

Curriculum for MD/ MS Ayurveda
(PRESCRIBED BY NCISM)

अभ्यासात्प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी ।

Semester II

Applied Basics of Stree Roga - Prasuti Tantra
(Ayurveda Gynaecology and Obstetrics)
(SUBJECT CODE : AYPG-AB-SRPT)

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



आयुषे सर्वलोकानाम्



SKILLS

Skill
Training



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.

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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 for MD/ MS Ayurveda

Applied Basics of Stree Roga - Prasuti Tantra (AYPG-AB-SRPT)

Summary & Credit Framework

Semester II

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative assessment)
M1. Stree Vishishta Shareera Rachana (Applied anatomy of female genito-urinary system)	2	60	50
M2. Yauvana avastha (Puberty), Kishora avastha (Adolescence) and Rajonivrutti (Menopause). Concept of Artava and Shukra	2	60	50
M3. Fundamentals of Garbhadhana (Conception)	2	60	50
M4. Aparā, Garbha Nabhinadi, Garbhodaka, Garbhaposhana	2	60	50
M5. Ashtavidha Shastra Karma, Yantra & Shastra	2	60	50
M6. Sthanika Upakrama (Local therapies)	2	60	50
M7. Kashthaushadhi evam Rasaushadhi-Commonly used drugs and formulations of Stree Roga (Gynaecology) and Prasuti Tantra (Obstetrics)	2	60	50
M8. Vyadhi Vinischaya Upaya- Diagnostic tools and techniques	2	60	50
	16	480	400

Credit frame work

AYPG-AB-SRPT consists of 8 modules totaling 16 credits, which correspond to 480 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. In case of

difficulty and questions regarding the curriculum, write to syllabus24ayu@ncismindia.org.

Course Code and Name of Course

Course code	Name of Course
AYPG-AB-SRPT	Applied Basics of Stree Roga - Prasuti Tantra

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) AYPG-AB-SRPT At the end of the course AYPG-AB-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)

2A Module Number	2B Module & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including modular assessment	2G Total
1	<p>M-1 Stree Vishishta Shareera Rachana (Applied anatomy of female genito-urinary system) This module explores the applied anatomy of the female genito-urinary system, highlighting neurovascular features. The module uses dissection, simulations, and clinical discussions to help learners recognize key structures and their clinical significance.</p> <ul style="list-style-type: none"> • M1U1 Stree Shroni Rachana- Female Pelvic Anatomy Bony pelvis- Structure, types and its clinical significance. Pelvic muscles-Anatomy, functions and its clinical significance. Pelvic fasciae- Anatomy and its clinical significance. • M1U2 Stree Yoni Samrachana-Female Reproductive System Anatomy and clinical significance of Upastha - External genitalia, Trayavarta Yoni (Yoni-Vagina, Garbhashaya - Uterus, Beejavahini nalika - Fallopian tubes, Phalakosha - Ovaries). Janmajata Janananga Vikruti - Congenital malformations of female genital organs Prajanana Anubandhi anga-avayava - Accessory Reproductive organs- Stana-Breasts. 	2	10	20	30	60

	<ul style="list-style-type: none"> • M1U3 Stree Mutravaha Srotas- Female Urinary System Anatomy and clinical significance of Basti–Urinary bladder, Mutravahini nalika - Ureters, Bahya mutramarga -uretral meatus. • M1U4 Neuroanatomy of Artavavaha Srotas Somatic and Autonomic innervation of female reproductive system Neuroanatomy of Artavavaha and Stanyavaha srotas Clinical importance of Neuroanatomy • M1U5 Vascular Anatomy of Stree janananga – Female Reproductive System Vascular anatomy (sira, dhamani and srotas) Blood Supply to internal and external genitalia Venous Drainage of internal and external genitalia Lymphatic Drainage of internal and external genitalia Vascular Anatomy and its importance 					
2	<p>M-2 Yauvana avastha (Puberty), Kishora avastha (Adolescence) and Rajonivrutti (Menopause). Concept of Artava and Shukra This module covers puberty, adolescence, and menopause, focusing on physical and hormonal changes. It emphasizes concepts like Rajaswalacharya and Shuddha Artava, linking them to reproductive health and lifestyle practices.</p>	2	10	20	30	60

• **M2U1 Yauvanavastha (Puberty) and Kishoravastha (Adolescence)**

Neuro-endocrinal changes in puberty, adolescence based on tanner stages and other staging methods.

• **M2U2 Artava Chakra, Rajaswala Charya**

Artava Chakra (Menstrual Cycle)
Rajaswala Charya (Menstrual hygiene)
Ritumati lakshana (Characteristic features of Fertility Period)
Psychological changes during menstruation.
Anovular menstruation and Postponement of menstruation.

• **M2U3 Rajo-Nivrutti-Menopause**

Rajo-Nivrutti (Menopause).
Diagnosis and prevention of Post-menopausal syndrome
Asamanya Rajo-Nivrutti (risk factors of abnormal menopause).

• **M2U4 Artava and Shukra**

Artava (Swaroop, Utpatti, Pravrutti, Artavapramana, Prathama Rajodarshana
vaya, Shuddhartava Lakshana, Vriddhi-Kshaya Lakshana)
Shukra (Swaroop, Utpatti, Pravrutti, Pramana, Vriddhi-Kshaya Lakshana
with their importance).
Shuddha Artava (Normal menstruation and oogenesis) and Shuddha Shukra
(Normal Semen and spermatogenesis)

3	<p>M-3 Fundamentals of Garbhadhana (Conception) This module covers Ayurvedic principles of Garbhadhana, focusing on conception, fertilization, and fetal development. It explores procreative factors, Garbhasambhava Samagri, Bijasanskara, and their applied aspects. This module will enable learners to assess reproductive health, observe fetal growth, and apply concepts like Masanumasika Vriddhi and Suprajanan Karma.</p> <ul style="list-style-type: none"> • M3U1 Concept of Garbhadhana (Process of Conception) Garbhadhana and Garbhadhana vidhi (process of conception) Bijasanskara (Preconceptional gametes optimization) Preconceptional Counseling Risk Assessment Panchakarma for Bijashuddhi • M3U2 Concept of Garbha (Zygote / Embryo/Fetus) Garbha nirmana - fertilization, zygote formation, implantation, embryogenesis, Garbha Sambhava Samagri, Garbhakara Shadbhava (procreating factors) along with their scientific relevance. Garbhavakranti (chronological evolution of Garbha) Garbhavriddhikara Bhava (factors influencing development and traits of fetus) Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana). • M3U3 Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana). 	2	10	20	30	60
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	<p>Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana).</p> <p>Various Techniques for Shreyasipraja - Preventive -Garbha Grahanartha, Garbhashthapanartham, and Promotive Aspects-Suprajananartham-Obtaining Healthy Progeny.</p> <p>Recent Research Updates in Ayurveda.</p>					
4	<p>M-4 Apara, Garbha Nabhinadi, Garbhodaka, Garbhaposhana</p> <p>This module explores the development, structure, and functions of the Apara (placenta), Garbha Nabhinadi (Umbilical Cord), Garbhodaka (Amniotic Fluid), and Garbhadharini (Membranes). It highlights their roles in Garbhaposhana - fetal nourishment, protection, and physiology, and their clinical relevance in pregnancy, through dissection, imaging, and case analysis.</p> <ul style="list-style-type: none"> • M4U1 Apara - Placenta <p>Development, structure and functions of Apara - Placenta and its applied aspects including Apara vikriti - abnormal placenta.</p> • M4U2 Garbha Nabhinadi - Umbilical cord <p>Development, structure and functions of Garbha Nabhinadi - Umbilical cord and Nabhinadi vikriti - abnormalities of umbilical cord including its applied aspects.</p> • M4U3 Garbhodaka - Amniotic fluid 	2	10	20	30	60

	<p>Formation, composition and functions of Garbhodaka - amniotic fluid and its applied aspects.</p> <p>• M4U4 Garbhaposhana - Fetal nourishment</p> <p>Garbhaposhana (Fetal nourishment) Garbha Sharirakriya (Fetal physiology)</p>					
5	<p>M-5 Ashtavidha Shastra Karma, Yantra & Shastra</p> <p>This module provides an in-depth understanding of Ashtavidha Shastrakarma and the use of Yantra and Shastra in Stree Roga and Prasuti Tantra. It focuses on indications, techniques, complications, and hands-on practice through models or simulators, enhancing surgical skills.</p> <p>• M5U1 Ashtavidha Shastra Karma</p> <p>Ashtavidha Shastra Karma (eight types of surgical procedures) performed in Stree Roga and Prasuti Tantra.</p> <p>• M5U2 Seevana vidhi (Suturing procedure)</p> <p>Description of different types of Seevana material and Seevana Vidhi (Suture material and methods of Suturing)</p> <p>• M5U3 Yantra and Shastra</p>	2	10	20	30	60

	Yantra and Shastra					
6	<p>M-6 Sthanika Upakrama (Local therapies) This module covers Sthanika Upakrama (local therapies) used in Stree Roga and Prasuti Tantra, focusing on their concept, applications, and special therapies like Panchakarma. It emphasizes indications, contraindications, and hands-on administration of therapies, preparation of medicines and identification of complications.</p> <ul style="list-style-type: none"> • M6U1 Sthanika Upakrama (special local treatment modalities) Sthanika Upakrama (special local treatment modalities): Yoniprakshalana, Yonipichu, Yonivarti, Yonikalkadharana, Yonidhupana, Yonilepana, Yoniavachurnana, Yonipottali, Nabhi Poorana. • M6U2 Agnikarma and Ksharakarma. Principles and application of Agnikarma, Ksharakarma • M6U3 Panchakarma in Streeroga and Prasutitantra. Principles and application of Panchakarma Vamana, Virechana. Asthapana, Anuvasnavasti, Matravasti; Yogavasti, Lekhanavasti, Yapanavasti, Ksheeravasti, Madhutailikavasti. Uttarabasti Nasya-Snehana, Brimhana, Lekhana, Shodhana. 	2	10	20	30	60

	Raktamokshana-Jalaukavacharana.					
7	<p>M-7 Kashthaushadhi evam Rasaushadhi-Commonly used drugs and formulations of Stree Roga (Gynaecology) and Prasuti Tantra (Obstetrics)</p> <p>This module introduces key Kashthaushadhi and Rasaushadhi used in Stree Roga and Prasuti Tantra. It covers their indications, dosage, actions, and safety, with emphasis on therapeutic applications and prescribing principles.</p> <p>• M7U1 Kashtha Aushadhi evam Rasa Aushadhi</p> <p>Kashtha Aushadhi evam Rasa Aushadhi- Commonly used formulations - Ingredients, indications, contraindications, therapeutic actions, adverse reactions (if any), posology and kalamaryada (duration), route of administration.</p> <p>Kashthaushadhi (herbal drugs and formulations) and Rasaushadhi (herbo-mineral, metallic and mineral formulations) in Stree Roga (Gynecology). Kashthaushadhi (herbal drugs and formulations) and Rasaushadhi (herbo-mineral, metallic and mineral formulations) in Prasuti Tantra (Obstetrics). Formulations used in integrative medicine in Gynecology and Obstetrics.</p> <p>• M7U2 Pharmacology of Female Reproductive System</p> <p>Pharmacological principles of female reproductive system. Pharmacology of drugs acting on uterus, pregnancy, labour and lactation. Placental transfer, teratogenicity, and FDA pregnancy categories.</p> <p>• M7U3 Pharmacology of drugs used in Gynaecology and Obstetrics</p>	2	10	20	30	60

	Pharmacological principles, mechanism of action, indications, and contraindications, pharmacodynamics, pharmacokinetics and clinical applications of conventional drugs used in Gynecology and Obstetrics. Pharmacological effects of conventional contraceptive drugs.					
8	<p>M-8 Vyadhi Vinischaya Upaya- Diagnostic tools and techniques</p> <p>This module covers diagnostic tools and techniques in Stree Roga and Prasuti Tantra. It includes physical examination, lab tests, and imaging methods. Emphasis is placed on interpreting findings and understanding their indications and limitations. Practical skills in diagnosis are developed through clinical application.</p> <ul style="list-style-type: none"> • M8U1 Diagnostic tools and techniques used in Stree Roga <p>Laboratory tests, diagnostic procedures and imaging studies used in Stree Roga.</p> <ul style="list-style-type: none"> • M8U2 Diagnostic tools and techniques used in Prasuti Tantra. <p>Diagnostic tools and techniques, laboratory tests, diagnostic procedures and imaging studies used in Prasuti Tantra.</p> <ul style="list-style-type: none"> • M8U3 Intrapartum Fetal and Maternal monitoring techniques <p>Intrapartum Fetal and Maternal monitoring techniques.</p>	2	10	20	30	60

		16	80	160	240	480
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Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain-Level- TL Methods

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/ Experiential Learning	3E Domain/ Sub Domain	3F Level (D oes/Show s how/K nows ho w/Know)	3G Teaching Learning Methods
Module 1 : Stree Vishishta Shareera Rachana (Applied anatomy of female genito-urinary system)						
<p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <ol style="list-style-type: none"> 1.Describe the applied anatomy, neuro-anatomy and vascular anatomy of Stree Janananga Rachana (female genito-urinary system). 2.Demonstrate dissection of female genito-urinary organs to understand the applied aspects 3.Identify the blood supply, innervation, and lymphatic drainage of female reproductive organs and breasts on Anatomage / live patients during surgery/ 3D simulator. 4.Analyse the clinical significance of anatomical variations and congenital anomalies of female reproductive organs. 						
<p>Unit 1 Stree Shroni Rachana- Female Pelvic Anatomy</p> <p>Bony pelvis- Structure, types and its clinical significance. Pelvic muscles-Anatomy, functions and its clinical significance. Pelvic fasciae- Anatomy and its clinical significance.</p> <p>References: 2,4,5,13,14</p>						
3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the clinical implications of applied anatomy of Stree Shroni (Female pelvis)	2	Lecture	CAN	Knows-how	L,L&PPT ,L_VC

CO1,CO2	Identify various types of female pelvis through pelvic models or clinical examination, and accurately measure and interpret the diameters of true and false pelvis.	6	Practical Training 1.1	PSY-ADT	Shows-how	D-M,PT,SIM
CO1,CO2	Identify the diameters of Shroni- Pelvis, assess the pelvis, Shroni Peshi and Snayu - Pelvic muscles and fascia. Perform clinical pelvimetry.	6	Experiential-Learning 1.1	PSY-MEC	Does	D-M,RLE,SIM

Unit 2 Stree Yoni Samrachana-Female Reproductive System

Anatomy and clinical significance of Upastha - External genitalia, Trayavarta Yoni (Yoni-Vagina, Garbhashaya - Uterus, Beejavahini nalika - Fallopian tubes, Phalakosha - Ovaries).

Janmajata Janananga Vikruti - Congenital malformations of female genital organs

Prajanana Anubandhi anga-avayava - Accessory Reproductive organs- Stana-Breasts.

References: 2,4,5,6,13,14,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse clinical implications of applied anatomy of Stree Janananga Rachana (Female reproductive system)	2	Lecture	CAN	Knows-how	L,L&PPT,L_VC
CO1,CO2	Perform dissection of female reproductive organs (Upastha and Trayavarta yoni). Identify marmas situated in female reproductive organs. Identify Janmajata Stree Janananga Vikruti.	8	Practical Training 1.2	PSY-GUD	Shows-how	D-M,DSN,SIM
CO1,CO2	Identify anatomical variations and congenital anomalies of female genital organs.	6	Experiential-Learning 1.2	CAN	Does	CBL,DIS,IBL,PER

Unit 3 Stree Mutravaha Srotas- Female Urinary System

Anatomy and clinical significance of Basti-Urinary bladder, Mutravahini nalika - Ureters, Bahya mutramarga -urethral meatus.

References: 2,3,4,5,13,14,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the relationships between different structures of the female urinary system and genital organs, and explain their clinical significance. Explain the role of urinary bladder as supporting structure to understand the mechanism of pelvic organ prolapse and role of in maintaining urinary continence.	3	Lecture	CAN	Knows-how	L,L&PPT ,L_VC
CO1,CO2,CO4	Demonstrate clinical significance of surgical anatomy of Basti- Urinary bladder, Mutravaha nalika-ureter in female. Demonstrate urethral catheterization.	2	Practical Training 1.3	PSY-GUD	Shows-how	D,D-BED ,D-M,SIM
CO1,CO2	Perform Urethral Catheterization	4	Experiential-Learning 1.3	CAP	Does	D,D-BED ,D-M,SIM

Unit 4 Neuroanatomy of Artavavaha Srotas

Somatic and Autonomic innervation of female reproductive system
Neuroanatomy of Artavavaha and Stanyavaha srotas
Clinical importance of Neuroanatomy

References: 13,14,15,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the applied aspects of neuro-anatomy of female reproductive organs	1	Lecture	CAP	Knows-how	L,L&PPT
CO1,CO2	Dissect the pathways of major pelvic nerves (pudendal nerve, pelvic splanchnic nerves, and hypogastric nerve) and demonstrate the anatomical site of pudendal block anaesthesia	2	Practical Training 1.4	PSY-GUD	Shows-how	D,D-M,D SN,PT,SI M
CO1,CO2	Demonstrate the pathways of major pelvic nerves (pudendal nerve, pelvic splanchnic	4	Experiential-	CAP	Does	D,D-

nerves, and hypogastric nerve) and Identify the anatomical site of pudendal block anaesthesia

Learning 1.4

M,SIM

Unit 5 Vascular Anatomy of Stree janananga – Female Reproductive System

Vascular anatomy (sira, dhamani and srotas)
 Blood Supply to internal and external genitalia
 Venous Drainage of internal and external genitalia
 Lymphatic Drainage of internal and external genitalia
 Vascular Anatomy and its importance

References: 14,15,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the applied aspects of vascular anatomy of female reproductive organs	2	Lecture	CAN	Knows-how	L&PPT ,L_VC
CO1,CO4	Demonstrate the pathways of blood vessels, lymphatic drainage of female genital organs	2	Practical Training 1.5	PSY-GUD	Shows-how	D-M,DSN ,SIM
CO1,CO2	Identify the major blood vessels supplying upastha - external genitalia and trayavarta yoni -internal genitalia	6	Experiential-Learning 1.5	CAN	Does	D-M,DSN ,SIM

Practical Training Activity

Practical No	Name	Activity details
Practical Training 1.1	Stree Shroni - Female pelvis	Demonstration by Teacher (3 hours) 1. Use 3D pelvis models and skeletal specimens 2. Show key landmarks: inlet, outlet, ischial spines, pubic arch. 3. Demonstrate how to measure: A. True pelvis diameters

		<p>B. False pelvis dimensions</p> <p>4. Correlate findings with pelvic types.</p> <p>Guided Practice by the students (3 hours)</p> <p>1. Each student receives one female pelvis model, measuring scale/pelvimeter.</p> <p>2. Under supervision, students:</p> <p style="padding-left: 20px;">A. Identify pelvic type.</p> <p style="padding-left: 20px;">B. Measure diameters as demonstrated.</p> <p>3. Instructor provides feedback</p> <p>4. Discuss how pelvic types and diameters influence mode of delivery.</p> <p>5. Students discuss findings and clinical implications with reference to progress of normal labour as well as abnormal labour.</p>
Practical Training 1.2	Upastha, Trayavarta yoni and Janmajata Stree Janananga Vikruti	<p>Under the guidance of teacher, student dissect / identify the following -</p> <p>Activity -1 : 4 hours</p> <p>1. Applied anatomy of upastha- external and trayavarta yoni- internal genitalia, anatomical location of marmas situated in female reproductive organs on Cadaveric dissection / 3D virtual dissection to assess the normal anatomy and anatomical deviations.</p> <p>Activity -2: 4 hours</p> <p>Identify Janmajata stree janananga vikruti- congenital malformation of female genital organs of real patients/ models.</p>
Practical Training 1.3	Surgical anatomy of Basti- Urinary bladder, Mutravaha nalika-ureter and demonstration of urethral catheterisation	<p>Activity-1: 1 hour</p> <p>First teacher will demonstrate surgical anatomy of Basti- Urinary bladder, Mutravaha nalika-ureter on real cases / 3D virtual dissection and urethral catheterization on a simulator or real case.</p> <p>Followed by student demonstrate surgical anatomy of Basti- Urinary bladder, Mutravaha nalika-ureter on real cases / 3D virtual simulator to understand their clinical significance.</p> <p>Activity-2: 1 hour</p> <p>Perform urethral catheterization on a simulator or real cases.</p>
Practical Training 1.4	Pathways of major pelvic nerves	<p>Activity-1: 1 hour</p> <p>Teacher first demonstrate tracing of pathways of major pelvic nerves (pudendal nerve, pelvic splanchnic nerves, and hypogastric nerve). and anatomical site of Pudendal block anaesthesia to make student to understand the course of major pelvic nerves.</p> <p>Activity-2: 1 hour</p> <p>Students will demonstrate the pathways of major pelvic nerves in real cases or simulators to avoid injury during pelvic surgeries in female.</p> <p>Discuss the importance of the pathways and condition caused due to the anatomical structures.</p>

