Curriculum for MD/MS Ayurveda
(PRESCRIBED BY NCISM)

अभ्यासात्प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी।

Semester III-VI
Kaumarabhritya
(Pediatrics)
(SUBJECT CODE : AYPG-KB)

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

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PREFACE

Kaumarabhritya, the specialized branch of Ayurveda dedicated to pediatric care, holds a unique and vital role in promoting health from conception through adolescence. Grounded in the holistic vision of Ayurveda, it addresses not only the treatment of childhood diseases but also the comprehensive nurturing of a child's physical, mental, and spiritual well-being. The postgraduate program in Kaumarabhritya is designed to impart in-depth theoretical knowledge alongside rigorous clinical training. It equips future practitioners with the ability to manage neonatal to adolescent health issues through Ayurvedic principles while sensitively integrating insights from modern pediatrics.

This curriculum adopts an innovative and progressive learning framework that moves beyond traditional didactic methods. It emphasizes clinical immersion, critical thinking, and real-world application from the early semesters. Learners are trained in detailed history-taking, examination of neonates and children, developmental assessments, and Dosha-based diagnosis. Emphasis is placed on understanding Garbhini Paricharya, Sutika Paricharya, and Balopachara with contextual relevance. Through simulation-based learning, case discussions, interdisciplinary sessions, and exposure to fieldwork, the learning process becomes dynamic and experiential, preparing scholars for complex pediatric care with confidence and clarity.

This revised syllabus is a result of collaborative academic insight and practical vision. It encourages young scholars to not only uphold Ayurvedic principles but also develop empathy, ethical understanding, and communication skills essential for working with children and families. It is expected that postgraduates will evolve into proficient Ayurvedic pediatricians, capable of clinical excellence, research contribution, and community service. This curriculum aspires to empower students with the tools to innovate, lead, and advocate for child health through Ayurveda in both national and global contexts.

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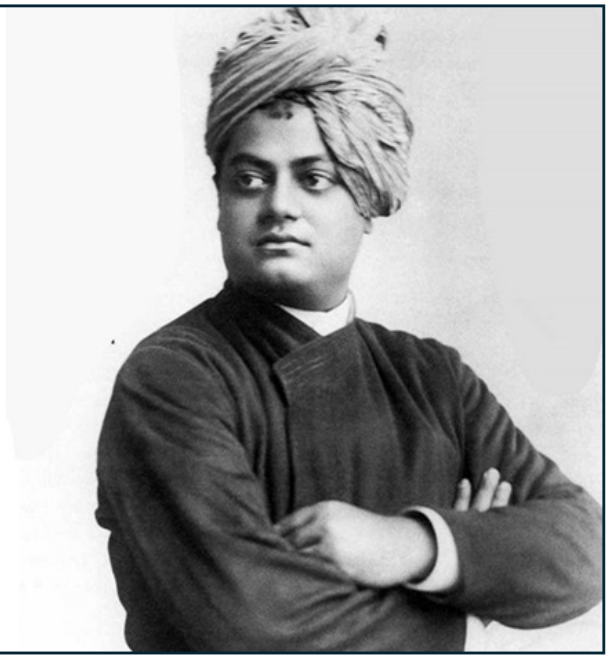
We want that education by which **character** is formed, **strength of mind** is increased, the **intellect** is expanded, and by which one can **stand on one's own feet.**

-Swami Vivekananda



NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Curriculum MD/ MS Ayurveda

Kaumarabhritya (AYPG-KB)

Summary & Credit Framework

Semester III-VI

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
Semester No : 3			
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))			
M1 Purushotpatti, Sahaja and Sanchari Roga Pariharopaya (Genetic Counselling)	2	60	50
M2 Prakriti Anusaarena Aushadhi (Pharmacogenetics)	2	60	50
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))			
M9 Navajata Parikshana, Paricharya and Poshana [Examination, Care, Management and Feeding of neonate (Normal/Sick)]	2	60	50
M10 Samaya Purva-Paschat (Newborn -Preterm/Full Term/Post Term), Alpabhara Jatamatra-(SGA/AGA/LGA)Navajata Paricharya. Assessment of Normal and Sick Neonate)	2	60	50
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))			
M17 Pranavaha Srotovikara (Respiratory disorders)	2	60	50
M18 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders)	2	60	50
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))			
M25 Pediatric developmental disabilities.	2	60	50
M26 Manovaha Sroto Vikaras, Psychiatric and Behavioral Disorders-I	2	60	50
Total	**16**	**480**	**400**
Semester No : 4			

Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))			
M3 Anuvamshkiya Vigyana	2	60	50
M4 Clinical application of Beeja Vigyana.	2	60	50
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))			
M11 Prasava Kalina Abhighata/Vyadhi (Birth Injuries)	1	30	25
M12 Sahaja Vyadhi and Anna Purisha Meda Asthi Majja Vaha Srotas Vikruti (Birth Injuries, Congenital anomalies and Diseases of The G.I. Tract, Musculo-Skeletal and Central Nervous System)	3	90	75
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))			
M19 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system)	2	60	50
M20 Vata Rogas, Mastishka Vyadhis (Neurological disorders)	2	60	50
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))			
M27 Manovaha Sroto Vikaras, Psychiatric and behavioral Disorders-II	2	60	50
M28 Vriddhi Vipratipatti - Learning and Developmental Disorders	2	60	50
Total	**16**	**480**	**400**
Semester No : 5			
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))			
M5 Garbhanirmana, Ashta Prakritis and Suprajasthapana (Healthy progeny)	2	60	50
M6 Garbhavakranti - Garbha Vriddhi & Vikasa (Embryology)	2	60	50
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))			
M13 Prana, Majja Vaha Srotas Vikaras (Diseases of the Respiratory System and Central Nervous System)	2	60	50
M14 Rasa Rakta Vaha Srotas Vikara (Disorders of the Cardiao Vascular and Circulatory System, and Haematology)	2	60	50
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))			
M21 Mutravaha Srotovikaras & Twaka Vikara (Nephrological, Genito-Urinary disorders & Skin disorders)	2	60	50
M22 Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders)	2	60	50
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))			
M29 Pediatric Rehabilitation	2	60	50

M30 Kishora Swasthya Vijnana, Adolescent Medicine	2	60	50
Total	**16**	**480**	**400**
Semester No : 6			
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))			
M7 Garbhopaghatakara Bhavas	2	60	50
M8 Fetal monitoring and Disorders of Sexual Differentiation	2	60	50
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))			
M15 Kshudra evam Anya Vikara (Minor Neonatal Ailments and Physiological Problems)	1	30	25
M16 Navajata Atyayika Chikitsa evam Naidanik evam Chikitsiya Karmaabhyasa (Neonatal Emergencies, Therapeutic Procedures and Trainings)	3	90	75
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))			
M23 Atyayika Balaroga prabandhana (Pediatric emergency management)	2	60	50
M24 Anya Vyadhyi (Miscellaneous disorders)	2	60	50
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))			
M31 Social And Community Pediatrics	2	60	50
M32 Aupsargika Roga (Infections)	2	60	50
Total	**16**	**480**	**400**
Grand Total	**64**	**1920**	**1600**

Credit frame work

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

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

Credit Analysis Overview					
Sem/Paper	**Paper No 1**	**Paper No 2**	**Paper No 3**	**Paper No 4**	**Credits**
Semester 3	M-1 | 2 Crs M-2 | 2 Crs	M-10 | 2 Crs M-9 | 2 Crs	M-17 | 2 Crs M-18 | 2 Crs	M-25 | 2 Crs M-26 | 2 Crs	**16**

Semester 4	M-3 | 2 Crs M-4 | 2 Crs	M-11 | 1 Crs M-12 | 3 Crs	M-19 | 2 Crs M-20 | 2 Crs	M-27 | 2 Crs M-28 | 2 Crs	**16**
Semester 5	M-5 | 2 Crs M-6 | 2 Crs	M-13 | 2 Crs M-14 | 2 Crs	M-21 | 2 Crs M-22 | 2 Crs	M-29 | 2 Crs M-30 | 2 Crs	**16**
Semester 6	M-7 | 2 Crs M-8 | 2 Crs	M-15 | 1 Crs M-16 | 3 Crs	M-23 | 2 Crs M-24 | 2 Crs	M-31 | 2 Crs M-32 | 2 Crs	**16**
Credits	**16**	**16**	**16**	**16**	**64**

<table>
<tr><td colspan="6">Semester VI University examination</td></tr>
<tr><td colspan="3">Theory</td><td colspan="3">Practical*</td></tr>
<tr><td>Paper</td><td>Marks</td><td>Total</td><td>Practical Heads</td><td>Marks</td><td>Total</td></tr>
<tr><td>Paper -1</td><td>100</td><td rowspan="9">400</td><td>Long case or procedure/Major practical as applicable</td><td>100</td><td rowspan="9">400</td></tr>
<tr><td rowspan="2"></td><td rowspan="2"></td><td>Short case or procedure/Minor practical</td><td>50</td></tr>
<tr><td>Paper -2</td><td>100</td><td>Spotters</td><td>50</td></tr>
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<tr><td rowspan="3"></td><td rowspan="3"></td><td>Viva (4 examiners: 20 marks/each examiner)</td><td>80</td></tr>
<tr><td>Paper -4</td><td>100</td><td>Dissertation Viva</td><td>40</td></tr>
<tr><td rowspan="2"></td><td rowspan="2"></td><td>Logbook (Activity record)</td><td>20</td></tr>
<tr><td colspan="3"></td><td>Practical/Clinical Record</td><td>20</td></tr>
<tr><td colspan="6">Semester VI University examination – 800 Marks</td></tr>
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* Details in 6H table

Course Code and Name of Course

Course code	Name of Course
AYPG-KB	Kaumarabhritya (Pediatrics)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) AYPG-KB At the end of the course AYPG-KB, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Demonstrate understanding and appreciation of the concept of Samvardhana (optimum growth and development) and its application in individual and community pediatric healthcare as a foundation for child health care.	PO1,PO2,PO3,PO4,PO7
CO2	Identify, categorize, and apply appropriate intervention strategies in pediatric and neonatal care based on urgency—distinguishing between emergency and non-emergency conditions.	PO1,PO2,PO4,PO6
CO3	Plan long-term care strategies and manage neonates and children requiring sustained medical support.	PO1,PO2,PO3,PO4
CO4	Demonstrate proficiency in Bala Panchakarma practices, ensuring safe and effective treatment while maintaining a focus on pediatric healthcare protocols.	PO1,PO2,PO3,PO4,PO7
CO5	Demonstrate skill in documentation and maintenance of case records, referrals, mortality, medico legal cases and notifiable diseases.	PO1,PO2,PO4,PO6,PO7
CO6	Demonstrate adherence to the principles of Sadvritta (ethical conduct) and Karunya (compassion) through effective and culturally sensitive communication with Rugna (patients), Abhibhavaka (parents), and Paricharaka (guardians).	PO4,PO6,PO8
CO7	Demonstrate skills in creating inclusive and adaptive work environment to ensure optimal patient outcomes and system-based practice.	PO4,PO6,PO7
CO8	Appraise global trends and current research in Kaumarabhritya to generate new insights and apply them in clinical practice using evidence-based approaches.	PO2,PO3,PO5,PO7,PO8

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

Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))						
Semester No : 3						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
1	**M-1 Purushotpatti, Sahaja and Sanchari Roga Pariharopaya (Genetic Counselling)** **This module focuses on understanding of hereditary and congenital diseases with their management through genetic counselling. It explores the concepts of genetic inheritance, disease prevention and therapeutic approaches through Ayurveda.** • **M1U1 Fundamentals of Genetics and its Clinical Application** • Fundamentals of Genetics • Yajjapurusha • Atma and its Transmigration • Sristhi Uthpatti Karana (Swabhava – Ishwara- Kala- Yadrichchha- Niyati- Parinama) • Sankhya Darshan theories of evolution of Purusha • Barker’s hypothesis	2	10	20	30	60

	• **M1U2 Lokasamya - Purusha Siddhanta and its Clinical Application** • Lokasamya - Purusha Siddhanta • Harmony between Universe and Human being in Preventive genetics • Principles of Disease Prevention and Health Promotion in the Context of Genetic Disorders • **M1U3 Rajaswala & Ritumati Paricharya and Naisthiki Bhrahmacharya for restoring Genetic Health** • Restoring the genetic health (Rajaswala, Ritumati Paricharya and Naisthiki Bhrahmacharya) • Atulya Gotra Vivaha and Asa Pinda - Prevention of recessive disorders. • Criteria for selection of partner (Premarital Counselling) • Consanguineous marriage, hereditary disorders and its prevention.					
2	**M-2 Prakriti Anusaarena Aushadhi (Pharmacogenetics)** **This module explores the principles of Prakriti-based administration, drawing parallels with pharmacogenetics, which involves genetic variations that influence individual responses to drugs. It aims to equip scholars with the ability to personalize therapeutic interventions based on *Prakriti*, thereby ensuring optimized and effective child care.** • **M2U1 Aushadhi Matra Evam Sevana Vidhi (Posology and Drug delivery)** • Aushadhi Matra • Aushadhi sevana Kala evam Vidhi • Sahapana and Anupana	2	10	20	30	60

• **M2U2 Aushadhi - I**

- Swarasa- Bhumyamalaki Swarasa, Durva Swarasa, Erandakarkati patra Swarasa, Nagavalli Swarasa, Nimba Patra Swarasa, Nirgundi Patra Swarasa, Punarnava Swarasa, Tulasi Patra Swarasa, Vasa Patra Swarasa, Mandukaparni Swarasa, Brahmi Swarasa
- Churna- Amalaki Churna, Ashwagandha churna, Bala Churna, Brahmi Churna, Godanti Bhasma, Gokshur Churna, Guduchi Churna, Haridra Churna, Haritaki Churna, Kampillaka Churna, Khadira Churna, Mandur Bhasma, Maricha Churna, Pippali churna, Shankhapushphi Churna, Shatavari Churna, Shunthi Churna, Sphatika Bhasma, Tankana Bhasma, Triphala Churna, Vacha Churna, Vasa Patra Churna, Vidanga Churna, Yashtimadhu Churna, Avipattikara Churna, Balachaturbhadra Churna, Balgangadhar Churna, Bilwashtak Churna, Dadimashtaka Churna, Dantadoshahara Churna. Dashana Sanskara Churna, Hingwashtaka Churna, Lavanbhaskar Churna, Rajanyadi Churna, Sitopaladi Churna, Sukhsaarak Churna, Talisadi churna.
- Vati/Vatak/Modaka/Guggulu- Abha Guggulu, Agnitundi Vati, Chandraprabha Vati, Chitrakadi Vati, Gokshuradi Guggulu, Kaishoradi Guggulu, Kanchnara Guggulu, Kankayana Vati, Khadiradi Vati, Lakshadi Guggulu, Lavangadi Vati, Preenana Modaka, Samshamani Vati, Sanjeevani Vati, Shankha Vati, Simhnada Guggulu, Sudarshanghana Vati, Trayodashanga Guggulu, Triphala Guggulu, Vyoshadi Vati, Yogaraja Guggulu.
- Kwatha and Kashaya- Asanadi Kashaya, Drakshadi Kashaya, Guduchyadi Kashaya, Indukanta Kashaya, Mustadimarma Kashaya, Nayopayadi Kashaya, Panchavalkala Kwatha, Pathyadi Kwatha, Phalatrikadi Kwatha, Punarnavadi Kashaya, Rasnaerandadi Kashaya, Rasnasaptak Kashaya, Sahacharadi Kashaya, Trinapanchmoola Kwatha.
- Phanta, Hima and Paneeya- Dhanyaka Hima, Mishreya Phanta, Shadanga Paneeya, Yashtimadhu Phanta.
- Asava - Aravindasava, Chandanasava, Kanakasava, Kumaryasava, Lohasav,

Madhukasava, Panchakolasav, Pippalyasava, Sarivaadyasava.

- Arishta- Abhayarishta, Amrutarishta, Arjunarishta, Dashmularishta, Draksharishta, Jeerakadyarishta, Khadirarishta, Kutajarishta, Mustakarishta, Saraswatarishta, Vasakarishta, Vidangarishta.

• **M2U3 Aushadhi-II**

- Taila and Avartini- Amalaki Taila, Anutaila, Ashwagandha bala Lakshadi Taila, Bilvadi Taila, Brihat Saindhvadi Taila , Chandan Bala Lakshadi Taila, Dhanwantar Taila, Dhanwantaram 101, Dhurdhurpatradi Taila, Himsagar Taila, Irimedadi Taila, Jatyadi Taila, Jyotishmati Taila, Khseerbala Taila, Ksheerbala 101, Lashuna Taila, Mahamanjishthadi Taila, Mahamasha Taila, Mahanarayana Taila, Mahavishgarbha Taila, Murivenna Taila, Neelabhringa Taila, Nirgundi Taila, Panchbhoutika Taila, Panchendriya vivardhana Taila, Prasarini Taila, Raj Taila, Rasnadi Taila, Sahacharadi Taila, Sahcharadi 21 Avartini, Yashtimadhu Taila.
- Ghrita- Abhaya Ghrita , Abheermuladi Ghrita , Amruta Ghrita, Ashtanga Ghrita, Ashwagandha Ghrita, Astamangala Ghrita, Brahmi Ghrita , Changeri Ghrita, Dadima Ghrita, Dashmula Ghrita, Guggulutiktak Ghrita, Indukantamrita Ghrita Jeevantyadi Ghrita, Jiwaniya Ghrita, Kalyanaka Ghrita , Kumarkalyanaka Ghrita, Kushmanda Ghrita, Mahapaishachika Ghrita, Mahatiktaka Ghrita Nagbala Ghrita, Panchagavya Ghrita, Panchendriya Vardhan Ghrita, Rasna Dashmoolyadi Ghrita, Samvardhana Ghrita, Shaishuk Ghrita, Shadpala Ghrita, shatapushpa Ghrita, Shatavari Ghrita, Sukumar Ghrita, Tiktak Ghrita, Triphala Ghrita, Vachadi Ghrita, Yashtimadhu Ghrita.
- Ksheerapaka- Amruta Ksheerapaka, Arjuna Ksheerapaka, Lashuna Ksheerapaka, Trivritta Ksheerapaka.
- Arka- Ajmoda Arka , Balarka Yogas, Shatpushpa Arka, Tulsi Arka, Vacha Arka, Hydrosols preparation.
- Khanda and Paka – Ardrak Khanda, Eranda Paka, Haridra Khanda, Narikela Khanda,

- Rasaushadhi and Parpati - Arogyavardhini Vati, Bol Parpati, Dantodbhedagadantak rasa, Dhatri Lauha, Ekangveer Rasa, Gandhak Rasayana, Jaimangal Rasa, Kaphaketu Rasa, Krimikuthar Rasa, Krimimudgara Rasa, Kumarkalyana Rasa, Laghu Sutashekhar Rasa, Laxmivilasa Rasa, Mritunjay Rasa, Panchamrita Parpati, Punarnava Mandur, Rasa Parpati, Shwasa Kuthara Rasa, Shweta Parpati, Smritisagar Rasa, Swarna Muktadi Gulika, Tribhuwan Kirti Rasa.
- Rasayana and Avaleha -Agastya Haritaki Rasayana, Amalak Rasayana, Amrita Bhallataka Avaleha, Asvagandhavaleha, Bilwavaleha, Chitraka Haritaki Avaleha, Chyawanprasha Rasayana, Dadimavaleha, Dashmula Haritaki Avaleha , Kalyanakavaleha, Kantakaryavaleha, Kushmanda Rasayana, Kutajavaleha, Medhya Rasayana, Nagbala Rasayana, Triphala Rasayana, Trivrittavaleha, Vardhaman Pippali Rasayana, Vasavleha.

• **M2U4 Pharmacodynamics and Pharmacokinetics of Drugs**

- Pharmacodynamics and Pharmacokinetics of routine and emergency drugs
- Antipyretics, Analgesics, NSAID, Antibiotics and chemotherapeutic agents, Anti-fungal, Anti-coagulants, Anti leprosy, Anti malarial, Anti tubercular, Anti mysthenic, Anti protozoal, Immunoglobulins, Anti toxins, Cardiotonics, Diuretics, Vasodilators, Hematanics, ionotropes, Calcium gluconate, Triclofos Sodium, Soda Bicarbonate, chelating agents, Colloids.
- Anti-viral, Anti helminthic, Anti spasmodic, Antacids, H2 blockers, Alkaline earth metal group, Bronchodilators, Anti-allergic, Anti emetic, Anti-diarrheal, Multivitamin and Multi Minerals, Nutritional supplements, Anxiolytic, Anti gout
- Steroids, Anti-cholinergic
- Anti-Convulsants (AED), Anti Myotonic, Anti spasticity, Catecholamine -Adrenaline, Hormonal agents for endocrinal disorders, Anti-obesity, Anti-Hypertensive drugs, Methyxanthine group drugs, Benzodiazepine,
- Topical drugs – Eye and Ear drops, Ointments and creams, Topical sprays, Aseptic solutions .

