu paricarya -prana pratyagamana kriya (neonatal resuscitation)	5
13.4	Sadyojata shishu paricharya-Immediate newborn care	5
13.5	Diagnosis and management of birth asphyxia	6
14.1	Prasava Paricharyantargata Yoga	10
14.2	Prasava paricharyantargata Roga	7
14.3	Drugs used in Sutika kaal	4
14.4	Treatment strategies using Sutika Paricharyantargata Yogas	3
14.5	Drugs in Navajat shishu (new born) care	2
15.1	Comprehensive Care in Sutika Avastha (Postpartum period)	7
15.2	Breastfeeding Alternatives.	7
15.3	Stana-Stanya Pareeksha, Lactation, and Breastfeeding Counseling	7
15.4	Stanyadushti (Lactation Disorders)	5
16.1	Competency Development in Research, Referral, Cultural, Legal, and Clinical Management of Sutika Vyadhi (puerperal disorders).	7
16.2	Ayurvedic Interventions for Postpartum uterine subinvolution	8
16.3	Puerperal emergencies	6
16.4	Postpartum psychological disorders (Sutika Manasik Vyadhi)	5
17.1	Differential diagnosis of Asrigdara.(Abnormal uterine bleeding)	6
17.2	History Taking and Diagnosis of Anartava/nashtartava.(Amenorrhea)	6

17.3	Anartava management.(Amenorrhea)	8
17.4	Clinical Reasoning and Integrated Management of Kashtartava and Rajahsrava Purva Vyapad.samuchaya (Dysmenorrhea and PMS)	6
18.1	Yoni Vyapad Clinical Skills and Management	6
18.2	Yoni Vyapad Clinical, Diagnostic Insights, Panchakarma Practicum, and Personalized Ayurvedic Management.	6
18.3	Pelvic Organ Prolapse (Mahayoni, Prasramsini, Phalini):	8
18.4	Bija Dushti (Chromosomal and congenital anomalies)	6
19.1	Kaphaja and Pittaja Yoni Vyapad.(Abnormal vaginal discharges and pelvic inflammatory disease)	8
19.2	Kaphaja and Pittaja Yoni Vyapad	8
19.3	sexually transmitted infections	10
20.1	Artava Vyapad Samuchaya (PCOS) and Ashta Nindita Lakshanas (Endocrinological Disorders).	10
20.2	Rakta Gulma, Granthi, Arbuda, Yoniyarsha, and Yoni Kanda.	10
20.3	Malignancy Screening.	6
21.1	Diagnostic Approaches in Female Infertility (Stree Vandhyatva):	8
21.2	Integrative Treatment Protocols for Female Infertility (Stree Vandhyatva):	8
21.3	Shukra Dushti	8
21.4	?hukra Du??i:	8
21.5	Assisted Reproductive Technologies	7
22.1	Breast Examination.	7
22.2	Stana Roga Management.	6

23.1	Maternal, Child Health, and Family Welfare Schemes and Programs.	6
23.2	Adolescent Health Management and Awareness Program.	6
23.3	Menopausal Health: Awareness.	6
23.4	Contraception Counseling and Management Skills.	8
24.1	Klaibya, Guhya Roga, and Jataharini.	8
24.2	Advancements in Precision Medicine:	4
24.3	Herbal and Herbomineral Formulations in Streeroga.	7
24.4	Case-Based Analysis of Herbal and Herbomineral Formulations in Streeroga	7
25.1	Pre--operative care in Obstetrics and Gynecology.	5
25.2	Ethics, Safety, and Care Coordination in Clinical Practice.	4
25.3	Sterilization Techniques	6
25.4	Mastering the Suturing Skills	6
25.5	Pain pathways in Analgesia, management of complications in Obstetric Anaesthesia.	5
26.1	Shock management	3
26.2	Shock diagnosis	3
26.3	Blood transfusion	3
26.4	Blood tranfusion in Obstetrics and Gynecology	3
26.5	Fluid therapy	3
26.6	Fluid therapy in Obstetrics	3
26.7	.Intensive care in Gynaecology	4