Practical Training 1.5	Vascular supply of female genitalia	<p>Duration 2 Hours</p> <p>Teacher demonstrates -</p> <ol style="list-style-type: none"> 1. Identification of major blood Vessels, lymphatic drainage including sira, dhamani and srotas supplying uterus, cervix, fallopian tubes, ovaries, vagina, external genitalia on Cadaver/ 3D virtual dissection / Models / real cases to understand the applied surgical anatomy. 2. Identification of uterine arteries and practicing ligation of uterine arteries and internal iliac arteries on dummy / simulator/ real cases. <p>Students identifies -</p> <ol style="list-style-type: none"> 3. Major blood Vessels, lymphatic drainage including sira, dhamani and srotas supplying uterus, cervix, fallopian tubes, ovaries, vagina, external genitalia on Cadaver/ 3D virtual dissection / Models / real cases to understand the applied surgical anatomy.
Experiential learning Activity		
Experiential learning No	Name	Activity details
Experiential-Learning 1.1	Identification of pelvic types and assessment of diameters	<p>Duration: 6 hours</p> <p>Student will -</p> <ol style="list-style-type: none"> 1. Assess diameters of Stree Shroni- Pelvis on real pelvis or 3D model. 2. Demonstrate Stree Shroni Peshi and Snayu - Pelvic muscles, ligaments and fascia on real case or mannequins or simulators by digital palpation. 3. Perform Clinical Pelvimetry on Patients (minimum two patients) or Mannequins.
Experiential-Learning 1.2	Applied anatomy and congenital anomalies of female genitalia	<p>Duration 6 hours</p> <p>Activity:</p> <ol style="list-style-type: none"> 1. Students attend examination and identify anatomical variations and congenital anomalies of female genital organs. (minimum 3) 2. Understand the importance of variation and its effect on reproductive health. 3. Reflect on the diagnosis
Experiential-Learning 1.3	Urethral Catheterization	<p>Duration: 4 hours</p> <p>Activity:</p> <ol style="list-style-type: none"> 1. Students attend examination and identify patients needing urethral catheterization. 2. Discuss the indication for procedure

		<p>3.Counsel the patients for the procedure</p> <p>4.Prepare for the procedure with aseptic measures</p> <p>5.Perform Catheterization on minimum 2 patients/simulator.</p> <p>6.Reflect on the challenges and SOP.</p>
Experiential-Learning 1.4	Pathways of major pelvic nerves and anatomical site of pudendal block anaesthesia	<p>Student demonstrates</p> <p>Activity-1: 2 hours</p> <p>Pathways of major pelvic nerves (pudendal nerve, pelvic splanchnic nerves, and hypogastric nerve) on simulator / 3D virtual dissection to the peers and discuss the clinical importance and disease conditions of these structures.</p> <p>Activity-2: 2 hours</p> <p>Identify Anatomical site of Pudendal block anaesthesia on simulator/ real case.</p>
Experiential-Learning 1.5	Vascular anatomy of female genitalia	<p>Students demonstrate-</p> <p>Activity -1: 6 hours</p> <p>1.Identify the major blood vessels supplying the upastha - external genitalia and trayavarta yoni -internal genitalia to understand their anatomical location and surgical landmarks.</p> <p>2.Demonstrate the location of uterine arteries, crossing of ureter on 3D virtual Dissection/simulator/model to identify the location where the ureter crosses the uterine artery.</p> <p>3.Discuss the clinical importance of these structure and identify minimum 5 clinical cases affecting these structure.</p>

Modular Assessment

Assessment method	Hour
<p>Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep structured marking pattern. Use different assessment methods in each module for the semester. Keep record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C.</p> <p>OSCE/OSPE-50 marks</p> <p>Assessment Stations</p> <p>1.Identification (10 marks) - Identify and label parts of uterus, ovary, vagina, bladder, and urethra on Cadaver(by dissection)/model/ Anatomage/ surgical image</p> <p>2.Neurovascular Mapping (10 marks): Trace and label the blood supply, innervation, and lymphatics of uterus, ovary, and breast (on chart/simulator/model)</p> <p>3. Case based assessment (15 marks): Given 2 case vignette (e.g., uterine prolapse, Mullerian agenesis), describe the anatomical basis & diagnosis</p> <p>4. Problem-based assessment (15 marks): Clinical problem on embryology and common congenital anomalies of female reproductive organs (e.g., septate uterus, imperforate hymen). Describe the congenital anomalies and identify the anatomical structure and embryology involved.</p>	4

or

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

and

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

Module 2 : Yauvana avastha (Puberty), Kishora avastha (Adolescence) and Rajonivrutti (Menopause). Concept of Artava and Shukra

Module Learning Objectives

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

1. Analyse the physical, emotional, psychological and hormonal changes of female life.
2. Describe the hormonal regulation of thelarche, adrenarche, pubarche, menarche and menstrual cycle.
3. Evaluate the applied aspects of Rajaswalacharya (menstruation regimen and menstrual hygiene), Ritumatcharya (proliferative phase regimen), Rajonivrutti Kalacharya (Menopausal stage diet and lifestyle).
5. Demonstrate the Ayurvedic concept of "Shuddha Artava" and its relationship with female reproductive health.
6. Educate females on menstrual hygiene and ahara-vihara during menstrual cycle.

Unit 1 Yauvanavastha (Puberty) and Kishoravastha (Adolescence)

Neuro-endocrinal changes in puberty, adolescence based on tanner stages and other staging methods.

References: 13,14,15,16,17,18,19

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Describe the morphological and neuro-endocrinal changes in puberty, adolescence and explanation of tanner stages of pubertal development in females.	1	Lecture	CAN	Know	L&GD,L &PPT
CO1,CO2	Outline the physiological and pathological mechanisms regulating puberty.	1	Lecture	CAN	Knows-how	L&GD,L_ VC
CO1,CO2,CO4	Perform clinical assessment of physical and neuroendocrine changes during puberty. Interpret the hormonal changes associated with pubertal onset.	2	Practical Training 2.1	PSY-GUD	Shows-how	CD,PT,SI M
CO1,CO2,CO4	Differentiate between premature thelarche, central precocious puberty, and other pubertal	2	Practical	CE	Shows-	CD,CBL,

	variants (e.g., premature adrenarche, constitutional delay) based on physical, hormonal and imaging investigations.		Training 2.2		how	SIM
CO2,CO4	Diagnose puberty menorrhagia through history-taking, physical examination, and interpret hematological and hormonal profiles and Analyse the Nidana.	2	Practical Training 2.3	CE	Shows-how	CD,CBL, SIM
CO2,CO4	Interpret the role of the hypothalamic-pituitary-gonadal (HPG) axis in pubertal onset using hormonal assays (GnRH, FSH, LH, estradiol/testosterone). Examine the cases of early or delayed puberty and differentiate between normal variants (e.g., constitutional delay, premature adrenarche) and pathological conditions (e.g., central precocious puberty, gonadal failure)	4	Experiential-Learning 2.1	PSY-ADT	Does	DIS,RLE, SIM

Unit 2 Artava Chakra, Rajaswala Charya

Artava Chakra (Menstrual Cycle)

Rajaswala Charya (Menstrual hygiene)

Ritumati lakshana (Characteristic features of Fertility Period)

Psychological changes during menstruation.

Anovular menstruation and Postponement of menstruation.

References: 1,2,3,4,5,6,13,14,15,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the responsible factors and role of prostaglandins in menstruation (Artava chakra).	1	Lecture	CAN	Knows-how	FC,L&G D,L&PPT
CO1,CO2	Analyse the physiological mechanism of Raja Srava (menstrual bleeding) and evaluate the structural-functional transformations of the endometrium during the various phases of Artava Chakra, by correlating classical Ayurvedic concepts with contemporary biomedical understanding.	1	Lecture	CAN	Knows-how	DIS,FC,L &PPT

CO1,CO2	Analyse Menstrual symptoms in detail and interpret the Menstrual hygiene, Anovular menstruation (Beejopghata Raja Srava) and Postponement of menstruation (Raja Srava).	1	Lecture	CC	Knows-how	DIS,L&P PT
CO2,CO4	Interpret serial measurements of reproductive hormones (FSH, LH, estradiol, progesterone) during the menstrual cycle and correlate with endometrial and ovarian changes. Evaluate the relationship between neuroendocrine mediators (e.g., serotonin, dopamine, prostaglandins) and symptoms such as dysmenorrhea, mood swings, and fatigue.	2	Practical Training 2.4	CAN	Shows-how	CBL,DIS, LRI
CO3,CO4	Record menstrual history. Classify menstrual abnormalities.	1	Practical Training 2.5	CE	Shows-how	CD
CO1,CO2	Interpret serum levels of FSH, LH, estradiol, progesterone, prolactin, and AMH in relation to specific phases of the ovarian and menstrual cycle. Analyze and interpret hormonal investigation reports in women presenting with menstrual irregularities .	2	Practical Training 2.6	CAN	Knows-how	CBL
CO2	Analyse the prevalence, behavioral patterns, and socio-cultural determinants of menstrual hygiene practices, taboos, and knowledge gaps among diverse populations. Evaluate the adequacy and usability of menstrual hygiene facilities in institutions.	2	Practical Training 2.7	CE	Shows-how	RLE,TPW ,TBL
CO1,CO2	Differentiate between various menstrual products. (e.g., pads, tampons, menstrual cups, cloth pads) based on material composition, absorption mechanism, health safety, environmental sustainability, and suitability for Dosha-Prakriti types. Analyze the health and environmental implications of the disposal practices of different menstrual products and evaluate local biomedical waste handling protocols in institutional/community settings.	2	Practical Training 2.8	CAN	Shows-how	DIS,PL,T BL
CO2,CO4	Identify and differentiate the histological features of the proliferative, secretory, and menstrual phases of the endometrium using microscopic slides and correlate them with hormonal profiles and clinical signs. Interpret serum levels of estrogen, progesterone, FSH, and LH in different phases of the menstrual cycle and correlate with ovarian-endometrial status and clinical presentation (e.g., ovulation, anovulation, luteal insufficiency)	2	Experiential-Learning 2.2	PSY-ADT	Does	DL,DIS,L RI,SDL

CO3,CO4,CO6,CO8	Conduct individualized counselling sessions with adolescent girls or women on menstrual hygiene and symptom management. Demonstrate empathetic, culturally appropriate communication addressing physical and emotional symptoms.	2	Experiential-Learning 2.3	AFT-RES	Does	DIS,FV,RLE
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Unit 3 Rajo-Nivrutti-Menopause

Rajo-Nivrutti (Menopause).
Diagnosis and prevention of Post-menopausal syndrome
Asamanya Rajo-Nivrutti (risk factors of abnormal menopause).

References: 2,4,5,15,16,17,18,19

3A	3B	3C	3D	3E	3F	3G
CO1,CO4	Analyse the neuro-endocrinal changes in sequence during the climacteric and menopausal phases and Rajonivrutti .	1	Lecture	CK	Knows-how	L&PPT
CO1,CO2	Differentiate between Samanya and Asamanya Rajo-Nivrutti based on clinical features, risk factors, and doshic involvement.	1	Lecture	CC	Know	L&PPT, L_VC
CO1,CO2	Analyse the changes in Artava Lakshana observed during the transition phase toward Rajonivrutti.	1	Lecture	CAN	Know	DIS
CO2,CO3	Evaluate clinical irregularities by analysing the changes in Arthava Lakshan during the transitional physiological and pathological menopause.	1	Practical Training 2.9	CE	Shows-how	CD,CBL,PT
CO2,CO6,CO8	Describe the diagnostic methods for menopause. Demonstrate the menopausal rating scale. Evaluate and educate the risk factors of vasomotor symptoms during menopause.	2	Practical Training 2.10	AFT-RES	Shows-how	CD,D,D-BED
CO1,CO2,CO8	Analyse the variability of menopausal symptoms across different individuals and socio-cultural backgrounds.	2	Experiential-Learning 2.4	AFT-VAL	Does	RLE,RP,TPW

CO1,CO2,CO4	Analyse variations in FSH, LH, estradiol, and progesterone levels across different stages of menopause and evaluate their significance in diagnosing menopause. Distinguish cytological features of pre-menopausal, peri-menopausal, and post-menopausal vaginal smears Correlate with clinical symptoms.	4	Experiential-Learning 2.5	CAN	Does	D,LRI
CO3,CO4	Evaluate menopausal symptoms and underlying Dosha imbalances and variations with reference to Prakriti, age, lifestyle, and seasonal variations in menopausal women. Design individualized lifestyle regimens tailored to menopausal symptoms and Dosha predominance.	4	Experiential-Learning 2.6	CS	Does	CBL,DIS, TBL

Unit 4 Artava and Shukra

Artava (Swaroopa, Utpatti, Pravrutti, Artavapramana, Prathama Rajodarshana vaya, Shuddhartava Lakshana, Vriddhi-Kshaya Lakshana)
Shukra (Swaroopa, Utpatti, Pravrutti, Pramana, Vriddhi-Kshaya Lakshana with their importance).
Shuddha Artava (Normal menstruation and oogenesis) and Shuddha Shukra (Normal Semen and spermatogenesis)

References: 1,2,3,4,5,6,9,13,14,15,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the concept of Artava Chakra in relation to modern reproductive physiology. Evaluate the rationale and relevance of Rajaswala Charya in promoting menstrual health in contemporary settings.	1	Lecture	CAN	Knows-how	FC,L&G D,L&PPT
CO1,CO2,CO6	Evaluate the concept and characteristics of Shuddha Artava and Shuddha Shukra and justify their essential role in reproductive health and fertility.	1	Lecture	CE	Knows-how	L&GD
CO1,CO2,CO4	Assess the characteristics of Shuddha Artava and Shuddha Shukra	2	Practical Training 2.11	CE	Shows-how	CD,LRI,SIM
CO1,CO2,CO4	Analyse the sequential phases of the Ritu Chakra (Rajakala, Ritu, Ritu Vyateeta) in relation to modern menstrual physiology.	4	Experiential-Learning 2.7	CE	Shows-how	CD,CBL, SIM

	Compare the Gonadotropins and ovarian hormonal assay in relation to normal and abnormal Ritu Chakra.					
CO1,CO2,CO4	Analyse and interpret the classical and contemporary, understanding of Shuddha Artava and Shuddha Shukra Lakshana. Perform semen analysis.	4	Experiential-Learning 2.8	PSY-MEC	Does	CD

Practical Training Activity

Practical No	Name	Activity details
Practical Training 2.1	Physical and Hormonal Assessment of Pubertal Development in Adolescents.	<p>Activity 1: 1 Hour</p> <p>Use of Tanner Stage Charts/Images: Visual demonstration of breast, genital, and pubic hair stages in both sexes using anatomical charts or virtual simulators.</p> <p>The students measure each other's height, weight, and calculate BMI</p> <p>Practice identifying Tanner stages from image-based OSCE stations.</p> <p>Activity 2: 1 Hour</p> <p>Present timeline chart of pubertal hormonal cascade: GnRH - FSH/LH - Gonadal steroids (estrogen/testosterone) + Growth hormone</p> <p>Show case profiles of early puberty, delayed puberty, and normal development with corresponding lab values.</p> <p>The student distributes 3–4 sample hormone reports (FSH, LH, Estradiol/Testosterone, GH).</p> <p>Students interpret hormonal patterns and correlate them with physical growth stage and clinical features.</p>
Practical Training 2.2	Pubertal Variants	<p>Activity 1: 2 hours</p> <p>1. Assign student 3 simulated case scenarios/real case (with age, clinical features, growth data, and hormone profiles)</p> <p>Case 1: Premature thelarche</p> <p>Case 2: Central precocious puberty</p> <p>Case 3: Constitutional delay of puberty</p> <p>2. Students differentiate the cases based on (Age of onset, Growth pattern, Tanner stage, and Hormonal levels)</p> <p>3. Interpretation of hormonal reports (FSH, LH, estradiol/testosterone, GnRH stimulation if included).</p> <p>4. Diagnose and differentiate premature thelarche vs. true precocious puberty.</p> <p>5. Discuss on the findings and analyse the pubertal variants.</p>
Practical	Puberty Menorrhagia	Activity: 2 hours

Training 2.3		<ol style="list-style-type: none"> 1. Assign students real case/ case vignette/ simulated case: e.g., a 15-year-old female with no breast development. 2. Students are expected to take <ol style="list-style-type: none"> A. Detailed history: age, growth, menarche status, family history B. Identify Tanner stage C. Review Hormonal profile: LH, FSH, estradiol/testosterone and Ultrasound for the uterus and ovaries. D. Diagnose the case, frame the Samprapti E. Analyse the probable cases. F. Classify menorrhagia: anovulatory vs. coagulopathy vs. endocrine.
Practical Training 2.4	Hormonal and neuroendocrine changes in relation to menstrual physiology.	<p>Activity 1: 1 hour</p> <ol style="list-style-type: none"> 1. The teacher uses a dynamic graph to show FSH, LH, estradiol, and progesterone levels across days 1–28. 2. Overlay endometrial histology and ovarian follicular changes on the same timeline. 3. Ayurvedic correlation: Kapha (Ritu Kala), Pitta (Ritu Vyatita), Vata (Ritu Kshaya). 4. Each student receives serial hormone reports (Day 5, Day 12, Day 21). 5. They identify the phase of cycle, predict ovarian activity, and describe endometrial state. 6. Then correlate with Dosha status in Artava Chakra. <p>Activity 2 : 1 hours</p> <ol style="list-style-type: none"> 1. Explain serotonin & dopamine pathways in mood regulation. 2. Show prostaglandin synthesis in the uterus and its role in dysmenorrhea. 3. Correlate with Vata-Pitta dosha disturbances in Ayurvedic pathology. 4. Present a video or read a narrative of a patient describing symptoms of PMS/dysmenorrhea. 5. Highlight psychological, somatic, and behavioral aspects. <p>Student activities</p> <ol style="list-style-type: none"> 1. Students solve short cases like Day 2 of cycle: cramps, nausea, irritability. 2. Identify neuroendocrine mediator imbalance and suggest Ayurvedic management (e.g., Snigdha Basti, Manas Rasayana). 3. Students conduct a roleplay where one acts as a patient with PMS and others act as Ayurvedic consultants. 4. Discuss symptoms, explain the physiological basis, and give Ayurvedic advice.
Practical Training 2.5	Menstrual history taking.	<p>Activity 1: 30 mins</p> <p>Teacher demonstrates menstrual history taking skill on real patient (including Ritu-Kala, Artava Guna, Dosha involvement) and modern (cycle length, pain score, PMS) using history-taking formats.</p> <p>Activity 2: 30 mins</p> <ol style="list-style-type: none"> 1. Students are assigned 2 cases per students.

		<p>2. Students practice skills of menstrual history in pairs using a prepared bilingual menstrual history proforma covering Artava Guna (Varna, Pramana, Gandha, Drava etc.), cycle duration, pain score, and associated PMS symptoms.</p> <p>3. Record the case and predict the probable dosha involvement.</p>
Practical Training 2.6	Clinical Interpretation of Hormonal Profiles in Menstrual and Ovarian Cycle Disorders.	<p>Activity-1 Hour.</p> <p>1. Use a visual timeline for demonstration (Day 1 to Day 28) to show hormonal fluctuations across the menstrual cycle and provide hormone values from various days (e.g., Day 3, 14, 21).</p> <p>2. Overlay graphs for:</p> <p>FSH & LH (Follicular to Ovulatory spike)</p> <p>3. Estradiol & Progesterone (Endometrial correlation)</p> <p>AMH (stable, indicates ovarian reserve).</p> <p>4. students match the hormone values with Ovarian phase, Endometrial status and Ovulatory or anovulatory status and correlate with probable pathophysiology and Ayurvedic Dosha involvement.</p> <p>Activity 2-1 Hour</p> <p>1. Present 3 clinical cases with menstrual disorders and lab reports (e.g., low FSH, high prolactin).</p> <p>2. Discuss modern diagnosis (e.g., PCOS, hypothalamic amenorrhea) and link to Ayurvedic Nidana and Dosha profiles (e.g., Artava Kshaya, Nashta Artava, Raja-Kshaya).</p> <p>3. Identify abnormal levels (e.g., low estradiol, high LH/FSH ratio)</p> <p>4. Diagnose the modern condition</p> <p>5. Propose Ayurvedic understanding (e.g., Dosha, Dhatu, Srotodushti).</p>
Practical Training 2.7	Menstrual Health and Hygiene.	<p>Activity 1: 1 hour</p> <p>Use 2–3 case vignettes showing variations in menstrual hygiene practices across:</p> <ol style="list-style-type: none"> 1. Urban vs rural adolescents 2. Tribal/community-specific restrictions 3. Religious/social taboos. <p>In small groups, students draft a 5-question survey addressing:</p> <ol style="list-style-type: none"> A. Product use B. Source of menstrual knowledge C. Restrictions/taboo D. Hygiene habits E. Disposal practices <p>Activity 2: 1 hour</p>

		<ol style="list-style-type: none"> 1. Introduce a Menstrual Hygiene Facility Checklist including: 2. Access to clean toilets 3. Availability of sanitary products 4. Disposal facilities 5. Running water and soap 6. Privacy and security 7. Students use the checklist to audit their own institute's facilities or a simulated environment <p>Each group presents 2 observations and 2 improvement suggestions (e.g., covered bins, pad vending machines, better water access).</p>
Practical Training 2.8	Menstrual Hygiene Products.	<p>Activity 1: 1 hour</p> <ol style="list-style-type: none"> 1. Present samples of various products. 2. Explain material types, chemical components, and link to Rajaswala Paricharya. 3. Hands-on product analysis station: Observe and compare physical structure, material, and usage instructions of various products. 4. Discussion: Align product use with Ayurvedic considerations (e.g., Kapha-dominant women & vaginal infections with synthetic pads). <p>Activity 2: 1 hour</p> <ol style="list-style-type: none"> 1. Show a short video or chart of waste management stages as per BMW Rules 2016/2018. 2. Discuss compostable pads vs plastic-based ones and their impact. 3. Student Conduct a facility-based audit (hospital/school/PHC) of menstrual waste disposal facilities. 4. Compare current practices vs ideal biomedical waste rules.
Practical Training 2.9	Assessment and Management of Pre-Menopausal Transition (Rajo-Nivrutti Poorva Avastha).	<p>Duration: 1 hour</p> <p>Activity</p> <ol style="list-style-type: none"> 1. Teacher demonstrates the case highlighting the comparison of normal physiological variations vs. early pathological deviations (e.g., Artava Vaivarnyata, Alpata, Dirghakalikata). 2. Correlate with Dosha involvement (e.g., Vata dominance leading to irregularity or pain, Pitta dominance causing heavy bleeding or discoloration) <p>Students are expected to -</p> <ol style="list-style-type: none"> 1. Record menstrual patterns of a minimum of 2 women in the perimenopausal age group (45–50 yrs) of real case/case vignette. 2. Document changes in color, volume, cycle length, and associated symptoms. 3. Identify normal aging features vs. pathological patterns (e.g., Rajodushti). 4. Analyze menstrual changes through Tridosha Siddhanta.