	• Life Saving medicines – Anti pyretics, Analgesics, Anti spasmodics, bronchodilators, Alkaline earth metal group -calcium, steroids, Soda bicarbonate, Atropine, Adrenaline, Hemostatic drugs, Naloxone, Benzodiazepine, Phenothiazine, Oxygen, Antidotes • **M2U5 Pediatric Dosage forms,Formulae & Dose calculations** • Pediatric Dosage Administration • Formulae & Dose calculations • Calculation of fluid requirement as per age and conditions • Oral route, Enteral route, sublingual/buccal route, rectal route • Parenteral route – Intravenous, Intramuscular, Subcutaneous, Intradermal, Intra arterial • Transdermal, Inhalation, Trans nasal, Intraosseous, Vaginal • Emergency medicines and their route of administration					
		4	**20**	**40**	**60**	**120**

Semester No : 4

2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**

3	**M-3 Anuvamshkiya Vigyana** **This module focuses on the study of chromosomes and their role in hereditary diseases, blending cytogenetic principles with Ayurveda principles. It covers the fundamentals of chromosomal inheritance, genetic mutations, and their implications for health. The module also emphasizes the significance of cytogenetic analysis in diagnosing genetic disorders and formulating personalized treatment strategies for effective disease management.** • **M3U1 Beeja-Vigyana (Cytogenetics)** • Cell, cell division, Nucleus • Chromosome, • Gene structure • Phenotype -Genotype • Chromosome banding pattern • Classification • Karyotyping, • Molecular genetics • **M3U2 Branches of Genetics Part 1** • Cancer genetics – Biochemical genetics, • Role of genetic aberration in producing malignancy • Biochemical genetics - Inborn Errors of Metabolism, metabolic screening • **M3U3 Branches of Genetics Part 2** • Population genetics (Gene pool) • Immunogenetics	2	10	20	30	60

	• Developmental genetics • Behavioural genetics					
4	**M-4 Clinical application of Beeja Vigyana.** **This module examines the role of genetic material in hereditary disorders through the lens of chromosomal theory and Mendelian genetics. It highlights inheritance mechanisms, genetic mutations, chromosomal abnormalities, and approaches to diagnosis and management of hereditary conditions.** • **M4U1 Beeja Bhaga Avyava janya Vikara (Chromosomal Disorder)** • Chromosomal aberrations (Mutations). • Structural chromosomal disorders (deletions, duplication, inversion, insertion, conjunction, translocation, mosaicism) • Numerical chromosomal Disorders (Monosomy, trisomy, polysomy). • Adibala Pravritta Vyadhi • **M4U2 Anuvamshkiya Vikara (Hereditary disorders)** • Vanshavahini janya Vikaras (Mendelian Disorders) • Single Gene disorders • Autosomal dominant and recessive disorders • X-linked dominant and recessive disorders • **M4U3 Non-Mendelian Disorders** • Polygenic disorders • Mitochondrial disorders,	2	10	20	30	60

	• Multi-factorial disorders • Other Hereditary disorders • **M4U4 Recent advances in genetics** • Genetic Engineering • Pharmacogenetics. • Recent advancement in genetic technology					
		4	**20**	**40**	**60**	**120**

Semester No : 5

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
5	**M-5 Garbhanirmana, Ashta Prakritis and Suprajasthapana (Healthy progeny)** **This module gives an insight into the concepts of garbha Nirmana, Ashtaprakritis and Suprajasthapana. It emphasizes on measures for ensuring optimal reproductive health and the birth of healthy progeny.** • **M5U1 Formation of quality Genetic Traits**	2	10	20	30	60

- Role of Shad Bhava .
- Shareera Vriddhikara Bhavas,
- Asta Prakriti
- Genetic traits

• **M5U2 Supraja – Principles for Optimal Progeny**

- Personal and social hygiene of parents
- Different regimens to maintain the genetic potential
- Atulya Gotra Vivaha and other criteria’s for selection of Partner
- Garbhadhana and Vivaha Samskara
- Pre-marital - pre conceptional -post conceptional care.
- Maternal and paternal Psychology and Maternal nutrition

• **M5U3 Garbha Dhana**

- Methods, rules and prerequisites
- Care of Embryo and foetus
- Care of Douhrida stage
- Garbhini paricharya
- Garbha Samskara, Seemantonayana Samskara

• **M5U4 Daivavyapashraya Chikitsa during Pregnancy**

- Daivavyapashraya Chikitsa during pregnancy
- Puthresti Yajna -Varana Bandha -Matangi Vidya and prevention of premature delivery
- Suprajanana Karma and its ethical consideration

• **M5U5 Ayur Genomics**

- Formation of prakriti in Garbha

	• Sharirika and Mansika Prakriti • Prakriti and genetic potential • Assessment of Prakriti • Clinical application • **M5U6 Garbha Prakriti and its development** • Pathya Apathya and Prakriti • Congenial and non-congenial food and its influence over Prakriti • Ensuring the Psychological- behavioural -emotional and social development • Development of Mahat (Endowment), Ahankara (Id) , Freud's- Id, Ego , Super Ego					
6	**M-6 Garbhavakranti - Garbha Vriddhi & Vikasa (Embryology)** **This module introduces Ayurvedic concepts of Garbhavakranti (embryogenesis), focusing on Garbha Vriddhi (fetal growth) and Vikasa (development) from Garbha Sthapana (implantation) to Prasava (delivery). It highlights the roles of Beeja (genetics), Ahara (nutrition), Desha-Kala (environment), Matruja–Pitruja Bhava (parental factors), and Manasika Bhava (psychological state) in Sampurna Garbha Vikas (holistic fetal development), integrating Garbha Vridhhi and Vikas insights with modern embryological understanding.** • **M6U1 Garbhavkranti (Embryogenesis)** • Spermatogenesis Oogenesis • Meiotic cell division • Graba Sambhva Samagri	2	10	20	30	60

	• Formation of Zygote, morula and germ layers • Neural plate formation • Care during embryogenesis • **M6U2 Garbha Avayava Utpatti (Organogenesis)** • Organogenesis- ectodermal- mesodermal – endodermal proliferation • Neural tube differentiation to form the CNS and Peripheral nerve system • Formation of fore -gut mid -gut and hind- gut • Formation of skeletal system, vascular system , Respiratory , Genitourinary System • Care during organogenesis • **M6U3 Apara** • Formation of Apara (Placenta) • Nabhi Nadi (umbilical cord) • **M6U4 Garbha Poshana** • Fetal circulation and Garbha Poshana, , • Beeja-Shonita Roopi Oja (Feto-maternal immunity) • **M6U5 Yamala Garbha** • Yamala Garbha, • Multiple Pregnancy • Benefits and risks of IVF.					
		4	**20**	**40**	**60**	**120**

Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
7	**M-7 Garbhopaghatakara Bhavas** **This module explores Garbhopaghatakara Bhavas (fetal-affecting factors) as described in Ayurveda. It focuses on various internal and external influences on fetal development, including the effects of Ahara (diet), Aushadha (medications), Vihara (lifestyle), Manasika Bhavas (emotions), and Vikara (environmental hazards or diseases), emphasizing their role in causing intrauterine disturbances and congenital anomalies.** • **M7U1 Garbhavyapad** • Garbha Vikruthi, • Grabhaja Vyadhi • Jathaharinis • Intrauterine infections and endocrinal problems • Hygiene and aseptic measures, prevention of recurrent abortions, social ethics • **M7U2 Effects of Garbhakara Bhava Dushti**	2	10	20	30	60

	• Atma Dosha • Kala Dosha • Beeja Dosha • Ashaya Dosha • **M7U3 Effects of Aahara, Vihara and Aushadha on Garbha** • Environmental factors (Satmyaja bhava) • Adverse effects of procedures during pregnancy • Maternal medication, diet and illness on foetus • **M7U4 Janmabala Pravritta Vyadhi** • Janmabala Pravritta Vyadhi • Congenital anomalies- Fetus, placenta , umbilical cord • Congenital anomalies of CNS , CVS , Renal and Skeletal System • Teratogenicity					
8	**M-8 Fetal monitoring and Disorders of Sexual Differentiation** **This module explores methods of Garbha Pariksha (fetal assessment) to evaluate fetal health and development, emphasizing the significance of regular monitoring during Garbha-Vriddhi and Garbha-Vikasa for early detection of anomalies. It also delves into the understanding and management of disorders of sexual differentiation, drawing from both Ayurveda principles—including the role of Beeja, Shukra, Artava, Garbha Sambhava Samagri, and Karma—and chromosomal and hormonal influences on sexual development.** • **M8U1 Foetal Monitoring**	2	10	20	30	60

	• Techniques of foetal monitoring • Assessment of Masanumasika Garbha Vriddhi and Vikas • **M8U2 Prenatal and Perinatal Diagnosis** • Fundamentals of Prenatal Diagnosis • Diagnostic tools and techniques • Screening and identification of fetal abnormalities • Ethical and legal aspects in Prenatal Diagnosis. • Perinatal Diagnosis and Immediate newborn Evaluation • **M8U3 Disorders of sexual differentiation** • Ambiguous genitalia • Hirsutism • Congenital Adrenal Hyperplasia • **M8U4 Streekara and Purushakara Bhava Vikaras** • Streekara and Purushakara Bhava Vikaras • Varta, Truna putrika, Pooti praja, Shanda					
		4	**20**	**40**	**60**	**120**
		16	**80**	**160**	**240**	**480**
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))						
Semester No : 3						
2A	**2B**	**2C**	**Notional Learning hours**			

Module Number	Modules & units	Number of Credits	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
9	**M-9 Navajata Parikshana, Paricharya and Poshana [Examination, Care, Management and Feeding of neonate (Normal/Sick)]** **This module focuses on developing competencies in Navajata Parikshana (examination), Paricharya (care and management), and Poshana (feeding and nutrition) of neonates—both normal and sick. It aims to equip students with the knowledge and skills necessary for neonatal assessment, integrative care approaches, and nutritional management. Additionally, the module provides a foundational understanding to design and set up neonatal care units such as NICU, SNCU, and neonatal wards.** • **M9U1 Transition from Garbhavastha to Navajata Shishu Avastha (Feto - Neonatal transition)** • Foetal growth from conception to expulsion of the foetus, at term. • Physiological and biochemical changes in a neonate occurring in post natal period, different from foetal life • Evaluation of ANC reports for anticipating foetal and neonatal outcome • Anticipation of perinatal complications • **M9U2 Assessment of Navajta Shishu (Normal Neonate)** • Assessment of Gestational age	2	10	20	30	60

- New born reflexes
- Head to toe examination
- Significance of maternal, perinatal and postnatal history

• **M9U3 Navajata Lakshana Pariksha (Neonatal screening)**

- Prashasta Bala Lakshana Pariksha
- Inborn errors of metabolism
- Disabilities of special senses
- Congenital chromosomal, genetic and hormonal disorders

• **M9U4 Navajata Shishu Paricharya (Immediate and routine care measures)**

- Care of the new born (Routine and ancillary procedures)
- Thermoregulation
- Neonatal feeding

• **M9U5 Sutikagara, Kumaragara**

- Navajata Shishu Kaksha Prabandhana (Nursery management) - Special Neonatal Intensive Care unit (SNICU), HDU and NICU
- Nursery and Neonatal ward
- Neonatal referral and transport
- Hazards of prolonged SNICU stay.
- Management and disposal of biomedical waste

• **M9U6 Shishu Poshana**

- Feeding Schedule and Techniques, Alternative and complimentary feed
- Calculation of nutritional feed in healthy and sick neonate
- Total Parental Nutrition

10	**M-10 Samaya Purva-Paschat (Newborn -Preterm/Full Term/Post Term), Alpabhara Jatamatra-(SGA/AGA/LGA)Navajata Paricharya. Assessment of Normal and Sick Neonate)** **This module focuses on developing expertise in the evaluation, revival, and comprehensive management of special neonatal conditions, including Samay Purva (Preterm), Samay Paschat (Post-term), Alpabhara (low birth weight), and other high-risk neonates. It aims to train the scholar in the assessment and management of asphyxiated neonates.** • **M10U1 Pranapratyagamana (Resuscitation) as per gestation and weight** • Resuscitation and pranapratyagaman chikitsa as per gestational age and birth weight and various perinatal conditions • Appropriate care on scientific basis, post birth • Comparison of ancient and current practices/ traditions • **M10U2 Pranapratyagamana of Achesta Navajata and Paricharya** • Assessment tools of perinatal and birth asphyxia. • Standard Guidelines for Resuscitation. • TABC of Resuscitation, Golden hour management • Management of birth asphyxia and co-morbidities • Post resuscitation care • Respiratory support invasive and non-invasive • Surfactant therapy, recent techniques, and advances. • **M10U3 Anticipation, Evaluation and management and outcome and follow-up care**	2	10	20	30	60

	• Management of Samaya Purva Evam- Pashchat Jata Shishu Paricharya (Pre-term & Post-term Neonate) • IUGR and Multiple Births, collodion baby, • Neonate born to Diabetic mother, mother with PIH, HIV positive mother, HBsAg positive mother • Mentally challenged, drug abused mother and special scenarios					
		4	**20**	**40**	**60**	**120**

Semester No : 4

2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
11	**M-11 Prasava Kalina Abhighata/Vyadhi (Birth Injuries)** **This module is designed to equip the scholar with the skills to anticipate, accurately diagnose, and effectively manage birth injuries occurring during the process of labor and delivery.** **• M11U1 Prasava Kalina Abhighataja/Sanghatabala Pravritta Vyadhis (Birth injuries)** • Upashirshaka (Caput and Cephalhaematoma)	1	5	10	15	30

	• Bhagna and Sandhichyuta • Spinal injuries, Peripheral nerve injuries, Plexus injury • Concealed hemorrhages • Soft tissue injuries and Mechanical traumas					
12	**M-12 Sahaja Vyadhi and Anna Purisha Meda Asthi Majja Vaha Srotas Vikruti (Birth Injuries, Congenital anomalies and Diseases of The G.I. Tract, Musculo-Skeletal and Central Nervous System)** **This module focuses on understanding srotovikara seen in neonates, particularly involving Anna, Pureesha, Meda, Asthi,and Majja vaha srotamsi, along with sahaja vyadhaya (congenital anomalies). It aims to equip the scholar with the knowledge and skills for early identification, interpretation, and primary management of congenital disorders affecting the gastrointestinal tract, musculoskeletal system, and central nervous system.** • **M12U1 Annavaha - Pureeshavaha Srotas Navajata Vyadhis** • Annavaha Srotas Vikara - Chhardi (Vomiting, Regurgitation), GERD, Atisara (Diarrhea), Necrotizing enterocolitis (NEC), Vibandha (Constipation), Udarshoola (Colic) • Asamyaka Nabhinalakartanajanya Vyadhi • Congenital Anomalies of Annavaha-Pureeshvaha Srotas • **M12U2 Medovaha, Mootravaha srotas and Jananganga Vikaras** • Medovaha, mootravaha srotas vikaras - UTI, UV reflux, acute renal failure • Congenital anomalies of Medovaha, Mootravaha srotas and Jananganga	3	15	30	45	90

	• **M12U3 Asthi Mamsa Majjavaha Srotas Vikriti** • Asthi majjavaha srotas - osteomyelitis, infective arthritis and other related diseases • Congenital anomalies of the musculoskeletal system - TAR syndrome, Torticollis • **M12U4 Anya Sahaja Vikriti (Other Congenital anomalies)** • Congenital anomalies based on ante natal scan • Treatment modalities, complications, outcomes, future anticipated disabilities of the possessed congenital anomalies					
		4	**20**	**40**	**60**	**120**

Semester No : 5

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
13	**M-13 Prana, Majja Vaha Srotas Vikaras (Diseases of the Respiratory System and Central Nervous System)** **This module is designed to develop skills in assessing and managing Asphyxiated**	2	10	20	30	60

neonate and managing complications arising out of asphyxia. It also aims at preventing and treating neonatal tetanus

• **M13U1 Shvasavarodha (Asphyxia)**

- Perinatal/Birth Asphyxia
- Ulbaka (aspiration pneumonia), meconium aspiration syndrome, hyaline membrane disease, transient tachypnoea of new born and congenital pneumonias
- GERD

• **M13U2 Assessment scales for Respiratory Distress**

- RDOS [Respiratory Distress Observation Scale]
- Silvermann-Anderson Score
- Borg Scale
- Downe's Score
- Visual Function Scale for Low Respiratory Compliance

• **M13U3 RDOS [Respiratory Distress Observation Scale], Silvermann-Anderson Score, Borg Scale, Downe's Score, Visual Function Scale for Low Respiratory Compliance)**

- Ventilators, C-PAP and their settings, Induction and Weaning, Monitoring
- ABG (Arterial Blood Gases)
- Complications related to assisted respiration

• **M13U4 Disorders of CNS**

- Neonatal seizures/convulsions
- Infections of the CNS of the neonate

	• **M13U5 HIE and its complications** • Asphyxia Neonatrum, complications and comorbidities • SIADH • Therapeutic hypothermia • **M13U6 Navajata Dhanustambha (Neonatal tetanus)** Navajata Dhanustambha (Neonatal tetanus)					
14	**M-14 Rasa Rakta Vaha Srotas Vikara (Disorders of the Cardiao Vascular and Circulatory System, and Haematology)** **This module deals to generate expertise to handle cases of metabolic disorders, sepsis, Navajata Shishu Kamala and various haemorrhagic diseases** • **M14U1 Navajata Shishu Kamala (Neonatal Hyperbilirubinaemia)** • Navajata Shishu Kamala - Neonatal hyperbilirubinaemia (Physiological, Pathological, Prolonged, Congenital, Breast Milk Jaundice) • Neonatal Hepatitis • Complications of Phototherapy and Exchange Blood Complications • Phototherapy • Exchange blood transfusion • **M14U2 Raktavishamayta / Septicaemia** • Navajata Raktavishamayta - Septicemia (Early and Late), Septic Screening • Congenital / Neonatal / Vertically transmitted infections • STORCH Infections, • Septic Shock, Complications • Other Newborn and Neonatal Infections	2	10	20	30	60

	• Sclerema • Congenital Rubella Syndrome • **M14U3 Haemorrhagic disorders of new born** • Polycythaemia, Thrombocytopenia • Hemolytic and Hemorrhagic diseases of newborn • **M14U4 Metabolic and Electrolyte disturbances** • Hypoglycemia • Hypocalcemia • Metabolic acidosis/alkalosis • Fluid-electrolyte balance imbalance • **M14U5 Navajata Hridroga (Cardiac disorders)** • Nabhinadi Vikriti • Sahaja Hridroga (approach to a child with murmur • Congenital Heart Diseases (CHD) - Patent Ductus Arteriosis, Tetrology of fallot, Cyanotic and Acyanotic heart diseases) • **M14U6 IEM** Inborn errors of Metabolism and their primary management					
		4	**20**	**40**	**60**	**120**
Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credi**	**Notional Learning hours**			

		ts	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
15	**M-15 Kshudra evam Anya Vikara (Minor Neonatal Ailments and Physiological Problems)** **This module focuses on the identification, diagnosis, and management of minor neonatal ailments and physiological conditions commonly encountered during the Navajata (neonatal) period. Emphasis is placed on disorders related to the skin, special senses, and other physiological adaptations of the newborn.** • **M15U1 Physiological neonatal problems** Common physiological neonatal problems and their management • **M15U2 Navajata Twaka Vikaras** Erythema toxicum, Streptococcal Scalded Skin Syndrome, Congenital Icthyosis, Darunaka (Seborrheic dermatitis), Charmadala, Atopic dermatitis, Paridagdha Chhavi, Shishu Visarpa/Mahapadmaka, Ahiputana (Napkin rash), Paschadruja, Puya Sphota (Pyoderma), Visphota, Epidermolysis bullosa • **M15U3 Karna evam Kantha Rogas** • Karnashoola • Sadanta Janma(Natal teeth), Laryngomalacia • Nasolacrimal duct obstruction • **M15U4 Netra, Nasa Rogas**	1	5	10	15	30

	Kukkunaka, Netrabhishyanda, Opthalmia neonatorum, coloboma, Congenital Cataract					
16	**M-16 Navajata Atyayika Chikitsa evam Naidanik evam Chikitsiya Karmaabhyasa (Neonatal Emergencies, Therapeutic Procedures and Trainings)** **This module is designed to develop clinical expertise in the identification and management of neonatal emergencies, along with hands-on training in essential diagnostic and therapeutic procedures relevant to the Navajata (neonatal) period.** • **M16U1 Neonatal Emergencies** • Basic Life Support • Neonatal Advanced Life Support • Life-saving drugs • **M16U2 Handling Emergencies** • Shock • Raktasrava (Haemorrhages) • Respiratory distress/ARDS • Dagdha Vrana (Burns) • Aspiration and choking • Disseminated Intravascular Coagulation • Acute Renal Failure • Respiratory/Metabolic Acidosis/Alkalosis • **M16U3 Neonatal Investigative/Therapeutic procedure**	3	15	30	45	90

	• Umbilical catheterization • Rapid sequential intubation • Femoral puncture • Venesection • Jugular canulation • Lumbar Puncture • Urethral catheterization • Inter costal drain • Blood and blood component/crystalloid/colloid infusion • **M16U4 Ancillary Procedures** • Amashaya Dhawana (Stomach wash) • Ksheerabasti, Stanyabasti • Gudavarti, Medicated Suppositories					
		4	**20**	**40**	**60**	**120**
		16	**80**	**160**	**240**	**480**

Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))