26.8	Intensive care in Obstetrics	4
27.1	Legal Literacy in Obstetrics and Gynaecology	3
27.2	Incomplete/Inaccurate documentation in Gynecology	3
27.3	Consequences of incomplete/in accurate documentation in Gynecology	3
27.4	Robotic surgery in Gynecology	3
27.5	Accurate Documentation in Clinical Practice	3
27.6	Navigating Legal Consequences: Case Studies in Patient Death	4
27.7	Documentation errors in contraceptive care.	2
27.8	Robotic surgeries in Obstetrics	5
28.1	Garbhashaya Greeva-Shastra Karma- Operations on Cervix	3
28.2	YoniArsha Chedana (Polypectomy). Yoni Granthi Bhedana/Chedana (Marsupialization of Bartholin Cyst).	3
28.3	Garbhashayamukha Vistriteekarana evam Lekhana (Dilatation and Curettage).	3
28.4	Yoni Bhramsha Shastra Karma – Anterior colporrhaphy, Posterior colporrhaphy, and Pelvic floor repair.	3
28.5	Fothergill's operation, Cervicopexy operation	4
28.6	Operations on ovary	10
29.1	Recanalization of Fallopian Tube	6
29.2	Hysterectomy Procedures	6
29.3	Reconstructive Surgeries of Uterus – Metroplasty	6
29.4	Reconstructive Surgeries of Vagina – Hymenoplasty	4

29.5	Neovagina Construction	4
30.1	Garbhashaya Punarnirmana Shalyakarma (Metroplasty)	6
30.2	Neovagina Construction: Surgical creation of a functional vagina for conditions like MRKH syndrome (Mayer-Rokitansky-Küster-Hauser).	4
30.3	Vaginoplasty: Repair of vaginal stenosis, trauma, or post-obstetric injuries (e.g., fistula repair).	6
30.4	Bhagadvara Sandhanakarma (Hymenoplasty)	5
30.5	Repair of Rectovaginal fistula	1
30.6	Repair of Vesicovaginal fistula	4
31.1	Cervical dilatation and evacuation	6
31.2	Manual removal of placenta	6
31.3	Cervical encircilage	6
31.4	Colpocentesis	8
32.1	Forceps delivery	5
32.2	Vaccum Delivery	5
32.3	Caesarian section	5
32.4	Garbhashaya Nirharana - Caesarean Hysterectomy	5
32.5	Garbhashaya Patana-Hysterotomy	6

Table 6 : Assessment Summary: Assessment is subdivided in A to H points**6 A : Number of Papers and Marks Distribution**

Subject Code	Paper	Theory	Practical	Total
AYPG-SRPT	4	100 x 4 Papers = 400	400	800

6 B : Scheme of Assessment (Formative and Summative Assessment)**Credit frame work**

AYPG-SRPT consists of 32 modules totaling 64 credits, which correspond to 1920 Notional Learning Hours. Each credit comprises 30 Hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Formative Assessment :Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment:Summative Assessment (University examination) will be carried out at the end of Semester VI.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximu m Marks of assessmen t of modules (e)	Obtained Marks per module (f)	MGP =d* f/c*e*100
Semester No : 3						
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)						
M1 Garbhini Vigyana- (Diagnosis of Pregnancy)	2	60		50		
M2 Garbhini Paricharya – (Antenatal care)	2	60		50		
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)						
M9 Prakrita Prasava (Normal Labour)	2	60		50		
M10 Prasavakaleena Upadrava (Intrapartum complications) and Complications of stages of labour	2	60		50		
Paper No : 3 (Stree Roga - Gynaecology)						
M17 Artava Vyapad- Disorders of menstruation	2	60		50		

M18 Yoni Vyapad -Epidemiology and general etiopathogenesis and management of Gynecological disorders	2	60		50		
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))						
M25 Shastrakarma Samanya Siddhanta –General principles of Gynaecological and Obstetrical Surgeries	2	60		50		
M26 Critical Care in Gynaecology and Obstetrics	2	60		50		
	16	480		400		
Semester No : 4						
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)						
M3 Garbhini vyapad – (Disorders in Pregnancy)	2	60		50		
M4 Garbha vyapad (Fetal disorders).	2	60		50		
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)						
M11 Prasava Kalaja Vikruti (Premature and Post term Labour)	2	60		50		
M12 Prasava-Vyapad (Abnormal Labour)	2	60		50		
Paper No : 3 (Stree Roga - Gynaecology)						
M19 Samkramika and Aupasargika rogas (Infectious disorders of Reproductive system & STD)	2	60		50		
M20 Artava vyapad samuchaya, Ashta nindita and Stree janananga arbuda (Reproductive endocrinology, polycystic ovarian syndrome, neoplasms of female reproductive system)	2	60		50		
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))						
M27 Medico-legal Aspects related to Stree Roga (Gynaecology) -Prasuti Tantra (Obstetrics)	2	60		50		
M28 Stree Roga Sambandhita Shastrakarmani- Operative Gynaecology - Part-I	2	60		50		
	16	480		400		
Semester No : 5						

Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)						
M5 Garbha vyapad- fetal Disorders -2	2	60		50		
M6 Pregnancy related medical and surgical complications	2	60		50		
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)						
M13 Jatamatra (Neonatal resuscitation) and Navajata Shishu Paricharya (New born care)	2	60		50		
M14 Vishesha Adhyayana of Prasava Vishishta Aushadhi	2	60		50		
Paper No : 3 (Stree Roga - Gynaecology)						
M21 Vandhyatwa (Female and male Infertility)	3	90		75		
M22 Stana roga - Breast diseases	1	30		25		
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))						
M29 Stree Roga Sambandhita Shalyakarmani - Operative Gynaecology-Part-II	2	60		50		
M30 Stree Roga Sambhandhita Shalyakarma -Part-III -Garbhashaya Nirmana & Yoni Nirmana Shalyakarma (Reconstructive Surgeries of the Uterus and Vagina)	2	60		50		
	16	480		400		
Semester No : 6						
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)						
M7 Kalpa used in Garbha garbhini vyapad	2	60		50		
M8 Streerog (Gynaecological disorders) complicating pregnancy-	2	60		50		
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)						
M15 Sutika Vigyan (Normal Puerperium)	2	60		50		
M16 Sutikavyadhi (Puerperial disorders)	2	60		50		
Paper No : 3 (Stree Roga - Gynaecology)						
M23 Stree swasthya- Family welfare and demography	2	60		50		
M24 Vishesha Adhyayana, recent advancements in gynecology and commonly used formulations in stree roga	2	60		50		

Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))

M31 Prasava Sambandhita Shalyakarmani- Operative Obstetrics – Part-I	2	60		50		
M32 Prasava Sambandhita Shalyakarmani - Operative Obstetrics – Part-II	2	60		50		
	16	480		400		

$MGP = ((\text{Number of Notional learning hours attended in a module}) \times (\text{Marks obtained in the modular assessment})) / ((\text{Total number of Notional learning hours in the module}) \times (\text{Maximum marks of the module})) \times 100$

6 D : Semester Evaluation Methods for Semester Grade point Average (SGPA)

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPs of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA

SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester
Evaluation Methods for Modular Assessment

Semester No : 3		
Paper No : 1 Garbha - Garbhini Vigyana - Embryology and Obstetrics		
A S.N o	B Module number and Name	C MGP
1	M1.Garbhini Vigyana- (Diagnosis of Pregnancy)	C1
2	M2.Garbhini Paricharya – (Antenatal care)	C2
Paper No : 2 Prasava Vigyan - Clinical Obstetrics		
A S.N o	B Module number and Name	C MGP
3	M9.Prakrita Prasava (Normal Labour)	C3
4	M10.Prasavakaleena Upadrava (Intrapartum complications) and Complications of stages of labour	C4
Paper No : 3 Stree Roga - Gynaecology		
A S.N o	B Module number and Name	C MGP
5	M17.Artava Vyapad- Disorders of menstruation	C5
6	M18.Yoni Vyapad -Epidemiology and general etiopathogenesis and management of Gynecological disorders	C6
Paper No : 4 Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology)		
A S.N o	B Module number and Name	C MGP
7	M25.Shastrakarma Samanya Siddhanta –General principles of Gynaecological and Obstetrical Surgeries	C7
8	M26.Critical Care in Gynaecology and Obstetrics	C8
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$
Semester No : 4		

Paper No : 1 Garbha - Garbhini Vigyana - Embryology and Obstetrics

A S.N o	B Module number and Name	C MGP
1	M3.Garbhini vyapad – (Disorders in Pregnancy)	C1
2	M4.Garbha vyapad (Fetal disorders).	C2