Practical Training 2.10	Evaluation of Vasomotor Symptoms and Menopausal Diagnostic Techniques.	<p>Duration: 2 hours</p> <p>Activity 1: 1 hour</p> <ol style="list-style-type: none"> 1. Students are expected to list the diagnostic methods for menopause. 2. Interpret the results of the diagnostic methods (hormonal assay, ratings scales) 3. Students take a history of menopausal women using menopausal rating scale and interpret the findings. <p>Activity 2: 1 hour</p> <ol style="list-style-type: none"> 1. Role play a education or counseling session (role of physician and perimenopausal women) 2. Highlight the associated risk factors (diet, stress, medical history) 3. Demonstrate empathy toward menopausal individuals by reflecting on the emotional and social impact of vasomotor symptoms in the role play. 4. Teacher summarizes the session and provides feedback.
Practical Training 2.11	Shuddha Artava and Shuddha Shukra	<p>Activity: 2 hours</p> <p>Teacher will discuss the</p> <ol style="list-style-type: none"> 1. Shuddha Artava and Shuddha Shukra lakshana and explain the differences between Shuddha (healthy) and Ashuddha (pathological) characteristics. 2. Highlight contemporary parallels, such as Artava: Normal menstrual blood vs. pathologies (e.g., heavy clotting, foul-smelling discharge). 3. Shukra: WHO guidelines on semen analysis (volume, motility, morphology, pH) 4. Each student will be given a real patient /a simulated patient /clinical case video 5. The student is expected to differentiate between Shuddha Artava, Shuddha Shukra and Ashuddha Artava and Ashuddha Shukra based on the History and identify Doshic imbalances and correlate with modern reproductive disorders.
Experiential learning Activity		
Experiential learning No	Name	Activity details
Experiential-Learning 2.1	Early and delayed Puberty.	<p>Activity : 4 hours</p> <ol style="list-style-type: none"> 1. Student is expected to understand HPG axis overview & hormone feedback loop. 2. Examine minimum 5 cases (real/simulated) early or delayed puberty. 3. Interpret lab reports (FSH, LH, Estradiol/Testosterone, GnRH stimulation test). 3. Diagnose the case and justify between normal variants (e.g., constitutional delay, premature adrenarche) and pathological

		<p>conditions (e.g., central precocious puberty, gonadal failure)</p> <p>4. Reflect on the findings.</p>
Experiential-Learning 2.2	Histological features and hormonal levels in different phases of menstrual cycle.	<p>Activity 1: 1 hour</p> <p>1.Explain features of glandular structure, stromal edema, and leukocyte infiltration on stained histology slides (real or digital) for each phase.</p> <p>The student will examine 3 histology slides and labels the menstrual phase.</p> <p>Activity 2: 1 hour</p> <p>1.Present 2–3 hormonal profiles and their expected physiological status.</p> <p>2.Discuss how changes influence ovarian follicular development and endometrial readiness.</p> <p>3.The students Work in pairs to match hormonal values with cycle day and histological phase.</p> <p>4.Diagnose abnormal patterns (e.g., PCOS, luteal phase defect).</p>
Experiential-Learning 2.3	Counseling on Artava Lakshana (Menstrual Symptoms) and Menstrual Health	<p>Activity 1: 1 hour</p> <p>1.Students are paired in counsellor–client roles (adolescents or adult women with menstrual issues) for Simulated</p> <p>2.Counseling Practice.</p> <p>3.Each student presents one key counseling point (e.g., importance of drying reusable cloth pads, yoga for pain).</p> <p>4.Peers provide constructive feedback using a checklist (clarity, relevance, empathy, cultural appropriateness).</p> <p>Activity 2: 30 minutes</p> <p>1.Conduct a counselling session focusing on:</p> <p>2.Symptom inquiry (pain, irregularity, mood, hygiene)</p> <p>3.Menstrual product education (pad, cloth, cup, etc.)</p> <p>4.Culturally adapted Rajaswala Paricharya advice</p> <p>5.Dietary & yoga guidance for symptom relief</p> <p>Activity 3: 30 minutes</p> <p>1.Each student is assigned a persona (e.g., a 14-year-old girl using cloth pads, a woman with dysmenorrhea and no family support).</p> <p>2.Students walk through situations: a public toilet scenario, shopping for pads with limited money, and facing social shame</p>
Experiential-Learning 2.4	Recognizing symptoms of Menopause	<p>Activity 1: 1 hour</p> <p>1. Each student interviews 2–3 menopausal/perimenopausal women from different backgrounds (e.g., rural/urban/ tribal/different regions).</p> <p>2. Use a structured format to collect</p> <p>A. Symptoms (vasomotor, urogenital, psychological)</p>

		<p>B. Prakriti assessment</p> <p>C. Cultural beliefs or home remedies</p> <p>D. Attitudes toward menopause (e.g., shame, openness, reverence)</p> <p>E. Record differences in symptom perception and expression.</p> <p>F. Record the case and reflect on variations.</p> <p>Activity 2: 1 hour</p> <p>1. Teacher allot a case scenarios- Each student randomly picks a scenario card (e.g., tribal woman/ IT professional/housewife/ widow in rural area).</p> <p>2. Roleplay a typical day in her life during menopause.</p> <p>3. Reflect on physical, emotional, and social challenges based on her context.</p>
Experiential-Learning 2.5	Hormonal Assessment and Vaginal Cytology in Menopause.	<p>Activity 1: 2 hours</p> <p>1. Collect anonymized lab reports (minimum 2-5) of menopausal women.</p> <p>2. Recognize patterns like elevated FSH (>40 IU/L) and decreased Estradiol (<30 pg/mL) in postmenopause.</p> <p>3. Interpret the report and reflect on when to rely on hormonal confirmation.</p> <p>4. Reflect on dynamic hormonal shifts across life stage.</p> <p>Activity 2: 2 hours</p> <p>1. Collect prepared vaginal smear slides and identify key cytological features in each menopausal stage.</p> <p>2. Interpret the result and compare with the clinical symptoms (e.g., dyspareunia, discharge, itching).</p>
Experiential-Learning 2.6	Integrative Practices for Preventing Menopausal Syndrome	<p>Activity 1: 2 hours</p> <p>1. Students work in pairs and analyze 3–4 menopausal real patient/case vignettes (with variations in Prakriti, seasonal factors, and symptoms).</p> <p>2. Identify the Dosha predominance, Hetu and Samprapti.</p> <p>3. Students reflect on how menopause symptoms vary in different seasons (e.g., Vata in Sharad, Pitta in Grishma) and how they impact Dosha aggravation and in two women with opposite Prakritis (e.g., Kapha vs Vata).</p> <p>Activity 2: 2 hours</p> <p>1. Students design lifestyle regimens (Ahara, Vihara, Dinacharya, Ritucharya, Rasayana) for 3 menopausal profiles differing in Dosha and symptoms in pairs.</p> <p>2. Students create a Dosha-specific Rasayana plan (Ajasrika + Naimittika) for menopausal support, including herbs, formulations, and diet.</p>
Experiential-	Analysis of Ritu	Duration: 4 hours

Learning 2.7	Chakra.	Activity: 1.The student is expected to take a detailed history of Ritu chakra of a minimum of 5 patients /simulated cases/clinical case videos. 2.Interpret the symptoms of the patients with the Ritu chakra and modern menstrual physiology. 3.Identify normal and abnormal Ritu chakra in patients (minimum 2). 4.Compare Gonadotrophins and ovarian hormonal assay in relation to normal and abnormal Ritu chakra.
Experiential-Learning 2.8	Shuddha Artava and Shuddha Shukra Lakshana.	Activity: 4 hours 1.The Student is expected to develop a questionnaire or scale to assess Shuddha Artava(eg, colour, odour, staining). 2.The student is expected to assess a minimum of 5 female patients. Analyze and interpret Shuddha Artava Lakshana 3.Visit the Andrology laboratory and examine a minimum of 2 semen samples. Analyze and interpret Shuddha Shukra lakshana.

Modular Assessment

Assessment method

Hour

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

4

Structured Assessment in following 5 Stations: 50 Marks

1. History taking (5 marks): Take the history of a menstruating female and identify Suddha Artava Lakshana.
2. Hormonal Assessment of Pubertal Development in Adolescents 10 marks: Interpretation of FSH, LH, Prolactin, thyroid profile and testosterone through lab report/hormonal assay.
3. Physical Assessment of Pubertal Development in Adolescents 10 marks: Identification of tanner stage from images
4. Menopause: 10 marks

Case scenario of a Menopausal female: Analyse the symptoms, diagnose and justify the diagnosis.

5. Variants of pubertal disorders: 15 marks

Case scenarios/Real case: Diagnose the variants of pubertal disorder through history taking, examination and hormonal assay.

or

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

and

Any of the experiential as portfolio/ reflections / presentations can be taken as assessment. (25 marks)

Module 3 : Fundamentals of Garbhadhana (Conception)

Module Learning Objectives

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

1. Analyse the fundamentals of Garbhadhana.
2. Differentiate between normal and abnormal embryological development.
3. Demonstrate and practice Bijasankara (pre-conceptual counseling and care).
4. Evaluate the role of pre-conceptual care in optimizing embryological development and preventing congenital anomalies.

Unit 1 Concept of Garbhadhana (Process of Conception)

Garbhadhana and Garbhadhana vidhi (process of conception)
 Bijasankara (Preconceptional gametes optimization)
 Preconceptional Counseling
 Risk Assessment
 Panchakarma for Bijashuddhi

References: 1,2,4,5,6,8,10,11

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO6	Analyze role of Garbhadhana and the process of Garbhadhana Vidhi in healthy conception.	2	Lecture	CAN	Knows-how	L&PPT ,L_VC
CO1,CO2,CO6	Analyze the role of Bijasankara (pre-conceptual care) in healthy conception (Ahara-Vihara, General Screening, Rasayana).	2	Lecture	CAN	Knows-how	L&GD,L &PPT ,L_VC

CO3,CO4,CO6	Demonstrate semen analysis.	2	Practical Training 3.1	PSY-GUD	Shows-how	BL,D,DL, LRI,L_V C
CO3,CO4,CO6	Demonstrate folliculometry including endometrial parameters.	2	Practical Training 3.2	PSY-GUD	Shows-how	CBL,D
CO1,CO3,CO4,CO6	Demonstrate conducting preconceptional care and counselling.	4	Practical Training 3.3	PSY-GUD	Shows-how	D,LRI
CO3,CO4,CO6	Perform semen analysis.	4	Experiential-Learning 3.1	PSY-MEC	Does	CBL,LRI
CO3,CO4,CO6	Evaluate folliculometry reports.	4	Experiential-Learning 3.2	CE	Does	CD,LRI
CO3,CO6	Educate people (adolescent to reproductive age) on the role of Shuddha Artava in maintaining general and reproductive health.	3	Experiential-Learning 3.3	AFT-VAL	Does	PrBL
CO3,CO4,CO6	Educate couple on the role of Preconceptional Health Care.	3	Experiential-Learning 3.4	AFT-VAL	Does	FV,PrBL, W
CO1,CO2,CO3,CO6	Evaluate appropriate Shodhana Chikitsa and Rasayana for Beeja shuddhi.	2	Practical Training 3.4	CE	Shows-how	DIS,PL, TBL

Unit 2 Concept of Garbha (Zygote / Embryo/Fetus)

Garbha nirmana - fertilization, zygote formation, implantation, embryogenesis, Garbha Sambhava Samagri, Garbhakara Shadbhava (procreating factors) along with their scientific relevance.

Garbhavakranti (chronological evolution of Garbha)

Garbhavriddhikara Bhava (factors influencing development and traits of fetus)

Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana).

References: 1,2,3,4,5,6,8,10,13,14,15,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO6	Analyse the process of Garbha formation and Garbhavakranti.	2	Lecture	CAN	Knows-how	L,L&GD, L&PPT
CO3,CO4,CO6	Educate the patient on Suprajanankarma and demonstrate Suprajanankarma.	3	Practical Training 3.5	AFT-RES	Shows-how	D,PT,RP
CO3,CO4,CO6	Demonstrate skills in Ritukalaja Ahara Kalpana Vidhi. Demonstrate the Preparation of Ritukalaja Ahara.	3	Practical Training 3.6	PSY-GUD	Shows-how	D
CO3,CO4,CO6	Educate and Perform Suprajanankarma.	3	Experiential-Learning 3.5	AFT-RES	Shows-how	D
CO3,CO4,CO6	Design Ritukalaja Ahara plan and Educate its importance to reproductive age group.	3	Experiential-Learning 3.6	AFT-RES	Does	TBL

Unit 3 Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana).

Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana).

Various Techniques for Shreyasipraja - Preventive -Garbha Grahanartha, Garbhasthapanartham, and Promotive Aspects-Suprajananartham-Obtaining Healthy Progeny.

Recent Research Updates in Ayurveda.

References: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO6	Analyse the role of Panchamahabhuta, Garbhavriddhikara shatbhava, and three doshas in Garbha Masanumasika Vriddhi. (fetal growth and development including physical, emotional, and spiritual)	2	Lecture	CAN	Knows-how	L&GD,L &PPT ,L_VC

CO1,CO2,CO6	Analyse the role of genetics in fetal development and embryology.	2	Lecture	CAN	Knows-how	L&PPT, L_VC
CO3,CO4,CO6	Demonstrate the skills for examining Garbha Masanumasika Vriddhi (month-wise fetal development).	2	Practical Training 3.7	PSY-GUD	Shows-how	D,D-M,SIM
CO1,CO6	Analyse morphology and organogenesis of embryological development.	2	Practical Training 3.8	CAN	Shows-how	DIS,PL,TBL
CO1,CO2,CO4	Examine Garbha Masanumasika Vriddhi in pregnant women, including clinical examination and correlation with imaging findings.	3	Experiential-Learning 3.7	PSY-MEC	Does	CBL,RLE
CO1,CO3,CO4,CO6	Examine and evaluate fetal development abnormalities.	3	Experiential-Learning 3.8	PSY-MEC	Does	D-BED,RLE,SIM

Practical Training Activity

Practical No	Name	Activity details
Practical Training 3.1	Semen Analysis	<p>Activity: Demonstration (Duration-2 hours)</p> <p>Teacher will demonstrate semen analysis in Lab or through Videos. Teacher will emphasize on macroscopic (liquefaction time, colour, viscosity, odour, pH) and microscopic features (sperm concentration, total sperm count, motility, vitality, morphology, agglutination, presence of RBC).</p> <p>Following demonstration students will:</p> <p>A. Observe the teacher's demonstration including the preparing sperm samples for analysis, centrifugation and staining, use of microscopy and other laboratory equipment and assist in the analysis of semen samples or observe the video demonstration and discuss with teacher.</p> <p>B. They will try to differentiate between normal and abnormal values, and co-relate macroscopic features with shuddha shukra lakshana.</p> <p>C. Identify challenges in performing semen analysis and seek clarification.</p> <p>D. Teacher will summarise the session highlighting the key points.</p>
Practical Training 3.2	Folliculometry	<p>Demonstration: (Duration-2 hrs)</p> <p>Teacher will demonstrate folliculometry under the guidance of radiologist on USG or through Videos. Teacher will emphasize on</p>

		<p>ultrasound equipment, follicular development pattern, follicular maturity, evidence of rupture, endometrial thickness, identify corpus luteum and free fluid in POD (Pouch of Douglas) in post ovulation phase.</p> <p>Following demonstration students will:</p> <p>A. Observe the teacher's demonstration or observe the video demonstration and discuss essentials of folliculometry with teacher.</p> <p>B. They will try to differentiate between ovulation and anovulation features on USG, and co-relate ritumati lakshanas which include the parameters of navarajasi nirmana and Beejashuddhi indicating ovulation or anovulation.</p> <p>C. Identify challenges in performing folliculometry and seek clarification.</p> <p>D. Teacher will summarise the session highlighting the key points.</p>
Practical Training 3.3	Preconceptional Care	<p>Demonstration: (Duration-4 hrs)</p> <p>Teacher will demonstrate:</p> <ol style="list-style-type: none"> 1. Sroto pariksha, Dashavidha pariksha, Prakruti pariksha and Nadi pariksha (general, systemic and local examination) in couple, 2. Ordering and interpreting appropriate investigations(CBC, blood-grouping and Rh typing, Thyroid profile, Blood sugar levels, Vitamin D levels, HIV, HbsAG, VDRL, and semen-analysis), USG pelvis/whole abdomen including Folliculometry, 3. Couple karyotyping in special cases, 4. Advise on Ahara-Vihara (diet, lifestyle and supplements) and recommendations for optimizing the health condition in case of any deviation from normal parameters is noted. (BMI more or less than normal, high blood sugars, vitamin deficiencies, hypo-hyper thyroidism, any STDs, low Hemoglobin levels). 5. Counselling couples about the risks of addiction in conception <p>Following demonstration students will:</p> <ol style="list-style-type: none"> 1. Observe teacher's demonstration and practice examination of couple, advising and interpreting appropriate investigations and counselling on risks of addiction. 2. They will try to differentiate between normal and abnormal findings of examination and lab reports. 3. Identify challenges in examining, advising investigation and counseling couples. They will seek clarification from teacher. <p>Teacher will summarise the session highlighting the keypoints.</p>
Practical Training 3.4	Beeja Shuddhi	<p>Duration 2 hours:</p> <ol style="list-style-type: none"> 1. Teacher opens up the discussion on Beeja Suddhi and highlight the importance. 2. Students debate and discuss on the following: <ol style="list-style-type: none"> A. Selection of appropriate Shodhana Chikitsa (Vamana, Virechana, Basti) as per Prakruti and Doshya-Dushya analysis in couples. B. Enlist the suitable Rasayanas for healthy conception.

<p>Practical Training 3.5</p>	<p>Suprajanankarma</p>	<p>Demonstration: (Duration-3hrs) Teacher will demonstrate: 1. Counselling of couple regarding the procedure of Suprajanankarma. 2. Selection and preparation of dravyas (e.g., medicated ghrita, milk, herbs like Jeevaniya gana dravyas). 3. Dosage and processing method (kalpana) for Suprajanan dravyas 4. Preparation of patient 5. Nasal administration (Suprajanan Nasya): Positioning the pregnant lady, instillation of medicine. 6. Post-procedure care. Following demonstration students will: A. Educating and counseling the patient for Suprajajan karma and taking the consent. 1. Selection and preparation of dravyas (e.g., medicated ghrita, milk, herbs like Jeevaniya gana dravyas). 2. Dosage and processing method (kalpana) for Suprajanan dravyas, 3. Preparation of patient 4. Nasal administration (Suprajanan Nasya): Positioning the pregnant lady, instillation of medicine. 5. Educate post-procedure care to the patient. 6. Identify challenges in performing Suprajanan karma and seek clarification. Teacher will summarise the session highlighting the key points.</p>
<p>Practical Training 3.6</p>	<p>Ritukalaja aharakalpana vidhi</p>	<p>Demonstration:(Duration 3 hours) 1. Listing the preparations along with ingredients 2. Demonstrate/display the preparation methods (e.g. Shatavari ksheerapaka, Mudga yusha, Godhuma kheer). 3. Discuss doshic relevance of these recipes. Following demonstration students will: 1. Assist in arranging raw ingredients (like milk, ghee, shatavari, mudga, jeera, dhanyaka) and prepare samples 2. Discuss the indications of the preparation 3. They will identify challenges in Teacher will summarise the session highlighting the key points.</p>
<p>Practical Training 3.7</p>	<p>Morphology and Organogenesis of embryological development.</p>	<p>Demonstration: (Duration-2 hrs) Students pair up in group and discuss 1. Fetal morphology and organogenesis using models, images, and USG visuals. 2. Changes in fetal shape, head-body ratio, limb and facial development month-wise.</p>

		<p>3. Explain organ formation timelines (heart, brain, lungs) and discuss USG measurements (BPD, HC, AC, FL).</p> <p>4. Correlate clinical and ultrasound findings with normal fetal development stages.</p>
Practical Training 3.8	Examination of Garbha Masanumasika Vriddhi	<p>Demonstration: (Duration 2 hours)</p> <p>The teacher will demonstrate the examination of Garbha Masanumasika Vriddhi (monthly fetal development) using Darshana, Sparshana, and Prashna Pariksha tools.</p> <p>Students will observe and demonstrate the following on real patient or model</p> <p>1. Palpation Technique:</p> <p>A. Fundal location</p> <p>B. Fundal Grip & Fetal Parts Identification</p> <p>2. Follow the Order of Palpation:</p> <p>A. Palpate in a systematic order: fundus ? sides ? lower pole to assess uterine feel.</p> <p>B. Uterine Height: Evaluation of the uterus's shape, size, softness, and turgidity month-wise.</p> <p>C. Measure: Symphysis-fundus distance</p> <p>D. Measure: Fetal Heart Sound</p> <p>Teacher will summarise the session highlighting the key points.</p>
Experiential learning Activity		
Experiential learning No	Name	Activity details
Experiential-Learning 3.1	Semen Analysis	<p>Duration: 4 hours</p> <p>Each student will perform semen analysis on a minimum of two samples in lab. Document:</p> <p>1. Macroscopic (volume, viscosity, pH and Liquefaction) and microscopic (motility and morphology) findings,</p> <p>2. Interpret the report with WHO standard reference values and co-relate the possible clinical conditions (Oligozoospermia, asthenozoospermia, teratozoospermia).</p> <p>3. Corelate the findings with shuddha and ashudhha shukra lakshanas with normal and abnormal semen parameters.</p> <p>4. Present their findings and discuss on challenges and sources of error faced with peers.</p>
Experiential-Learning 3.2	Folliculometry	<p>Activity: 4 hours</p> <p>1. Each student will evaluate minimum of five USG reports on folliculometry and document the difference between ovulation and anovulation features, co-relate ritumati lakshanas which include the parameters of navarajasi nirmana and Beeja shuddhi indicating ovulation or anovulation.</p>