Semester No : 3

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total

17	**M-17 Pranavaha Srotovikara (Respiratory disorders)** **The module on Pranavaha Srotovikara (Respiratory System Disorders) focuses on analysing the etiopathogenesis (Nidana and Samprapti), clinical features (Lakshana), and management (Chikitsa) of conditions such as Shwasa, Kasa, and Rajayakshma. Emphasis is placed on doshic balance, dietary and lifestyle modifications, and evidence-based therapeutic interventions for effective prevention and management.** • **M17U1 Pranavaha Srotovikara I** • Kasa • Shwasa • Pratishyaya • Kukkura Kasa • Rajayakshma • Choraka • **M17U2 Pranavaha Srotovikara II** (Upper Respiratory Tract Infections)– • Rhinitis • Pharyngitis • Adenoids • Tonsillitis • Croup • Laryngitis • Epiglottitis	2	10	20	30	60

	• **M17U3 Pranavaha Srotovikara III** (Lower Respiratory Tract Infections) – • Bronchitis • Bronchiolitis • Pneumonia • Tuberculosis (Pulmonary and Extra Pulmonary) • **M17U4 Pranavaha Srotovikara IV** • Recurrent Allergic Respiratory disorders • Reactive airway disorders – Asthma, • Lung Parenchymal disorders					
18	**M-18 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders)** **The module on Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders in Children) explores the etiopathogenesis, clinical features, and management of conditions such as Ajeerna (indigestion), Atisara (diarrhea), and Vibandha(constipation). Emphasis is placed on the role of appropriate diet (Ahara), lifestyle (Vihara), and therapeutic interventions—both preventive and curative—to promote gastrointestinal health.** • **M18U1 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) - I** • Mukha Roga, Danta evam dantodbhedajanya roga, Kantha and Gala Roga	2	10	20	30	60

	• Achalasia Cardia, Esophagitis. • **M18U2 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) II** • Amlapitta,Acid Peptic disorders • Grahanidosha-Malabsorption disorders, Celiac diseases • Chhardi- vomiting • Vibandha,-Constipation, Arochaka, Ajeerna • Abdominal pain and distention -(Udara Shoola, Aanaha, Aatopa) • Atisara- Visuchika, Alasaka - Diarrhoea • Pravahika- Dysentry, Collitis, Inflammatory bowel disorders. • **M18U3 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) III** • Dehydration • Dyselectrolytemia • Food intolerance and Allergy • Polyps, Tumors, Diverticulitis • Guda-bhramsha- Rectal prolapse • **M18U4 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) IV** • Krimi Roga - Worm infestation					
		4	**20**	**40**	**60**	**120**
Semester No : 4						

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
19	**M-19 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system)** **The module on Rasavaha and Raktavaha Srotovikara along with Hridaya Vikara (Disorders of the Circulatory and Hemopoietic Systems) encompasses the Nidana, Samprapti, Lakshana, and Chikitsa of conditions such as Jwara, Pandu, Hridroga, and their correlates like anemia, hypertension, and pediatric cardiac disorders. Emphasis is placed on maintaining systemic balance through appropriate Ahara, Vihara, and therapeutic interventions.** **• M19U1 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) I** • Jwara, Fever of unknown origin • Pandu-Anemia **• M19U2 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) II** • Hrudroga- Structural, Functional, Positional defects • Infective disorders of CVS • Amavata, - Arthritis.	2	10	20	30	60

	• **M19U3 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) III** • Rakta pitta Bleeding and Clotting disorders. Raktasrava - Hemophilia • Sahaja Pandu-. Disorders of Bone marrow Hemoglobinopathies • **M19U4 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) IV** • Udararoga, Kamala, Pleehavruddhi, Haleemaka-Disorders of hepatobiliary system Hepatitis • Storage and Metabolic disorders of liver, • Biliary disorders, Cholecystitis, Cholelithiasis. • Hepatosplenomegaly					
20	**M-20 Vata Rogas, Mastishka Vyadhis (Neurological disorders)** **This module focuses on analysing disorders arising from Vata imbalance, such as Pakshaghata (paralysis), Apasmara (epilepsy), and other neurodegenerative conditions. It explores the Nidana, Samprapti, clinical features, and comprehensive management of neurological disorders. The module emphasizes the role of Vata dosha regulation through appropriate Ahara (diet), Vihara (lifestyle), and Chikitsa (therapeutic interventions), aiming to enhance diagnostic accuracy and evidence-informed care in neurological health.** • **M20U1 Vata Rogas, Mastishka Vyadhis (Neurological disorders) I** • Akshepaka (Seizure Disorders)	2	10	20	30	60

	• Febrile convulsions • Apatanaka • Aptantraka • Apasmara (Epilepsy). • **M20U2 Vata Rogas, Mastishka Vyadhis (Neurological disorders) II** • Neurodegenerative, Metabolic, Infective Neurological Conditions (Encephalitis, Meningitis, Storage disorders, Demyelination Disorders, Movement disorders, Gait disorders). • Tremors and Ataxia • **M20U3 Vata Rogas, Mastishka Vyadhis (Neurological disorders) III** • Encephalopathies • Shiro-Arbuda (Space Occupying Lesion) • Sheershaambu Roga, Mastulunga Kshaya • Guillain-Barre Syndrome • Transverse myelitis, Traumatic neuritis, Syringomyelia.					
		4	**20**	**40**	**60**	**120**
Semester No : 5						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular**	**2G Total**

					Assessment	
21	**M-21 Mutravaha Srotovikaras & Twaka Vikara (Nephrological, Genito-Urinary disorders & Skin disorders)** **This module focuses on analysis of disorders related to the Mutravaha Srotas (urogenital system) and Twaka (skin). It covers conditions such as Mutrakricha (urinary tract infections), Shayyamutra (nocturnal enuresis/bedwetting), Kushtha, and Twaka Vikara (eczema, allergic rashes). Emphasis is on the Nidana, Samprapti, and Chikitsa with relevant modern correlates. The module highlights the importance of personalized Ahara (dietary practices), Vihara(lifestyle modifications) and therapeutic interventions to promote holistic and sustainable management of these disorders.** • **M21U1 Mutravaha Srotovikaras (Nephrological, Genito-Urinary disorders) I** • Vrikka Roga,-Vrikka Shotha, Nephrotic syndrome, Glomerular nephritis • Mutraghata- Acute and Chronic renal failure, Renal tubular disorders, • Renal malignancies. • Proteinuria, Anuria and Haematuria • **M21U2 Mutravaha Srotovikaras (Nephrological, Genito-Urinary disorders) II** • Mutrakricchra, -Disorders of Ureter-Bladder-Urethra • Urinary tract infections • Structural Anomalies & Obstructive disorders • Renal & bladder stone • Voiding dysfunctions,Nirudhha Prakash, Dysuria • Hydrocoele	2	10	20	30	60

	• **M21U3 Twaka Vikara (Skin disorders)** • Ahiputana/ Gudakutta/ Pashchadruj -Napkin Rashes and perianal infections, • Visarpa Mahapadma- Fever with rash conditions, • Kushtha, Kitibha ,Ekakustha- Psoriasis, Ichthyosis , Shvitra,- Vitiligo, Visphota-Pemphigusvulgaris, Impetigo, Sidhma, Vicharchika,- Eczema, Charmadala,-Atopic dermatitis, Sheetapitta – Udarda – Kotha, Urticaria- Urticarial and hypersensitive skin disorders, Youvan Pidika,-Acne Vulgaris, Vasculitis /Vascular lesions, Dadru, Pama, Vipadika – Scabies, Hand foot mouth disease, Molluscum contagiosum, Warts, Indralupta- Alopecia, Steven Johnson syndrome, Fungal Infections.					
22	**M-22 Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders)** **This module explores the approaches to diagnosing and managing Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (pediatric endocrine, metabolic, and nutritional disorders) such as diabetes, thyroid imbalance, malnutrition, and growth issues. Emphasis is placed on early detection, balanced nutrition, and integrative interventions for effective management and prevention.** • **M22U1 Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders) I** • Ashtha Nindita Purusha and Endocrinal Disorders • Hypo and hyper Pitutarism and pituitary gland disorders • Hypo Thyoridsim and Hyper Thyoridsim disorders and Thyroid gland disorders • Hypo Adrenalism and Hyper Adrenalism disorders and Adrenal gland	2	10	20	30	60

Disorders

- Sahaja Prameha - Type 1 Diabetes Mellitus
- Approach to a child with (Abnormal stature, Kubja – Vamana- Short stature, Sthoulya - Obesity, Delayed & Precocious Puberty)

• **M22U2 Kuposhanajanya Rogas (Nutritional Disorders) I**

- Phakka
- Balashosha
- Parigarbhika
- Shuska Revati
- Karshya

• **M22U3 Kuposhanajanya Rogas (Nutritional Disorders) II**

- Protein-Energy Malnutrition (PEM)
- Severe Acute Malnutrition (SAM)
- Moderate Acute Malnutrition (MAM)
- Failure to thrive
- Refeeding Syndrome
- Nutritional oedema

• **M22U4 Kuposhanajanya Rogas (Nutritional Disorders) III**

- Nutritional deficiency disorders (Macronutrient deficiency - Micronutrient deficiency)
- Vitamin deficiency disorders
- Hypervitaminosis
- Rickets.

		4	**20**	**40**	**60**	**120**
Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
23	**M-23 Atyayika Balaroga prabandhana (Pediatric emergency management)** **This module focuses on the Ayurvedic understanding and management of Atyayika Balaroga (Acute and life-threatening pediatric conditions). It includes recognition, immediate response, and treatment of emergencies such as high fever, convulsions, respiratory distress, and dehydration. Emphasis is placed on timely intervention and integration of emergency care practices to ensure optimal outcomes.** **• M23U1 Atyayika Balaroga prabandhana (Pediatric emergency management) I** • Unconscious Child, Mada -Intoxication, Moorchha -Syncope, –Sanyasa -Coma, Shock and Anaphylaxis, • Fluid and electrolyte management, Acidosis and alkalosis, Diabetic ketoacidosis, • Acute Respiratory Distress Syndrome, Acute Abdomen.	2	10	20	30	60

	• **M23U2 Atyayika Balaroga prabandhana (Pediatric emergency management) II** • Hypothermia • Heat stroke • Status epilepticus • Status asthmaticus,Seizure and Convulsion • Foreign body aspiration • Foreign body in eye, ear and nose • Acute haemorrhages • Torsion of testis • **M23U3 Atyayika Balaroga prabandhana (Pediatric emergency management) III** • Daghdha vrana (Burn) • Visha (Acute poisoning) • Drowning • Damsha (Dog bite, Snake bite, Scorpion bite, Human bite & Unknown bite) • Apaghata (Accidents) • Aghata (Injuries, Trauma). • Life saving drugs					
24	**M-24 Anya Vyadhyi (Miscellaneous disorders)** **This module addresses a broad spectrum of conditions including malignancies, lifestyle-related disorders, autoimmune diseases, and common surgical concerns. It emphasizes early diagnosis, comprehensive assessment, and integrated management using Ayurvedic principles alongside modern medical approaches.**	2	10	20	30	60

	The focus is on developing competency in personalized and preventive pediatric care for complex and atypical cases. • **M24U1 Pediatric Malignancies** • Pediatric Malignancies (Leukemia, Hodgkin's & Non-Hodgkin's Lymphoma). • **M24U2 Autoimmune disorders** • Autoimmune disorders (SLE, Kawasaki, IgG Nephropathy) • Rheumatological disorders (Juvenile idiopathic Arthritis) • **M24U3 Life style Disorders** • Uccha Raktachapa, Hypertension • Lifestyle Disorders. • **M24U4 Granthi, Vriddhi and Apachi, Gandamala** • Lasika Granthi Vikara (Lymphatic disorders), Gandamala, Apachi • Vridhhi, Hernia • Unduka Puchha Shotha, Appendicitis • Vidradhi, Abscess					
		4	**20**	**40**	**60**	**120**
		16	**80**	**160**	**240**	**480**

Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))

Semester No : 3						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
25	**M-25 Pediatric developmental disabilities.** **The module focuses on the early identification, assessment, and holistic management of developmental delays and disabilities in children, including conditions such as autism, cerebral palsy, and intellectual disabilities. It emphasizes the importance of early intervention, therapeutic support, and the integration of diverse therapeutic principles to promote optimal development and enhance quality of life.** • **M25U1 Beeja Dusti Janya Vikara (Congenital, Chromosomal, Hereditary) Mamsavaha Srotodusti Janya Vikara, Myopathies and Dystrophies.** • Beeja Dushti Janya (Congenital, Chromosomal, Hereditary) Mamsavaha Srotodushti Janya Vikara, Myopathies and Dystrophies. • **M25U2 Asthi-Majjavaha Sroto Vikara (Skeletal deformities, Musculo Skeletal Problems).** • Asthimajjavaha sroto Vikara (Skeletal deformities, Musculo-skeletal problems).	2	10	20	30	60

	• **M25U3 Mastishka Agahata janya Vyadhis (Neurological and CNS injuries), Cerebral palsy.** • Mastishka Agahata Janya Vyadhi (Neurological and CNS injuries), Cerebral palsy. • **M25U4 Sarvanga, Ekanga and Adhranga Vata.** • Sarvanga, Ekanga and Adhranga Vata. • **M25U5 Pakshavadha, (Quadriplegia , diplegia, Hemiplegia, paraplegia, mono plegia), Ardita (facial palsy).** • Pakshavadha, (Quadriplegia , diplegia, Hemiplegia, paraplegia, mono plegia) • Ardita (facial palsy). • **M25U6 Neurodevelopmental disabilities** • Neurodevelopmental disabilities.					
26	**M-26 Manovaha Sroto Vikaras, Psychiatric and Behavioral Disorders-I** **This module covers perspectives on Manovaha Sroto Vikaras mental health, including Anxiety, Depression, and ADHD. It highlights Nidana, Samprapti, Dosha imbalances, and holistic treatments focusing on early diagnosis, lifestyle changes, and therapy.** • **M26U1 Unmada, Childhood psychosis (Catatonia, Phobic and**	2	10	20	30	60

Hallucination disorders).

- Unmada
- Childhood psychosis (Catatonia, Phobic and Hallucination disorders).

• **M26U2 Atatwabhinivesha (Schizophrenia spectrum disorders) Suicide and attempted suicide.**

- Atatwabhinivesha (Schizophrenia spectrum disorders)
- Suicide and attempted suicide.

• **M26U3 Psychosomatic Disorders, Manas Taapa (Anxiety Disorders, Mood Disorders),**

- Psychosomatic Disorders
- Manas Taapa (Anxiety Disorders, Mood Disorders)

• **M26U4 Vishada (Depression), Jagarukata, Nidra-luptata (Sleep Disorders), Eating Disorders.**

- Vishada (Depression)
- Jagarukata
- Nidra-luptata (Sleep Disorders)
- Eating Disorders.

• **M26U5 Anaaryata (Disruptive impulse - control and Conduct disorders).**

- Anaaryata (Disruptive impulse - control and Conduct disorders)

• **M26U6 Tantrum and breath holding spells**

- Temper Tantrum

	• Breath holding spells					
		4	**20**	**40**	**60**	**120**

Semester No : 4

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
27	**M-27 Manovaha Sroto Vikaras, Psychiatric and behavioral Disorders-II** **This module explores Manovaha sroto vikaras, Durupacharata and Krodhajanya Vyadhis, addressing behavioral issues such as aggression, stealing, lying, and truancy. It covers self-injurious behavior, stress disorders, and specific conditions like Mrudbhakshana (pica and rumination), Shayyamutra (enuresis), and Ayukta Mala Visarjana (encopresis). Additionally, it examines Pragnyaparadha Janya Vyadhis, including screen and gaming disorders, as well as motor and habit disorders like Atanashealata and Nakha Khadi (bruxism), providing a holistic understanding for diagnosis and management.** **• M27U1 Durupacharata and Krodhajanya Vyadhis, Aggression, Stena, Lying, Stealing and Truancy.** • Durupacharata and Krodhajanya Vyadhis	2	10	20	30	60

	• Aggression, Stena, Lying, Stealing and Truancy. • **M27U2 Self-Injurious behavior, Stress Disorders.** • Self-Injurious behavior • Stress Disorders. • **M27U3 (3). Acharya Agnivesha, Charaka Samhita, e, (35). Keligman Robert M, Nelson Textbook of, (38). Meharban Singh, Care of the Newborn, , (39). Meharban Singh, Medical Emergencies i, (45). Piyush Gupta, PG Textbook of Pediatri, (76). Ambikadatta Shashtri, Susruta Samhita, (77). Prof. K.R. Srikantha Murthy, Illustra, (93). Dr Lal Krishnan, Arogya Raksha Kalpad** • Mrudbhakshana (Pica and rumination disorders), • Shayyamutra (Enuresis) • Ayukta Mala Visarjana (Encopresis). • **M27U4 Pragnyaparadha Janya Vyadhis(Screen and Gaming Disorder).** • Pragnyaparadha Janya Vyadhis(Screen and Gaming Disorder). • **M27U5 Atanashealata, Motor and habit disorders, , Nakha Khadi (Bruxism).** • Atanashealata, • Motor and habit disorders, • Nakha Khadi (Bruxism).					
28	**M-28 Vriddhi Vipratipatti - Learning and Developmental Disorders**	2	10	20	30	60

The module explores perspectives on learning disabilities and developmental challenges in children. It addresses conditions like dyslexia and ADHD, focusing on their causes, symptoms, and management. Emphasizing early intervention and personalized therapies, the module aims to enhance cognitive development and learning outcomes through holistic Ayurvedic practices.

- **M28U1 Chitta Chaanchalya, Chittodvega, Anvasthita Chittata, ADHD.**

  - Chitta Chaanchalya
  - Chittodvega
  - Anvasthita Chittata
  - ADHD

- **M28U2 Neuro-developmental disorders, Executive function and dysfunction disorder**

  - Neuro-developmental disorders
  - Executive function and dysfunction disorder

- **M28U3 Adhyanana akshamata - Dyslexia, Maths and writing disabilities.**

  - Dyslexia
  - Maths and writing disabilities.

- **M28U4 (9). Cloherty & Stark's Manual o, (38). Meharban Singh, Care of the Newborn, , (39). Meharban Singh, Medical Emergencies i, (43). Pandit Hemraj Sharma, Kashyapa Samhit, (46). Prof. Devendra Nath Mishra, Kaumarbhr, (57). Shilpi Gupta, Kaumarbhritya, Te, (59). Vinod K Paul and Arvind Bagga, Ghai, , (76). Ambikadatta Shashtri, Susruta Samhita, (77). Prof. K.R. Srikantha Murthy, Illustra, (78). Prof. K.R. Srikantha Murthy, Astanga , (79). Dr. S.Suresh Babu, Astanga Samgraham , (80). Dr. R.K. Sharma, Vaidya Bhagawan Dash**

	• Language development • Communication disorders. • **M28U5 Vakagraha -Hearing Disabilities** Vakagraha -Hearing Disabilities • **M28U6 Buddhi Nirodha (Intellectual Disability), Vriddhi Vyakshepa -Developmental Delay** • Buddhi Nirodha (Intellectual Disability) • Vriddhi vyakshepa -Developmental Delay • **M28U7 Chhitavibhrama / Unmada - Autism Spectrum Disorders** • Chhitavibhrama / Unmada • Autism Spectrum Disorders					
		4	**20**	**40**	**60**	**120**

Semester No : 5

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
29	**M-29 Pediatric Rehabilitation**	2	10	20	30	60

The module focuses on the holistic Ayurvedic management of children with Sharirika, Manasika, and Vikasaja Vikara. It addresses conditions like Janmabala Pravritta Vyadhi (e.g., cerebral palsy), Asthi-Mamsa Gata Vikara, and post-Shastra Karma recovery. Emphasis is placed on individualized rehabilitation plans through Snehana, Swedana, Yogabhyasa, Ahara-Vihara, and integration with modern rehabilitation techniques to enhance Bala, Medha, and overall quality of life.

• M29U1 Panchakarma (Rehabilitation medicine), Rasayana , Daiva Vyapashrya chikitsa

- Panchakarma (Rehabilitation medicine)
- Rasayana
- Daiva Vyapashrya chikitsa

• M29U2 Satvavajaya (Cognitive behavioural therapy) chikitsa, Therapeutic Yoga.

- Satvavajaya (Cognitive Behavioral Therapy) Chikitsa
- Therapeutic Yoga.