Paper No : 2 Prasava Vigyan - Clinical Obstetrics

A S.N o	B Module number and Name	C MGP
3	M11.Prasava Kalaja Vikruti (Premature and Post term Labour)	C3
4	M12.Prasava-Vyapad (Abnormal Labour)	C4

Paper No : 3 Stree Roga - Gynaecology

A S.N o	B Module number and Name	C MGP
5	M19.Samkramika and Aupasargika rogas (Infectious disorders of Reproductive system & STD)	C5
6	M20.Artava vyapad samuchaya, Ashta nindita and Stree janananga arbuda (Reproductive endocrinology, polycystic ovarian syndrome, neoplasms of female reproductive system)	C6

Paper No : 4 Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology)

A S.N o	B Module number and Name	C MGP
7	M27.Medico-legal Aspects related to Stree Roga (Gynaecology) -Prasuti Tantra (Obstetrics)	C7
8	M28.Stree Roga Sambandhita Shastrakarmani- Operative Gynaecology - Part-I	C8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)

Semester No : 5**Paper No : 1 Garbha - Garbhini Vigyana - Embryology and Obstetrics**

A S.N o	B Module number and Name	C MGP
1	M5.Garbha vyapad– fetal Disorders -2	C1
2	M6.Pregnancy related medical and surgical complications	C2

Paper No : 2 Prasava Vigyan - Clinical Obstetrics

A S.N o	B Module number and Name	C MGP
3	M13.Jatamatra (Neonatal resuscitation) and Navajata Shishu Paricharya (New born care)	C3
4	M14.Vishesha Adhyayana of Prasava Vishishta Aushadhi	C4
Paper No : 3 Stree Roga - Gynaecology		
A S.N o	B Module number and Name	C MGP
5	M21.Vandhyatwa (Female and male Infertility)	C5
6	M22.Stana roga - Breast diseases	C6
Paper No : 4 Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology)		
A S.N o	B Module number and Name	C MGP
7	M29.Stree Roga Sambandhita Shalyakarmani - Operative Gynaecology–Part-II	C7
8	M30.Stree Roga Sambhandhita Shalyakarma -Part-III -Garbhashaya Nirmana & Yoni Nirmana Shalyakarma (Reconstructive Surgeries of the Uterus and Vagina)	C8
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$
Semester No : 6		
Paper No : 1 Garbha - Garbhini Vigyana - Embryology and Obstetrics		
A S.N o	B Module number and Name	C MGP
1	M7.Kalpa used in Garbha garbhini vyapad	C1
2	M8.Streerog (Gynaecological disorders) complicating pregnancy-	C2
Paper No : 2 Prasava Vigyan - Clinical Obstetrics		
A S.N o	B Module number and Name	C MGP
3	M15.Sutika Vigyan (Normal Puerperium)	C3
4	M16.Sutikavyadhi (Puerperial disorders)	C4
Paper No : 3 Stree Roga - Gynaecology		
A S.N	B Module number and Name	C MGP

o		
5	M23.Stree swasthya- Family welfare and demography	C5
6	M24.Vishesha Adhyayana, recent advancements in gynecology and commonly used formulations in stree roga	C6
Paper No : 4 Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology)		
A S.N o	B Module number and Name	C MGP
7	M31.Prasava Sambandhita Shalyakarmani- Operative Obstetrics – Part-I	C7
8	M32.Prasava Sambandhita Shalyakarmani - Operative Obstetrics – Part-II	C8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)