		<p>2.They will document their findings in the logbook.</p> <p>3.Each student will prepare and assist USG folliculometry (prepare the patient for trans vaginal sonography (TVS), position of probe under supervision of radiologist) of minimum three cases in a radiology unit/centre.</p> <p>4.They will document identification of ovaries, follicles and size of follicles in their logbook.</p>
Experiential-Learning 3.3	Education on Shudhha Artava Lakshana	<p>Duration 3 Hours</p> <p>1.Each student will prepare atleast one of the following educational tools (leaflet, short video, poster) and educate a minimum of five participants or two groups of participants on shudhha artava lakshana assessing with the parameters of maintaining menstrual diary to record flow amount, clots, colour and timing , Pictorial blood loss assessment Chart (PBAC chart) to assess the amount of blood loss.</p> <p>2.They will document the feedback from the participants and their experience in the logbook.</p> <p>3.Reflect on different cases encountered during education.</p>
Experiential-Learning 3.4	Preconceptional Health Care	<p>Activity: 3 hours</p> <p>1.Each student will prepare at least one of the following educational tools (leaflet, short video, poster) and educate a minimum of three couples or two groups of participants on significance of preconceptional health assessments(general health check-ups with necessary investigations and supplements to correct deficiencies), shodhana chikitsa for beeja-shuddhi for a healthy conception.</p> <p>2.Students will document the feedback from the participants and their experience in the logbook.</p>
Experiential-Learning 3.5	Suprajanankarma	<p>Duration: 3 hours</p> <p>1.Students identify cases (minimum 3) for Suprajanankarma.</p> <p>2.Educate and counsel the couple for Suprajanankarma. Take the consent</p> <p>3.Student will follow step-by-step process and prepare Suprajanan Ghrita formulation and Suprajanan Ksheera with dravya (vatankura).</p> <p>4.Perform Suprajanankarma on a pregnant women with proper nasal instillation technique.</p> <p>5.Reflect on the challenges and document the cases and follow-up.</p>
Experiential-Learning 3.6	Ritukalaja Ahara Kalpana Vidhi.	<p>Duration 3 hours:</p> <p>1.Each student will prepare appropriate Ahara kalpana (Mudga Yusha, Yavagu or Godhuma Kheer).</p> <p>2.Each student will design a 7-day diet chart for a woman in Rutu Kala based on Ayurveda guidelines (qualities like madhura, snigdha, pushtikara).</p> <p>3.Prepare at least one of the following educational tools (leaflet, short video, poster) and educate a minimum of 10 women or two groups of participants on significance of rutukalaja ahara kalpana in the maintenance of female health.</p>

Experiential-Learning 3.7	Assessment of Garbha Masanumasika Vriddhi (monthly development of fetus)	<p>Duration: 3 hours</p> <ol style="list-style-type: none"> 1. Students will perform clinical examination of three pregnant woman in three different trimester (first,second, third), focusing on monthly fetal development (Masanumasika Vriddhi) using abdominal palpation and USG imaging. 2. Correlate gestational age with fetal growth milestones (e.g., heartbeats, limb formation). 3. Reflect on variations in growth or abnormalities and Record and present their findings to peers. 4. Peers will review and provide feedback.
Experiential-Learning 3.8	Garbha vikruti - Fetal developmental abnormalities.	<p>Duration: 3 hours</p> <ol style="list-style-type: none"> 1.Each student will interview minimum of two pregnant women (real or simulated) to assess fetal development milestones and potential risks (e.g., teratogen exposure, maternal health factors). 2.They will gather information through darshana (Viewing USG reports), prashna (questioning) and sparshana (touch) techniques. 3.Correlate the findings with fetal health and development and present their findings. 4.Peers will review and provide feedback. 5.Students will document their learnings in logbook.

Modular Assessment

Assessment method

Hour

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

4

Structured Assessment in Stations: 50 Marks

1. Bija Shuddhi (10 marks): Taking the history of couple (real/case vignette), examination, selection and justification of appropriate Panchkarama.
2. Diagnostic Station (10 marks): Interpretation of semen analysis/foliculometry reports.
3. Masanumasika Vriddhi (10 marks): History taking and examination of antenatal case (real/case vignette). Identify the month-wise development and justify the normal and abnormal development in the case.
4. Skill-based assessment (10 marks): Perform Suprajanan karma/Preparation of Suprajanan Dravya/ Perform Semen analysis.
- 5.Ritumati Ahara Vihara (10 marks): History taking of Ritumati female and prepare Ahara Vihara Chart and justify.

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

and
Any of the experiential as portfolio/ reflections / presentations can be taken as assessment. (25 marks)

Module 4 : Apara, Garbha Nabhinadi, Garbhodaka, Garbhaposhana

Module Learning Objectives

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

- 1.Evaluate the development, structure, and functions of the Apara (placenta) and Garbhaposhana (fetal nourishment), Garbha nabhinadi (umbilical cord), Garbhodaka (amniotic fluid) and Garbhadharini (amniotic membranes).
- 2.Analyze the role of Apara, Garbhodaka, Garbhaposhana, Garbha Nabhinadi, and Garbhadharini in fetal health and development.
- 3.Demonstrate and interpret the applied aspects of Apara (Placenta).
- 4.Assess the prenatal diagnostic significance of Apara, Garbhodaka, Garbhaposhana, Nabhinadi, and Garbhadharini using Garbha Shareerakriya knowledge.

Unit 1 Apara - Placenta

Development, structure and functions of Apara - Placenta and its applied aspects including Apara vikriti - abnormal placenta.

References: 1,2,4,5,6,14

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the structure and development of Apara - placenta	1	Lecture	CK	Know	L&PPT
CO1,CO2	Describe the physiology of Apara - placenta	1	Lecture	CK	Know	L_VC
CO1,CO2	Categorize placental abnormalities based on morphological, histological and molecular criteria Analyse the morphological, positional and implantation abnormalities of Apara - Placenta	1	Lecture	CK	Know	L&PPT
CO3,CO4	Illustrate the anatomical structures of the placenta. Differentiate primary, secondary, and tertiary villi using microscope	3	Practical Training 4.1	CAP	Knows-how	D,DSN

CO3,CO4	Identify the abnormalities of placenta and justify the clinical implications.	3	Practical Training 4.2	CAP	Shows-how	D,PT
CO3,CO4	Perform examinations of both normal and abnormal placentas.	4	Experiential-Learning 4.1	AFT-RES	Does	D,D-M,PBL
CO3,CO4	Identify specific placental pathologies and evaluate associated maternal complications and fetal outcomes.	4	Experiential-Learning 4.2	CC	Does	CBL

Unit 2 Garbha Nabhinadi - Umbilical cord

Development, structure and functions of Garbha Nabhinadi - Umbilical cord and Nabhinadi vikriti - abnormalities of umbilical cord including its applied aspects.

References: 1,2,4,5,6,8,14,18

3A	3B	3C	3D	3E	3F	3G
CO1	Analyse the stages of embryological development of the Garbhanabhi Nadi - Umbilical cord Analyze the microanatomy of Garbhanabhinadi - Umbilical cord	1	Lecture	CAN	Knows-how	L&PPT ,L_VC
CO1,CO2,CO4	Outline the physiology of Umbilical cord. Analyse the functions of Umbilical cord. Identify the umbilical cord abnormalities and correlate with adverse outcomes.	1	Lecture	CAN	Knows-how	DIS,FC
CO1,CO2,CO4	Demonstrate examination of a normal umbilical cord. Correlate anatomical findings with clinical significance.	2	Practical Training 4.3	PSY-GUD	Shows-how	D
CO1,CO2,CO4	Examine and classify pathological umbilical cord features. Correlate macroscopic findings with clinical risks.	2	Practical Training 4.4	PSY-MEC	Shows-how	D,DL
CO3,CO4	Examine and evaluate the umbilical cord. Diagnose abnormalities and their impact on fetal outcome.	4	Experiential-Learning 4.3	PSY-MEC	Does	RLE

Unit 3 Garbhodaka - Amniotic fluid

Formation, composition and functions of Garbhodaka - amniotic fluid and its applied aspects.

References: 1,2,4,5,6,15,21,22,23,24

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the formation, composition of Garbhodaka - amniotic fluid. Enlist its various functions.	1	Lecture	CAN	Knows-how	FC,L&PPT ,L_VC
CO1,CO2,CO4	Analyse the relationship between amniotic fluid dynamics and fetal organogenesis. Differentiate between the physiological and pathological variations in amniotic fluid volume. Appraise the clinical significance of amniotic fluid as a diagnostic and prognostic tool.	1	Lecture	CE	Knows-how	DIS,FC
CO1,CO2,CO4	Analyse the sources, dynamics, and regulatory mechanisms of amniotic fluid, and illustrate its directional flow and physiological significance in fetal development.	3	Practical Training 4.5	CAN	Shows-how	PL,TBL
CO1,CO2,CO4	Evaluate Amniotic fluid abnormalities and its importance in predicting specific fetal outcomes.	3	Practical Training 4.6	CE	Shows-how	CBL,PBL
CO1,CO2,CO4	Analyse the trimester-wise physiological sources contributing to amniotic fluid formation (maternal plasma, fetal urine, and lung secretions). Differentiate the compositional changes in amniotic fluid across the three trimesters.	4	Experiential-Learning 4.4	CAN	Does	BS,L&GD,PL
CO1,CO2,CO4	Diagnose abnormalities of Garbhodaka - Amniotic fluid	6	Experiential-Learning 4.5	CE	Does	CD,CBL, PBL

Unit 4 Garbhaposhana - Fetal nourishment

Garbhaposhana (Fetal nourishment)

Garbha Sharirakriya (Fetal physiology)

References: 1,2,4,5,6,8,14,25,26,27,28

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Describe the physiology of Fetal nourishment. Deconstruct the metabolic pathways involved in the utilization of key macronutrients. Analyse the influence of specific maternal health conditions on placental nutrient transfer and fetal nutritional status.	1	Lecture	CAN	Knows-how	L,L_VC
CO1,CO2	Identify the key nutrients of the three trimesters of pregnancy. Evaluate the fetal nourishment through history taking. Interpret fetal growth patterns.	4	Practical Training 4.7	CE	Shows-how	CBL,D,SI M
CO1,CO2	Evaluate fetal circulation and assess fetal outcome.	4	Experiential-Learning 4.6	CE	Shows-how	RLE
CO1,CO2	Analyse Rasachankramana in Garbha. Evaluate Garbhaposhana - Fetal nourishment	2	Lecture	CAN	Knows-how	DIS,FC,L &GD

Practical Training Activity

Practical No	Name	Activity details
Practical Training 4.1	Structural examination of Apara-Placenta.	<p>Activity 1: 1 hour</p> <p>Examination of Placenta</p> <p>Pre-Preparation: Placenta specimen -fresh or preserved placenta, gloves, ruler, tray, magnifying glass.</p> <p>Under the guidance of teacher students is expected to Identify and label the anatomical structures of placenta</p> <ol style="list-style-type: none"> 1. Identification of the fetal and maternal surface. 2. Recognize the structure of blood vessels and the umbilical cord insertion. 3. Observe the number of cotyledons on the maternal surface. 4. Maternal surface (cotyledons, grooves, color). 5. Fetal surface (chorionic plate, umbilical cord insertion, vessels). 6. Check for missing cotyledons. 7. Record the observation.

		<p>Activity 2: 2 hours Digital/ Microscopic slide visualization Pre-Preparation: Microscope, slides, or digital slide repository. Under the guidance of teacher, student is expected to identify placental villi at different stages.</p> <ol style="list-style-type: none"> 1. Observe microscope slides/virtual slides of: <ol style="list-style-type: none"> A. Early placenta (primary villi) B. Term placenta (tertiary villi with capillaries) C. Record the observation and differentiate primary, secondary, and tertiary villi.
<p>Practical Training 4.2</p>	<p>Apara Vikruti- Abnormalities of placenta.</p>	<p>Activity 1: Abnormal Placenta Identification Station - 2 hour Pre-preparation: Pathological specimens/photos. Teacher sets up stations with different abnormal placentas (or high-quality photos/models) Under the guidance of teacher, student is expected to identify:</p> <ol style="list-style-type: none"> 1. Gross (macroscopic) appearance of infarcts of placenta - <ol style="list-style-type: none"> A. Color: Pale, firm, well-demarcated areas (early infarcts may appear dark red due to hemorrhage, later becoming white/yellow as necrosis progresses). B. Shape: Wedge-shaped or irregular, with the base toward the basal plate (maternal side). C. Size: Varies from small (few millimeters) to large (several centimeters). D. Location: Typically in the maternal (basal) portion of the placenta, away from the fetal surface. E. Consistency: Firmer than surrounding placental tissue due to coagulation necrosis. 2. Gross (macroscopic) appearance of calcification in placenta - <ol style="list-style-type: none"> A. Color: White to pale yellow, gritty or chalky deposits. B. Texture: Gritty (fine granularity) when touched or cut. C. Hard/firm areas that may crunch when sliced with a scalpel. D. Distribution: Basal plate (maternal side) – common in mature placentas. E. Patterns: Punctate (tiny dots) – scattered fine calcifications, Linear or dendritic – following septal or vascular structures. F. Large, irregular chunks – seen in extensive calcification. 3. Succenturiate lobe (accessory lobe) <p>Activity 2: Placental Weight & Measurement Activity- 1 Hour Pre-preparation: Scale, ruler, placental specimens. Under the guidance of teacher, student is expected to</p> <ol style="list-style-type: none"> 1. Weigh and measure placentas

		<p>2. Compare with normal size</p> <p>3. Discussion: Correlate placental size with fetal health.</p>
Practical Training 4.3	Garbhanabhinadi - Examination of umbilical cord	<p>Activity 1: Macroscopic examination (2 hours)</p> <p>Pre-Preparation: Normal term placenta with cord, ruler, magnifying glass.</p> <p>Under teacher guidance, student examine the Umbilical cord in the following:</p> <ol style="list-style-type: none"> 1.Measure length. 2.Identify insertion type (central vs. eccentric) on chorionic plate 3.Count vessels after transverse sectioning 4.Assess coiling with spiral measurement 5.Inspect Wharton's jelly
Practical Training 4.4	Umbilical cord abnormalities	<p>Activity: 2 hours</p> <ol style="list-style-type: none"> 1.Students are provided with umbilical cord post delivery/Images/videos of abnormal cords. 2.Under the guidance of teacher, student is expected to: <ol style="list-style-type: none"> A.Identify abnormal Cord. Eg: Velamentous insertion (membranous vessels), Single umbilical artery (SUA), True knots (vs. false knots) B.Macroscopic examination: Document insertion type, knots, discoloration. C.Transverse sectioning: Count vessels, assess Wharton's jelly. 3.Correlate findings with clinical risks (e.g., vasa previa ? fetal hemorrhage).
Practical Training 4.5	Formation and composition of Garbhodaka - Amniotic fluid	<p>Activity: 3 hours</p> <p>Students are paired up in teams and expected to discuss on:</p> <ol style="list-style-type: none"> 1.Identify and label the primary sources of amniotic fluid 2.Discuss on the dynamics of regulatory mechanisms amniotic fluid. 3.Specific components of amniotic fluid (e.g., water, antimicrobial factors) to their respective functions (e.g., hydration, protection). 4.Debate on the physiological significance of amniotic fluid in fetal development.
Practical Training 4.6	Amniotic fluid abnormalities	<p>Duration: 3 hours</p> <p>Activity:</p> <ol style="list-style-type: none"> 1.Students are assigned case vignettes with reports of amniotic fluid. 2.Students are expected to identify the Amniotic fluid abnormality based on quantity, consistency, and clinical

		<p>features.</p> <p>3. Apply the knowledge of amniotic fluid dynamics and fetal organogenesis and predict specific fetal outcomes.</p> <p>4. Present their findings and build a consensus.</p>
Practical Training 4.7	Applied aspects of Garbhaphoshana - Fetal Nourishment	<p>Activity: 4 hours</p> <ol style="list-style-type: none"> 1. Teacher discusses key nutrients of the three trimesters of pregnancy. 2. Teacher demonstrates communication and history taking to assess fetal nourishment. 3. Students are assigned real cases/simulated cases/case vignettes. 4. Students record the history and note <ol style="list-style-type: none"> A. Meal planning, cravings, morning sickness, cultural taboos, and supplements. B. Interpret the fetal growth from USG and examination C. Analyse the nutrition based on the fetal growth
Experiential learning Activity		
Experiential learning No	Name	Activity details
Experiential-Learning 4.1	Apara Parikshana - Placental Examination	<p>Activity: 4 hours</p> <ol style="list-style-type: none"> 1. Students are given 5 placentas with varying pathologies (3 normal term placentas and 2 abnormal placentas (e.g., infarcted, velamentous cord)) 2. Student examine and record: Maternal Surface: Cotyledon pattern (complete/incomplete), Adherent blood clots, infarcts (size/location) Fetal Surface: Chorionic plate vascularity (normal/aneurysms) 3. Differentiate normal and abnormal 4. Reflect on the observations.
Experiential-Learning 4.2	Apara vikruti - placental abnormalities effect on maternal and fetal outcomes.	<p>Activity: 4 hours</p> <p>Objective: Correlate placental pathologies with clinical outcomes through realistic scenarios.</p> <ol style="list-style-type: none"> 1. Student collect minimum two abnormal placentas (e.g., infarcted, velamentous cord) after normal/LSCS deliveries 2. Student examine the patient and take a detailed history of the patient and look for any ailment (e.g., preeclampsia, IUGR, stillbirth) 3. Examine the placental structure for abnormalities.

		<p>4. Trace the outcome of the patient and infant.</p> <p>5. Map the maternal condition to the structure of the placenta and outcome of the infant (e.g., infarcts ? placental insufficiency ? IUGR).</p> <p>6. Reflect and record the case.</p>
Experiential-Learning 4.3	Umbilical cord examination.	<p>Activity: 4 hours</p> <p>1.Students are expected to examine minimum 5 umbilical cords post delivery.</p> <p>2.Identify macro and microscopic features of umbilical cord.</p> <p>3.Identify umbilical cord abnormalities if any.</p> <p>4.Trace the fetal outcome resulted due to abnormality.</p> <p>5.Record and reflect on the findings.</p>
Experiential-Learning 4.4	Formation and composition of amniotic fluid.	<p>Activity: 4 hours</p> <p>1.Students study research articles and find resources and critically analyses trimester-wise physiological sources contributing to amniotic fluid formation (maternal plasma, fetal urine, and lung secretions). (2 hours)</p> <p>2.Discuss in group and reflect on compositional changes in amniotic fluid across the three trimesters. (2 hours)</p>
Experiential-Learning 4.5	Abnormalities of Garbhodaka - Amniotic fluid	<p>Activity: 6 hours</p> <p>1.Students are assigned real cases/case vignettes (minimum 10)</p> <p>2.Students evaluate the amniotic fluid.</p> <p>3.Interpret the amniotic fluid analysis report or USG report</p> <p>4.Diagnose the abnormalities</p> <p>5.Reflect on the fetal outcomes.</p> <p>6.Record the observations.</p>
Experiential-Learning 4.6	Assessment of fetal circulatory parameters.	<p>Duration: 4 hours</p> <p>Activity:</p> <p>Students examine minimum 10 female of different trimesters and record the following:</p> <p>1. Detailed history on Diet and supplements of pregnant women.</p> <p>2. Evaluate fetal monitoring parameters using USG, Doppler indices.</p> <p>A. Umbilical artery Doppler waveforms (S/D ratio, PI, RI)</p> <p>B. Middle cerebral artery (MCA) Doppler waveforms (PI)</p> <p>C. Fetal heart rate patterns</p>

D. Biophysical profile components
3. Chart the fetal growth chart

Modular Assessment

Assessment method

Hour

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

4

Structured Assessment in Stations: 50 Marks

1. Structure and function of Apara/placenta (10 marks): Identify the parts and label on the Chart/model/specimen
2. Abnormality of Apara (10 marks): Identify the image and diagnose the abnormality and justify the fetal outcome.
3. Garbhi Nabi Nadi (10 marks): Identify the image/specimen. Write the abnormality and its fetal outcome.
4. Garbha Poshana (10 marks): Explain Garbha Poshana and fetal circulation
5. Garbodaka and fetal membranes (10 marks): Identify the normal and abnormal amniotic fluid through USG report/examination and justify the fetal outcomes.

or
Any practical in converted form can be taken for assessment. (25 marks)
and
Any of the experiential as portfolio/ reflections / presentations can be taken as assessment. (25 marks)

Module 5 : Ashtavidha Shastra Karma, Yantra & Shastra

Module Learning Objectives

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

1. Identify Yantra and Shastra and demonstrate their handling, sterilization methods and tray preparation for Ashtavidha Shastra karma.
2. Apply principles of surgical asepsis and sterilization while preparing and performing Ashtavidha Shastrakarma.
3. Demonstrate skills in selection and handling the instruments and suturing techniques.
4. Analyse the Indications, Contraindications and complications of Ashtavidha Shastrakarma.

Unit 1 Ashtavidha Shastra Karma

Ashtavidha Shastra Karma (eight types of surgical procedures) performed in Stree Roga and Prasuti Tantra.