• M29U3 Physiotherapy, Speech Therapy, Behavioural Therapy, Occupational Therapy

- Physiotherapy
- Speech therapy
- Behavioural therapy
- Occupational therapy

30	**M-30 Kishora Swasthya Vijnana, Adolescent Medicine** **The module focuses on Kaumaryaavastha-specific challenges, including Sharirika, Manasika, and Rasaja Vikara. It addresses concerns like Yauvanapida, Manodaurbalya, and Vyasanabhigata Vikaras, emphasizing Ayurveda-based Chikitsa, Rasayana, and Nidanaparivarjana for balanced Vikas and Ojasvardhana.** • **M30U1 Behavioral Adolescent Problems** • Physiological, Psychological and Behavioral Adolescent Problems. • **M30U2 Adolescent Nutrition.** • Adolescent Sexuality • Adolescent Nutrition. • **M30U3 : Adolescent Mental Health** • Adolescent Mental Health • Adolescent Behavioral Problems • **M30U4 Adolescent Friendly Health Services** • Drug Abuses, (Adolescent Friendly Health Services (AFHS). • **M30U5 National Programs for Adolescent Health** • National Programs for Adolescent Health	2	10	20	30	60

		4	**20**	**40**	**60**	**120**

Semester No : 6

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
31	**M-31 Social And Community Pediatrics** **The module explores how social, environmental, and community factors influence child health. It emphasizes public health programs, nutrition, disease prevention, and the role of community participation and education in promoting pediatric well-being.** **• M31U1 Child Protection and Parenting: Understanding Care, Abuse, and Rights** • Art of Parenting • Child Abuse • Trafficking • Sexual abuse • Labour, • Violence and Child Neglect, Domestic, Foster Care.	2	10	20	30	60

	• **M31U2 Child Adoption** • International adoption • Safety healthcare Practice for children • Ethics. • **M31U3 Vital Statistics** • Global child care(Vital statistics) • Cultural Issues • **M31U4 National Health Mission** • National Health Mission. • **M31U5 Disinfection** • Application of aseptic and community disinfection principles of Graha Roga.					
32	**M-32 Aupsargika Roga (Infections)** **The module focuses on the understanding and management of infections caused by external pathogens, traditionally referred to as Graha Rogas. It explores the diagnosis, symptoms, and treatment of these conditions, which can affect both physical and mental health in children. This module emphasizes early detection, preventive strategies, and holistic Ayurvedic approaches to effectively manage and mitigate the impact of Graha Rogas.** • **M32U1 Diagnosis and management of Graha Rogas**	2	10	20	30	60

- Skanda
- Skanda Apasmara
- Naigamesha
- Shwa Graha

• **M32U2 Diagnosis and management of Graha Rogas**

- Putana and its types
- Pithru
- Mukha mandika
- Shushkha Revati
- Shakuni
- Revati

• **M32U3 Diagnosis and management of Aupsargika-Roga (Infectious Disorders):**

- Antrika Jwara- Typhoid, Paratyphoid,
- Rohini- Diphtheria, Kukkura kasa - Whooping cough,
- Danurvata -Tetanus, neonatal tetanus,
- Karna shola / srava - Otitis Media.

• **M32U4 Diagnosis and management of Aupsargika-Roga (Infectious Disorders):**

- Romantika-Measles
- Karnamula Shotha-Mumps
- Rubella
- Masurika, Chickenpox
- Viral hepatitis
- Weil’s Disease,
- COVID

	• HIV • AIDS • Poliomyelitis. • **M32U5 Diagnosis and management of Aupsargika-Roga (Infectious Disorders):** • Vishama Jwar- Malaria, Kala-azar • Dengue fever • Chikungunya, • Zika • Rickettsial fever, Typhus fever.					
		4	**20**	**40**	**60**	**120**
		16	**80**	**160**	**240**	**480**
		64	**320**	**640**	**960**	**1920**

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

Paper No : 1 Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology)						
Semester No : 3						
3A Course Outcome	**3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)**	**3C Notional learning Hours**	**3D Lecture/ Practical Training/ Experiential Learning**	**3E Domain/ Sub Domain**	**3F Level (Does/Shows how/ Knows how/Know)**	**3G Teaching Learning Methods**
Module 1 : Purushotpatti, Sahaja and Sanchari Roga Pariharopaya (Genetic Counselling)						
Module Learning Objectives **(At the end of the module, the students should be able to)** 1. Analyze Yajnapurusha, Sankhya, Atma Parivartana, and Loka-Purusha Samya Siddhanta in relation to Sharira, Manas, and Bhava- samskarana. 2. Demonstrate skills in genetic analysis, pedigree interpretation, and application of gene and stem cell therapies in clinical care. 3. Apply concepts like Naisthiki Brahmacharya, Atulya Gotra and Rajaswala Paricharya in genetic counselling to prevent hereditary disorders.						
M 1 Unit 1 Fundamentals of Genetics and its Clinical Application • Fundamentals of Genetics • Yajjapurusha • Atma and its Transmigration • Sristhi Uthpatti Karana (Swabhava – Ishwara- Kala- Yadrichchha- Niyati- Parinama) • Sankhya Darshan theories of evolution of Purusha • Barker’s hypothesis **References:** 2,3,8,31,54,75,76,78,79,80						

3A	3B	3C	3D	3E	3F	3G
CO7,CO8	Analyse genetic literature and evaluate research for consistencies, inconsistencies, and gaps.	1	Lecture	CAN	Knows-how	L,BS,L&PPT
CO7,CO8	Demonstrate correlation of genetic fundamentals with Prakriti assessment and apply it in clinical or research practice.	2	Practical Training 1.1	PSY-GUD	Shows-how	CBL,SIM,D
CO7,CO8	Conduct genetic counseling using appropriate terminology, empathy, and ethical communication in simulated/real clinical scenarios.	2	Experiential-Learning 1.1	AFT-RES	Does	SIM,W,RP,RLE
CO7,CO8	Evaluate Yajnapurusha and Atma concepts with reference to transmigration.	1	Lecture	CE	Knows-how	L,L&PPT
CO7,CO8	Explore clinical relevance of Yajnapurusha and Atma transmigration.	3	Experiential-Learning 1.2	CAN	Knows-how	RLE
CO7,CO8	Evaluate and compare Barker’s Hypothesis with Yajnapurusha’s multifactorial origin.	1	Lecture	CE	Knows-how	BS,L&GD,DIS
CO7,CO8	Apply Yajna Purusha concept in understanding human origin, disease, and holistic health.	3	Practical Training 1.2	CAP	Shows-how	D,DIS,TBL
CO7,CO8	Compare Srishti Utpatti Karana with modern universe formation theories.	1	Lecture	CAN	Knows-how	BS,DIS,L&GD
CO7,CO8	Compare Sankhya theory with modern universe evolution theories.	2	Practical Training 1.3	CAN	Shows-how	JC,DIS,SDL,TBL
CO7,CO8	Explore Sankhya theory to understand human evolution and disease origins.	2	Experiential-	CAN	Knows-	SDL,RLE

			Learning 1.3		how	

M 1 Unit 2 Lokasamya - Purusha Siddhanta and its Clinical Application

- Lokasamya - Purusha Siddhanta
- Harmony between Universe and Human being in Preventive genetics
- Principles of Disease Prevention and Health Promotion in the Context of Genetic Disorders

References: 2,3,8,45,54,55,76,78,79

3A	3B	3C	3D	3E	3F	3G
CO5,CO7,CO8	Analyse Loka Purusha Sidhant and its significance in Ayurveda.	1	Lecture	CAN	Knows-how	BS,L&GD
CO5,CO7,CO8	Evaluate the concept of Purush and its relation to the universe.	2	Practical Training 1.4	CE	Shows-how	L&GD,TBL,IBL
CO5,CO7,CO8	Analyze the role of Ashta Prakriti in determining psychological and genetic constitution.	2	Experiential-Learning 1.4	CAN	Knows-how	RLE,CBL
CO5,CO7,CO8	Evaluate Beejadosha Nivaran (Preventive genetics) and its relevance in modern genetic health.	1	Lecture	CE	Knows-how	L&GD,BS
CO5,CO7,CO8	Demonstrate application of Loka Purusha Samya Siddhanta in patient assessment and lifestyle counseling.	2	Practical Training 1.5	PSY-MEC	Shows-how	D,PrBL,D-M
CO5,CO7,CO8	Assess and manage Child Health Deviations applying Lok Purusha Siddhanta.	3	Experiential-Learning 1.5	PSY-MEC	Does	TBL,RLE,W
CO5,CO7,CO8	Integrate Beeja-Beejabhaga-Beejabhagavayava Siddhanta with multidisciplinary care for health promotion.	1	Lecture	CS	Knows-how	L&PPT , BS,L&GD
CO5,CO7,CO8	Plan preventive methods to prevent genetic disorders and promote genetic health.	2	Practical	CS	Shows-	CBL,D

			Training 1.6		how	
CO5,CO7,CO8	Apply Triguna and Prakriti concepts to analyze homeostasis and justify Loka-Purusha Samya Siddhanta in context of human evolution and genetics.	3	Experiential-Learning 1.6	PSY-MEC	Shows-how	W,RLE,JC

M 1 Unit 3 Rajaswala & Ritumati Paricharya and Naisthiki Bhrahmacharya for restoring Genetic Health

- Restoring the genetic health (Rajaswala, Ritumati Paricharya and Naisthiki Bhrahmacharya)
- Atulya Gotra Vivaha and Asa Pinda - Prevention of recessive disorders.
- Criteria for selection of partner (Premarital Counselling)
- Consanguineous marriage, hereditary disorders and its prevention.

References: 2,3,8,31,55,76,77,78,79,86

3A	3B	3C	3D	3E	3F	3G
CO6,CO8	Evaluate potential of Rajaswala, Ritumati Paricharya and Naishtiki Brahmacharya in preserving genetic integrity	1	Lecture	CE	Knows-how	L&PPT ,DIS
CO6,CO8	Identify and analyse relation of Gotra and Asapinda in genetic risks.	2	Practical Training 1.7	CAN	Shows-how	CBL,DIS
CO6,CO8	Analyze Atulya Gotra Vivaha and its preventive role in genetic disorders.	3	Experiential-Learning 1.7	PSY-MEC	Does	RLE,FV
CO6,CO8	Analyze criteria for partner selection using philosophical views, astrological compatibility, and recent premarital counselling advances.	1	Lecture	CAN	Knows-how	BS,L&PPT ,DIS
CO6,CO8	Demonstrate preventive strategies for single gene disorders using modern genetics and Ayurvedic principles like Garbha Sanskar, Bheeja Shuddhi, Ahara, Vihara, and counselling.	2	Practical Training 1.8	PSY-GUD	Shows-how	D,D-BED,RP
CO6,CO8	Conduct/Demonstrate Premarital counselling to couples and educate on Tulya Gotra	4	Experiential-	AFT-RES	Does	W,RLE,S

	Vivaha and preventive measures for genetic disorder.		Learning 1.8			IM,RP
CO6,CO8	Analyze genetic risks of consanguineous marriages and evaluate preventive strategies.	1	Lecture	CE	Knows-how	BS,L&PPT ,DIS
CO6,CO8	Demonstrate analysis of genetic risks in consanguineous marriages using inheritance patterns of major genetic disorders.	3	Practical Training 1.9	PSY-GUD	Shows-how	D,CBL
CO6,CO8	Interpret genetic risks through Gotra, consanguinity, pedigree, and Ayurvedic causation.	4	Experiential-Learning 1.9	AFT-RES	Does	FV,CBL

Practical Training Activity

Practical Training 1.1 : Applied Genomics in Prakriti Assessment

Demonstration
The teacher will demonstrate the process of correlating genetic fundamentals with Prakriti assessment using a patient case. This will include:

- Overview of relevant genetic background (e.g., inheritance pattern, trait expression).
- Step-by-step Prakriti Pariksha using classical Ayurvedic methods (e.g., questionnaires, observation, interrogation).
- Identification of dosha-dominant features and their potential correlation with genetic predispositions.
- Application of this integrated knowledge to suggest individualized lifestyle, dietary, or preventive measures.

Following the demonstration, students will:

- Perform Prakriti Pariksha on a peer or simulated subject using validated tools, under teacher supervision.
- Interpret the given genetic case data and correlate it with the observed Prakriti.
- Identify difficulties or ambiguities during assessment and discuss these with peers and faculty.
- Collaboratively analyze the integrated findings to draw conclusions about personalized healthcare recommendations.

Teacher will summarise the session. (Duration-2 hrs)

Practical Training 1.2 : Yajna Purusha and Human Origin, Disease and Holistic Health

Demonstration
The teacher will demonstrate the components of the Yajna Purusha concept as a symbolic representation of human origin and holistic physiology. Using a visual model or chart, the teacher will explain the derivation of different body parts and systems from Yajna Purusha, linking each with corresponding Panchamahabhutas, Tridoshas, Dhatus, and Srotas. The teacher will highlight how imbalance in these components leads to disease and how restoring balance supports holistic health.
Following the demonstration, students will:
• Identify body components and physiological systems derived from different aspects of Yajna Purusha, using charts/models under teacher supervision.
• Map selected diseases to disturbed elements of the Yajna Purusha framework (e.g., doshic imbalance, affected dhatu or srotas).
• Analyze how the concept promotes a holistic view of health and apply it in case discussions or patient scenarios.
Teacher will summarise the session. (Duration-3 hrs)

Practical Training 1.3 : Cosmic Evolution: Sankhya Meets Science

Demonstration
The teacher will demonstrate the Sankhya theory of cosmic evolution using visual aids/models, highlighting the sequential manifestation of Tattvas (from Prakriti to Mahat, Ahamkara, and the elements). Parallelly, the teacher will illustrate key stages of modern universe evolution (Big Bang, cosmic inflation, matter formation) for comparative understanding.
Following the demonstration, students will:

- Recreate the sequence of Sankhya Tattvas and match them with corresponding stages in modern theories.
- Identify similarities and differences between both models of evolution.
- Analyze the philosophical and scientific implications through group discussion or concept maps.
- Present findings/outcomes..

Teacher will summarise the session. (Duration-2 hrs)

Practical Training 1.4 : Purusha-Loka Sambandha Prayoga

Demonstration
The teacher will demonstrate the philosophical framework of Purush and its cosmic relationship by using a diagrammatic model illustrating the microcosm-macrocosm connection, including aspects like Panchamahabhutas, Tridosha, and the cosmic elements. Teacher will then provide each student with one case study/scenario to analyse the

concept.
Following the demonstration, students will:

- Analyze given case studies or scenarios to identify manifestations of Purush's connection to universal principles.
- Discuss and map how changes in the universe (environment, seasons, cosmic rhythms) influence human physiology and health.
- Collaborate to evaluate the practical implications of this concept in holistic health and Ayurveda practice.

Teacher will summarise the session. (Duration- 2 hrs)

Practical Training 1.5 : Loka Purusha Samya Siddhant-Based Assessment

Demonstration
The teacher will demonstrate the application of Loka Purusha Samya Siddhanta in the assessment of patients by illustrating how cosmic principles (Panchamahabhuta, Tridosha, Kala, and Desha) reflect in child health, development, and disease presentation. The session will include Ayurvedic history-taking, observation of Bala Sharira (child constitution), and parent counseling methods for age-appropriate wellness and lifestyle guidance.
Following the demonstration, students will:

- Practice assessment of relevant cases (real/simulated) assigned by teacher, using Lok Purush Siddhant.
- Identify challenges in applying universal-cosmic concepts to pediatric growth, behavior, or disease patterns.
- Collaboratively interpret findings and prepare an Ayurvedic lifestyle and wellness advice plan for the child and parents.

Teacher will summarise the session, linking practical findings with foundational philosophy. (Duration- 2 hrs)

Practical Training 1.6 : Beeja Dushti Prevention and Genetic Health Promotion

Demonstration
The teacher will demonstrate preventive protocols for Beeja Dushti Vyadhi, focusing on Garbhini Paricharya (prenatal care), Rasayana therapy, and lifestyle modifications aimed at genetic health promotion.
Following the demonstration, students will:

- Practice designing a preventive care plan incorporating principles for Beeja Dushti on case scenarios of pregnant women or families with genetic risk.
- Identify challenges in counseling and implementing genetic health promotion strategies.
- Collaboratively analyze the potential impact of these protocols on disease prevention and holistic health.

Teacher will summarize the session. (Duration-2 hrs)

Practical Training 1.7 : Atulya Gotra Pariksha

Demonstration
The teacher will demonstrate the method of analyzing Gotra and Asapinda lineage using texts and case records, focusing on their relevance in predicting genetic compatibility and risk of recessive disorders.
Following the demonstration, students will:

- Practice documenting Gotra and Asapinda information from assigned case by teacher.
- Identify possible implications of Atulyagotra Vivaha in genetic risks by analyzing clinical histories of hereditary pediatric disorders.
- Discuss and reflect on ethical, cultural, and preventive aspects related to genetic screening.

Teacher will summarise the session. (Duration- 2 hrs)

Practical Training 1.8 : Integrative Counselling for Genetic Disorder Prevention

Demonstration
The teacher will demonstrate the integrated approach to preventive strategies for single gene disorders, emphasizing the roles of modern genetic counselling and Ayurvedic principles such as Bheeja Shuddhi, Garbha Sanskar, Ahara, and Vihara. The demonstration will include:

- Steps to be followed during preconception period.
- Practices for Bheeja Shuddhi (e.g., use of Rasayana, Panchakarma).
- Key aspects of Garbha Sanskar (mental, spiritual, and emotional conditioning).
- Dietary (Ahara) and lifestyle (Vihara) modifications.

Following the demonstration, students will:

- Role-play a counselling session for a couple at risk of a genetic disorder, incorporating both modern and Ayurveda perspectives.
- Identify key preventive strategies discussed and challenges in communication or implementation.
- Collaboratively analyze the case to relate genetic risk with relevant Ayurvedic concepts like Beeja Dosha and Garbha Dushti.

The teacher will conclude the session with a summary and clarify key takeaways and real-world application. (Duration-2 hrs)

Practical Training 1.9 : Genetic Mapping in Consanguineous Marriages

Demonstration
The teacher will demonstrate the analysis of genetic risks associated with consanguineous marriages using clinical examples and pedigree charts of:

- Autosomal recessive disorders (e.g., sickle cell anemia, cystic fibrosis)
- Autosomal dominant disorders (e.g., Huntington's disease)
- X-linked disorders (e.g., hemophilia)

The demonstration will include:

- How to draw and interpret pedigree charts
- Identifying inheritance patterns
- Calculating recurrence risk
- Highlighting the role of consanguinity in increasing carrier frequency

Following the demonstration, students will:

- Practice pedigree analysis using sample case scenarios
- Identify inheritance patterns and risk of transmission in each case
- Document their findings and note challenges in interpretation in their logbook
- Reflect on prevention strategies in relation to consanguinity and genetics

The teacher will summarize key concepts and correct common errors in interpretation. (Duration-3 hrs)

Experiential learning Activity

Experiential-Learning 1.1 : Applied Genetics: Communication and Counseling through Simulation

Each student will counsel two real parents/simulated parents of a child diagnosed with a genetic disorder,or role play in group a similar scenario. They will:

- Communicate complex genetic information in an understandable and sensitive manner.
- Address emotional concerns, inheritance patterns, risk factors, and available options with empathy.
- Reflect on ethical, social, and cultural aspects of genetic counseling.
- Students will document their experience, communication challenges, emotional insights, and learning outcomes in their logbook. (Duration- 2 hrs)

OR
Students will actively participate in workshops and symposiums related to genetic research. They will:

- Engage with experts, researchers.
- Gain exposure to the latest advances and innovations in genetic science.
- Participate in hands-on sessions, tutorials, and demonstrations to reinforce applied skills.
- Explore opportunities for interdisciplinary collaboration and future research initiatives.
- After participation, students will document their reflections, key learnings, and potential applications in their logbook. (Duration- 2 hrs)

Experiential-Learning 1.2 : Clinical Relevance of Yajnapurusha and Atma transmigration

Each student interacts with two patients/families (with consent) to explore their beliefs about karma, disease origin, or past-life influence.
Document the patient's narrative and correlate it with Ayurvedic concepts like Atma transmigration and Yajnapurusha.
Reflect on how these beliefs influence the patient's approach to illness and healing.
Relate findings to one classical Ayurvedic reference and modern clinical understanding.
Record the experience and a 150-word reflection in the logbook. (Duration-3 hrs)

Experiential-Learning 1.3 : Tattva Vivechana: Sharira evam Vyadhi ka Sankhya Siddhanta

Students will analyze a minimum of three clinical cases representing different stages of human development (e.g., infant,childhood, adolescence) and disease conditions (e.g., metabolic, psychological, degenerative) from the perspective of Sankhya Darshana. They will identify the involvement of Mahat, Ahamkara, and Trigunas, and relate disease progression to imbalance in Tattvas (Tanmatras to Mahabhutas). Findings, interpretations, and challenges in application will be documented in their logbook with reflection on how Sankhya theory explains the evolutionary basis of the human constitution and disease. (Duration-2 hrs)

Experiential-Learning 1.4 : Ashta Prakriti Analysis

Students will perform Ashta Prakriti Parikshana on a minimum of three cases across different age groups (infant, toddler, and adolescent).
They will assess both Sharirika and Manasika Prakriti using classical Ayurvedic parameters, with emphasis on developmental patterns, behavioral tendencies, emotional responses, and family history. The findings will be interpreted to understand the influence of prakriti on the child's psychological-genetic constitution and its relevance to predisposition toward certain conditions (e.g., behavioral disorders, allergies, recurrent illnesses).
They will document:

- Observed prakriti characteristics and patterns across age groups
- Relevant family history and inferred genetic links
- Challenges faced in prakriti assessment in children
- Clinical and preventive implications in Kaumarabhritya

Findings and reflections will be recorded in their logbook. (Duration-2 hrs)

Experiential-Learning 1.5 : Loka-Purusha Mapping in Pediatric Health

Students will perform holistic assessments of a minimum of three cases across different age groups (infant, toddler, and adolescent), identifying deviations from cosmic principles as per Lok Purusha Siddhanta (e.g., seasonal imbalance, lifestyle disharmony, dosha-vikruti mismatch).
They will analyze:

- Environmental and lifestyle factors (Ritu, Ahara, Vihara) impacting child health.
- Corresponding signs of imbalance in dosha, agni, bala, and manas.
- The influence of disharmony between macrocosm (Loka) and microcosm (Purusha) on disease patterns.