S. No	Evaluation Methods
1.	Method explained in the Assessment of the module or similar to the objectives of the module.

6 E : Question Paper Pattern

MD/MS Ayurveda Examination AYPG-SRPT Sem VI

Time: 3 Hours ,**Maximum Marks:** 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per Question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 1 (Garbha - Garbhini Vigyana - Embryology and Obstetrics)				
(M-1)Garbhini Vigyana- (Diagnosis of Pregnancy) (Marks: Range 5-20)				
1	(U-1) Garbhini Nidana(Diagnosis of pregnanacy)	Yes	Yes	Yes
2	(U-2) Garbhavakranti(Embryology)	Yes	Yes	Yes
3	(U-3) Garbhanga Vikruti(Chromosomal and congenital fetal anamolies)	Yes	Yes	Yes
(M-2)Garbhini Paricharya – (Antenatal care) (Marks: Range 5-20)				
1	(U-1) Garbhini Masanumasika Paricharya(Antenatal care)	Yes	Yes	Yes
2	(U-2) Bahu-apatyata	Yes	Yes	Yes
3	(U-3) PC&PNDT Act	Yes	Yes	Yes
(M-3)Garbhini vyapad – (Disorders in Pregnancy) (Marks: Range 5-20)				
1	(U-1) Garbhini Vyapad(minor and major medical ailments in pregnancy,Anemia in pregnancy)	Yes	Yes	Yes
2	(U-2) Garbhini Chardi(Emesis and hyperemesis gravidarum)	Yes	Yes	Yes
3	(U-3) Garbhani Raktachapa (Pregnancy induced hypertension))	Yes	Yes	Yes
(M-4)Garbha vyapad (Fetal disorders). (Marks: Range 5-20)				
1	(U-1) Garbha Vyapad(diseases of fetus)	Yes	Yes	Yes
2	(U-2) Ectopic pregnancy	Yes	Yes	Yes
3	(U-3) Rh incompatibility	Yes	Yes	Yes
(M-5)Garbha vyapad– fetal Disorders -2 (Marks: Range 5-20)				
1	(U-1) Garbha sosha-Intra uterine growth restriction)	Yes	Yes	Yes
2	(U-2) Jarayu dosha(placental anamolies and Gestational trophoblastic neoplasia)	Yes	Yes	Yes
3	(U-3) Antarmrita garbha (IUFD)	Yes	Yes	Yes
(M-6)Pregnancy related medical and surgical complications (Marks: Range 5-20)				
1	(U-1) Evaluation of fetal and maternal health in high risk pregnancies	Yes	Yes	Yes
2	(U-2) Elderly primi gravida , Bad obstetric history.	Yes	Yes	Yes
3	(U-3) Garbhini makkala (Antepartum hemorrhage.)	Yes	Yes	Yes
(M-7)Kalpa used in Garbha garbhini vyapad (Marks: Range 5-20)				
1	(U-1) Group of drugs for fetal growth	Yes	Yes	Yes

2	(U-2) Group of drugs for Garbhini chikitsa	Yes	Yes	Yes
3	(U-3) Pharmacology of drugs for prevention of abortion, preter labour	Yes	Yes	Yes
(M-8)Streerog (Gynaecological disorders) complicating pregnancy- (Marks: Range 5-20)				
1	(U-1) Tumors in pregnancy	Yes	Yes	Yes
2	(U-2) Genital prolapse in pregnancy.	Yes	Yes	Yes

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 2 (Prasava Vigyan - Clinical Obstetrics)				
(M-9)Prakrita Prasava (Normal Labour) (Marks: Range 5-20)				
1	(U-1) Prakrita Prasava prakriya and Avastha	Yes	Yes	Yes
2	(U-2) Prasavagara	Yes	Yes	Yes
3	(U-3) Prasava vidhi (Mechanism of normal labour)	Yes	Yes	Yes
4	(U-4) Prasava Paricharya (Management of labour)	Yes	Yes	Yes
(M-10)Prasavakaleena Upadrava (Intrapartum complications) and Complications of stages of labour (Marks: Range 5-20)				
1	(U-1) Garbha avasada (Fetal Distress)	Yes	Yes	Yes
2	(U-2) Prasavakaleena Garbhamrita (Still birth)	Yes	Yes	Yes
3	(U-3) Obstetric management of high-risk pregnancies	Yes	Yes	Yes
(M-11)Prasava Kalaja Vikruti (Premature and Post term Labour) (Marks: Range 5-20)				
1	(U-1) Akala-prasava (Preterm labour)	Yes	Yes	Yes
2	(U-2) Kalateeta Prasava (Post term labour)	Yes	Yes	Yes
3	(U-3) Aparasanga (Retained placenta)	Yes	Yes	Yes
(M-12)Prasava-Vyapad (Abnormal Labour) (Marks: Range 5-20)				
1	(U-1) Garbha Sanga –Mudhagarbha (Obstructed labour)	Yes	Yes	Yes
2	(U-2) Vilambita prasava (Delayed labour)	Yes	Yes	Yes
(M-13)Jatamatra (Neonatal resuscitation) and Navajata Shishu Paricharya (New born care) (Marks: Range 5-20)				
1	(U-1) Jatamatra shishu paricharya (Neonatal resuscitation)	Yes	Yes	Yes
2	(U-2) Navajata Shishu paricharya - Neonatal care	Yes	Yes	Yes
3	(U-3) Navajata shishu shvasavarodha - Birth Asphyxia	Yes	Yes	Yes
(M-14)Vishesha Adhyayana of Prasava Vishishta Aushadhi (Marks: Range 5-20)				
1	(U-1) Prasava Paricharyantargata Yoga	Yes	Yes	Yes
2	(U-2) Sutika Paricharyantargata Yoga	Yes	Yes	Yes
3	(U-3) Navajatashishu Paricharyantargata Yoga	Yes	Yes	Yes
(M-15)Sutika Vigyan (Normal Puerperium) (Marks: Range 5-20)				
1	(U-1) Sutika (Normal puerperium)	Yes	Yes	Yes
2	(U-2) Stanya utpatti (Lactation)	Yes	Yes	Yes