References: 2,5,6

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse Ashtavidha Shastra (eight kinds of surgical procedures) with their indications, importance and contraindications	2	Lecture	CAN	Knows-how	FC,L&GD,L&PPT
CO1,CO2	Analyse the complications of Ashtavidha karma (eight kinds of surgical procedures) and their management.	1	Lecture	CAN	Knows-how	L&GD,L&PPT
CO4,CO5	Demonstrate Purvakarma (pre-operative care) and Pashchat karma (post-operative care) of Ashtavidhakarma (eight kinds of surgical procedures).	4	Practical Training 5.1	PSY-GUD	Shows-how	D-M,PT,SIM
CO1,CO4,CO5	Demonstrate techniques, indications, and complications of Ashtavidha Shastra karma (eight kinds of surgical procedures).	4	Practical Training 5.2	PSY-GUD	Shows-how	D-M,PT,SIM

	Demonstrate ropana karma after Shastrakarma.					
CO4,CO5	Perform aseptic technique and ethical considerations during Chedana, Bhedana, Lekhana, Aharana karma and recognize their role in preventing complications and improving patient outcomes.	4	Experiential-Learning 5.1	PSY-ADT	Does	RLE
CO3,CO4,CO5	Perform aseptic technique and ethical considerations during Visravana (drainage), Vyadhana (Puncturing), Eshana (Probing) karma and recognize their role in preventing complications and improving patient outcomes.	3	Experiential-Learning 5.2	PSY-ADT	Does	RLE

Unit 2 Seevana vidhi (Suturing procedure)

Description of different types of Seevana material and Seevana Vidhi (Suture material and methods of Suturing)

References: 2,4,5,11,14,15,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the indications and contraindications of Seevana dravya and Seevana Vidhi (Sutures, Suture material and methods/ techniques of Suturing).	2	Lecture	CAN	Knows-how	L,L&GD
CO3,CO4,CO5	Identify different types of Seevana dravyas (suturing materials) and demonstrate different Seevana vidhi (suturing techniques/ methods) with their application in different procedures.	4	Practical Training 5.3	PSY-GUD	Shows-how	D,D-M,SIM
CO3,CO4,CO5,CO6	Perform Purva Karma and Pashchat karma for suturing and counsel the post-suture care to the patient/caretaker.	3	Experiential-Learning 5.3	PSY-ADT	Does	D-M,RLE,SIM,TBL
CO3,CO4,CO5	Identify the indication for suturing, select appropriate suturing material in different clinical cases	4	Experiential-Learning 5.4	PSY-ADT	Does	D,ECE

Unit 3 Yantra and Shastra

Yantra and Shastra

References: 2,4,5,8

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Describe Yantra (blunt instruments) and enlist their indications. Evaluate the functions, Sampat (merits) and dosha (demerits) of the Yantra (Blunt instruments).	2	Lecture	CE	Knows-how	L,L&PPT ,L_VC
CO1,CO2	Describe Shastra used in various procedures. Identify their indications. Analyse and evaluate the functions, sampat (merits) and dosha (demerits), mode of holding and handling, dhara pramana (size of the edge-blade), payana (tampering), nisana (sharpening) and nirmana (manufacturing) of Shastra (sharp instruments).	2	Lecture	CE	Knows-how	L&GD,L &PPT ,L_VC
CO1,CO2	Analyse the clinical implications of Upayantra and Anushastra (Accessory instruments). Enumerate the indications, contraindications and complications of Upayantra and Anushastra (Accessory instruments)	1	Lecture	CAN	Knows-how	L,L&PPT ,L_VC,PS M
CO3,CO4,CO5	Demonstrate the appropriate technique of insertion, positioning and handling of various Yantra used in different procedures.	3	Practical Training 5.4	PSY-GUD	Shows-how	D,D-M,PT
CO3,CO4	Demonstrate the appropriate technique of insertion, positioning and handling of various Shastra used in different procedures.	3	Practical Training 5.5	PSY-GUD	Shows-how	D,D-M,PT
CO4,CO5	Demonstrate the application of Upayantra and Anushastra (accessory instruments) in various procedures	2	Practical Training 5.6	PSY-GUD	Shows-how	D,D-M,SIM
CO4,CO5	Identify the appropriate Yantra (blunt instruments) used in various procedures and assist the procedure.	4	Experiential-Learning 5.5	PSY-ADT	Does	SIM
CO4,CO5	Identify the appropriate Shastra (sharp instruments) used in various procedures and assist the procedure.	4	Experiential-Learning 5.6	PSY-ADT	Does	RLE
CO4,CO5	Identify the appropriate Upayantra and Anushastra (accessory instruments) used in	4	Experiential-	PSY-ADT	Does	KL,PT,R

	various procedures and assist the procedure		Learning 5.7		LE
Practical Training Activity					
Practical No	Name	Activity details			
Practical Training 5.1	Purvakarma (pre-operative care) and Pashchat karma (post-operative care) in Ashtavidhakarma	<p>Activity - 1: 2 hours Teacher will Demonstrate:</p> <ol style="list-style-type: none"> 1.The guidelines of Purvakarma (pre-operative care) and Pashchat karma (post-operative care) in Ashtavidhakarma. 2.Elucidate the importance of monitoring vitals and maintenance of record before, during and after Ashtavidhakarma. 3.In a simulated environment, administer well informed verbal, written consent and counsel to a person wants to undergo Ashtavidhakarma (Eight kinds of surgical procedures). 4.Students discuss the importance of Preparation of patient before Shalya karma. 5.Student is expected to identify the drugs and their formulation used for pre-operative care and post-operative care. <p>Activity - 2: 2 hours Student will:</p> <ol style="list-style-type: none"> 1.Demonstrate and practice all activities of Purvakarma (Pre-operative care) and Pashchat karma (post-operative care) on real patient or model or task trainer. 2.Perform General, local and systemic examination after Ashtavidhakarma (Eight kinds of surgical procedures) on real patient or model or task trainer. 			
Practical Training 5.2	Ashtavidha Shastra karma and Ropana karma	<p>Activity 1: 3 hours Teacher will Demonstrate:</p> <ol style="list-style-type: none"> 1.Chedana (excision, cutting), Bhedana (cutting, separation), Lekhana (scrapping), Aharana (extraction), Visravana (drainage), Vyadhana (puncturing), Eshana (probing) and Seevana (suturing) on real patient or task trainers or simulators. 2.Student is expected to observe and assist the procedures of Ashtavidha Shastra Karma on real patient/model. 3.Students discuss indications, and complications of Ashtavidha Shastra karma. <p>Activity 2: 1 hour</p> <ol style="list-style-type: none"> 1.Demonstrate ropana karma after shastrakarma as mentioned in Vrana Chikitsa by the teacher. 2.Student will practice on real patient or model or task trainer. 			
Practical Training 5.3	Seevana dravyas (suturing materials) and Seevana vidhi (suturing techniques/ methods).	<p>Activity - 1: 2 hours Teacher will:</p> <ol style="list-style-type: none"> 1.Demonstrate different types of Suchi (surgical needles), Seevana dravyas (Sutures and Suturing materials), and different Seevana vidhi (suturing techniques/ methods). 			

		<p>2.Enumerate the indications and contraindications of different methods of Seevana karma (Suturing).</p> <p>3.Elicit the merits and demerits of different types of Suchi (surgical needles), Sutures and Suturing materials (Seevana dravyas).</p> <p>Activity - 2: 2 hours</p> <p>Student will:</p> <p>1.Each student will demonstrate the classification of Suchi (surgical needles) by their point geometry.</p> <p>2.Identify the Suchi (surgical needles) according their shapes and size.</p> <p>3.Identify and discuss the colour coding of Suture material and their significance.</p> <p>4.Assist/ Perform the Seevana vidhi (suturing techniques/ methods) on models or real patient or task trainers.</p>
Practical Training 5.4	Application of Yantras (Blunt instruments)	<p>Activity: 3 hours</p> <p>1.Teacher demonstrate usage of various Yantra (insertion, positioning and handling) on pelvic models/real patients.</p> <p>2.Students are expected to identify the instruments and list the indication, merits and demerits of various Yantras.</p> <p>3.Students demonstrate the insertion, positioning and handling of instruments on pelvic models/ real patients.</p> <p>4.Discuss the comparison of Swastika yantra, Shalaka yantra, Nadi yantra, Taal yantra and Sandamnsha yantra to the present day instruments.</p> <p>5.Demonstrate the Nadi Yantra-Uterine sound, Vasti Yantra-Rectal enema, Tala yantra-Sim's Speculum, Obstetrics forceps, Cusco's speculum, Annigraha Sandamnsha Yantra-Plain nontoothed forceps, Sannigraha Sandamnsha Yantra -Toothed Forceps on pelvic models/stimulators.</p> <p>6.Discuss the complications due of mal handling of Yantras.</p>
Practical Training 5.5	Application of Shastra (Sharp instruments)	<p>Activity: 3 hours</p> <p>1.Teacher demonstrates usage of various Shastra (insertion, positioning and handling) on pelvic models/real patients.</p> <p>2.Discuss the comparison of Kartari Shastra, Atimukha Shastra, Shararimukha Shastra, Vriddhipatra Shastra, Badisha Shastra to the present-day instruments.</p> <p>3.Students are expected to identify the instruments and list the indication, merits and demerits of various Shastra.</p> <p>4.Students demonstrate the insertion, positioning and handling of instruments on pelvic models/ real patients.</p> <p>5.Discuss the complications due of mal handling of Shastra.</p>
Practical Training 5.6	Upayantra and Anushastra (accessory instruments)	<p>Activity: 2 hours</p> <p>1.Teacher demonstrates usage of various Upayantra and Anushastra (insertion, positioning and handling) on pelvic models/real patients eg. Raktamokshana.</p> <p>2.Discuss the comparison of Upayantra and Anushastra (accessory instruments) to the present-day instruments.</p> <p>3.Students are expected to identify the instruments and list the indication, merits and demerits of various Upayantra and</p>

Anushastra.
 4.Students demonstrate the insertion, positioning and handling of instruments on pelvic models/ real patients.
 5.Discuss the complications due of mal handling of Upayantra and Anushastra.

Experiential learning Activity

Experiential learning No	Name	Activity details
Experiential-Learning 5.1	Ashtavidha shastrakarma-I	<p>Activity: 4 hours</p> <p>Student is expected to assist/perform Chedana, Bhedana, Lekhana, Aharana karma in minimum 2-3 patients following the order.</p> <ol style="list-style-type: none"> 1.Take the consent for Ashtavidha Shastra Karma 2.Counsel the patient on the procedure and its importance, risk and benefits 3.Practice hand hygiene, donning in a sterile surgical environment for Ashtavidha Shastra Karma. 4.Assist/Perform Ashtavidha Shastra Karma in purva/pradhana and paschat karma. 5.Engage in a small group exercise to reflect on ethical challenges during Shastra Karma procedures. 6 Ensure communication among health workers during surgical procedure. 7.Reflect and record correct choice and execution of each Chedana, Bhedana, Lekhana, Aharana Karma.
Experiential-Learning 5.2	Ashtavidha Shastra Karma -II	<p>Activity: 3 hours</p> <p>1.Student is expected to assist/perform Visravana (drainage), Vyadhana (Puncturing), Eshana (Probing) karma in minimum 2-3 patients following the order.</p> <ol style="list-style-type: none"> 2.Take the consent for Ashtavidha Shastra Karma 3.Counsel the patient on the procedure and its importance, risk and benefits 4.Practice hand hygiene, donning in a sterile surgical environment for Ashtavidha Shastra Karma. 5.Assist/Perform Ashtavidha Shastra Karma in purva/pradhana and paschat karma. 6.Engage in a small group exercise to reflect on ethical challenges during Shastra Karma procedures. 7.Ensure communication among health workers during surgical procedure. 8.Reflect and record correct choice and execution of each Visravana (drainage), Vyadhana (Puncturing), Eshana (Probing) Karma.
Experiential-Learning 5.3	Seevana karma	<p>Activity: 3 hours</p> <ol style="list-style-type: none"> 1.Students are expected to perform Purva Karma and Pashchat karma for suturing following the order. 2.Take the consent and counsel the patient for the procedure considering the ethical considerations 3.Demonstrate proficiency in aseptic techniques in surgical environments.

		<p>4.Handle and pass the surgical instruments maintaining sterility during surgery and wound dressing.</p> <p>5.Observe the procedure</p> <p>6.Counsel the patients for post operative care.</p> <p>7.Discuss the common time to remove the stiches of different obstetrical and gynaecological operations.</p> <p>8.Discuss the Tissue adhesive and enumerate the indications, contraindications, advantages and disadvantages of tissue adhesive.</p>
Experiential-Learning 5.4	Seevana karma vidhi and Seevana dravyas	<p>Activity: 4 hours</p> <p>1.Teacher will assign students different cases(real/simulated/clinical case video) indicated for suturing</p> <p>2.Student is expected to identify the case and its indication for suturing</p> <p>3.Identify appropriate suturing material required for the case and justify</p> <p>4.Take the consent of the patient (in real case) and counsel the patient for the procedure</p> <p>5.Reflect on the importance of suturing skills in patient outcomes, wound healing, infection prevention.</p>
Experiential-Learning 5.5	Yantra (Blunt instruments) in different procedures.	<p>Activity: 4 hours</p> <p>1.Students are assigned different procedures real cases (minimum 10 procedures) (E.g., Agnikarma, Ksharakarma, Uttarabasti)</p> <p>2.Students are expected to identify the Yantra (blunt instruments) used for the procedure.</p> <p>3.Place the instruments in order on the trolley.</p> <p>4.Handle the instrument and assist the procedure.</p> <p>5.Record and reflect on the procedure.</p> <p>6.Assemble a file comparing all blunt instruments with contemporary instruments.</p>
Experiential-Learning 5.6	Shastra (Sharp instruments) in different procedures.	<p>Activity: 4 hours</p> <p>1.Students are assigned different procedures real cases (minimum 10 procedures) (E.g.: Episiotomy, D&C)</p> <p>2.Students are expected to identify the Shastra (Sharp instruments) used for the procedure.</p> <p>3.Place the instruments in order on the trolley.</p> <p>4.Handle the instrument and assist the procedure.</p> <p>5.Record and reflect on the procedure.</p>
Experiential-Learning 5.7	Upayantra and Anushastra (accessary instruments) in different procedures.	<p>Activity: 4 hours</p> <p>1.Students are assigned different procedures real cases (minimum 5 procedures)</p> <p>2.Students are expected to identify the Upayantra and Anushastra (accessary instruments) used for the procedure. 3.Place the instruments in order on the trolley.</p> <p>4.Handle the instrument and assist the procedure.</p>

5.Record and reflect on the procedure.

Modular Assessment

Assessment method

Hour

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

4

Structured Assessment in Stations: 50 marks

1. Identification (4 X 5= 20 marks): Identify the Shastra/Yantra/Anushashtra and write the uses/merits/demerits.
2. Demonstration (15 X 2= 30 marks): Perform 2 Ashta Vidha Shastra Karma on model/task trainer following the SOP.

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

and
Any of the experiential as portfolio/ reflections / presentations can be taken as assessment. (25 marks)

Module 6 : Sthanika Upakrama (Local therapies)

Module Learning Objectives

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

1. Analyze the role of Sthanika Upakrama and Panchakarma
2. Demonstrate skills in Sthanika Upakrama and Panchakarma, adhering to standard guidelines.
3. Counsel patients on the significance of Panchakarma procedures (Vamana, Virechana, Basti, Nasya, and Raktamokshana).
4. Integrate Sthanika Upakrama with systemic therapies for comprehensive management in Stree Roga and Prasuti Tantra.

Unit 1 Sthanika Upakrama (special local treatment modalities)

Sthanika Upakrama (special local treatment modalities): Yoniprakshalana, Yonipichu, Yonivarti, Yonikalkadharana, Yonidhupana, Yonilepana, Yoniavachurnana, Yonipottali, Nabhi Poorana.

References: 1,2,4,5,13,14,16,17,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the Sthanika Upakrama used in Stree Roga with indications. Analyse the Sthanika Upakrama used in Prasuti Tantra with indications.	1	Lecture	CAN	Knows-how	L&GD
CO1,CO2	Analyse the role of appropriate ingredients and instruments used for sthanika upakrama (yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana, yoni lepana, yoni avachurana, yoni pottali and nabhi purana)	1	Lecture	CAN	Knows-how	L&PPT
CO4,CO5	Demonstrate skills in yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana.	2	Practical Training 6.1	PSY-GUD	Shows-how	D,PT,SIM
CO4,CO5	Demonstrate skills in yoni lepana, yoni avachurana, yoni pottali and nabhi purana.	2	Practical	PSY-	Shows-	D,PT

			Training 6.2	GUD	how	
CO4,CO5	Perform Sthanika Upakrama - yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana and communicate its significance to patient.	3	Experiential-Learning 6.1	PSY-MEC	Does	PL,TBL
CO5,CO6	Perform Sthanika Upakrama - yoni lepana, yoni avachurana, yoni pottali and nabhi purana and communicate its significance to patient.	3	Experiential-Learning 6.2	PSY-MEC	Does	TBL

Unit 2 Agnikarma and Ksharakarma.

Principles and application of Agnikarma, Ksharakarma

References: 1,2,4,5,7,8,10,11

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Evaluate the principles, indications, contraindications and complications of Agnikarma.	1	Lecture	CE	Knows-how	L,L&GD, L&PPT ,L_VC
CO1,CO2	Evaluate the principle, indications, contraindications and complications of Ksharakarma.	1	Lecture	CE	Knows-how	L,L&GD, L_VC
CO1,CO2	Evaluate the ethical and medico-legal considerations in applying Agnikarma and Ksharakarma.	1	Lecture	CE	Knows-how	L,L&GD, L_VC
CO3,CO4	Demonstrate the procedure of Agnikarma.	2	Practical Training 6.3	PSY-GUD	Shows-how	D,SIM
CO3,CO4	Demonstrate Ksharakarma.	2	Practical Training 6.4	PSY-GUD	Shows-how	D,PT,SIM
CO4,CO5	Develop Standard Operating Procedure on Agnikarma.	2	Experiential-Learning 6.3	CS	Does	RLE,TBL

CO4,CO5	Develop Standard operating procedure of Ksharakarma.	2	Experiential-Learning 6.4	CS	Does	TBL
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Unit 3 Panchakarma in Streeroga and Prasutitantra.

Principles and application of Panchakarma

Vamana, Virechana.

Asthapana, Anuvasanavasti, Matravasti; Yogavasti, Lekhanavasti, Yapanavasti, Ksheeravasti, Madhutailikavasti.

Uttarabasti

Nasya-Snehana, Brimhana, Lekhana, Shodhana.

Raktamokshana-Jalaukavacharana.

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

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyse the therapeutic rationale of Vamana and Virechana.	1	Lecture	CAN	Knows-how	DIS,FC
CO1,CO2	Analyse the role of Basti Karma in Stree roga and Prasuti tantra.	2	Lecture	CAN	Knows-how	L&GD
CO1,CO2	Analyse the role of Nasya Karma.	1	Lecture	CAN	Knows-how	L&GD
CO4,CO5	Demonstrate skills in Vamana Karma.	2	Practical Training 6.5	PSY-GUD	Shows-how	D,PT
CO5,CO6	Demonstrate skills in Basti Karma.	3	Practical Training 6.6	PSY-GUD	Shows-how	D,PT
CO5,CO6	Demonstrate skills in Nasya Karma (Snehana, Brimhana, Shodhana types)	2	Practical Training 6.7	PSY-GUD	Shows-how	D,SIM

CO5,CO6	Perform Vamana Karma and communicate its significance to patient.	3	Experiential-Learning 6.5	PSY-MEC	Does	PL,TBL
CO5,CO6	Perform Basti Karma and communicate its significance to patient.	3	Experiential-Learning 6.6	PSY-MEC	Does	PL,TBL
CO5,CO6	Evaluate clinical significance of Uttara Basti.	3	Experiential-Learning 6.7	CK	Does	CBL,PBL
CO5,CO6	Analyse the role of Raktamokshana.	1	Lecture	CAN	Knows-how	L,L&GD, L&PPT ,L_VC
CO3,CO4	Demonstrate skills in Virechana.	2	Practical Training 6.8	PSY-GUD	Shows-how	D
CO3,CO4	Demonstrate skills in Raktamokshana.	2	Practical Training 6.9	PSY-GUD	Shows-how	D
CO2,CO3	Demonstrate skills in Uttara Basti.	1	Practical Training 6.10	PSY-GUD	Shows-how	D,PT,SIM
CO4,CO5	Perform Virechana Karma and communicate its significance to patient.	3	Experiential-Learning 6.8	PSY-MEC	Does	PL,RLE
CO4,CO5	Perform Nasya Karma and communicate its significance to patient.	2	Experiential-Learning 6.9	PSY-MEC	Does	RLE,TBL
CO4,CO5	Perform Raktamokshana and communicate its significance to patient.	2	Experiential-Learning 6.10	PSY-MEC	Does	RLE,TBL

Practical Training Activity

Practical No	Name	Activity details
Practical	Sthanik Upakrama- I	Activity: 2 hours

Training 6.1		<p>1. Teacher will demonstrate Sthanika Upakrama (yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana) with standard guidelines (preparation of Kwatha, Yoni Pichu, Yonivarti, Kalka).</p> <p>2. Teacher will emphasize on temperature of prepared dravya, appropriate case selection and communication with the patient for specific sthanika upakrama</p> <p>Following the demonstration, students will;</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of appropriate drugs and materials for sthanika upakrama (yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana), preparation of the patient, application technique, prevention of burns/injury during procedure, post procedure care. 2. Practice Sthanika Upakrama techniques on simulation model/ patient, under teacher supervision 3. Identify challenges in performing Sthanika Upakrama and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>
Practical Training 6.2	Sthanik Upakrama Part-II	<p>Duration: 2 hours</p> <ol style="list-style-type: none"> 1. Each student will perform three different Sthanika Upakrama (Yoni lepana, Yoni Avachurnana, Yoni Pottali, Nabhi Purana) adhering to standard guidelines, in a minimum of three patients. 2. Monitor the temperature of materials being used for these procedures and observe for the complications (redness, itching, burning sensation and pain). 3. They will actively document their experience and learnings in the logbook. <p>Activity: 1 hour</p> <ol style="list-style-type: none"> 1. Each student will prepare, a standard operating procedure for any one of the sthanika upakrama (Yoni lepana, Yoni Avachurnana, Yoni Pottali, Nabhi Purana) and present in class. 2. Teacher will facilitate discussion. 3. Students will document their learnings and experiences in the logbook. <p>Activity: 1 hour</p> <ol style="list-style-type: none"> 1. Teacher will demonstrate Sthanika Upakrama (Yoni lepana, Yoni Avachurnana, Yoni Pottali, Nabhi Purana) with standard guidelines (preparation of churna, selection of lepana dravyas, appropriate taila). 2. Teacher will emphasize on appropriate case selection, precautionary measures to prevent accidental injury during pottali insertion, observe for any complications like local irritation, itching or pain, and communication with the patient for above sthanika upakrama. <p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of appropriate drugs and materials for sthanika upakrama (Yoni lepana, Yoni Avachurnana, Yoni Pottali, Nabhi Purana), preparation of the patient, application technique, post procedure care.