Students will document:

- Clinical observations and their correlation to imbalances through the Lok-Purusha Siddhanta..
- Challenges faced during assessment and counseling.
- Proposed lifestyle or behavioral modifications based on Ayurvedic principles.
- Reflections on the applicability of cosmic principles in pediatric care.

Findings and reflections will be recorded in their logbook. (Duration- 3 hrs)

Experiential-Learning 1.6 : Triguna–Prakriti Samya in Bala Swasthya

Students will assess Triguna dominance and Prakriti (Sharirika and Manasika) in a minimum of three cases across different age groups (infant, school-going, and adolescent).
They will:

- Use classical parameters to evaluate Triguna (Sattva, Rajas, Tamas) and Prakriti.
- Document findings related to behavioral tendencies, emotional balance, physical constitution, and health status.
- Map correlations between prakriti, homeostasis, and any deviations in health.
- Reflect on how Loka-Purusha Samya (macro-microcosmic equivalence) manifests in child growth, development, and disease predisposition.
- Identify challenges in assessing Guna and Prakriti in pediatric practice.
- Record clinical implications and preventive recommendations for maintaining homeostasis.

All findings, interpretations, and reflections will be documented in the student logbook. (Duration- 3 hrs)

Experiential-Learning 1.7 : Atulya Gotra Siddhanta: Beejadosha Nivarana

Students will conduct a case-based review and community interaction focusing on the role of Atulya Gotra Vivaha(non-consanguineous marriage) in the prevention of hereditary disorders.
They will:

- Collect data through interviews or secondary sources from a minimum of three families with different marital lineages (Atulya Gotra vs consanguineous).
- Document the family history of genetic/pediatric disorders, if any.
- Analyze patterns of inheritance and relate them to classical Ayurvedic concepts of Gotra, Asapinda, and genetic diversity.
- Explore associated lifestyle, diet, and Karma–Daiva factors in the health outcomes of offspring.
- Reflect on how Ayurvedic principles align with modern understanding of recessive disorder prevention.
- Identify practical challenges in integrating traditional marital ethics into contemporary public health awareness.

All observations, comparative findings, and reflections will be compiled in logbook.(Duration-3 hrs)

Experiential-Learning 1.8 : Ayurgenetic Counselling for Healthy Progeny

Students will participate in a simulated premarital counselling workshop, where they will:
Interact with simulated couples (standardized patients or peers role-playing) from diverse socio-genetic and cultural backgrounds.
Conduct a premarital counselling session, incorporating:

- The importance of Atulya Gotriya Vivaha in preventing hereditary/genetic disorders.
- Basic genetic risk communication and the role of modern screening.
- Ayurvedic perspectives on incurable diseases (e.g., Anupakrama, Asadhya Lakshana, Bheeja Dosha).
- The preventive role of Garbha Sanskar, Bheeja Shuddhi, Ahara, and Vihara.

Students will:

- Document the session outcomes including communication strategy, participant response, and integrating modern genetic principles.
- Reflect on challenges encountered in applying cultural, genetic, and ethical perspectives in a counselling context.
- Students will document their findings and reflections in the logbook.(Duration- 4 hrs)

Experiential-Learning 1.9 : Genetic Risk : Gotra, Pedigree & Karma

Students will interact with a minimum of three couples/families (real or simulated cases) representing different social, cultural, and genetic backgrounds to:

- Explore the influence of consanguinity and Atulya Gotra Vivaha in the prevention of recessive genetic disorders.
- Interpret pedigree charts of each case to identify inheritance of recessive traits and assess the risk of transmission.
- Engage in reflective discussion on the Ayurvedic view of genetic disorders through concepts of Karma, Daiva, Bheeja Dosha, and Garbha Dushti.
- Discuss social and environmental factors influencing consanguineous marriages and assess community perspectives.

They will document their:

- Key observations on genetic risk, cultural beliefs, and preventive strategies identified.
- Pedigree interpretations and diagnostic conclusions on recessive traits.
- Challenges encountered in communication, cultural sensitivity, or interpretation.
- Reflections on integrating Ayurvedic causative theories (Karma & Daiva) with genetic counselling.

All findings and reflections will be documented in the logbook. (Duration- 4 hrs)

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. OSCE/OSPE - 5 Stations - 10 marks Each Station 1: Interpretation of Pedigree Chart in a Case of Hereditary Disorder (10 marks) Station 2: Simulated Counselling on Atulya Gotra and Partner Selection (10 marks) Station 3: Identify and Explain Relevance of Rajaswala/Ritumati Paricharya (10 marks) Station 4: Communicate complex genetic information to parent of a child diagnosed with genetic disorder. (10 marks) Station 5: Counselling a couple at risk of a genetic disorder. (10 marks) OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/ Knows how/Know)	3G Teaching Learning Methods

Module 2 : Prakriti Anusaarena Aushadhi (Pharmacogenetics)

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

- Analyze the concepts of Prakriti and Pharmacogenetics.
- Apply Pharmacogenetic priciples in Clinical Practice.
- Demonstrate ethical and cultural sensitivity in Personalised medicine.
- Evaluate clinical outcomes and safety profiles of personalized therapeutic interventions.

M 2 Unit 1 Aushadhi Matra Evam Sevana Vidhi (Posology and Drug delivery)

- Aushadhi Matra
- Aushadhi sevana Kala evam Vidhi
- Sahapana and Anupana

References: 26,49,57,72,73,74,76,77,78,79,81,84,87

3A	3B	3C	3D	3E	3F	3G

CO6	Analyse the principles of Aushadhi Matra with reference to Desha, Kala, Bala, and Rogi-Roga Bala	1	Lecture	CAN	Knows-how	DIS,L&PPT ,BS
CO2,CO3	Calculate Aushadhi Matra specific to different Prakriti, Vyadhi and Bala.	2	Practical Training 2.1	CAN	Shows-how	CBL,SIM
CO2,CO3	Formulate and justify appropriate Aushadhi Matra in varied clinical case contexts and for different varieties of Aushadhi.	3	Experiential-Learning 2.1	CS	Shows-how	RLE,CBL
CO2,CO3	Analyze Aushadhi Sevana Kala and Vidhi to optimize therapeutic outcomes.	1	Lecture	CAN	Knows-how	BS,DIS
CO2,CO3	Apply Aushadhi Sevana Kala and Vidhi in different Prakriti and disease.	2	Practical Training 2.2	CAP	Shows-how	D,SIM,CBL
CO2,CO3	Plan Aushadhi Sevana Kala and Vidhi in different disease.	3	Experiential-Learning 2.2	CS	Shows-how	RLE,CBL
CO2,CO3	Evaluate Sahapana and Anupana effects on therapy.	1	Experiential-Learning 2.3	CE	Shows-how	PrBL,RLE,CBL

M 2 Unit 2 Aushadhi - I

- Swarasa- Bhumyamalaki Swarasa, Durva Swarasa, Erandakarkati patra Swarasa, Nagavalli Swarasa, Nimba Patra Swarasa, Nirgundi Patra Swarasa, Punarnava Swarasa, Tulasi Patra Swarasa, Vasa Patra Swarasa, Mandukaparni Swarasa, Brahmi Swarasa
- Churna- Amalaki Churna, Ashwagandha churna, Bala Churna, Brahmi Churna, Godanti Bhasma, Gokshur Churna, Guduchi Churna, Haridra Churna, Haritaki Churna, Kampillaka Churna, Khadira Churna, Mandur Bhasma, Maricha Churna, Pippali churna, Shankhapushphi Churna, Shatavari Churna, Shunthi Churna, Sphatika Bhasma, Tankana Bhasma, Triphala Churna, Vacha Churna, Vasa Patra Churna, Vidanga Churna, Yashtimadhu Churna, Avipattikara Churna, Balachaturbhadra Churna, Balgangadhar Churna, Bilwashtak Churna, Dadimashtaka Churna, Dantadoshahara Churna. Dashana Sanskara Churna, Hingwashtaka Churna, Lavanbhaskar Churna, Rajanyadi Churna, Sitopaladi Churna, Sukhsaarak Churna, Talisadi churna.
- Vati/Vatak/Modaka/Guggulu- Abha Guggulu, Agnitundi Vati, Chandraprabha Vati, Chitrakadi Vati, Gokshuradi Guggulu, Kaishoradi Guggulu, Kanchnara Guggulu, Kankayana Vati, Khadiradi Vati, Lakshadi Guggulu, Lavangadi Vati, Preenana Modaka, Samshamani Vati, Sanjeevani Vati, Shankha Vati, Simhnada Guggulu, Sudarshanghana Vati, Trayodashanga Guggulu, Triphala Guggulu, Vyoshadi Vati, Yogaraja Guggulu.

- Kwatha and Kashaya- Asanadi Kashaya, Drakshadi Kashaya, Guduchyadi Kashaya, Indukanta Kashaya, Mustadimarma Kashaya, Nayopayadi Kashaya, Panchavalkala Kwatha, Pathyadi Kwatha, Phalatrikadi Kwatha, Punarnavadi Kashaya, Rasnaerandadi Kashaya, Rasnasaptak Kashaya, Sahacharadi Kashaya, Trinapanchmoola Kwatha.
- Phanta, Hima and Paneeya- Dhanyaka Hima, Mishreya Phanta, Shadanga Paneeya, Yashtimadhu Phanta.
- Asava - Aravindasava, Chandanasava, Kanakasava, Kumaryasava, Lohasav, Madhukasava, Panchakolasav, Pippalyasava, Sarivaadyasava.
- Arishta- Abhayarishta, Amrutarishta, Arjunarishta, Dashmularishta, Draksharishta, Jeerakadyarishta, Khadirarishta, Kutajarishta, Mustakarishta, Saraswatarishta, Vasakarishta, Vidangarishta.

References: 3,43,49,73,74,76,78,79,80,84,87,89,92,95,96,97,98,99,108

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze the mode of action and newer advances of the following aushadhi in preventive, protective and specific therapeutic conditions. Swarasa- Bhumyamalaki Swarasa, Durva Swarasa, Erandakarkati patra Swarasa, Nagavalli Swarasa, Nimba Patra Swarasa, Nirgundi Patra Swarasa, Punarnava Swarasa, Tulasi Patra Swarasa, Vasa Patra Swarasa, Mandukaparni Swarasa, Brahmi Swarasa. Churna/Bhasma- Amalaki Churna, Ashwagandha churna, Bala Churna, Brahmi Churna, Godanti Bhasma, Gokshur Churna, Guduchi Churna, Haridra Churna, Haritaki Churna, Kampillaka Churna, Khadira Churna, Mandur Bhasma, Maricha Churna, Pippali churna, Shankhapushphi Churna, Shatavari Churna, Shunthi Churna, Sphatika Bhasma, Tankana Bhasma, Triphala Churna, Vacha churna, Vasa Patra Churna, Vidanga Churna, Yashtimadhu Churna, Avipattikara Churna, Balachaturbhadra Churna, Balgangadhar Churna, Bilwashtak Churna, Dadimashtaka Churna, Dantadoshahara Churna. Dashana Sanskara Churna, Hingwashtaka Churna, Lavanbhaskar Churna, Rajanyadi Churna, Sitopaladi Churna, Sukhsaarak Churna, Talisadi churna. Vati/Vatak/Modaka/Guggulu- Abha Guggulu, Agnitundi Vati, Chandraprabha Vati, Chitrakadi Vati, Gokshuradi Guggulu, Kaishoradi Guggulu, Kanchnara Guggulu, Kankayana Vati, Khadiradi Vati, Lakshadi Guggulu, Lavangadi Vati, Preenana Modaka, Samshamani Vati, Sanjeevani Vati, Shankha Vati, Simhnada Guggulu, Sudarshanghana Vati, Trayodashanga Guggulu, Triphala Guggulu, Vyoshadi Vati, Yogaraja guggulu. Kwatha and Kashaya- Asanadi Kashaya, Drakshadi Kashaya, Guduchyadi Kashaya,	2	Lecture	CAN	Knows-how	L&GD,L&PPT,BS

	Indukanta Kashaya, Mustadimarma Kashaya, Nayopayadi Kashaya, Panchavalkala Kwatha, Pathyadi Kwatha, Phalatrikadi Kwatha, Punarnavadi Kashaya, Rasnaerandadi Kashaya, Rasnasaptak Kashaya, Sahacharadi Kashaya, Trinapanchmoola Kwatha. Phanta, Hima and Paneeya- Dhanyaka Hima, Mishreya Phanta, Shadanga Paneeya, Yashtimadhu Phanta. Asava - Aravindasava, Chandanasav, Chandanasava, Kanakasava, Kumaryasava, Lauhasav, Madhukasava, Panchakolasav, Pippalyasava, Sarivaadyasava. Arishta- Abhayarishta, Amrutarishta, Arjunarishta, Dashmularishta, Draksharishta, Jeerakadyarishta, Khadirarishta, Kutajarishta, Mustakarishta, Saraswatarishta, Vasakarishta, Vidangarishta.					
CO2,CO3,CO4	Discuss Aushadhi selection and administration as per Prakriti and Dosha imbalance.	4	Practical Training 2.3	CAN	Knows-how	SIM,CBL
CO2,CO3,CO4	Evaluate outcomes of different Aushadhis in various clinical conditions.	5	Experiential-Learning 2.4	CE	Knows-how	RLE,CBL ,DIS

M 2 Unit 3 Aushadhi-II

- Taila and Avartini- Amalaki Taila, Anutaila, Ashwagandha bala Lakshadi Taila, Bilvadi Taila, Brihat Saindhvadi Taila , Chandan Bala Lakshadi Taila, Dhanwantar Taila, Dhanwantaram 101, Dhurdhurpatradi Taila, Himsagar Taila, Irimedadi Taila, Jatyadi Taila, Jyotishmati Taila, Khseerbala Taila, Ksheerbala 101, Lashuna Taila, Mahamanjishthadi Taila, Mahamasha Taila, Mahanarayana Taila, Mahavishgarbha Taila, Murivenna Taila, Neelabhringa Taila, Nirgundi Taila, Panchbhoutika Taila, Panchendriya vivardhana Taila, Prasarini Taila, Raj Taila, Rasnadi Taila, Sahacharadi Taila, Sahcharadi 21 Avartini, Yashtimadhu Taila.
- Ghrita- Abhaya Ghrita , Abheermuladi Ghrita , Amruta Ghrita, Ashtanga Ghrita, Ashwagandha Ghrita, Astamangala Ghrita, Brahmi Ghrita , Changeri Ghrita, Dadima Ghrita, Dashmula Ghrita, Guggulutiktak Ghrita, Indukantamrita Ghrita Jeevantyadi Ghrita, Jiwaniya Ghrita, Kalyanaka Ghrita , Kumarkalyanaka Ghrita, Kushmanda Ghrita, Mahapaishachika Ghrita, Mahatiktaka Ghrita Nagbala Ghrita, Panchagavya Ghrita, Panchendriya Vardhan Ghrita, Rasna Dashmoolyadi Ghrita, Samvardhana Ghrita, Shaishuk Ghrita, Shadpala Ghrita, shatapushpa Ghrita, Shatavari Ghrita, Sukumar Ghrita, Tiktak Ghrita, Triphala Ghrita, Vachadi Ghrita, Yashtimadhu Ghrita.
- Ksheerapaka- Amruta Ksheerapaka, Arjuna Ksheerapaka, Lashuna Ksheerapaka, Trivritta Ksheerapaka.
- Arka- Ajmoda Arka , Balarka Yogas, Shatpushpa Arka, Tulsi Arka, Vacha Arka, Hydrosols preparation.
- Khanda and Paka – Ardrak Khanda, Eranda Paka, Haridra Khanda, Narikela Khanda,
- Rasaushadhi and Parpati - Arogyavardhini Vati, Bol Parpati, Dantodbhedagadantak rasa, Dhatri Lauha, Ekangveer Rasa, Gandhak Rasayana, Jaimangal Rasa, Kaphaketu Rasa, Krimikuthar Rasa, Krimimudgara Rasa, Kumarkalyana Rasa, Laghu Sutashekhar Rasa, Laxmivilasa Rasa, Mritunjay Rasa, Panchamrita Parpati,

Punarnava Mandur, Rasa Parpati, Shwasa Kuthara Rasa, Shweta Parpati, Smritisagar Rasa, Swarna Muktadi Gulika, Tribhuwan Kirti Rasa.

- Rasayana and Avaleha -Agastya Haritaki Rasayana, Amalak Rasayana, Amrita Bhallataka Avaleha, Asvagandhavaleha, Bilwavaleha, Chitraka Haritaki Avaleha, Chyawanprasha Rasayana, Dadimavaleha, Dashmula Haritaki Avaleha , Kalyanakavaleha, Kantakaryavaleha, Kushmanda Rasayana, Kutajavaleha, Medhya Rasayana, Nagbala Rasayana, Triphala Rasayana, Trivrittavaleha, Vardhaman Pippali Rasayana, Vasavleha.

References: 3,43,49,72,73,74,76,78,79,81,84,87,89,94,95,96,97,98,99,108

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze the mode of action and newer advances of the following aushadhi in preventive, protective and specific therapeutic conditions, Taila and Avartini- Amalaki Taila, Anutaila, Ashwagandha bala Lakshadi tail, Bilvadi Taila, Brihat Saindhvadi tail, Chandan Bala Lakshadi tail, Dhanwantar Taila, Dhanwantaram 101, Dhurdhurpatradi Taila, Himsagar Taila, Irimedadi Taila, Jatyadi Taila, Jyotishmati Taila, Khseerbala taila, Ksheerbala 101, Lashuna Taila, Mahamanjishthadi Taila, Mahamasha tail, Mahanarayana tail, Mahavishgarbha tail, Murivenna Tail, Neelabhringa tail, Nirgundi tail, Panchbhoutika Taila, Panchendriya vivardhana Taila, Prasarini tail, Raj tail, Rasnadi Taila, Sahacharadi tail, Sahcharadi 21 Avartini, Yashtimadhu Taila. Ghrita- Abhaya Ghrita , Abheermuladi Ghrita , Amruta Ghrita, Ashtanga Ghrita, Ashwagandha Ghrita, Astamangala Ghrita, Brahmi Ghrita , Changeri Ghrita, Dadima Ghrita, Dashmula Ghrita, Guggulutiktak Ghrita, Indukantamrita Ghrita Jeevantyadi Ghrita, Jiwaniya Ghrita, Kalyanaka Ghrita , Kumarkalyanaka Ghrita, Kushmanda Ghrita, Mahapaishachika Ghrita, Mahatiktaka Ghrita Nagbala Ghrita, Panchagavya Ghrita, Panchendriya Vardhan Ghrita, Rasna Dashmoolyadi Ghrita, Samvardhana Ghrita, Shaishuk Ghrita, Shadpala Ghrita, Shatapushpa Ghrita, Shatavari Ghrita, Sukumar Ghrita, Tiktak Ghrita, Triphala Ghrita, Vachadi Ghrita, Yashtimadhu Ghrita. Ksheerapaka- Amruta Ksheerapaka, Arjuna Ksheerapaka, Lashuna Ksheerapaka, Trivritta Ksheerapaka. Arka- Ajmoda Arka , Balarka Yogas, Shatpushpa Arka, Tulsi Arka, Vacha Arka, Hydrosols preparation. Khanda and Paka – Ardrak Khanda, Eranda Paka, Haridra Khanda, Narikela Khanda,	2	Lecture	CAN	Knows-how	BS,L&PPT ,DIS

	Rasaushadhi and Parpati - Arogyavardhini Vati, Bol Parpati, Dantodbhedagadantak rasa, Dhatri Lauha, Ekangveer Rasa, Gandhak rasayana, Jaimangal Rasa, Kaphaketu Rasa, Krimikuthar Rasa, Krimimudgara rasa, Kumarkalyana rasa, Laghu Sutashekhar Rasa, Laxmivilasa rasa, Mritunjay Rasa, Panchamrita Parpati, Punarnava Mandur, Rasa Parpati, Shwasa Kuthara Rasa, Shweta Parpati, Smritisagar rasa, Swarna muktadi Gulika, Tribhuwan Kirti Rasa. Rasayana and Avaleha -Agastya Haritaki Rasayana, Amalak Rasayana, Amrita Bhallataka Avaleha, Asvagandhavaleha, Bilwavaleha, Chitraka Haritaki Avaleha, Chyawanprasha Rasayana, Dadimavaleha, Dashmula haritaki Avaleha , Kalyanakavaleha, Kantakaryavaleha, Kushmanda Rasayana, Kutajavaleha, Medhya Rasayana, Nagbala rasayana, Triphala Rasayana, Trivrittavaleha, Vardhaman Pippali Rasayana, Vasavleha.					
CO2,CO3,CO4	Discuss Aushadhi selection and administration as per Prakriti and Dosha imbalance.	4	Practical Training 2.4	CAN	Knows-how	CBL,D
CO2,CO3,CO4	Evaluate outcomes of different Aushadhi in various clinical conditions.	5	Experiential-Learning 2.5	CE	Shows-how	RLE,CBL