3	(U-3) Stanyadushti (Lactation disorders)	Yes	Yes	Yes
(M-16)Sutikavyadhi (Puerperial disorders) (Marks: Range 5-20)				
1	(U-1) Sutika Vyapad (Puerperal disorders)	Yes	Yes	Yes
2	(U-2) Abnormal Puerperium	Yes	Yes	Yes

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 3 (Stree Roga - Gynaecology)				
(M-17)Artava Vyapad- Disorders of menstruation (Marks: Range 5-20)				
1	(U-1) Asrigdara (AUB)	Yes	Yes	Yes
2	(U-2) Anartava	Yes	Yes	Yes
3	(U-3) Kashtartava	Yes	Yes	Yes
(M-18)Yoni Vyapad -Epidemiology and general etiopathogenesis and management of Gynecological disorders (Marks: Range 5-20)				
1	(U-1) Yonivyapad(Gynaecological disorders)	Yes	Yes	Yes
2	(U-2) Yonibhramsha(Pelvic organ prolapse)	Yes	Yes	Yes
3	(U-3) Beeja dushti(Chromosomal anomalies and congenital anomalies)	Yes	Yes	Yes
(M-19)Samkramika and Aupasargika rogas (Infectious disorders of Reproductive system & STD) (Marks: Range 5-20)				
1	(U-1) Sankramika yoni rogas(Genital infections)	Yes	Yes	Yes
2	(U-2) Oupasargika yoni rogas(Sexually transmitted infections)	Yes	Yes	Yes
(M-20)Artava vyapad samuchaya, Ashta nindita and Stree janananga arbuda (Reproductive endocrinology, polycystic ovarian syndrome, neoplasms of female reproductive system) (Marks: Range 5-20)				
1	(U-1) Ashta nindita, artava vyapad samuchhaya(reproductive endocrinology and Polycystic ovarian syndrome)	Yes	Yes	Yes
2	(U-2) Rakta gulma, Granthi, arbuda (benign neoplasms)	Yes	Yes	Yes
3	(U-3) Karkatarbuda (malignant tumors)	No	Yes	Yes
(M-21)Vandhyatwa (Female and male Infertility) (Marks: Range 5-20)				
1	(U-1) Stree vandhyatwa - Female Infertility	Yes	Yes	Yes
2	(U-2) Shukradushti(Male infertility)	Yes	No	Yes
3	(U-3) Assisted reproductive technology procedures.	No	Yes	No
(M-22)Stana roga - Breast diseases (Marks: Range 5-20)				
1	(U-1) Stana rogas(Benign neoplasms of breast)	Yes	Yes	Yes
(M-23)Stree swasthya- Family welfare and demography (Marks: Range 5-20)				
1	(U-1) Vital statistics	Yes	Yes	Yes
2	(U-2) Taruna awastha swastya rakshana(Adolescent women health care)	Yes	Yes	Yes

3	(U-3) Garbha nirodha and garbhapatakara yoga (Contraceptive methods)	Yes	Yes	Yes
(M-24) Vishesha Adhyayana, recent advancements in gynecology and commonly used formulations in stree roga (Marks: Range 5-20)				
1	(U-1) Commonly used formulations	Yes	Yes	No
2	(U-2) Recent studies	No	No	No
3	(U-3) Klaibya	Yes	Yes	No