		<p>2.Practice Sthanika Upakrama techniques on simulation model/ patient, under teacher supervision</p> <p>3.Identify challenges in performing Sthanika Upakrama and seek clarification.</p> <p>Teacher will summarise the session highlighting the key points.</p>
Practical Training 6.3	Agnikarma	<p>Activity: 2 hours</p> <p>Teacher will demonstrate Poorvakarma (instruments, site, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (application of Vrana ropanana dravya) of Agni Karma.</p> <p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1.Observe the teacher’s demonstration and assist in the selection of instrument and its sterilization, preparation of the patient, heating of Shalaka, selection of the site , application technique, post procedure care. 2.Practice Agni karma techniques on simulation model, under teacher supervision 3.Identify challenges in performing Agni Karma procedure and seek clarification. 4.Teacher will summarise the session highlighting the key points.
Practical Training 6.4	Ksharakarma	<p>Activity: 2 hours</p> <p>Teacher will demonstrate Poorvakarma (instruments, site, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (application of Vrana ropanana dravya) of Ksharakarma.</p> <p>Following the demonstration, students will;</p> <ol style="list-style-type: none"> 1.Observe the teacher’s demonstration and assist in the selection of instrument and its sterilization, Kshara drugs, preparation of the patient, selection of the site, application technique, post procedure care. 2.Practice Ksharakarma techniques on simulation model, under teacher supervision 3.Identify challenges in performing Ksharakarma and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>
Practical Training 6.5	Vamana Karma	<p>Activity: 2 hours</p> <p>Teacher will demonstrate Poorvakarma (materials, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (samsarjana karma) of Vamana Karma.</p> <p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1. Observe the teacher’s demonstration and assist in the selection of appropriate materials for Vamana Karma, preparation of the patient, administration procedure, post procedure care. 2. Practice Vamana Karma in patient, under teacher supervision 3. Identify challenges in performing Vamana Karma and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>

Practical Training 6.6	Nasya Karma	<p>Activity: 2 hours</p> <p>Teacher will demonstrate Poorvakarma (instruments, site, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (Kaval/gandush, Dhoopana) of Nasya Karma.</p> <p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of instrument, appropriate drugs and type of Nasya, preparation of the patient, application technique, post procedure care. 2. Practice Nasyakarma techniques on simulation model, under teacher supervision 3. Identify challenges in performing Nasya Karma and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>
Practical Training 6.7	Virechana Karma	<p>Activity: 2 hours</p> <p>Teacher will demonstrate Poorvakarma (materials, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (samsarjana karma) of Virechana Karma.</p> <p>Following the demonstration, students will;</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of appropriate materials for Virechana Karma, preparation of the patient, administration procedure, post procedure care. 2. Practice Virechana Karma in patient, under teacher supervision 3. Identify challenges in performing Virechana Karma and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>
Practical Training 6.8	Uttara Basti	<p>Activity: 1 hour</p> <p>Teacher will demonstrate the Poorvakarma (instruments and materials, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (post procedural care) of Uttara Basti Karma.</p> <p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of appropriate instruments and materials for Uttara Basti Karma, preparation of the patient, administration procedure, post procedure care. 2. Practice Uttara Basti Karma in simulation model, under teacher supervision 3. Identify challenges in performing Uttar Basti Karma and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>
Practical Training 6.9	Basti Karma	<p>Activity: 3 hours</p> <p>Teacher will demonstrate Poorvakarma (instruments and materials, preparation of the patient), Pradhana Karma (the standard procedure) and Paschat Karma (samsarjana karma) of Basti Karma (Niruha Basti, Anuvasana Basti, Matra Basti, Apana Basti).</p>

		<p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of appropriate instruments and materials for Basti Karma, preparation of the patient, administration procedure, post procedure care. 2. Practice Basti Karma in patient, under teacher supervision 3. Identify challenges in performing Basti Karma and seek clarification. 4. Teacher will summarise the session highlighting the key points.
Practical Training 6.10	Raktamokshana	<p>Activity: 2 hours</p> <p>Teacher will demonstrate Poorvakarma (materials, preparation of the patient/model), Pradhana Karma (the standard procedure) and Paschat Karma (ensure haemostasis by appropriate methods (e.g. haridra churna avachurnana in jalaukavacharana, pressure application in siravedha) and wound care management) of Raktamokshana Karma.</p> <p>Following the demonstration, students will:</p> <ol style="list-style-type: none"> 1. Observe the teacher's demonstration and assist in the selection of appropriate materials for Raktamokshana Karma, preparation of the patient, administration procedure, post procedure care. 2. Practice Raktamokshana Karma in patient, under teacher supervision 3. Identify challenges in performing Raktamokshana Karma and seek clarification. <p>Teacher will summarise the session highlighting the key points.</p>
Experiential learning Activity		
Experiential learning No	Name	Activity details
Experiential-Learning 6.1	Sthanika Upakrama-I	<p>Activity: 2 hours</p> <ol style="list-style-type: none"> 1. Each student will perform three different Sthanika Upakrama (yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana) adhering to standard guidelines, in a minimum of three patients. 2. Monitor the temperature of materials being used for these procedures, check the pH of the prepared dravya and observe for the complications (itching, burning sensation, irritation and pain). 3. Students will actively document their experience and learnings in the logbook. <p>Activity: 1 hours</p> <ol style="list-style-type: none"> 1. Each student will prepare, a standard operating procedure for any one of the sthanika upakrama (yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana) and present in class.

		<p>2. Teacher will facilitate discussion.</p> <p>3. Students will actively document their learnings and experiences in the logbook.</p>
Experiential-Learning 6.2	Sthanika Upakrama Part-II	<p>Activity: 2 hours</p> <p>1. Each student will perform three different Sthanika Upakrama (Yoni lepana, Yoni Avachurnana, Yoni Pottali, Nabhi Purana) adhering to standard guidelines, in a minimum of three patients.</p> <p>2. Monitor the temperature of materials being used for these procedures and observe for the complications (redness, itching, burning sensation and pain).</p> <p>3. They will actively document their experience and learnings in the logbook.</p> <p>Activity: 1 hour</p> <p>1. Each student will prepare, a standard operating procedure for any one of the sthanika upakrama (Yoni lepana, Yoni Avachurnana, Yoni Pottali, Nabhi Purana) and present in class.</p> <p>2. Teacher will facilitate discussion.</p> <p>3. Students will document their learnings and experiences in the logbook.</p>
Experiential-Learning 6.3	Agnikarma	<p>Activity: 2 hours</p> <p>1. Students will work as team and develop Standard operating procedure of Agnikarma.</p> <p>2. Teacher will facilitate discussion.</p> <p>3. Students will actively document their experience and learnings in logbook.</p>
Experiential-Learning 6.4	Ksharakarma	<p>Activity: 2 hours</p> <p>1. Students will work as team and develop Standard operating procedure of Ksharakarma.</p> <p>2. They will present SOP and teacher will facilitate discussion.</p> <p>3. Students will actively document their experience and learnings in logbook.</p>
Experiential-Learning 6.5	Vamana Karma.	<p>Activity: 3 hours</p> <p>1. Each student will perform Vamana Karma adhering to standard guidelines, in a minimum of two patients.</p> <p>2. Monitor the vitals of the patient, note the number of Vegas and observe for the complications (blood in the vomitus, signs of dehydration), Samyak Vamana lakshana.</p> <p>3. Students will actively document their experience and learnings in the logbook.</p>
Experiential-Learning 6.6	Basti Karma	<p>Activity: 3 hours</p> <p>1. Each student will perform at least two different types of Basti Karma (Yoga Basti, Matra Basti) adhering to standard guidelines, in a minimum of two patients.</p>

		<p>2. Monitor the vitals of the patient, note the Basti Dravya nirgamana kala and observe for the complications (retention of Basti Dravya and abdominal pain), Samyak Basti lakshana.</p> <p>3. Students will actively document their experience and learnings in the logbook.</p>
Experiential-Learning 6.7	Uttara Basti	<p>yoni prakshalana, yoni pichu, yoni varti, yoni kalka dharana, yoni dhupana</p> <p>Activity-1: 1 hour Each student will manage or co-manage a minimum of 2 real or standardized patients receiving Uttara Basti for conditions like: Artavakshaya (oligomenorrhea) and Vandhyatva (infertility). They will document their findings and experience in logbook.</p> <p>Activity-2: 1 hour Each student will track USG reports before & after therapy (follicular development and endometrial thickness.) of minimum two patients and prepare a report. They will document their findings and experience in logbook.</p> <p>Activity-3: 1 hour Each student will create a mock OPD/IPD case audit board. They will review minimum of five anonymized Uttara basti cases with pre/post records AND identify what worked, suggest protocol improvements, and present their data interpretation. They will document their findings and experience in logbook.</p>
Experiential-Learning 6.8	Virechana Karma	<p>Activity: 3 hours</p> <p>1. Each student will perform Virechana Karma adhering to standard guidelines, on minimum two patients.</p> <p>2. Monitor the vitals of the patient, note the number of vegas and observe for the complications (signs of dehydration, pain in abdomen, blood in stools), samyak virechana lakshana.</p> <p>3. Students will actively document their experience and learnings in the logbook.</p>
Experiential-Learning 6.9	Nasya Karma	<p>Activity: 2 hours</p> <p>1. Each student will perform Nasya Karma adhering to standard guidelines, on minimum two patients.</p> <p>2. Monitor the vitals of the patient and observe for the complications (nasarava, peenasa, shirashoola, bhrama), samyak nasya lakshana.</p> <p>3. Students will actively document their experience and learnings in the logbook.</p>
Experiential-Learning 6.10	Raktamokshana	<p>Activity: 2 hours</p> <p>1. Each student will perform Raktamokshana Karma (Jalaukavacharana, Siravedha) adhering to standard guidelines, on minimum two patients.</p> <p>2. Monitor the vitals of the patient and observe for the complications (bhrama, moorchha, inflammation and infection at the site of raktamokshana).</p>

3. Students will actively document their experience and learnings in the logbook.

Modular Assessment

Assessment method

Hour

Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep 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 6 C.

4

DOPS Assessment – 50 marks

Perform on a patient/simulated patient. Real-time observation by faculty assessor.

Procedure to be Observed -Select any two of the Sthanika Upakrama/ Panchakarma Procedures for DOPS:

Components of Assessment:

1. Preparation for Procedure: Assembles necessary materials, maintains hygiene & patient preparation.
2. Explanation to Patient: Explains the procedure, indications, and obtains consent.
3. Demonstration of Procedure: Performs/explain therapy correctly with appropriate technique.
4. Knowledge of Ingredients & Dosage: Describes ingredients, dose, route, and method of preparation.
5. Recognition of Contraindications/Complications: Identifies when not to perform or possible risks.
6. Post-Procedure Care: Explain Post procedural care.

or

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

and

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

Module 7 : Kashthaushadhi evam Rasaushadhi-Commonly used drugs and formulations of Stree Roga (Gynaecology) and Prasuti Tantra (Obstetrics)

Module Learning Objectives

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

1. Identify key Kashthaushadhi evam Rasaushadhi formulations, conventional drugs used in Stree Roga and Prasuti Tantra.
2. Describe the ingredients, indications, contra-indications, therapeutic actions, adverse reaction, dosage and route of administration of Kashthaushadhi evam Rasaushadhi formulations and conventional drugs.
3. Analyse the active principles, pharmacology and mechanism of action of Kashthaushadhi evam Rasaushadhi formulations and conventional drugs.
4. Recognize the therapeutic applications of Kashthaushadhi evam Rasaushadhi formulations and conventional drugs.
5. Compare traditional uses with modern scientific evidence supporting their efficacy.
6. Develop the ability to prescribe appropriate single drugs and compound formulations.

Unit 1 Kashtha Aushadhi evam Rasa Aushadhi

Kashtha Aushadhi evam Rasa Aushadhi- Commonly used formulations - Ingredients, indications, contraindications, therapeutic actions, adverse reactions (if any), posology and kalamaryada (duration), route of administration.

Kashthaushadhi (herbal drugs and formulations) and Rasaushadhi (herbo-mineral, metallic and mineral formulations) in Stree Roga (Gynecology).

Kashthaushadhi (herbal drugs and formulations) and Rasaushadhi (herbo-mineral, metallic and mineral formulations) in Prasuti Tantra (Obstetrics).

Formulations used in integrative medicine in Gynecology and Obstetrics.

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

3A	3B	3C	3D	3E	3F	3G
CO1,CO3	Identify commonly used Kashthaushadhi (herbal drugs and formulations) and Rasaushadhi (Herbo-mineral, metallic and mineral formulations) in Stree Roga and	2	Lecture	CAN	Knows-how	L&GD,L &PPT

	analyse the mode of action.					
CO1,CO3	Identify commonly used Kashthaushadhi (herbal drugs and formulations) and Rasaushadhi (Herbo-mineral, metallic and mineral formulations) in Prasuti Tantra. Analyse the mode of action.	2	Lecture	CAN	Knows-how	L,L&GD
CO1,CO3	Justify the selection of specific Kashthaushadhi based on their properties and their role in disease management.	2	Practical Training 7.1	CE	Knows-how	DG,DIS,FV
CO1,CO3	Justify the selection of specific Rasaushadhies based on their properties and their role in disease management.	2	Practical Training 7.2	CE	Knows-how	DIS,FV
CO3,CO4	Demonstrate Ksheerapaka formulations used in various disorders, and analyse the Samprapti Vighatana with rationale.	4	Practical Training 7.3	PSY-MEC	Shows-how	D,DIS,PT
CO1,CO2,CO3	Construct individualized treatment strategies using Kashthaushadhi based on diverse clinical presentations.	5	Experiential-Learning 7.1	CS	Does	DIS,RLE, SIM
CO1,CO2,CO3	Construct individualized treatment strategies using Rasaushadhies based on diverse clinical presentations.	5	Experiential-Learning 7.2	CS	Does	CD,DIS,RLE

Unit 2 Pharmacology of Female Reproductive System

Pharmacological principles of female reproductive system.
Pharmacology of drugs acting on uterus, pregnancy, labour and lactation.
Placental transfer, teratogenicity, and FDA pregnancy categories.

References: 13,14,15,16,17,18,23,24,25,26,27,28

3A	3B	3C	3D	3E	3F	3G
CO1,CO3	Analyse the drugs affecting the uterus into uterotonics (oxytocics) and uterine relaxants (tocolytics). Explain the Pharmacokinetics and Pharmacodynamics of drugs acting on	1	Lecture	CAN	Knows-how	L,L&PPT

	uterus.					
CO2,CO3	Identify the primary pharmacological agents used to manage labour. Outline the mode of action of these drugs. Analyse the potential adverse effects and contraindications of these drugs. Evaluate the factors that influence the selection and administration of pharmacological agents during labour.	1	Lecture	CE	Knows-how	DIS,FC
CO2,CO3	Explain placental drug transfer mechanisms- Passive diffusion and active transport (ABC transporters), and receptor-mediated uptake. Analyse the factors influencing transfer (pH, protein binding, placental efflux pumps). Define teratogenicity and critical periods of susceptibility (e.g., thalidomide in weeks 4–7, ACE inhibitors in 2nd/3rd trimesters).	1	Lecture	CAN	Knows-how	L,L&GD
CO2,CO4	Evaluate and justify the selection of uterine contracting agents in different clinical cases by analysing receptor profiles, pharmacologic mechanisms, contraindications, and gestational timing.	2	Practical Training 7.4	CE	Shows-how	CBL,DIS, SIM
CO1,CO3	Justify the classification, clinical application, and safety profile of uterotonics and tocolytics through analysis of pharmacologic actions, therapeutic indications, and adverse effect profiles in different clinical contexts.	2	Practical Training 7.5	CE	Shows-how	CBL,DIS, GBL
CO2,CO7	Evaluate the safety, risks, and timing of drug use during pregnancy and lactation by interpreting FDA Pregnancy & Lactation Labelling Rules, identifying teratogenic agents from clinical histories, and analysing placental drug transfer mechanisms in relation to gestational development.	3	Experiential-Learning 7.3	CE	Does	CBL,PBL ,SIM
CO2,CO3	Assess and justify the clinical use, safety, and fetal-maternal impact of uterine contracting and relaxing agents by analysing their pharmacologic actions, transfer mechanisms, FDA PLLR guidelines, and clinical outcomes.	4	Experiential-Learning 7.4	CAN	Does	PrBL,TP W,TBL
CO3,CO4	Evaluate the effectiveness and clinical appropriateness of oxytocin versus prostaglandin analogues for labour induction based on patient-specific factors.	3	Experiential-Learning 7.5	CE	Does	CD,DIS,P BL

Unit 3 Pharmacology of drugs used in Gynaecology and Obstetrics

Pharmacological principles, mechanism of action, indications, and contraindications, pharmacodynamics, pharmacokinetics and clinical applications of conventional drugs used in Gynecology and Obstetrics.

Pharmacological effects of conventional contraceptive drugs.

References: 13,14,15,17,18,23,24,25,26,27,28

3A	3B	3C	3D	3E	3F	3G
CO1,CO3	Explain the major drug categories used in Stree Roga (e.g., hormonal agents, chemotherapeutics) based on their mechanisms of action. Analyse the Pharmacological Effects of hormonal agents, chemotherapeutics. Analyse potential adverse drug reactions.	1	Lecture	CAN	Knows-how	L,L&PPT
CO1,CO3	Explain drugs used in obstetric emergencies (e.g., MgSO ₄ , oxytocin, antihypertensives) based on their mechanisms of action and clinical indications. Analyse the mode of action.	1	Lecture	CAN	Knows-how	L&GD,L_VC
CO1,CO3	Explain conventional contraceptive drugs (e.g., COCs, POPs, injectables, implants, IUDs) based on their hormonal composition and mechanisms of action. Analyse the mode of action.	1	Lecture	CAN	Knows-how	L,L&GD
CO1,CO3	Analyse the mode of action of gynaecologic drugs (e.g., SERMs vs. aromatase inhibitors). Compare and contrast the pharmacodynamic profiles of different progestins (e.g., medroxyprogesterone vs. levonorgestrel).	3	Practical Training 7.6	CAN	Shows-how	CBL,DIS,SIM
CO1,CO3	Justify the classification, clinical application, and safety profile of uterotonics and tocolytics through analysis of pharmacological actions and adverse effect in different clinical contexts.	3	Practical Training 7.7	CAN	Shows-how	CBL,DIS,SIM
CO1,CO3	Differentiate between Combined Oral Contraceptive Pills (COCPs) and Progestin-Only Pills (POPs/Mini-Pills). Analyse the mode of action.	2	Practical Training 7.8	CAN	Shows-how	DIS,PT
CO3,CO4	Assess and justify the clinical use, safety, and adverse effects of drugs used in Stree Roga.	3	Experiential-Learning 7.6	CE	Knows-how	PL

CO3,CO4	Assess and justify the clinical use, safety, and adverse effects of drugs used in Prasuti Tantra.	3	Experiential-Learning 7.7	CE	Knows-how	PL,TBL
Practical Training Activity						
Practical No	Name	Activity details				
Practical Training 7.1	Kashthaushadhi used in Stree Roga and Prasuti Tantra	Duration: 2 hours Activity: 1.Visit Herbal Garden 2.Demonstration by Teacher: A.Use dry, fresh drug specimens B.Show single herbal drugs / key ingredients of formulations. 3.Identify the Kashta Oushadhis used in different disorders 4.Enlist the properties 5.Group discussion: Analyse the Samprapti Vighatana and mode of action of these drugs in different disorders.				
Practical Training 7.2	Rasaushadhies used in Stree Roga and Prasuti Tantra	Activity-1: Duration 2 hours 1.Visit the Dispensary/Pharmacy 2.Identify the Rasaushadhi used in different disorders 3.Enlist the indications 4.Group discussion: Analyse the Samprapti Vighatana of these formulations in different disorders.				
Practical Training 7.3	Demonstration of Ksheerapaka preparation	Activity 1: 2 hours 1.List the Ksheerapakas used in different disorders. 2. Prepare minimum 4-5 Ksheerapakas used in different disorders. 3. Discuss and analyse the Samprapti Vighatana of these formulations in different disorders. Activity 2: 2 hours 1.Each student will be assigned 3 real case/simulated case/case vignette of different disorders 2.Student is expected to diagnose the case A. Identify the Ksheerapaka that can be used to treat the case. B. Analyse the Samprapti Vighatana and present the case.				
Practical	Uterine Contracting	Duration: 2 hours				

Training 7.4	Agents	<p>Activity:</p> <ol style="list-style-type: none"> 1. Teachers discuss the uterine contracting agents. 2. Students are given real case/clinical case scenarios/ simulated patients. Students are expected to <ol style="list-style-type: none"> A. Analyse the case B. Choose between oxytocin (OTR agonist), methylergonovine (?-agonist), or carboprost (FP agonist) based on receptor profiles. C. Explain mifepristone (PR antagonist) + misoprostol (PGE?) receptor synergy. D. Justify the agent selection and explain the mode of action. E. Enlist the contraindication and justify the contraindication of ergots in hypertensive patients (?-adrenergic vasospasm risk). G. Discuss oxytocin's ineffectiveness in early pregnancy (low OTR expression).
Practical Training 7.5	Pharmacokinetics & Pharmacodynamics in Pregnancy and Lactation.	<p>Duration: 2 hours</p> <p>Activity 1- Classification Card Sort Activity: 1 hour</p> <p>Classify drugs into uterotonics (oxytocic) and uterine relaxants (tocolytics).</p> <ol style="list-style-type: none"> 1. Teacher provides students with drug cards (e.g., Oxytocin, Prostaglandins, Ritodrine, Nifedipine, Magnesium sulphate, NSAIDs, Ergot alkaloids). 2. Students work in groups to sort them into uterotonics and tocolytics. 3. Each group justifies their classification and discusses any ambiguous cases (e.g., NSAIDs can act as tocolytics but are not primary tocolytics). <p>Activity 2- Clinical Case Scenarios & Drug Selection: 1 hour</p> <ol style="list-style-type: none"> 1. Apply knowledge of clinical uses and adverse effects. 2. Students are divided in groups and assigned case vignettes: <p>Case 1: Postpartum haemorrhage ? Choose between oxytocin, ergot alkaloids, or PGF2?.</p> <p>Case 2: Preterm labour ? Compare nifedipine vs. MgSO4 vs. indomethacin.</p> 3. Groups debate the best drug, considering efficacy and side effects (e.g., ergot alkaloids contraindicated in hypertension).
Practical Training 7.6	Mode of action of Gynaecological drugs	<p>Duration: 3 Hours</p> <p>Activity:</p> <ol style="list-style-type: none"> 1. Students are assigned real/simulated/Case vignette of various gynaecological disorders. 2. Analyse the case 3. Students pick the gynaecologic drug the suitable for the case. 4. Analyse the Pharmacodynamics of the drug. 5. Group discussion: <ol style="list-style-type: none"> A. Students sit in group and compare and contrast the pharmacodynamic profiles of different progestins.