M 2 Unit 4 Pharmacodynamics and Pharmacokinetics of Drugs

- Pharmacodynamics and Pharmacokinetics of routine and emergency drugs
- Antipyretics, Analgesics, NSAID, Antibiotics and chemotherapeutic agents, Anti-fungal, Anti-coagulants, Anti leprosy, Anti malarial, Anti tubercular, Anti mysthenic, Anti protozoal, Immunoglobulins, Anti toxins, Cardiotonics, Diuretics, Vasodilators, Hematanics, ionotropes, Calcium gluconate, Triclofos Sodium, Soda Bicarbonate, chelating agents, Colloids.
- Anti-viral, Anti helminthic, Anti spasmodic, Antacids, H2 blockers, Alkaline earth metal group, Bronchodilators, Anti-allergic, Anti emetic, Anti-diarrheal, Multivitamin and Multi Minerals, Nutritional supplements, Anxiolytic, Anti gout
- Steroids, Anti-cholinergic
- Anti-Convulsants (AED), Anti Myotonic, Anti spasticity, Catecholamine -Adrenaline, Hormonal agents for endocrinal disorders, Anti-obesity, Anti-Hypertensive drugs, Methyxanthine group drugs, Benzodiazepine,
- Topical drugs – Eye and Ear drops, Ointments and creams, Topical sprays, Aseptic solutions .
- Life Saving medicines – Anti pyretics, Analgesics, Anti spasmodics, bronchodilators, Alkaline earth metal group -calcium, steroids, Soda bicarbonate, Atropine, Adrenaline, Hemostatic drugs, Naloxone, Benzodiazepine, Phenothiazine, Oxygen, Antidotes

References: 37,72,88

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4 ,CO6	Evaluate drug actions, kinetics, advances, and interactions of the following, Antipyretics, Analgesics, NSAID, Antibiotics and chemotherapeutic agents, Anti-fungal, Anti-coagulants, Anti leprosy, Anti Malarial, Anti Tubercular, Anti Mysthenic, Anti protozoal, Immunoglobulins, Anti Toxins, Cardiotonics, Diuretics, Vasodilators, Hematanics, ionotropes, Calcium gluconate, Triclofos Sodium, Soda Bicarbonate, chelating agents, Colloids. Anti-viral, Anti helminthic, Anti spasmodic, Antacids, H2 blockers, Alkaline earth metal group, Bronchodilators, Anti-allergic, Anti emetic, Anti-diarrheal, Multivitamin and multi minerals, Nutritional supplements, Anxiolytic, Anti gout, Steroids, Anti-cholinergic, Anti-Convulsants (AED), Anti Myotonic, Anti spasticity, Catecholamine -Adrenaline, Hormonal agents for endocrinal disorders, Anti-obesity, Anti-Hypertensive drugs, Methyxanthine group drugs, Benzodiazepine, Topical drugs – Eye and Ear drops, Ointments and creams, Topical sprays, Aseptic solutions . Life Saving medicines – Anti pyretics, Analgesics, Anti spasmodics, bronchodilators, Alkaline earth metal group -calcium, steroids, Soda bicarbonate, Atropine, Adrenaline, Hemostatic drugs, Naloxone, Benzodiazepine, Phenothiazine, Oxygen, Antidotes	2	Lecture	CE	Knows-how	L&GD,BS
CO2,CO3,CO4	Demonstrate safe drug use applying pharmacokinetics and dynamics.	2	Practical Training 2.5	CE	Knows-how	SIM,CBL

M 2 Unit 5 Pediatric Dosage forms,Formulae & Dose calculations

- Pediatric Dosage Administration
- Formulae & Dose calculations
- Calculation of fluid requirement as per age and conditions
- Oral route, Enteral route, sublingual/buccal route, rectal route
- Parenteral route – Intravenous, Intramuscular, Subcutaneous, Intradermal, Intra arterial

- Transdermal, Inhalation, Trans nasal, Intraosseous, Vaginal
- Emergency medicines and their route of administration

References: 37,38,59,88

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Integrate principles of pharmacokinetics and dynamics for effective therapy.	5	Experiential-Learning 2.6	CS	Shows-how	CBL,SIM
CO2,CO3,CO4	Analyze drug administration routes based on pharmacokinetic and pharmacodynamic principles.	2	Lecture	CAN	Knows-how	L&GD,SDL,BS
CO2,CO3,CO4	Administer medications via age-specific preferred pediatric routes.	4	Practical Training 2.6	PSY-GUD	Shows-how	CBL,D
CO2,CO3,CO4	Justify the drug route based on the outcomes.	4	Experiential-Learning 2.7	CE	Shows-how	CBL,RLE
CO2,CO3	Demonstrate proficiency in applying dose calculation formulas based on age, weight, and body surface area.	2	Practical Training 2.7	PSY-GUD	Shows-how	D,CBL

Practical Training Activity

Practical Training 2.1 : Dosage Calculation

Demonstration
Teacher shall demonstrate dosage calculation to the students for Real/Simulated/Hypothesized cases, based on classical guidelines. Teacher shall then divide student into pairs. Assign each pair with 2-3 case scenarios representing different age-groups, varying constitutions and disease conditions. Teacher shall guide each group in calculating the correct Aushadhi Matra based on age, weight, prakriti, bala, agni.
Students in pairs shall work together to calculate the dosage for the given Real/Simulated/Hypothesized scenarios using classical guidelines. They would first calculate the dose in traditional units (Ratti, Masha, Karsha) and then convert it into modern units (milligrams or millilitres) using conversion charts. (Duration - 2hrs)

Practical Training 2.2 : Aushadhi Sevana Kala & Vidhi: Application and Analysis

Demonstration

The teacher will demonstrate the principles of Aushadhi Sevana Kala (timing) and Aushadhi Sevana Vidhi (method), emphasizing their relevance according to different Prakriti types and disease conditions to enhance therapeutic efficacy. Teacher shall then assign 2-3 real/simulated/hypothesized cases to students for practice
Following the demonstration, students will:
• Analyze assigned case scenarios involving varied Prakriti and disease conditions.
• Apply the principles of Sevana Kala and Vidhi to select appropriate timing and method of medicine administration for each case.
• Justify their choices with clinical reasoning.
• Identify challenges encountered during application and discuss possible solutions collaboratively.
Teacher will summarize the session, highlighting key points and clarifying doubts. (Duration-2 hrs)

Practical Training 2.3 : Prakriti-Vikriti Guided Drug Selection- Part I

Case Based Learning
Instruction for Teachers: Teacher shall divide students into a group of 2 to 3 students. Present students with 2-3 case scenarios or simulated patients with diverse Prakriti (constitution), Vikriti and Dosha imbalance. Teacher shall demonstrate selecting appropriate aushadhi as per patient's condition.
Instruction for students:
Students in small groups, shall analyse the cases and discuss the underlying Nidana Panchaka, accordingly select and advise the appropriate Aushadhi listed below. Students shall provide classical references to justify the decision.
(For Aushadhi Part I-
Swarasa- Bhumyamalaki Swarasa, Durva Swarasa, Erandakarkati patra Swarasa, Nagavalli Swarasa, Nimba Patra Swarasa, Nirgundi Patra Swarasa, Punarnava Swarasa, Tulasi Patra Swarasa, Vasa Patra Swarasa, Mandukaparni Swarasa, Brahmi Swarasa.
Churna- Amalaki Churna, Ashwagandha churna, Bala Churna, Brahmi Churna, Godanti Bhasma, Gokshur Churna, Guduchi Churna, Haridra Churna, Haritaki Churna, Kampillaka Churna, Khadira Churna, Mandur Bhasma, Maricha Churna, Pippali churna, Shankhapushphi Churna, Shatavari Churna, Shunthi Churna, Sphatika Bhasma, Tankana Bhasma, Triphala Churna, vacha churna, Vasa Patra Churna, Vidanga Churna, Yashtimadhu Churna, Avipattikara Churna, Balachaturbhadra Churna, Balgangadhar Churna, Bilwashtak Churna, Dadimashtaka Churna, Dantadoshahara Churna. Dashana Sanskara Churna, Hingwashtaka Churna, Lavanbhaskar Churna, Rajanyadi Churna, Sitopaladi Churna, Sukhsaarak Churna, Talisadi churna.
Vati/Vatak/Modaka/Guggulu- Abha Guggulu, Agnitundi Vati, Chandraprabha Vati, Chitrakadi Vati, Gokshuradi Guggulu, Kaishoradi Guggulu, Kanchnara Guggulu, Kankayana Vati, Khadiradi Vati, Lakshadi Guggulu, Lavangadi Vati, Preenana Modaka, Samshamani Vati, Sanjeevani Vati, Shankha Vati, Simhnada Guggulu, Sudarshanghana Vati, Trayodashanga Guggulu, Triphala Guggulu, Vyoshadi Vati, Yogaraja guggulu.
Kwatha and Kashaya- Asanadi Kashaya, Drakshadi Kashaya, Guduchyadi Kashaya, Indukanta Kashaya, Mustadimarma Kashaya, Nayopayadi Kashaya, Panchavalkala Kwatha, Pathyadi Kwatha, Phalatrikadi Kwatha, Punarnavadi Kashaya, Rasnaerandadi Kashaya, Rasnasaptak Kashaya, Sahacharadi Kashaya, Trinapanchmoola Kwatha.
Phanta, Hima and Paneeya- Dhanyaka Hima, Mishreya Phanta, Shadanga Paneeya, Yashtimadhu Phanta.
Asava - Aravindasava, Chandanasav, Chandanasava, Kanakasava, Kumaryasava, Lauhasav, Madhukasava, Panchakolasav, Pippalyasava, Sarivaadyasava.
Arishta- Abhayarishta, Amrutarishta, Arjunarishta, Dashmularishta, Draksharishta, Jeerakadyarishta, Khadirarishta, Kutajarishta, Mustakarishta, Saraswatarishta,

Vasakarishta, Vidangarishta.)
Teacher will summarise the session, highlighting key principles of individualized Aushadhi selection and safe administration practices. (Duration-4 hrs)

Practical Training 2.4 : Prakriti-Vikriti Guided Drug Selection- Part II

Case Based Learning
Instruction for Teachers: Teacher shall divide students into a group of 2 to 3 students. Present students with 2-3 case scenarios or simulated patients with diverse Prakriti (constitution), Vikriti and Dosha imbalance. Teacher shall demonstrate selecting appropriate aushadhi as per patient's condition.
Instruction for students:
Students in small groups, shall analyse the cases and discuss the underlying Nidana Panchaka, accordingly select and advise the appropriate Aushadhi listed below. Students shall provide classical references to justify the decision.
(Aushadhi Part II
Taila and Avartini- Amalaki Taila, Anutaila, Ashwagandha bala Lakshadi tail, Bilvadi Taila, Brihat Saindhvadi tail, Chandan Bala Lakshadi tail, Dhanwantar Taila, Dhanwantaram 101, Dhurdhurpatradi Taila, Himsagar Taila, Irimedadi Taila, Jatyadi Taila, Jyotishmati Taila, Khseerbala taila, Ksheerbala 101, Lashuna Taila, Mahamanjishthadi Taila, Mahamasha tail, Mahanarayana tail, Mahavishgarbha tail, Murivenna Tail, Neelabhringa tail, Nirgundi tail, Panchbhoutika Taila, Panchendriya vivardhana Taila, Prasarini tail, Raj tail, Rasnadi Taila, Sahacharadi tail, Sahcharadi 21 Avartini, Yashtimadhu Taila.
Ghrita- Abhaya Ghrita , Abheermuladi Ghrita , Amruta Ghrita, Ashtanga Ghrita, Ashwagandha Ghrita, Astamangala Ghrita, Brahmi Ghrita , Changeri Ghrita, Dadima Ghrita, Dashmula Ghrita, Guggulutiktak Ghrita, Indukantamrita Ghrita Jeevantyadi Ghrita, Jiwaniya Ghrita, Kalyanaka Ghrita , Kumarkalyanaka Ghrita, Kushmanda Ghrita, Mahapaishachika Ghrita, Mahatiktaka Ghrita Nagbala Ghrita, Panchagavya Ghrita, Panchendriya Vardhan Ghrita, Rasna Dashmoolyadi Ghrita, Samvardhana Ghrita, Shaishuk Ghrita, Shadpala Ghrita, shatapushpa Ghrita, Shatavari Ghrita, Sukumar Ghrita, Tiktak Ghrita, Triphala Ghrita, Vachadi Ghrita, Yashtimadhu Ghrita.
Ksheerapaka- Amruta Ksheerapaka, Arjuna Ksheerapaka, Lashuna Ksheerapaka, Trivritta Ksheerapaka.
Arka- Ajmoda Arka , Balarka Yogas, Shatpushpa Arka, Tulsi Arka, Vacha Arka, Hydrosols preparation.
Khanda and Paka – Ardrak Khanda, Eranda Paka, Haridra Khanda, Narikela Khanda,
Rasaushadhi and Parpati - Arogyavardhini Vati, Bol Parpati, Dantodbhedagadantak rasa, Dhatri Lauha, Ekangveer Rasa, Gandhak rasayana, Jaimangal Rasa, Kaphaketu Rasa, Krimikuthar Rasa, Krimimudgara rasa, Kumarkalyana rasa, Laghu Sutashekhar Rasa, Laxmivilasa rasa, Mritunjay Rasa, Panchamrita Parpati, Punarnava Mandur, Rasa Parpati, Shwasa Kuthara Rasa, Shweta Parpati, Smritisagar rasa, Swarna muktadi Gulika, Tribhuwan Kirti Rasa.
Rasayana and Avaleha -Agastya Haritaki Rasayana, Amalak Rasayana, Amrita Bhallataka Avaleha, Asvagandhavaleha, Bilwavaleha, Chitraka Haritaki Avaleha, Chyawanprasha Rasayana, Dadimavaleha, Dashmula haritaki Avaleha , Kalyanakavaleha, Kantakaryavaleha, Kushmanda Rasayana, Kutajavaleha, Medhya Rasayana, Nagbala rasayana, Triphala Rasayana, Trivrittavaleha, Vardhaman Pippali Rasayana, Vasavleha.)
Following the demonstration, students will:
• Assess assigned patient/mannequin/peer under the teacher’s supervision for Prakriti, Vikriti, and Dosha imbalance.
• Select an appropriate Aushadhi using classical reasoning and justify the choice.
• Document challenges encountered during selection and administration.

• Discuss as a group the rationale behind their selections and how these align with therapeutic goals.
Teacher will summarise the session, highlighting key principles of individualized Aushadhi selection and safe administration practices. (Duration- 4 hrs)

Practical Training 2.5 : Safe Drug Administration Practice

Demonstration
The teacher will demonstrate the application of pharmacokinetic and pharmacodynamic principles in the selection and safe administration of routine and emergency drugs, emphasizing dose calculation, timing, and monitoring for adverse effects.
Following the demonstration, students will be divided in pairs and provided 2-3 case scenarios or simulated patients and they will:

- Practice calculating and administering dosages
- Identify challenges and potential errors encountered during the process.
- Present opinion.

Teacher will summarize the session. (Duration- 2 hrs)

Practical Training 2.6 : Age-Appropriate Pediatric Drug Administration

Demonstration
The teacher will demonstrate the administration of pediatric medications through different routes (oral, nasal, rectal, topical, intramuscular, etc.), emphasizing age-specific (Infant, toddler, school-going, adolescents) techniques such as appropriate positioning, dosage calculation, preparation of the drug, and comforting the child during administration.
Following the demonstration, students will:

- Practice administering mock medications using simulation tools, mannequins, or peers under the supervision of the teacher.
- Identify practical challenges in handling pediatric patients during medication administration (e.g., resistance, anxiety, cooperation).
- Reflect and discuss the rationale for selecting a particular route in a given scenario, considering age, condition, and expected therapeutic outcome.

The teacher will conclude by summarizing the key considerations and reinforcing safe and effective pediatric drug administration practices. (Duration- 4 hrs)

Practical Training 2.7 : Dose Calculation Techniques

Demonstration
The teacher shall demonstrate methods for calculating drug dosages using age-based, weight-based, and body surface area–based formulas, explaining their clinical relevance and application in pediatric patients.
Following the demonstration, students will:

- Calculate medication dosages for a set of given pediatric case scenarios using all three methods.
- Compare and discuss differences in calculated doses for same patient using different formulae.
- Identify potential errors or challenges encountered during calculations.
- Justify choice of most appropriate dosage calculation method based on patient characteristics and clinical context.

The teacher will summarize the session by emphasizing safe and accurate dose calculation practices. (Duration-2 hrs)

Experiential learning Activity

Experiential-Learning 2.1 : Aushadhi Matra Calculation and Documentation i.e. art of writing prescription.

Students will assess minimum of three clinical cases across different pediatric age groups (infants, toddlers, school-going children, adolescents) presenting with varied conditions. They shall calculate the appropriate Aushadhi Matra for different types of Aushadha (Herbal and Mineral) and forms (Vati-Kashaya-Churna etc) in traditional units (e.g., Ratti, Masha, Karsha) and convert it into modern equivalents (milligrams or millilitres), if required. Students will document the dosage along with justification based on the child's constitution (Prakriti), condition, and severity of disease. Challenges faced during assessment and calculation will also be recorded in the logbook. (Duration-3 hrs)

Experiential-Learning 2.2 : Aushadhi Sevana Kala and Vidhi

Student will evaluate a minimum of three patient cases across different age groups (infant, toddler, school-going, adolescent) presenting with varied disease conditions and Prakriti types. For each case, they will design and formulate a personalized Aushadhi Sevana Kala and Vidhi plan, integrating classical Ayurvedic principles and patient-specific factors. Students will document their treatment plans, rationale, and challenges encountered in the logbook. (Duration- 3 hrs)

Experiential-Learning 2.3 : Impact of Sahapana and Anupana

Student will administer different Sahapana and Anupana combinations to a minimum of three cases across varied Prakriti and disease conditions. They will observe and document therapeutic responses, patient tolerance, and any challenges encountered during administration, in the logbook. (Duration-3 hrs)

Experiential-Learning 2.4 : Application and Evaluation of Aushadhi- Part I

Students will attend to a minimum of three assigned cases across different age groups (infant, toddler, school-going, adolescents) undergoing treatment with specific Aushadhi
(Aushadhi Part I-
Swarasa- Bhumyamalaki Swarasa, Durva Swarasa, Erandakarkati patra Swarasa, Nagavalli Swarasa, Nimba Patra Swarasa, Nirgundi Patra Swarasa, Punarnava Swarasa, Tulasi Patra Swarasa, Vasa Patra Swarasa, Mandukaparni Swarasa, Brahmi Swarasa.
Churna- Amalaki Churna, Ashwagandha churna, Bala Churna, Brahmi Churna, Godanti Bhasma, Gokshur Churna, Guduchi Churna, Haridra Churna, Haritaki Churna, Kampillaka Churna, Khadira Churna, Mandur Bhasma, Maricha Churna, Pippali churna, Shankhapushphi Churna, Shatavari Churna, Shunthi Churna, Sphatika Bhasma, Tankana Bhasma, Triphala Churna, vacha churna, Vasa Patra Churna, Vidanga Churna, Yashtimadhu Churna, Avipattikara Churna, Balachaturbhadra Churna, Balgangadhar Churna, Bilwashtak Churna, Dadimashtaka Churna, Dantadoshahara Churna. Dashana Sanskara Churna, Hingwashtaka Churna, Lavanbhaskar Churna,Rajanyadi Churna, Sitopaladi Churna, Sukhsaarak Churna, Talisadi churna.
Vati/Vatak/Modaka/Guggulu- Abha Guggulu, Agnitundi Vati, Chandraprabha Vati, Chitrakadi Vati, Gokshuradi Guggulu, Kaishoradi Guggulu, Kanchnara Guggulu, Kankayana Vati, Khadiradi Vati, Lakshadi Guggulu, Lavangadi Vati, Preenana Modaka, Samshamani Vati, Sanjeevani Vati, Shankha Vati, Simhnada Guggulu, Sudarshanghana Vati, Trayodashanga Guggulu, Triphala Guggulu, Vyoshadi Vati, Yogaraja guggulu.
Kwatha and Kashaya- Asanadi Kashaya, Drakshadi Kashaya, Guduchyadi Kashaya, Indukanta Kashaya, Mustadimarma Kashaya, Nayopayadi Kashaya, Panchavalkala Kwatha, Pathyadi Kwatha, Phalatrikadi Kwatha, Punarnavadi Kashaya, Rasnaerandadi Kashaya, Rasnasaptak Kashaya, Sahacharadi Kashaya, Trinapanchmoola Kwatha.
Phanta, Hima and Paneeya- Dhanyaka Hima, Mishreya Phanta, Shadanga Paneeya, Yashtimadhu Phanta.
Asava - Aravindasava, Chandanasav, Chandanasava, Kanakasava, Kumaryasava, Lauhasav, Madhukasava, Panchakolasav, Pippalyasava, Sarivaadyasava.
Arishta- Abhayarishta, Amrutarishta, Arjunarishta, Dashmularishta, Draksharishta, Jeerakadyarishta, Khadirarishta, Kutajarishta, Mustakarishta, Saraswatarishta, Vasakarishta, Vidangarishta.)
They will track patient progress over multiple follow-up visits, noting symptom changes in relation to doshic variations and any modifications in Aushadhi. They will document therapeutic outcomes, patient feedback, and clinical decisions made during follow-up, along with challenges encountered, in the logbook. (Duration- 5 hrs)

Experiential-Learning 2.5 : Application and Evaluation of Aushadhi- Part II

Students will attend to a minimum of three assigned cases across different age groups (infant, toddler, school-going, adolescents) undergoing treatment with specific Aushadhi.
(Aushadhi Part II-
Taila and Avartini- Amalaki Taila, Anutaila, Ashwagandha bala Lakshadi tail, Bilvadi Taila, Brihat Saindhvadi tail, Chandan Bala Lakshadi tail, Dhanwantar Taila, Dhanwantaram 101, Dhurdhurpatradi Taila, Himsagar Taila, Irimedadi Taila, Jatyadi Taila, Jyotishmati Taila, Khseerbala taila, Ksheerbala 101, Lashuna Taila, Mahamanjishthadi Taila, Mahamasha tail, Mahanarayana tail, Mahavishgarbha tail, Murivenna Tail, Neelabhringa tail, Nirgundi tail, Panchbhoutika Taila, Panchendriya vivardhana Taila, Prasarini tail, Raj tail, Rasnadi Taila, Sahacharadi tail, Sahcharadi 21 Avartini, Yashtimadhu Taila.