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 4 (Prasuti-Streeroga-Shastra Karma (Operative Obstetrics and Gynaecology))				
(M-25)Shastrakarma Samanya Siddhanta –General principles of Gynaecological and Obstetrical Surgeries (Marks: Range 5-20)				
1	(U-1) Shastrakarma Siddhanta	Yes	Yes	Yes
2	(U-2) Analgesia and Anaesthesia in Obstetrics	No	Yes	Yes
3	(U-3) Analgesia and Anaesthesia in Gynaecology	Yes	Yes	Yes
4	(U-4) Intensive Care in Obstetric and Gynaecology	Yes	Yes	Yes
(M-26)Critical Care in Gynaecology and Obstetrics (Marks: Range 5-20)				
1	(U-1) Shock management	Yes	Yes	Yes
2	(U-2) Raktadana - Blood Transfusion	Yes	Yes	Yes
3	(U-3) Fluid and electrolyte balance and fluid therapy.	Yes	Yes	Yes
4	(U-4) Intensive Care in Obstetric and Gynaecology	Yes	Yes	Yes
(M-27)Medico-legal Aspects related to Stree Roga (Gynaecology) -Prasuti Tantra (Obstetrics) (Marks: Range 5-20)				
1	(U-1) Knowledge and Application of Acts and Laws	Yes	Yes	Yes
2	(U-2) Accurate Documentation in Patient Care	Yes	Yes	Yes
3	(U-3) Systematic Documentation of Maternal foetal death	Yes	Yes	No
4	(U-4) Robotic surgery in Gynecology and Obstetrics	Yes	Yes	No
(M-28)Stree Roga Sambandhita Shastrakarmani- Operative Gynaecology - Part-I (Marks: Range 5-20)				
1	(U-1) Upashastra karma - Minor surgeries	Yes	Yes	Yes
2	(U-2) Upashastra karma - Minor surgeries	Yes	Yes	Yes
3	(U-3) Operations for Genital prolapse	Yes	Yes	Yes
4	(U-4) Operations on ovary	Yes	Yes	Yes
(M-29)Stree Roga Sambandhita Shalyakarmani - Operative Gynaecology–Part-II (Marks: Range 5-20)				
1	(U-1) Operations on Fallopian Tube	Yes	Yes	Yes
2	(U-2) Surgeries related to Uterus	Yes	Yes	Yes
3	(U-3) Reconstructive surgeries of female reproductive tract	Yes	Yes	Yes
4	(U-4) Reconstructive surgeries of vagina	No	Yes	Yes
(M-30)Stree Roga Sambhandhita Shalyakarma -Part-III -Garbhashaya Nirmana & Yoni Nirmana Shalyakarma (Reconstructive Surgeries of the Uterus and Vagina) (Marks: Range 5-20)				

1	(U-1) Garbhashaya Punarnirmana Shalyakarma (Reconstructive Surgeries of the Uterus)	Yes	Yes	Yes
2	(U-2) Yoni Punarnirmana Shalyakarma (Reconstructive Surgeries of the Vagina)	Yes	Yes	Yes
3	(U-3) Bhagadvara Sandhanakarma(Hymenoplasty)	No	Yes	Yes
4	(U-4) Fistula Repair	Yes	Yes	Yes
(M-31)Prasava Sambandhita Shalyakarmani- Operative Obstetrics – Part-I (Marks: Range 5-20)				
1	(U-1) Minor surgeries 1	Yes	Yes	Yes
2	(U-2) Minor surgeries 2	Yes	Yes	Yes
3	(U-3) Safe abortion services	Yes	Yes	Yes
4	(U-4) Surgical management of Septic abortion / Criminal abortion	Yes	Yes	Yes
(M-32)Prasava Sambandhita Shalyakarmani - Operative Obstetrics – Part-II (Marks: Range 5-20)				
1	(U-1) Instrumental delivery	Yes	Yes	Yes
2	(U-2) Major surgeries-1	Yes	Yes	Yes
3	(U-3) Major surgeries-2	Yes	Yes	Yes
4	(U-4) Major surgeries -3	Yes	Yes	Yes

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

1. University examination shall have 4 papers of 100 marks.
Each 100 marks question paper shall contain:-
 - Application Based Question: 1 No (carries 20 marks)
 - Short Answer Questions: 8 Nos (each question carries 05 marks)
 - Long Answer Questions: 4 Nos (each question carries 10 marks)
2. Questions should be drawn based on the table 6F.
3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.
4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated “NO”.
5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.
6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.
7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.
8. Create Blueprint based on instructions 1 to 7