		B. Present their findings in groups.
Practical Training 7.7	Mode of action of uterotonics and tocolytics drugs	Duration: 3 hours Activity: 1. Students discuss the classification of uterotonics and tocolytics and their indications. 2. Students are assigned real /simulated/Case vignette of different disorders. 3. Analyse the case 4. Students are expected to choose the appropriate drug and outline the mode of action suitable for the case. 5. analyse the safety profile of these drugs. 6. Discuss the adverse effect in different clinical contexts. 7. Present their findings in group.
Practical Training 7.8	Combined Oral Contraceptive Pills (COCPs) and Progestin-Only Pills (POPs/Mini-Pills)	Duration: 2 hours Activity: 1. Students collect and record the clinical cases of Combined Oral Contraceptive Pills (COCPs) and Progestin-Only Pills. 2. Evaluate the patient outcome and identify the difference in mode of action. 3. Debate on the adverse effects of Combined Oral Contraceptive Pills (COCPs) and Progestin-Only Pills.
Experiential learning Activity		
Experiential learning No	Name	Activity details
Experiential-Learning 7.1	Application of Kashthaushadhi in various disorders	Duration: 5 hours Activity: 1. Students are assigned minimum 10 real case/case vignettes/ simulated cases 2. Students are expected to A. Diagnose the case B. Analyse the Dosha and Dushya involved in the case C. Select the appropriate Kashthaushadhi that can be used in the case. D. Record the case and reflect on the Samprapti Vighatana.
Experiential-	Application of	Duration: 5 hours

Learning 7.2	Rasaushadhies in various disorders	<p>Activity:</p> <ol style="list-style-type: none"> 1. Students are assigned minimum 10 real case/case vignettes/ simulated cases 2. Students are expected to <ol style="list-style-type: none"> A. Diagnose the case B. Analyse the Dosha and Dushya involved in the case C. Select the appropriate Rasaushadhies that can be used in the case. D. Record the case and reflect on the Samprapti Vighatana
Experiential-Learning 7.3	Pregnancy and lactation by interpreting FDA Pregnancy & Lactation Labelling Rules and Teratogenic agents	<p>Duration: 3 hours</p> <p>Activity 1: 1 hour</p> <ol style="list-style-type: none"> 1. Teacher discusses FDA Pregnancy & Lactation Labelling Rule (PLLR). 2. Students are given list of 10 drugs used in labour or lactation 3. Students are expected to <ol style="list-style-type: none"> A. Identify the safety limit of the drug mentioned in FDA Pregnancy & Lactation Labelling Rule (PLLR). B. Assess the potential risks and benefits of drug use in pregnant and lactating individuals, as well as those of reproductive potential. <p>Activity 2: 2 hours</p> <ol style="list-style-type: none"> 1. Students are given real case/case scenarios of children with birth defects. 2. Students are expected to <ol style="list-style-type: none"> A. Identify the teratogen based on the history B. Analyse probable mechanisms of placental drug transfer in case. C. Plot specific teratogens (like thalidomide, ACE inhibitors, alcohol, isotretinoin) on the timeline, indicating the gestational weeks during which exposure is most likely to cause specific developmental abnormalities.
Experiential-Learning 7.4	Uterine contracting and relaxing agents	<p>Duration: 4 hours</p> <p>Activity:</p> <ol style="list-style-type: none"> 1. Students will be given the list of drugs Uterine contracting and relaxing agents. 2. Students pair up as team and are expected to <ol style="list-style-type: none"> A. Categorize the drug and B. Identify the benefits of the drug (search through PLLR and research articles) C. Analyse the mode of action. D. Identify the mechanism of drug transfer through placenta. E. Identify the safety limit of the drugs and its adverse effects.

		<p>F. What is a potential risk to the mother and the fetus.</p> <p>G. Compile the activity.</p> <p>H. Identify the minimum 2 clinical cases for each drug and record the cases with detailed history and map the outcome (benefit/adversely affected) of drug usage.</p>
Experiential-Learning 7.5	Mechanism of action of oxytocin and prostaglandin	<p>Duration: 3 hours</p> <p>Activity:</p> <p>Students are assigned real/case vignette of complex labour scenarios with patient variables (e.g., parity, cervix status, comorbidities)</p> <p>Students are expected to</p> <ol style="list-style-type: none"> 1. Students individually write a brief clinical note recommending an induction method for a given case. 2. Justify choice of induction method based on clinical effectiveness, side effects, and patient-centred considerations. 3. Explain how oxytocin/prostaglandins interact with receptors on uterine smooth muscle cells to initiate uterine contractions. 4. Illustrate the interaction of oxytocin with its receptors on uterine smooth muscle cells and the subsequent initiation of muscle contraction. 5. Explain how the binding of oxytocin or prostaglandin analogues to receptors on uterine smooth muscle leads to changes in uterine contractility during labour. 6. Provide constructive critique and reflect on the differing clinical judgments of different cases of peers.
Experiential-Learning 7.6	Drugs used in Stree Roga	<p>Duration: 3 hours</p> <p>Activity:</p> <ol style="list-style-type: none"> 1. Students will be given the list of drugs used in Gynaecology. 2. Students pair up as team and are expected to <ol style="list-style-type: none"> A. Categorize the drug B. Identify the benefits of the drug (search through research articles) C. Analyse the mode of action. D. Identify the safety limit of the drugs and its adverse effects. E. Discuss the potential risk to the conception. F. Compile the activity. G. Identify the minimum 2 clinical cases for each drug and record the cases with detailed history and map the outcome (benefit/adversely affected) of drug usage.
Experiential-	Clinical applications of	Duration: 3 hours

Learning 7.7	drugs used in Prasuti Tantra.	<p>Activity:</p> <ol style="list-style-type: none"> 1. Students will be given the list of drugs (MGSO4, Oxytocin, Misoprostol, corticosteroids) 2. Students pair up as team and are expected to <ol style="list-style-type: none"> A. Categorize the drug and B. Identify the benefits of the drug (search through research articles) C. Analyse the mode of action. D. Identify the safety limit of the drugs and its adverse effects. E. Discuss the potential risk to the conception. F. Compile the activity. G. Identify the minimum 2 clinical cases for each drug and record the cases with detailed history and map the outcome (benefit/adversely affected) of drug usage.
Modular Assessment		
Assessment method		Hour
<p>Instructions- Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep 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 6 C.</p> <p>Applied Prescription Writing Based on Case Scenarios- 50 marks</p> <p>Structured Assessment in Stations: 50 Marks</p> <ol style="list-style-type: none"> 1. Kashthaushadhi / Rasaushadhi Formulations (20 marks): Analyse 2 case scenarios (real/ case vignette) and select appropriate Kashthaushadhi / Rasaushadhi and justify. Explain the mode of administration, Dose and Anupana. 2. Scheduled drugs/FDA/ (10 marks): Identify the 2 drug and write the safety limit and its maternal and fetal outcome. 3. Mode of action (10 marks): Identify and classify the 2 drug and write the mode of action, indication and dose of the drug. 4. Extended Matching Questions (EMQ) (10 marks): Analyse the given 5 case situation and write the fetal and maternal outcome. <p>Eg: A 8-month antenatal woman was administered tetracycline 500mg. Choose the appropriate outcome:</p> <ol style="list-style-type: none"> 1. Tooth discoloration in baby. 2. Stunted growth. 3. Congenital heart diseases. 4. Ototoxicity. <p>or</p> <p>Justify the indication of drug and write the expected fetal and maternal outcome. what will be the possible solution.</p>		4

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

and
Any of the experiential as portfolio/ reflections / presentations can be taken as assessment. (25 marks)

Module 8 : Vyadhi Vinischaya Upaya- Diagnostic tools and techniques

Module Learning Objectives

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

1. Describe the various diagnostic tools and techniques used in Stree Roga and Prasuti Tantra, including physical examination, laboratory tests, and imaging studies.
2. Describe the indications and contraindications for each diagnostic technique.
3. Describe the normal and abnormal findings for each diagnostic technique.
4. Conduct and interpret laboratory tests and imaging studies used in Stree Roga and Prasuti Tantra.

Unit 1 Diagnostic tools and techniques used in Stree Roga

Laboratory tests, diagnostic procedures and imaging studies used in Stree Roga.

References: 14,16,18

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Discuss the principles of common diagnostic modalities (History taking, Clinical examination, Imaging modalities, Endoscopic techniques, Laboratory diagnostics, Functional and specialized tests) used in Stree Roga . Evaluate the merits and drawbacks of diagnostic modalities and their effects on patient's health.	1	Lecture	CE	Knows-how	DIS,L,L&PPT
CO1,CO2	Enlist and interpret the imaging studies and invasive studies used in Stree roga.	1	Lecture	CAN	Knows-how	LRI,L&PPT ,L_VC
CO1,CO2	Enlist and Interpret Histopathology cytology and laboratory test used in Stree Roga.	1	Lecture	CAN	Knows-how	LRI,L&PPT ,L_VC

CO3,CO4	Enlist and Interpret Histopathology cytology and laboratory test used in Stree Roga.	4	Practical Training 8.1	CE	Shows-how	DL,LRI,SDL
CO3,CO4,CO5	Enlist and interpret Genetic and Molecular Diagnostics in Stree Roga.	2	Practical Training 8.2	CAN	Shows-how	DIS,LRI
CO3,CO4,CO5	Demonstrate Cytology sample collection and Biopsy procedures used in Stree roga.	2	Practical Training 8.3	PSY-GUD	Shows-how	D,PT
CO3,CO4,CO5	Evaluate blood and urine investigations in Stree Roga.	1	Practical Training 8.4	CE	Shows-how	D,LRI
CO3,CO4,CO5	Evaluate and interpret the reports of imaging and invasive studies in Stree Roga.	3	Experiential-Learning 8.1	CE	Knows-how	DIS,LRI,TBL
CO4,CO5	Evaluate and interpret Genetic and Molecular Diagnostics report in Stree Roga	2	Experiential-Learning 8.2	CE	Knows-how	CBL,DIS,LRI
CO4,CO5	Assist in Cytology sample collection and Biopsy procedures used in Stree Roga.	2	Experiential-Learning 8.3	PSY-ADT	Shows-how	RLE
CO4,CO5	Perform blood and urine investigations in Stree Roga and analyse the reports.	1	Experiential-Learning 8.4	PSY-ADT	Does	LRI,RLE

Unit 2 Diagnostic tools and techniques used in Prasuti Tantra.

Diagnostic tools and techniques, laboratory tests, diagnostic procedures and imaging studies used in Prasuti Tantra.

References: 14,17,18,23,24,26,27

3A	3B	3C	3D	3E	3F	3G
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CO1,CO2	Explain diagnostic techniques including imaging studies and laboratory tests used in Prasuti Tantra . Analyse their importance in clinical diagnosis.	1	Lecture	CAN	Knows-how	LRI,L&PPT ,L_VC
CO1,CO2	Explain the principles and types of ultrasounds. Analyse the clinical significance of First trimester ultrasound, Second trimester ultrasound, Third trimester ultrasound and Doppler ultrasound.	1	Lecture	CAN	Knows-how	LRI,L&GD,L&PPT
CO1,CO2,CO3	Explain the principles, indications, safety, complications and contribution of Magnetic Resonance Images (MRI), Computed Tomography (CT) and Amniocentesis in Prasuti Tantra. Analyse the clinical significance.	1	Lecture	CAN	Knows-how	LRI,L,L&PPT ,L_VC
CO1,CO2,CO3	Analyse and explain the Laboratory Baseline and Routine Investigations, First Trimester, Second Trimester, Third Trimester Specific Tests and Advanced Clinical Tests and examinations in Prasuti Tantra.	2	Lecture	CAN	Knows-how	LRI,L,L&PPT ,PER
CO3,CO4,CO5	Demonstrate Trimester-Specific applications of Ultrasound and Advanced techniques in Prasuti Tantra. Enumerate the legal and ethical considerations in obstetric ultrasonography under the PCPNDT Act.	2	Practical Training 8.5	PSY-GUD	Knows-how	D,LRI,PT
CO4,CO5	Demonstrate diagnosis, evaluation of abnormalities, techniques of MRI with its complications and challenges in acquiring and interpreting MRI. Identifying normal and abnormal findings of CT image.	2	Practical Training 8.6	CE	Knows-how	D,DIS,LRI,RP
CO4,CO5	Evaluate blood investigations in Prasuti Tantra.	1	Practical Training 8.7	PSY-GUD	Shows-how	D,LRI
CO3,CO4,CO5	Analyse Trimester-Specific Ultrasound and Advanced techniques with their clinical interpretation in Prasuti Tantra. Explain the legal and ethical considerations in obstetric ultrasonography under the PCPNDT Act.	5	Experiential-Learning 8.5	CAN	Knows-how	LRI,SDL
CO3,CO4,CO5	Interpret MRI and CT reports and analyse the protocols of these procedures in Prasuti	3	Experiential-	CE	Knows-	LRI

	Tantra.		Learning 8.6		how	
CO3,CO4,CO5	Perform venepuncture and interpret the blood investigation report.	4	Experiential-Learning 8.7	PSY-ADT	Does	RLE

Unit 3 Intrapartum Fetal and Maternal monitoring techniques

Intrapartum Fetal and Maternal monitoring techniques.

References: 17,24,26,27,28

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Define Electronic Fetal Monitoring and explain its components, principles, types, monitoring parameters and purpose in intrapartum fetal monitoring.	1	Lecture	CC	Know	LRI,L&P PT ,L_VC
CO1,CO2,CO3	Analyse normal and abnormal FHR patterns during labour, including baseline rate, variability, accelerations and decelerations. Illustrate the significance of FHR patterns in assessing fetal well-being during labour.	1	Lecture	CAN	Knows-how	LRI,L&G D,L&PPT ,L_VC
CO2,CO4,CO5	Demonstrate normal and abnormal patterns of FHR tracings and identify significant changes in accelerations, decelerations, and variability of FHR patterns during labour.	1	Practical Training 8.8	PSY-GUD	Shows-how	D-BED,D-M
CO2,CO4	Demonstrate Non-Stress Test (NST) and Contraction Stress Test (CST). Interpret the test report and analyse the fetal wellbeing.	1	Practical Training 8.9	PSY-GUD	Shows-how	D,PT
CO2,CO4	Demonstrate and analyse fetal monitoring using fetal scalp electrode and tocodynamometer.	4	Practical Training 8.10	PSY-GUD	Shows-how	D,D-M,PT
CO4,CO5	Perform fetal heart rate monitoring and application of CTG machine with interpretation of its graphical findings.	2	Experiential-Learning 8.8	PSY-ADT	Does	RLE
CO4,CO5	Perform Non-Stress Test (NST) and Contraction Stress Test (CST) and analyse their reports for decision making and management of fetal well-being.	2	Experiential-Learning 8.9	PSY-ADT	Does	RLE,SIM

CO1,CO2,CO4	Interpret Ultrasound biophysical profile (BPP) scores and assessment for fetal well-being.	2	Experiential-Learning 8.10	CE	Does	DIS,LRI, PL,SIM
Practical Training Activity						
Practical No	Name	Activity details				
Practical Training 8.1	Interpretation of imaging studies and invasive investigations used in Stree Roga.	Activity: 4 hours 1. Students pair up in group and are assigned different investigations reports (Transabdominal Ultrasound (TAS), Transvaginal Ultrasound (TVUS), Saline Infusion Sono hystero-graphy (SIS), 3D/4D Ultrasound, Doppler Ultrasound, X – Ray, HSG, Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Sono-mammography, Laparoscopy, Hysteroscopy, Colposcopy). 2. Discuss on normal and abnormal findings and corelate with history, clinical symptoms and diagnosis of various gynaecological diseases. 3. Record the findings.				
Practical Training 8.2	Genetic and Molecular Diagnostics	Activity: 2 hours 1. Students pair up in group and are assigned different investigations reports (Cervical Cytology (Pap Smear), HPV DNA Testing, Vaginal and Cervical Cultures, Hormonal Assays and Tumour Markers.) 2. Discuss on normal and abnormal findings and corelate with history, clinical symptoms and diagnosis of various gynaecological diseases. 3. Record the findings.				
Practical Training 8.3	Cytology sample collection and Biopsy procedures	Activity: 2 hours 1. Teacher will demonstrate the Cytology sample collection and Biopsy procedures(Endometrial Biopsy, Cervical Punch Biopsy, Vulvar and Vaginal Biopsy) on real patient/models. 2. Students under the guidance of teacher demonstrate <ol style="list-style-type: none"> A. Counsell the patient on the procedure and take the consent B. Patient preparation C. Collect the sample with aseptic measures. D. Discuss the report and record the case. 				
Practical	Blood and Urine	Activity: 1 hour				

Training 8.4	investigations	<ol style="list-style-type: none"> 1. Teacher will discuss Blood and Urine investigation done in Stree Roga 2. Students attend the examination and analyse the indications for blood investigations. 3. Student is expected to practice venipuncture and collect urine sample from real patients. 4. Students will analyse and interpret the reports of normal and abnormal blood tests and correlate with sign and symptoms of diseases of Stree Roga.
Practical Training 8.5	Trimester-Specific applications of Ultrasound and Advanced techniques in Prasuti Tantra.	<p>Activity-1: 1 hour Teacher/ Radiologist will demonstrate/display the Trimester-Specific applications of Ultrasound and Advanced techniques in Obstetrics.</p> <p>Activity-2: 1 hour Student is expected to demonstrate the correct probe handling and machine setup.</p> <p>Record</p> <ol style="list-style-type: none"> 1. First-trimester viability scan on real patient. 2. Assess the measurement of fetal biometry (BPD, HC, AC, FL). 3. Analyse and evaluate amniotic fluid and placenta. 4. Interpretation of Doppler waveforms. 5. Present the Case study with ultrasound images 6. Enumerate the points of documentation and report writing based on ultrasound findings. 7. Discuss legal and ethical considerations in obstetric ultrasonography under the PCPNDT Act.
Practical Training 8.6	MRI and CT scans in Prasuti Tantra.	<p>Activity-1: 1 hour 1. Teacher/ Radiologist will demonstrate safety parameters, diagnosis, normal and abnormal findings, indications, contraindications and fetal complications of MRI in obstetrics.</p> <p>Activity-2: 1 hour Students will observe and discuss</p> <ol style="list-style-type: none"> 1. Diagnostic parameters of placenta accreta spectrum (PAS) and evaluation of CNS abnormalities in the fetus. 2. Interpret CT images of a pregnant patient with suspected bowel obstruction or trauma and suspected appendicitis. 3. Differentiate between normal and pathological findings in CT imaging during pregnancy. 4. Simulate a multidisciplinary decision-making session involving CT imaging findings. 5. Role play communication of CT procedure to a pregnant patient. 6. Discuss medico-legal and ethical considerations in using MRI and CT in pregnant patients. 7. Identify the parameters to minimize radiation dose and interpretation of its report.