Ghrita- Abhaya Ghrita , Abheermuladi Ghrita , Amruta Ghrita, Ashtanga Ghrita, Ashwagandha Ghrita, Astamangala Ghrita, Brahmi Ghrita , Changeri Ghrita, Dadima Ghrita, Dashmula Ghrita, Guggulutiktak Ghrita, Indukantamrita Ghrita Jeevantyadi Ghrita, Jiwaniya Ghrita, Kalyanaka Ghrita , Kumarkalyanaka Ghrita, Kushmanda Ghrita, Mahapaishachika Ghrita, Mahatiktaka Ghrita Nagbala Ghrita, Panchagavya Ghrita, Panchendriya Vardhan Ghrita, Rasna Dashmoolyadi Ghrita, Samvardhana Ghrita, Shaishuk Ghrita, Shadpala Ghrita, shatapushpa Ghrita, Shatavari Ghrita, Sukumar Ghrita, Tiktak Ghrita, Triphala Ghrita, Vachadi Ghrita, Yashtimadhu Ghrita.
Ksheerapaka- Amruta Ksheerapaka, Arjuna Ksheerapaka, Lashuna Ksheerapaka, Trivritta Ksheerapaka.
Arka- Ajmoda Arka , Balarka Yogas, Shatpushpa Arka, Tulsi Arka, Vacha Arka, Hydrosols preparation.
Khanda and Paka – Ardrak Khanda, Eranda Paka, Haridra Khanda, Narikela Khanda,
Rasaushadhi and Parpati - Arogyavardhini Vati, Bol Parpati, Dantodbhedagadantak rasa, Dhatri Lauha, Ekangveer Rasa, Gandhak rasayana, Jaimangal Rasa, Kaphaketu Rasa, Krimikuthar Rasa, Krimimudgara rasa, Kumarkalyana rasa, Laghu Sutashekhar Rasa, Laxmivilasa rasa, Mritunjay Rasa, Panchamrita Parpati, Punarnava Mandur, Rasa Parpati, Shwasa Kuthara Rasa, Shweta Parpati, Smritisagar rasa, Swarna muktadi Gulika, Tribhuwan Kirti Rasa.
Rasayana and Avaleha -Agastya Haritaki Rasayana, Amalak Rasayana, Amrita Bhallataka Avaleha, Asvagandhavaleha, Bilwavaleha, Chitraka Haritaki Avaleha, Chyawanprasha Rasayana, Dadimavaleha, Dashmula haritaki Avaleha , Kalyanakavaleha, Kantakaryavaleha, Kushmanda Rasayana, Kutajavaleha, Medhya Rasayana, Nagbala rasayana, Triphala Rasayana, Trivrittavaleha, Vardhaman Pippali Rasayana, Vasavleha.
They will track patient progress over multiple follow-up visits, noting symptom changes in relation to doshic variations and any modifications in Aushadhi. They will document therapeutic outcomes, patient feedback, and clinical decisions made during follow-up, along with challenges encountered, in the logbook. (Duration- 5 hrs)

Experiential-Learning 2.6 : Pediatric Pharmacokinetics and Pharmacodynamics Case Analysis

Student will manage medication dosing and administration for a minimum of four cases across different age groups (infant, toddler, school-going, adolescent) presenting with various acute or chronic conditions requiring routine or emergency drugs. They will apply principles of pediatric pharmacokinetics and pharmacodynamics to calculate doses, monitor therapeutic effects, and adjust medication as needed. Students will document dosing rationale, observed drug responses, adverse effects, and challenges encountered in logbook. (Duration- 4 hrs)

Experiential-Learning 2.7 : Drug Route Evaluation

Student will assess a minimum of three pediatric cases across different age groups (infant, toddler, school-going, adolescent) presenting with varying clinical conditions (acute or chronic), where drug therapy is indicated (e.g., Jwara, Shwasa, Apasmara, Unmada, Krimi, etc.).They will:

- Evaluate available drug administration routes considering age, disease condition, dosha predominance, and urgency of action.
- Select the most appropriate route for each case.
- Justify their choice based on expected therapeutic outcomes and patient-specific factors (e.g., compliance, bioavailability, comfort).
- Document their evaluations, route selection rationale, and challenges encountered in their logbook. (Duration- 4 hrs)

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. OSPE- 5 Stations for 10 marks each Station 1: Identify appropriate Prakriti-based formulations and match them to common pediatric conditions Station 2: Calculate doses of Kashaya, Arishta, Vati, Guggulu, etc. for children based on age/weight and Prakriti Station 3: Calculate pediatric dose of modern drugs using Young's, Clark's, or BSA method Station 4: Demonstrate or identify appropriate route of administration (oral, nasal, rectal, topical, parenteral) for both Ayurvedic and modern drugs Station 5: Justify choice of Sahapana and Anupana for given formulation, based on Prakriti and therapeutic principles. OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Semester No : 4

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/ Knows how/Know)	3G Teaching Learning Methods
Module 3 : Anuvamshkiya Vigyana						
Module Learning Objectives **(At the end of the module, the students should be able to)**						

- Describe the role of heredity in maintaining health and contributing to disease.
- Interpret the concepts of Sahaja and Anuvamshika Rogas.
- Apply principles of genetic counselling.
- Formulate preventive strategies for managing and mitigating genetic disorders.

M 3 Unit 1 Beeja-Vigyana (Cytogenetics)

- Cell, cell division, Nucleus
- Chromosome,
- Gene structure
- Phenotype -Genotype
- Chromosome banding pattern
- Classification
- Karyotyping,
- Molecular genetics

References: 2,8,28,31,45,54,55,62

3A	3B	3C	3D	3E	3F	3G
CO5,CO6,CO8	Evaluate cell biology's role in Beeja Dosha-based diagnosis.	1	Lecture	CE	Knows-how	BS,L&GD
CO5,CO6,CO8	Analyse links between cell biology and Beeja Dosha in pediatric disorders.	3	Practical Training 3.1	CAN	Shows-how	PL,D
CO5,CO6,CO8	Analyze cytogenetic data and interpret pediatric genetic disorders using bioinformatics tools.	4	Experiential-Learning 3.1	CAN	Does	W,CBL,RLE
CO7,CO8	Analyze chromosome classification and its genetic significance.	1	Lecture	CAN	Knows-how	BS,L&GD

CO7,CO8	Evaluate clinical classification of chromosomal abnormalities.	4	Experiential-Learning 3.2	CE	Knows-how	ML,TPW,PrBL
CO7,CO8	Analyze principles, techniques, and clinical significance of karyotyping in genetics.	1	Lecture	CAN	Knows-how	L&GD,BS
CO7,CO8	Demonstrate microscopic identification, karyotype arrangement, and interpretation of chromosome spreads for diagnosing chromosomal disorders.	3	Practical Training 3.2	PSY-MEC	Shows-how	D,LRI,TBL
CO7,CO8	Apply karyotyping with clinical correlation and awareness of limitations.	7	Experiential-Learning 3.3	AFT-VAL	Does	RLE,W,SY
CO7,CO8	Demonstrate DNA and RNA structures using models and relate to Beeja-dosha and Prakriti identification.	2	Practical Training 3.3	PSY-GUD	Knows-how	D,L&GD
CO7,CO8	Demonstrate handling and safeguarding of genetic information following ethical and confidentiality protocols.	2	Experiential-Learning 3.4	AFT-RES	Does	ML,JC,LRI,W

M 3 Unit 2 Branches of Genetics Part 1

- Cancer genetics – Biochemical genetics,
- Role of genetic aberration in producing malignancy
- Biochemical genetics - Inborn Errors of Metabolism, metabolic screening

References: 2,8,28,31,45,54,62

3A	3B	3C	3D	3E	3F	3G
CO7,CO8	Analyze branches of genetics and inheritance principles from gene to population, in relation to child health.	2	Lecture	CAN	Knows-how	BS,L&GD

CO7,CO8	Demonstrate genetic analysis techniques across key branches.	6	Practical Training 3.4	CE	Shows-how	W,PL,D
CO7,CO8	Analyze genetic cases to interpret inheritance patterns, predict outcomes and address family concerns.	4	Experiential-Learning 3.5	PSY-MEC	Does	RLE
CO1,CO7	Analyze genetic and biochemical mechanisms involved in pediatric cancers and evaluate the role of genetic aberrations in malignancy.	2	Lecture	CAN	Knows-how	L&GD,BS
CO1,CO7	Interpret genetic data to identify biochemical aberrations linked to pediatric malignancies.	2	Experiential-Learning 3.6	CE	Does	SY,W

M 3 Unit 3 Branches of Genetics Part 2

- Population genetics (Gene pool)
- Immunogenetics
- Developmental genetics
- Behavioural genetics

References: 2,8,31,45,54,55,62

3A	3B	3C	3D	3E	3F	3G
CO7,CO8	Analyze and integrate genetic principles to explain variations in health, disease susceptibility, and development.	3	Lecture	CAN	Knows-how	BS,L&GD,L&PPT
CO7,CO8	Analyse the gene pool, immune-genetic, developmental, and behavioral genetic traits.	6	Practical Training 3.5	CAN	Knows-how	D,PBL
CO7,CO8	Apply genetic concepts to analyze pediatric cases involving population, immune, developmental, and behavioral traits.	3	Experiential-Learning 3.7	AFT-VAL	Does	RLE

Practical Training Activity

Practical Training 3.1 : Beeja Dosha and Pediatric Genetics

Demonstration
The teacher will demonstrate the stages and significance of cell division (mitosis and meiosis) and its impact on pediatric growth, development, and congenital anomalies, highlighting how errors in cell division relate to Ayurvedic concepts such as Beeja Dosha and Garbha Vikriti. The demonstration will include microscopic slides/images of dividing cells, examples of common chromosomal abnormalities, and discussion of clinical implications in child health.
Following the demonstration, students will:

- Observe and identify the phases of cell division using microscope slides or digital images under the teacher's guidance.
- Discuss clinical cases where aberrant cell division leads to pediatric disorders, correlating these with Ayurvedic principles.
- Analyze how cell division abnormalities contribute to developmental defects and infer the involvement of Beeja Dosha in samprapti.

Teacher will summarise the session. (Duration- 3 hrs)

Practical Training 3.2 : Karyotype Analysis and Dosha Correlation

Demonstration
The teacher will demonstrate the process of microscopic identification of chromosome morphology and banding patterns using prepared metaphase spread images/slides, followed by arranging chromosomes into a standard karyotype format. The teacher will explain key features for identifying homologous pairs and highlight common chromosomal abnormalities. The demonstration will include discussion on how these chromosomal disorders relate to dosha imbalances, defects in the Beeja (genetic 'seed'), and their role in vikriti and hereditary conditions.
Following the demonstration, students will:

- Practice arranging chromosomes into a karyotype using provided metaphase images/slides under the teacher's supervision.
- Identify challenges encountered during chromosome pairing and band pattern recognition.
- Analyze and interpret karyotypes collaboratively to diagnose chromosomal abnormalities and discuss possible implications in dosha involvement and pathogenesis (Samprapti).

The teacher will summarise the session. (Duration- 3 hrs)

Practical Training 3.3 : Molecular Basis of Prakriti and Beeja-dosha

Demonstration
The teacher will demonstrate DNA and RNA structures using 3D models, diagrams, or digital tools, highlighting key components (double helix, nucleotides, RNA types). Ayurvedic concepts of Beeja, Beeja-bhagavayava, and Beeja-dosha will be explained in relation to molecular defects in Jataja Rogas. The teacher will also discuss Trigunas (Sattva, Rajas, Tamas) as influencers of genetic expression and Prakriti types (Vata, Pitta, Kapha) as reflections of genetic diversity.
Following the demonstration, students will:

- Handle models to reinforce structural understanding.
- Correlate DNA/RNA features with concepts like Beeja and Beeja-dosha.
- Reflect on Trigunas in relation to cellular behavior.
- Discuss Prakriti as a constitutional type influenced by genetic variability.
- Analyze clinical examples of Jataja Rogas from an integrative perspective.
- Identify challenges in linking Ayurvedic and molecular frameworks.
- Collaboratively infer Samprapti Ghatakas from case-based findings.

The teacher will conclude with a summary of key integrative insights and guide reflective discussion.(Duration-2 hrs)

Practical Training 3.4 : Applied Genetics in Child Health

Demonstration
The teacher will demonstrate the concepts and methodologies associated with the five key branches of genetics:

- Molecular Genetics: Structure and replication of DNA, transcription, translation, gene regulation.
- Classical Genetics: Mendelian laws, Punnett squares, chromosomal behavior, linkage and mapping.
- Population Genetics: Hardy-Weinberg equilibrium, allele frequency calculations, forces of evolution.
- Quantitative Genetics: Polygenic traits, heritability estimates, phenotypic variance.
- Epigenetics: DNA methylation, histone modification, environmental impacts on gene expression.

This will be done through:

- Visual models (e.g., DNA models, pedigree charts, gene maps),
- Case-based discussions,
- Concept mapping,
- Simulation software (if available) to visualize population dynamics and epigenetic changes.

Following the demonstration, students will:
Engage in hands-on activities such as:

- Solving Mendelian and population genetics problems.
- Simulating genetic crosses or Hardy-Weinberg calculations.
- Reviewing case studies highlighting epigenetic changes in diseases.
- Analyzing polygenic trait inheritance in simulated or real datasets.

Identify challenges they encounter while:

- Distinguishing between different types of genetic inheritance.
- Applying formulas and principles (e.g., for allele frequency or heritability).
- Interpreting epigenetic regulation in clinical or environmental contexts.

Analyze findings collaboratively in pairs to:

- Compare and contrast the genetic principles across the branches.
- Evaluate how each branch contributes to understanding health, disease, and heredity.
- Correlate findings with Ayurvedic concepts like Beeja-Beejabhaga-Beejabhagavayava dushti, Janmika vikriti, or Adibala/Janmabala pravritta vyadhi wherever applicable.

Teacher will summarize the session by:

- Recapping the key features and scope of each branch of genetics.
- Linking modern genetic insights to Ayurvedic embryology and hereditary concepts.
- Encouraging reflection on how integrative understanding enhances diagnosis and research. (Duration- 6 hrs)

OR
Workshop
"Branches of Genetics in Pediatric Practice":
Teacher will conduct a workshop on "Branches of Genetics in Pediatric Practice" (Molecular Genetics: Examines DNA structure, replication, and expression; Classical Genetics:Focuses on Mendelian inheritance, genetic terminology, and chromosomal inheritance; Population Genetics: Investigates genetic variation, evolution, and population dynamics). Students will be paired and five activity stations will be prepared, focusing on one genetic branch with case-based tasks. Teacher will introduce key concepts of molecular, classical, population, quantitative genetics, and epigenetics.

- Pairs rotate through 5 activity stations.
- At each station, they analyze scenarios, interpret data (e.g., pedigrees, gene charts), and discuss findings.
- Each pair reflect and present insights, connecting modern genetics to Beeja Dushti.
- Teacher summarizes applications in pediatric care; session ends with a quick evaluation or quiz. (Duration- 6 hrs)

Practical Training 3.5 : Decoding Pediatric Disorders through Genetics

Demonstration
The teacher will demonstrate the core concepts of Population Genetics (gene pool variation), Immunogenetics, Developmental Genetics, and Behavioral Genetics through case studies and problem-solving exercises. The demonstration will include:

- Explanation of gene pool dynamics and genetic variation in populations.
- Overview of immune system genetics and its role in pediatric diseases.
- Key developmental genetic mechanisms affecting child growth.

- Behavioral genetics principles influencing pediatric behavior.

Following the demonstration, students will:

- Practice analyzing genetic cases and datasets related to gene pool variations, immune-genetic patterns, developmental anomalies, and behavioral traits under the teacher's supervision.
- Identify challenges encountered in interpreting genetic information and case findings.
- Collaboratively analyze results to distinguish normal from abnormal genetic patterns and relate findings to pediatric health implications.

Teacher will summarize the session by recapping key genetic principles and their relevance in pediatric care. (Duration- 3hrs)
AND
PBL
The teacher will demonstrate a clinical case of a pediatric patient with complex symptoms involving developmental delay, recurrent infections, and behavioral abnormalities. The demonstration will focus on:

- Population genetic aspects (e.g., family history, consanguinity, gene pool influence).
- Immunogenetic clues (e.g., frequent infections, vaccine responses).
- Developmental genetic features (e.g., milestones delay, dysmorphisms).
- Behavioral genetic observations (e.g., hyperactivity, poor social skills).

The teacher will guide students through identifying key features in the case and associating them with underlying genetic mechanisms using visuals like pedigrees, clinical images, and lab data. (Duration- 3 hrs)

Experiential learning Activity

Experiential-Learning 3.1 : Applied Cytogenetics with Bioinformatics

Students will analyze cytogenetic data from a minimum of three cases with suspected/confirmed genetic disorders across different age groups (infant, toddler, school-going,adolescents). Using appropriate bioinformatics tools, they will interpret chromosomal abnormalities, correlate findings with clinical features, and document the clinical significance of the cytogenetic research. Students will record their analysis process, interpretations, and challenges encountered in their logbook. (Duration-4 hrs)
OR

Students will attend a workshop to skillfully use bioinformatics tools for analyzing cytogenetic data from pediatric cases. They will perform step-by-step interpretation of chromosomal abnormalities and correlate these with clinical features. Under minimal supervision, students will document their findings and workflow efficiently.(Duration-4 hrs)

Experiential-Learning 3.2 : Evaluation of Chromosomal Abnormalities

Students will review clinical cases involving chromosomal abnormalities in a minimum of three pediatric patients across different age groups (infant, toddler, school-going, adolescent) presenting with varied genetic conditions. They will evaluate the classification of these chromosomal abnormalities based on clinical findings and laboratory data. Students will document their evaluations, including classification rationale and challenges encountered, in their logbooks. (Duration 4 hrs)

Experiential-Learning 3.3 : Karyotyping Skills and Genetic Diagnostics

Student will analyze and interpret karyotype results from a minimum of three clinical cases with different chromosomal or genetic conditions. They will correlate the karyotype findings with clinical features and underlying dosha imbalances or Beeja defects, apply karyotyping principles to each case, and evaluate the limitations encountered during diagnosis. Students will document their analyses, clinical correlations including dosha involvement, and challenges faced in a logbook. (Duration- 3 hours)
AND
Student will actively participate in a workshop on chromosomal disorders and their clinical implications. The workshop will include hands-on sessions on karyotype analysis, interpretation of chromosomal abnormalities, and discussions on the correlation of these findings with dosha imbalances and Beeja defects. Students will engage in case-based group discussions to apply karyotyping principles in clinical scenarios and reflect on the limitations of this diagnostic method. They will document their learning points and insights in a reflective journal. (Duration- 4 hours)
OR
Student will visit a cytogenetics laboratory to observe the practical process of karyotyping, including sample preparation, staining, microscopic examination, and report generation. During the visit, students will also be introduced to mobile applications and digital tools used for genetic analysis, data recording, and interpretation in genetic studies. They will explore how these technologies assist in diagnosing chromosomal disorders and track genetic information efficiently. Students will discuss the integration of these tools with traditional concepts such as dosha and Beeja in hereditary conditions. Following the visit, students will prepare a report summarizing their observations and reflecting on the role of digital technology in enhancing genetic diagnostics. (Duration- 4 hours)

Experiential-Learning 3.4 : Protecting Genetic Data: Ethical Practice

Students will review and analyze three case scenarios involving pediatric patients with genetic or congenital conditions (e.g., Jataja Rogas, inherited metabolic disorders, congenital anomalies). They will:

- Identify ethical issues and confidentiality concerns related to genetic information sharing in each case.
- Practice documenting and communicating genetic information while maintaining confidentiality as per ethical guidelines.
- Reflect on challenges faced during maintaining privacy and ethical decision-making.
- Record findings, ethical dilemmas, and solutions in their logbook. (Duration-3 hrs)

Experiential-Learning 3.5 : Integrative Genetic Counseling

Students will preapre any one of the educational tools (leaflet/poster/short video/ digital) and conduct genetic counseling sessions for families of at least three pediatric patients, incorporating concepts from molecular, classical, population, quantitative genetics, and epigenetics alongside principles such as Beeja(seed), Beeja Dushti (genetic faults), and Dosha influences on heredity. They will explain inheritance patterns, gene expression, population risks, complex traits, and epigenetic influences in simple terms, relate these to Ayurvedic understanding of Garbha Vriddhi and Janma Bala, address family concerns, and document the counseling process and challenges faced in a logbook.(Duration-4 hrs)

Experiential-Learning 3.6 : Cancer Genes and Beeja Dushti: Bridging Systems

Students will attend a symposium/Guest Lecture on cancer genetics with a focus on pediatric malignancies and integrative perspectives.Experts from modern medicine and Ayurveda will present insights on genetic mutations, biochemical pathways, and Beeja Dushti-based interpretations.Sessions will include panel discussions on diagnosis, prognosis, and integrative management approaches.Students will participate as audience, ask questions, and engage in guided discussions with faculty moderators.They will document key comparative insights in their logbook. (Duration- 2hrs)

Experiential-Learning 3.7 : Genetic Profiling in Pediatric Disorders

Student will analyze a minimum of three pediatric cases across different age groups (infant, toddler, school-going, adolescents) exhibiting genetic influences related to population traits, immune dysfunctions, developmental delays, or behavioral deviations (e.g., thalassemia, primary immunodeficiency, Down syndrome, autism spectrum disorders). They will apply genetic principles to assess familial patterns, doshic involvement, and prakriti-vikriti correlations. Findings and reflections, including diagnostic challenges and Ayurvedic interpretation, will be documented in the logbook. (Duration- 3 hrs)

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

OSCE Stations (10 marks each): 5 x10 =50 marks

• Slide (picture) Identification: Identify normal/abnormal metaphase spread, specify abnormality, give two clinical implications, and correlate with Beeja dosha.