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	Long case evaluation-100 history taking-15 marks. elicits relevant history, systemic examination, abdominal, local, pelvic examination, nidana panchaka, prakriti etc. 2. Physical examination & provisional diagnosis-15 marks Ashtavidha pariksha, Dasavidha pariksha, general and systemic examination. 3. Differential diagnosis & diagnosis-40 marks 4. Treatment plan -30 marks 5. communication & professionalisim -5 marks 6. organisation & clinical judgement-5 marks demonstrate confidence, time management and logical approach.	100
2	A. short case-50 marks 1. history and examination-10 marks 2. differential diagnosis & diagnosis-10 marks 3. treatment plan-10 marks. OR B. Procedure-50 marks perform given procedure on patient/simulated patient-30 marks document the procedure -20 marks (real time observation by faculty assessor).	50
3	Spotters-50 marks 1. instruments (prasuti tantra & streeroga) 2. lab reports/USG, x ray, CT, MRI images, surgical specimens. 3. Drugs and formulations used in prasuti tantra & stree roga	50
4	Assessing teaching ability 1. Preparation and planning-4 marks 2. induction & motivation-2 marks 3. content delivery (clarity, relevance, Accuracy)-6 marks 4. Teaching Aids/use of Media -2 marks 5. interaction & engagement with learners-2 marks 6. communication & reinforcement of key points-2 marks 7. Communication Skills (Voice, Language, Non verbal cues)-2 marks	20
5	Dissertation presentation-20 marks content -8 marks organization & flow-4 marks presentation skills-4 marks visual aids-2 marks	20

	professionalisim-2 marks	
6	Viva (4 examiners-20 marks each examiner)	80
7	Dissertation viva	40
8	Log Book Activity	20
9	Practical /clinical record	20
Total Marks		400

Reference Books/ Resources

S.No	References
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3	Vridha Vagbhata, Astanga Sangraha. Edited by Shivprasad Sharma. 3rd ed. Varanasi: Chaukhambha Sanskrit Series Office; 2012
4	Vagbhata, Astanga Hridayam. Edited by Harishastri Paradkar Vaidya. 1st ed. Varanasi: Krishanadas Academy; 2000.
5	Vrddhajivaka, Kashyapa Samhita. Edited by Tewari P V, Reprint edition. Varanasi: Chaukhambha Visvabharati; 2008
6	Siddhinandan Mishra, Bhaishajya Ratnawali of Shri Govind Das Sen, 2017 edition, Varanasi: Chaukhamba Surbharati Prakashan; 2017.
7	K.R. Srikantha Murthy, Bhavaprakasha of Bhavmishra -Volume I, translated from Sanskrit to English, 1st edition, Varanasi: Krishnadas academy; 2000
8	Priya Vrat Sharma (editor), Bhela Samhita of Bhela, Reprint edition, Varanasi: Chaukhambha Visvabharati; 2008
9	Harihariprasad Tripathi (editor), Harita Samhita of Harita, 2nd edition, Varanasi: Chaukhambha Krishnadas Academy; 2009
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12	M.S. Krishanmurthy, Sahastrayoga. 2nd edition, New Delhi, Chaukhambha Orientalia 2021
13	Usha V.N.K., A Text Book of Gynaecology Streeroga-Vijnan, 1st edition, Delhi, Chaukhamba Sanskrit Pratishthan, 2010
14	Usha V.N.K., A Text Book of Obstetrics Prasuti Tantra, 1st edition, Delhi, Chaukhamba Sanskrit Pratishthan, 2020
15	Tewari P.V., Ayurvediya Prasuti Tantra Evam StriRoga Vol 1, 2nd edition, Reprint, Varanasi, Chaukhambha Orientalia, 2017
16	Tewari P.V., Ayurvediya Prasuti Tantra Evam StriRoga Vol 2, 2nd edition, Reprint, Varanasi, Chaukhambha Orientalia, 2017
17	Kapoorchand H., A Comprehensive Treatise on StriRoga (Gynaecology), 1st edition, Reprint, Varanasi, Chaukhambha Vishvabharati, 2020
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Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		
		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		

		LRI	Lab Report Interpretation		
		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		
		DSN	Dissection		
		PSN	Prosection		

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