Practical Training 8.7	Laboratory Baseline and Routine Investigations, Specific and Advanced Clinical Tests in Prasuti Tantra.	Activity: 1 hour 1. Teacher will discuss First Trimester, Second Trimester, Third Trimester Specific and Advanced Clinical Tests with their clinical significance. 2. Student is expected to practice venipuncture and blood collection techniques on real patients/ simulators or models. 3. Students will analyse and interpret the reports of normal and abnormal blood tests and correlate with sign and symptoms of pregnancy associated diseases.
Practical Training 8.8	Normal and abnormal patterns of FHR tracings during labour	Activity: 1 hour 1. Teacher will demonstrate electronic fetal monitoring and diagnostic techniques and functions of electronic fetal monitoring equipments (E.g. Cardiotocography machine, scalp electrodes). 2. Students demonstrate recording FHR on Cardiotocography machine on real/simulated patient or manikin. 3. Recognizing normal and abnormal patterns. Identify accelerations, decelerations, and variability of FHR patterns during labour.
Practical Training 8.9	Non-Stress Test (NST) and Contraction Stress Test (CST)	Activity: 1 hour 1. Teacher will demonstrate Non-Stress Test (NST) and Contraction Stress Test (CST) and discuss their interpretation. 2. Students demonstrate Non-Stress Test (NST) and Contraction Stress Test (CST) including patient preparation, equipment setup and interpreting fetal heart rate (FHR) tracings during the procedure on real/simulated patients/ Manikin stimulator.
Practical Training 8.10	Fetal Heart Rate Monitoring techniques and Application of FHR monitoring equipments	Activity-1: 2 hours 1. Teacher will demonstrate the fetal monitoring on real patients/stimulator using fetal scalp electrode and tocodynamometer. Activity-2: 2 hours 1. Students are expected to demonstrate fetal monitoring using fetal scalp electrode and tocodynamometer on real patients/stimulator. 2. Differentiate normal and abnormal findings and discuss expected fetal outcome.

Experiential learning Activity

Experiential learning No	Name	Activity details
Experiential-Learning 8.1	Imaging and Invasive studies in Stree Roga	Activity: 3 hours 1. Students collect reports of Ultrasound images, X-Ray, HSG, MRI, CT, Sono mammography and Endoscopic (Laparoscopy, Hysteroscopy) and Colposcopy (ONE EACH) done in diseases of Stree Roga. 2. Discuss and interpret the reports and record the findings.

		<p>3. Analyse the indication for investigation</p> <p>4. Reflect on the safety issues and adverse effects and usefulness in diagnosis</p>
Experiential-Learning 8.2	Genetic and Molecular Diagnostics	<p>Activity: 2 hours</p> <p>1. Students collect reports of Genetic and Molecular Diagnostics report (minimum 2 each)</p> <p>2. Discuss and interpret the reports and record the findings.</p> <p>3. Analyse the indication for investigation</p> <p>4. Reflect on the safety issues and adverse effects and usefulness in diagnosis</p>
Experiential-Learning 8.3	Cytology sample collection and Biopsy procedures	<p>Activity: 2 hours</p> <p>1. Students assist in Cytology sample collection and Biopsy procedures (minimum 2 each)</p> <p>2. Students reflect on challenges encountered during the collection.</p> <p>3. Record and interpret the normal and abnormal findings.</p> <p>4. Reflect on the indications of the investigation and its importance in the diagnosis.</p>
Experiential-Learning 8.4	Blood and Urine Investigations in Stree Roga	<p>Activity: 1 hour</p> <p>1. Examine the cases and collect minimum 5 each Blood and Urine Investigations advised in different cases of Stree Roga</p> <p>2. Discuss the indication for investigation</p> <p>3. Record and interpret the report</p> <p>4. Reflect on the challenges faced during collection and its importance in diagnosis</p>
Experiential-Learning 8.5	Trimester-Specific applications of Ultrasound and Advanced techniques with legal and ethical considerations in Prasuti Tantra.	<p>Activity: 5 hours</p> <p>1. Student collects minimum 5 USG reports of each trimester.</p> <p>2. Evaluate Growth Parameter of fetus, BPD, HC, AC, FL.</p> <p>3. Reflect and record the report .</p> <p>4. Differentiate normal and abnormal parameter and reflect on the expected fetal outcome.</p> <p>5. Debate on the legal and ethical considerations in obstetric ultrasonography under the PCPNDT Act and reflect on the cases reported on the act from news reports/legal records.</p>
Experiential-Learning 8.6	MRI and CT interpretation and protocols in pregnancy	<p>Activity: 3 hours</p> <p>1. Collect minimum 3 MRI and CT each done in pregnant women.</p> <p>2. Analyse the indications in those cases.</p> <p>3. Discuss on the safety issues.</p> <p>4. Interpret the report.</p>

		5.Record and reflect the case.
Experiential-Learning 8.7	Blood investigations in Prasuti Tantra	Activity: 4 hours 1.Attend the examination of antenatal patients. 2.Perform venepuncture and collect it in appropriate container (minimum 10 patients). 3.Analyse the indications of venepuncture. 4.Record and reflect on the investigation report and the expected fetal outcome.
Experiential-Learning 8.8	Fetal Heart Rate Monitoring and application of CTG machine.	Activity: 2 hours 1.Perform Fetal Heart Rate Monitoring and application of CTG machine on real pregnant woman/ simulator/ model on minimum 5 patients. 2.Interpret the normal and abnormal CTG graphical findings with clinical significance. 3.Identify the CTG machine errors due to its incorrect application. 4.Reflect normal and abnormal patterns of FHR and assessment criteria of fetal well-being.
Experiential-Learning 8.9	Non-Stress Test (NST) and Contraction Stress Test (CST)	Activity: 2 hours 1.Perform Non-Stress Test (NST) and Contraction Stress Test (CST) real pregnant woman/ simulator/ model on minimum 5 patients. 2.Interpret the normal and abnormal NST and CST report. 3.Identify machine errors due to its incorrect application. 4.Reflect normal and abnormal patterns of the report and fetal well-being.
Experiential-Learning 8.10	Ultrasound BPP scoring	Activity:2 hours 1.Studets collect minimum 5 USG report for antenatal women of third trimester. 2.Interpret the report and differentiate normal and abnormal findings fetal movement, tone, breathing, and amniotic fluid volume. 3.Reflect on effect of BPP scoring on fetal well-being. 4.Record the case.

Modular Assessment

Assessment method

Assessment will be for 50 marks. Keep structured marking pattern. Use different assessment methods in each module for the semester. Keep record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C.

Hour

4

Structured Assessment in Stations: 50 Marks

1. Demonstration (30 marks): Perform two among Pap smear/ HPV DNA testing/ Vaginal swab culture/ fetal monitoring/ NST/ CST/Endometrial biopsy/cervical punch biopsy.

2. Diagnostic interpretation (20 marks): Interpret 4 report of USG/doppler/MRI /CT/ Sonomamograpgy/ genetical and molecular diagnostics, hormonal assay, tumor markers,

or

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

and

Any of the experiential as portfolio/ reflections /presentations can be taken as assessment(25 Marks)

Table 4 : Practical Training Activity

Practical No	Practical name	Hours
1.1	Stree Shroni - Female pelvis	6
1.2	Upastha, Trayavarta yoni and Janmajata Stree Janananga Vikruti	8
1.3	Surgical anatomy of Basti- Urinary bladder, Mutravaha nalika-ureter and demonstration of urethral catheterisation	2
1.4	Pathways of major pelvic nerves	2
1.5	Vascular supply of female genitalia	2
2.1	Physical and Hormonal Assessment of Pubertal Development in Adolescents.	2
2.2	Pubertal Variants	2
2.3	Puberty Menorrhagia	2
2.4	Hormonal and neuroendocrine changes in relation to menstrual physiology.	2
2.5	Menstrual history taking.	1
2.6	Clinical Interpretation of Hormonal Profiles in Menstrual and Ovarian Cycle Disorders.	2
2.7	Menstrual Health and Hygiene.	2
2.8	Menstrual Hygiene Products.	2
2.9	Assessment and Management of Pre-Menopausal Transition (Rajo-Nivrutti Poorva Avastha).	1
2.10	Evaluation of Vasomotor Symptoms and Menopausal Diagnostic Techniques.	2

2.11	Shuddha Artava and Shuddha Shukra	2
3.1	Semen Analysis	2
3.2	Folliculometry	2
3.3	Preconceptional Care	4
3.4	Beeja Shuddhi	2
3.5	Suprajanankarma	3
3.6	Ritukalaja aharakalpana vidhi	3
3.7	Morphology and Organogenesis of embryological development.	2
3.8	Examination of Garbha Masanumasika Vriddhi	2
4.1	Structural examination of Apara-Placenta.	3
4.2	Apara Vikruti- Abnormalities of placenta.	3
4.3	Garbhanabhinadi - Examination of umbilical cord	2
4.4	Umbilical cord abnormalities	2
4.5	Formation and composition of Garbhodaka - Amniotic fluid	3
4.6	Amniotic fluid abnormalities	3
4.7	Applied aspects of Garbhaposhana - Fetal Nourishment	4
5.1	Purvakarma (pre-operative care) and Pashchat karma (post-operative care) in Ashtavidhakarma	4
5.2	Ashtavidha Shastra karma and Ropana karma	4
5.3	Seevana dravyas (suturing materials) and Seevana vidhi (suturing techniques/ methods).	4
5.4	Application of Yantras (Blunt instruments)	3

5.5	Application of Shastra (Sharp instruments)	3
5.6	Upayantra and Anushastra (accessory instruments)	2
6.1	Sthanik Upakrama- I	2
6.2	Sthanik Upakrama Part-II	2
6.3	Agnikarma	2
6.4	Ksharakarma	2
6.5	Vamana Karma	2
6.6	Nasya Karma	2
6.7	Virechana Karma	2
6.8	Uttara Basti	1
6.9	Basti Karma	3
6.10	Raktamokshana	2
7.1	Kashthaushadhi used in Stree Roga and Prasuti Tantra	2
7.2	Rasaushadhies used in Stree Roga and Prasuti Tantra	2
7.3	Demonstration of Ksheerapaka preparation	4
7.4	Uterine Contracting Agents	2
7.5	Pharmacokinetics & Pharmacodynamics in Pregnancy and Lactation.	2
7.6	Mode of action of Gynaecological drugs	3
7.7	Mode of action of uterotonics and tocolytics drugs	3
7.8	Combined Oral Contraceptive Pills (COCPs) and Progestin-Only Pills (POPs/Mini-Pills)	2

8.1	Interpretation of imaging studies and invasive investigations used in Stree Roga.	4
8.2	Genetic and Molecular Diagnostics	2
8.3	Cytology sample collection and Biopsy procedures	2
8.4	Blood and Urine investigations	1
8.5	Trimester-Specific applications of Ultrasound and Advanced techniques in Prasuti Tantra.	2
8.6	MRI and CT scans in Prasuti Tantra.	2
8.7	Laboratory Baseline and Routine Investigations, Specific and Advanced Clinical Tests in Prasuti Tantra.	1
8.8	Normal and abnormal patterns of FHR tracings during labour	1
8.9	Non-Stress Test (NST) and Contraction Stress Test (CST)	1
8.10	Fetal Heart Rate Monitoring techniques and Application of FHR monitoring equipments	4

Table 5 : Experiential learning Activity

Experiential learning No	Experiential name	Hours
1.1	Identification of pelvic types and assessment of diameters	6
1.2	Applied anatomy and congenital anomalies of female genitalia	6
1.3	Urethral Catheterization	4
1.4	Pathways of major pelvic nerves and anatomical site of pudendal block anaesthesia	4
1.5	Vascular anatomy of female genitalia	6
2.1	Early and delayed Puberty.	4
2.2	Histological features and hormonal levels in different phases of menstrual cycle.	2
2.3	Counseling on Artava Lakshana (Menstrual Symptoms) and Menstrual Health	2
2.4	Recognizing symptoms of Menopause	2
2.5	Hormonal Assessment and Vaginal Cytology in Menopause.	4
2.6	Integrative Practices for Preventing Menopausal Syndrome	4
2.7	Analysis of Ritu Chakra.	4
2.8	Shuddha Artava and Shuddha Shukra Lakshana.	4
3.1	Semen Analysis	4
3.2	Folliculometry	4
3.3	Education on Shudhha Artava Lakshana	3
3.4	Preconceptional Health Care	3
3.5	Suprajanankarma	3

3.6	Ritukalaja Ahara Kalpana Vidhi.	3
3.7	Assessment of Garbha Masanumasika Vriddhi (monthly development of fetus)	3
3.8	Garbha vikruti - Fetal developmental abnormalities.	3
4.1	Apara Parikshana - Placental Examination	4
4.2	Apara vikruti - placental abnormalities effect on maternal and fetal outcomes.	4
4.3	Umbilical cord examination.	4
4.4	Formation and composition of amniotic fluid.	4
4.5	Abnormalities of Garbhodaka - Amniotic fluid	6
4.6	Assessment of fetal circulatory parameters.	4
5.1	Ashtavidha shastrakarma-I	4
5.2	Ashtavidha Shastra Karma -II	3
5.3	Seevana karma	3
5.4	Seevana karma vidhi and Seevana dravyas	4
5.5	Yantra (Blunt instruments) in different procedures.	4
5.6	Shastra (Sharp instruments) in different procedures.	4
5.7	Upayantra and Anushastra (accessary instruments) in different procedures.	4
6.1	Sthanika Upakrama-I	3
6.2	Sthanika Upakrama Part-II	3
6.3	Agnikarma	2

6.4	Ksharakarma	2
6.5	Vamana Karma.	3
6.6	Basti Karma	3
6.7	Uttara Basti	3
6.8	Virechana Karma	3
6.9	Nasya Karma	2
6.10	Raktamokshana	2
7.1	Application of Kashthaushadhi in various disorders	5
7.2	Application of Rasaushadhies in various disorders	5
7.3	Pregnancy and lactation by interpreting FDA Pregnancy & Lactation Labelling Rules and Teratogenic agents	3
7.4	Uterine contracting and relaxing agents	4
7.5	Mechanism of action of oxytocin and prostaglandin	3
7.6	Drugs used in Stree Roga	3
7.7	Clinical applications of drugs used in Prasuti Tantra.	3
8.1	Imaging and Invasive studies in Stree Roga	3
8.2	Genetic and Molecular Diagnostics	2
8.3	Cytology sample collection and Biopsy procedures	2
8.4	Blood and Urine Investigations in Stree Roga	1
8.5	Trimester-Specific applications of Ultrasound and Advanced techniques with legal and ethical considerations in Prasuti Tantra.	5
8.6	MRI and CT interpretation and protocols in pregnancy	3

8.7	Blood investigations in Prasuti Tantra	4
8.8	Fetal Heart Rate Monitoring and application of CTG machine.	2
8.9	Non-Stress Test (NST) and Contraction Stress Test (CST)	2
8.10	Ultrasound BPP scoring	2

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-AB-SRPT	1	100	200	300

6 B : Scheme of Assessment (Formative and Summative Assessment)**Credit frame work**

AYPG-AB-SRPT consists of 8 modules totaling 16 credits, which correspond to 480 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 II.

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)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP = $d \times \frac{f}{c \times e} \times 100$
M1. Stree Vishishta Shareera Rachana (Applied anatomy of female genito-urinary system)	2	60		50		
M2. Yauvana avastha (Puberty), Kishora avastha (Adolescence) and Rajonivrutti (Menopause). Concept of Artava and Shukra	2	60		50		
M3. Fundamentals of Garbhadhana (Conception)	2	60		50		
M4. Apra, Garbha Nabhinadi, Garbhodaka, Garbhaposhana	2	60		50		
M5. Ashtavidha Shastra Karma, Yantra & Shastra	2	60		50		
M6. Sthanika Upakrama (Local therapies)	2	60		50		
M7. Kashthaushadhi evam Rasaushadhi- Commonly used drugs and formulations of Stree Roga (Gynaecology) and Prasuti Tantra	2	60		50		

(Obstetrics)						
M8. Vyadhi Vinischaya Upaya- Diagnostic tools and techniques	2	60		50		
$\text{MGP} = \frac{(\text{Number of Notional learning hours attended in a module}) \times (\text{Marks obtained in the modular assessment})}{(\text{Total number of Notional learning hours in the module}) \times (\text{Maximum marks of the module})} \times 100$						

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

A S.No	B Module number and Name	C MGP
1	M1.Stree Vishishta Shareera Rachana (Applied anatomy of female genito-urinary system)	C1
2	M2.Yauvana avastha (Puberty), Kishora avastha (Adolescence) and Rajonivrutti (Menopause). Concept of Artava and Shukra	C2
3	M3.Fundamentals of Garbhadhana (Conception)	C3
4	M4.Apara, Garbha Nabhinadi, Garbhodaka, Garbhaposhana	C4
5	M5.Ashtavidha Shastra Karma, Yantra & Shastra	C5
6	M6.Sthanika Upakrama (Local therapies)	C6
7	M7.Kashthaushadhi evam Rasaushadhi-Commonly used drugs and formulations of Stree Roga (Gynaecology) and Prasuti Tantra (Obstetrics)	C7
8	M8.Vyadhi Vinischaya Upaya- Diagnostic tools and techniques	C8
	Semester Grade point Average (SGPA)	$(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$

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-AB-SRPT
Sem II

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
(M-1)Stree Vishishta Shareera Rachana (Applied anatomy of female genito-urinary system) (Marks: Range 5-15)				
1	(U-1) Stree Shroni Rachana- Female Pelvic Anatomy	Yes	Yes	Yes
2	(U-2) Stree Yoni Samrachana-Female Reproductive System	Yes	Yes	Yes
3	(U-3) Stree Mutravaha Srotas- Female Urinary System	Yes	Yes	Yes
4	(U-4) Neuroanatomy of Artavavaha Srotas	Yes	Yes	Yes
5	(U-5) Vascular Anatomy of Stree janananga – Female Reproductive System	Yes	Yes	Yes
(M-2)Yauvana avastha (Puberty), Kishora avastha (Adolescence) and Rajonivrutti (Menopause). Concept of Artava and Shukra (Marks: Range 5-20)				
1	(U-1) Yauvanavastha (Puberty) and Kishoravastha (Adolescence)	Yes	Yes	Yes
2	(U-2) Artava Chakra, Rajaswala Charya	Yes	Yes	Yes
3	(U-3) Rajo-Nivrutti-Menopause	Yes	Yes	Yes
4	(U-4) Artava and Shukra	Yes	Yes	Yes
(M-3)Fundamentals of Garbhadhana (Conception) (Marks: Range 5-20)				
1	(U-1) Concept of Garbhadhana (Process of Conception)	Yes	Yes	Yes
2	(U-2) Concept of Garbha (Zygote / Embryo/Fetus)	Yes	Yes	Yes
3	(U-3) Suprajanankarma (Epigenetics - Obtaining Healthy Progeny synonym Pusavanana).	Yes	Yes	Yes
(M-4)Apara, Garbha Nabhinadi, Garbhodaka, Garbhaposhana (Marks: Range 5-20)				
1	(U-1) Apra - Placenta	Yes	Yes	Yes
2	(U-2) Garbha Nabhinadi - Umbilical cord	Yes	Yes	Yes
3	(U-3) Garbhodaka - Amniotic fluid	Yes	Yes	Yes
4	(U-4) Garbhaposhana - Fetal nourishment	Yes	Yes	Yes
(M-5)Ashtavidha Shastra Karma, Yantra & Shastra (Marks: Range 5-10)				
1	(U-1) Ashtavidha Shastra Karma	No	No	Yes
2	(U-2) Seevana vidhi (Suturing procedure)	No	No	Yes
3	(U-3) Yantra and Shastra	No	No	Yes
(M-6)Sthanika Upakrama (Local therapies) (Marks: Range 5-20)				
1	(U-1) Sthanika Upakrama (special local treatment modalities)	Yes	Yes	Yes

2	(U-2) Agnikarma and Ksharakarma.	Yes	Yes	Yes
3	(U-3) Panchakarma in Streeroga and Prasutitantra.	Yes	Yes	Yes
(M-7)Kashthaushadhi evam Rasaushadhi-Commonly used drugs and formulations of Stree Roga (Gynaecology) and Prasuti Tantra (Obstetrics) (Marks: Range 5-10)				
1	(U-1) Kashtha Aushadhi evam Rasa Aushadhi	No	No	Yes
2	(U-2) Pharmacology of Female Reproductive System	No	No	Yes
3	(U-3) Pharmacology of drugs used in Gynaecology and Obstetrics	No	No	Yes
(M-8)Vyadhi Vinischaya Upaya- Diagnostic tools and techniques (Marks: Range 5-20)				
1	(U-1) Diagnostic tools and techniques used in Stree Roga	Yes	Yes	Yes
2	(U-2) Diagnostic tools and techniques used in Prasuti Tantra.	Yes	Yes	Yes
3	(U-3) Intrapartum Fetal and Maternal monitoring techniques	Yes	Yes	Yes

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

1. 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. Use the Blueprint provided in 6G or similar Blueprint created based on instructions 1 to 7

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	Long Case Evaluation Components to be assessed are as follows: 1. History taking- Elicits relevant history (15 marks) 2. Physical examination and Provisional Diagnosis- Ashtasthana Pariksha, Dashvidha Pariksha, General and Systemic Examination and Local Examination. (25 marks) 3. Choosing appropriate diagnostic tool/interpret the report: Makes logical correlations. (10 marks) 4. Choose appropriate Shodhana and Stanika Upakrama with justification. (30 marks)	80
2	Short Case/Procedure based evaluation A) Case-Based Assessment - 20 marks Different Case Scenarios (5 X 4 marks) B) Procedure- 20 marks Perform on a patient or simulated patient. Real-time observation by faculty assessor. C) Spotters: 20 marks 5 Instruments (Obstetrics and Gynaecology) 2 Lab Report/ Radiological Images 5 Dry/Fresh Herbo-Mineral Drugs	60
3	Viva (2 examiners: 20 marks/each examiner)	40
4	Logbook (Activity record)/Portfolio	10
5	Practical/Clinical Record	10

- 1.Ritumati Charya Case -5 cases
- 2.Garbadana Case- 5 cases
- 3.Rajonivrutti Charya Case- 5 cases
- 4.Taruna Avastha/Kishora Avastha Case- 5 cases

Total Marks

200

Reference Books/ Resources



14_Stree_Rog

[Click here to access References and Resources](#)

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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