• Karyotype Analysis: Identify abnormality in given karyogram, state mechanism, mention two diagnostic utilities, and link to Ayurveda-based personalized care.

• Pedigree Interpretation: Identify inheritance pattern, name one similar disease, state recurrence risk, and relate findings with Beejabhaga dushti/Prakriti.

• Case Scenario: Diagnose chromosomal disorder in child with clinical features, explain cytogenetic basis, name one confirmatory test, and discuss Ayurveda interpretation.

• Viva/Concepts: Define nondisjunction with example, differentiate structural vs numerical abnormalities, explain diagnostic role of cytogenetics, and relate Beejabhagavayava to genes/chromosomes.

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/ Knows how/Know)	3G Teaching Learning Methods
Module 4 : Clinical application of Beeja Vigyana.						

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

- Analyze the concept of Beeja, Beeja Bhaga, and Beeja Bhaga Avayava in correlation with genetic principles.
- Analyze the mechanisms of genetic mutations and chromosomal abnormalities, and their clinical relevance.
- Evaluate the preventive and therapeutic approaches for genetic disorders.

M 4 Unit 1 Beeja Bhaga Avyava janya Vikara (Chromosomal Disorder)

- Chromosomal aberrations (Mutations).
- Structural chromosomal disorders (deletions, duplication, inversion, insertion, conjunction, translocation, mosaicism)
- Numerical chromosomal Disorders (Monosomy, trisomy, polysomy).
- Adibala Pravritta Vyadhi

References: 3,8,31,45,54,55,62,76

3A	3B	3C	3D	3E	3F	3G
CO3,CO6,CO7 ,CO8	Analyze structural and numerical chromosomal aberrations and their correlation with Adibala Pravritta Vyadhis in pediatric disorders.	3	Lecture	CE	Knows-how	L&PPT ,BS
CO3,CO6,CO7 ,CO8	Analyse the karyotypes to identify and evaluate numerical and structural chromosomal abnormalities.	4	Practical Training 4.1	CAN	Knows-how	D,LRI,PBL
CO3,CO6,CO7 ,CO8	Counsel and manage patients with chromosomal disorders using concepts of Beeja, Beeja Bhaga Vikara, and Janmabala Pravritta Vikara	6	Experiential-Learning 4.1	PSY-MEC	Does	RLE
CO1,CO8	Identify Adibala Pravritta Vyadhi and correlate with hereditary chromosomal mutations.	3	Practical Training 4.2	CAN	Knows-how	D,PL

M 4 Unit 2 Anuvamshkiya Vikara (Hereditary disorders)

- Vanshavahini janya Vikaras (Mendelian Disorders)
- Single Gene disorders
- Autosomal dominant and recessive disorders
- X-linked dominant and recessive disorders

References: 2,8,45,54,55

3A	3B	3C	3D	3E	3F	3G
CO3,CO6,CO7,CO8	Analyze Vanshavahini Janya Vikaras by interpreting inheritance patterns (autosomal dominant, recessive and X-linked inheritance) of Mendelian disorders.	3	Lecture	CAN	Knows-how	L&PPT,BS
CO3,CO6,CO7,CO8	Demonstrate pedigree analysis, and basic management of single-gene disorders (e.g., Marfan syndrome, Thalassemia, Sickle Cell Anemia, DMD, BMD)	4	Practical Training 4.3	CAN	Knows-how	D,PAL,CBL
CO3,CO6,CO7,CO8	Integrate preventive concepts like Garbhasamskara, Rasayana, and Samskaras with genetic counseling in management of Vanshavahini janya Vikaras.	6	Experiential-Learning 4.2	CAN	Knows-how	SY,RLE,PBL,W

M 4 Unit 3 Non-Mendelian Disorders

- Polygenic disorders
- Mitochondrial disorders,
- Multi-factorial disorders
- Other Hereditary disorders

References: 2,8,35,54

3A	3B	3C	3D	3E	3F	3G
CO3,CO4,CO5,CO6	Analyze the inheritance patterns, clinical features, and diagnostic relevance of Non-Mendelian, Mitochondrial and multifactorial hereditary disorders.	2	Lecture	CAN	Knows-how	BS,L&GD

CO3,CO5,CO7,CO8	Demonstrate identification, differentiation, and management of Non-Mendelian and multifactorial hereditary disorders.	5	Practical Training 4.4	CAN	Knows-how	D,CBL,DIS,PAL
CO3,CO5,CO7,CO8	Integrate preventive concepts (Garbhasamskara, Rasayana, and Samskaras) with genetic counseling in managing Non-Mendelian, Mitochondrial and Multi-factorial hereditary disorders.	6	Experiential-Learning 4.3	PSY-MEC	Does	SY,RLE,PBL

M 4 Unit 4 Recent advances in genetics

- Genetic Engineering
- Pharmacogenetics.
- Recent advancement in genetic technology

References: 2,8,28,31,45,54,55,62

3A	3B	3C	3D	3E	3F	3G
CO5,CO8	Analyze recent advancements in genetic technology and their applications in genetic engineering.	1	Lecture	CAN	Knows-how	L_VC,BS,L&GD
CO5,CO8	Analyze the principles of pharmacogenetics and evaluate its relevance to personalized medicine.	1	Lecture	CAN	Knows-how	BS,L&PPT,L,L&GD
CO5,CO8	Demonstrate evaluation of genetic technologies and their applications, including data interpretation and ethical considerations.	4	Practical Training 4.5	CE	Knows-how	D,TBL,PAL
CO5,CO8	Evaluate the application of genomic technologies in pharmacogenomics and analyze genetic data using bioinformatics tools and also explore the method of application of AI in analysis and interpretation of Ayurveda Genetic principles	8	Experiential-Learning 4.4	CE	Knows-how	W,SY

Practical Training Activity

Practical Training 4.1 : Karyotype Skills and Samprapti Mapping

Demonstration
The teacher will demonstrate the process of karyotype analysis, highlighting the identification of numerical (e.g., trisomy, monosomy, polyploidy) and structural chromosomal abnormalities (e.g., deletions, duplications, inversions, translocations, isochromosomes). The teacher will also explain the interpretation of chromosomal patterns in common syndromes like Down, Turner, Klinefelter, Patau, and Edward syndromes, along with their clinical correlations and Ayurvedic relevance such as Adibala Pravritta Vyadhis.
Following the demonstration, students will:

- Practice analyzing provided karyotype images under the teacher's supervision.
- Identify challenges they face during identification and interpretation.
- Collaboratively analyze the abnormalities to correlate genetic findings with clinical features and Beeja Dushti, Anuvanshika Vikara concepts.
- The teacher will summarize the session, clarify doubts, and highlight key learning points. (Duration- 2 hrs)

AND
Lab Report Interpretation
The teacher will demonstrate how to interpret genetic lab reports, focusing on karyotype findings and identifying numerical and structural chromosomal abnormalities. Sample reports featuring conditions like trisomy 21, monosomy X, and Robertsonian translocations will be explained step-by-step. Students will then practice interpreting anonymized lab reports under guided supervision. They will identify abnormalities, correlate them with clinical syndromes, and reflect on Ayurveda parallels like Adibala Pravritta Vyadhi.
Findings will be discussed in small groups, followed by teacher feedback and clarification. (Duration-2 hrs)

Practical Training 4.2 : Adibala Vyadhi and Chromosomal Mutations

Demonstration
The teacher will demonstrate the identification of Adibala Pravritta Vyadhi through detailed family and perinatal history-taking, clinical examination, and interpretation of genetic findings. This will include recognition of numerical chromosomal aberrations (e.g., monosomy, trisomy syndromes like Down, Turner, Klinefelter) and structural aberrations (e.g., deletions, duplications, inversions, translocations). The demonstration will integrate Ayurvedic concepts such as Beeja Dushti and Prakriti in understanding the hereditary basis of these disorders.
Following the demonstration, students will:

- Practice eliciting family and perinatal history and examine clinical cases or simulations under teacher supervision.
- Identify and classify chromosomal abnormalities based on karyotype or clinical features.
- Correlate genetic aberrations with Ayurvedic samprapti and infer implications for Adibala Pravritta Vyadhi.

The teacher will summarize the session, reinforcing links between chromosomal abnormalities and Ayurvedic hereditary concepts. (Duration-2 hrs)

Practical Training 4.3 : Applied Mendelian Genetics

Demonstration
The teacher will demonstrate the process of pedigree analysis and interpretation of inheritance patterns in single-gene disorders, highlighting autosomal dominant, recessive, co-dominant, and X-linked traits using real or simulated case examples.
Following the demonstration, students will:
• Practice constructing and analyzing pedigrees for disorders such as Marfan syndrome, Thalassemia, Sickle Cell Anemia, DMD, and BMD under the teacher's supervision.
• Identify challenges encountered during pedigree charting and case interpretation.
• Collaboratively analyze findings to classify inheritance patterns and discuss clinical implications.
Teacher will summarize the session. (Duration-2 hrs)
AND
Peer-Assisted Learning Activity
Students will be divided into pairs, with each pair assigned a specific single-gene disorder (e.g., Marfan syndrome, Thalassemia, Sickle Cell Anemia, DMD, BMD).
Each pair will research and prepare a short presentation on the disorder's inheritance pattern, corelation with Beeja Vikriti, clinical features, and basic management principles.
Pairs will exchange case scenarios and perform pedigree analysis collaboratively.
Peers will provide constructive feedback on each other's analysis, interpretations, and suggested management approaches.The session will conclude with group reflections and sharing of key clinical and conceptual takeaways with the whole class. (Duration-2 hrs)

Practical Training 4.4 : Managing Non-Mendelian Hereditary Disorders

Demonstration
The teacher will demonstrate the clinical identification, differentiation, and management principles of Non-Mendelian and multifactorial hereditary disorders using real or simulated case examples (e.g., MELAS, cleft lip/palate, Huntington's disease).
Following the demonstration, students will:

• Examine and document clinical features from at least two case scenarios representing Non-Mendelian and multifactorial disorders.
• Discuss differential diagnosis and propose basic management plans for each case under teacher's supervision.
• Identify challenges encountered in clinical evaluation and management planning.
• Collaboratively analyze and present their findings, emphasizing inheritance patterns and management strategies.
Teacher will summarize the session. (Duration-2 hrs)
AND
Peer Assisted Learning
Students will be divided into pairs, with each pair assigned a specific Non-Mendelian or multifactorial hereditary disorder (e.g., MELAS, cleft lip/palate, Huntington's disease).
Each pair will:

- Research and prepare a short presentation on the disorder's inheritance pattern, correlation with Beeja Vikriti, clinical features, and basic management principles.
- Exchange case scenarios with another pair and collaboratively analyze clinical features and discuss management strategies.
- Provide constructive feedback to their peers on the clinical identification, differential diagnosis, and management approaches presented.

The session will conclude with group reflections and sharing of key clinical insights and conceptual takeaways with the whole class.(Duration-3hrs)

Practical Training 4.5 : Genetic Technologies and Ayurveda Integration

Demonstration
The teacher will demonstrate the use and clinical relevance of genetic technologies such as Next-Generation Sequencing (NGS), Whole-Exome Sequencing (WES), Whole-Genome Sequencing (WGS), and RNA sequencing, along with a discussion on basic bioinformatics tools and ethical considerations in genetic testing. Ayurvedic perspectives such as Beeja Dosha, Garbha Sambhava Samagri, and Garbhaja Vyadhi will be integrated during the discussion to highlight correlations between classical concepts and modern genetic understanding.
Following the demonstration, students will:

- Interpret simplified genetic data sets using basic bioinformatics tools or pre-analyzed case summaries.
- Evaluate and document the applications of NGS, WES, and RNA-seq in three simulated pediatric clinical scenarios (e.g., cleft palate, autism spectrum disorder, mitochondrial disorder), integrating relevant Ayurvedic interpretations (e.g., Beeja Dushti, Dosha predominance).
- Identify ethical concerns including informed consent, cultural sensitivity, and genetic discrimination.
- Collaboratively present their findings, emphasizing both modern technological use and corresponding Ayurvedic preventive or therapeutic strategies (e.g.,

Garbhasamskara, Rasayana).

Teacher will summarize the session.(Duration-3 hrs)
AND
Peer Assisted Learning
Students will be divided into pairs, with each pair assigned a specific genetic technology (e.g., NGS, WES, WGS, RNA-seq) and a relevant pediatric clinical scenario (e.g., cleft lip/palate, autism, mitochondrial disorder).
Each pair will:

- Research and prepare a brief presentation explaining the assigned technology, its clinical application, basic interpretation of results, and ethical considerations. Ayurvedic correlations such as *Beeja Dushti*, *Garbhasamskara*, and *Garbhotpatti Siddhanta* will be integrated.
- Exchange clinical scenarios with another pair and collaboratively interpret genetic findings and discuss management strategies from both modern and Ayurvedic perspectives.
- Provide constructive peer feedback on clinical interpretation, technological application, ethical clarity, and Ayurvedic integration.
- Conclude with group reflection and discussion, highlighting key clinical, technological, ethical, and Ayurvedic insights gained during the activity.

Teacher will summarise the session. (Duration-2 hrs)

Experiential learning Activity

Experiential-Learning 4.1 : Integrative Counseling in Chromosomal Disorders

Student will counsel and manage a minimum of three pediatric cases diagnosed with chromosomal disorders (e.g., Down syndrome, Turner syndrome, Klinefelter syndrome), incorporating both modern and Ayurvedic perspectives. They will explore Beeja, Beeja Bhaga Vikara, and Janmabala Pravritta Vikara concepts during history-taking and case analysis. Each student will document counseling approach, management plan, Ayurvedic interpretation, and challenges encountered in their logbook.(Duration- 4 hrs)
AND
Students will select case vignettes of chromosomal disorders and prepare a counseling plan using concepts of Beeja, Beeja Bhaga Vikara, and Janmabala Vikara.
They will work in pairs to analyze cases and map genetic findings to Ayurvedic principles.
Each pair will present their approach and reasoning to peers for collaborative feedback.
Students will document key insights, counseling strategies, and challenges in their logbooks. (Duration- 2hrs)

Experiential-Learning 4.2 : Integrative Counseling for Hereditary Disorders
Student will participate in a simulated patient education session involving at least three case scenarios representing families at risk of hereditary disorders (e.g., Thalassemia, Autism Spectrum Disorder, Down Syndrome). In each scenario, they will integrate preventive concepts like Garbhasamskara, Rasayana, and Samskaras with modern genetic counseling strategies. They will document key counseling points, family concerns, and reflections on communication effectiveness and cultural sensitivity in their logbook. (Duration- 3 hrs) AND Students will participate in a symposium on the multidisciplinary approach to hereditary disorders that integrates preventive strategies such as Garbhasamskara, Rasayana, and Samskaras with modern genetic counseling principles. Students will submit a brief report summarizing the insights gained from the session, and reflections on the integration of approaches, documented in their logbook. (Duration- 3 hrs)
Experiential-Learning 4.3 : Integrative Genetic Counseling-II
Student will participate in a simulated patient education session involving at least three case scenarios representing families at risk of Non-Mendelian hereditary disorders (e.g., MELAS, cleft lip/palate, Huntington's disease). In each scenario, they will integrate preventive concepts like Garbhasamskara, Rasayana, and Samskaras with modern genetic counseling strategies. They will document key counseling points, family concerns, and reflections on communication effectiveness and cultural sensitivity in their logbook. (Duration – 3 hrs) AND Students will participate in a symposium on the multidisciplinary management of Non-Mendelian hereditary disorders that integrates preventive strategies such as Garbhasamskara, Rasayana, and Samskaras with modern genetic counseling principles. Students will submit a brief report summarizing the insights gained from the session and reflections on the integration of approaches, documented in their logbook. (Duration – 3 hrs)
Experiential-Learning 4.4 : Evaluate the application of Genomic technologies in pharmacogenomics.
Workshop and Symposium The Students should attend Workshops and Symposium realated to non mendelian and others heriditory disorders to get more insight on these above topics Mobile learning The Student should download different app avilable for the diagnosis and preventation and counselling of heriditory disorders. Lectures on vedio clips The students should be ask to watch vedios related to Genetic advancement and newer AI technology for better understanding.

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation • Treatment planning • Communication Skills • Professionalism and Documentation OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Semester No : 5

3A Course Outcome	**3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)**	**3C Notional learning Hours**	**3D Lecture/ Practical Training/ Experiential Learning**	**3E Domain/ Sub Domain**	**3F Level (Does/Shows how/ Knows how/Know)**	**3G Teaching Learning Methods**
Module 5 : Garbhanirmana, Ashta Prakritis and Suprajasthapana (Healthy progeny)						

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

- Correlate Garbha Vriddhi with fetal development.
- Apply the principles of Supraja in Clinical Practice.
- Evaluate the impact of maternal and paternal health on progeny.

M 5 Unit 1 Formation of quality Genetic Traits

- Role of Shad Bhava .
- Shareera Vriddhikara Bhavas,
- Asta Prakriti
- Genetic traits

References: 3,43,45,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO6,CO8	Describe the role of Shad Bhava in embryonic development and inheritance of parental traits.	1	Lecture	CAN	Knows-how	L&PPT , BS,L&GD
CO6,CO8	Identify the Vriddhikara Bhavas and Ashta Prakriti to relate with hereditary traits.	5	Practical Training 5.1	CE	Knows-how	PBL,TPW,D
CO6,CO8	Evaluate Vriddhikara Bhavas and Ashta Prakriti clinically to understand genetic trait formation.	6	Experiential-Learning 5.1	PSY-MEC	Does	FV,W
CO6,CO8	Explore the factors responsible for formation of qulaity genetic traits.	1	Lecture	CE	Knows-how	BS,L&GD,L&PPT

M 5 Unit 2 Supraja – Principles for Optimal Progeny

- Personal and social hygiene of parents
- Different regimens to maintain the genetic potential
- Atulya Gotra Vivaha and other criteria's for selection of Partner
- Garbhadhana and Vivaha Samskara
- Pre-marital - pre conceptional -post conceptional care.
- Maternal and paternal Psychology and Maternal nutrition

References: 3,43,47,76,77,78,79,80,82,86

3A	3B	3C	3D	3E	3F	3G
CO5,CO6,CO8	Demonstrate various methodologies and regimens essential for the procurement of healthy progeny.	5	Practical Training 5.2	CAN	Knows-how	RP,CBL,DIS,D
CO5,CO6,CO8	Communicate risks of unplanned pregnancy and advise strategies to promote healthy progeny.	6	Experiential-Learning 5.2	AFT-RES	Does	CBL,PrBL,RLE,FV
CO5,CO6,CO8	Analyze the role of Atulya Gotra Vivaha in preventing genetic disorders in Garbha.	2	Lecture	CAN	Knows-how	L&PPT ,L&GD,BS

M 5 Unit 3 Garbha Dhana

- Methods, rules and prerequisites
- Care of Embryo and foetus
- Care of Douhrida stage
- Garbhini paricharya
- Garbha Samskara, Seemantonayana Samskara

References: 3,31,46,49,60,77,78,79,80,81,82,86

3A	3B	3C	3D	3E	3F	3G
CO6,CO8	Discuss key factors (prerequisites, methods, timings, rules, diet, regimen, and couple's physical and psychological status) during Garbhadhana for procuring a healthy baby.	2	Lecture	CAN	Knows-how	BS,L&GD,L&PPT
CO6,CO8	Demonstrate care practices during Douhrida, Garbhini Pricharaya, Garbha Samskara, and Seemantonayana for fetal well-being.	4	Practical Training 5.3	CAN	Knows-how	CBL,PBL,D
CO6,CO8	Communicate the clinical importance of Douhrida, Garbhini Pricharaya, Garbha Samskara, and Seemantonayana in the community.	6	Experiential-Learning 5.3	AFT-VAL	Does	RLE,SDL,W,TBL,FV

M 5 Unit 4 Daivavyapashraya Chikitsa during Pregnancy

- Daivavyapashraya Chikitsa during pregnancy
- Puthresti Yajna -Varana Bandha -Matangi Vidya and prevention of premature delivery
- Suprajanana Karma and its ethical consideration

References: 3,43,49,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO7,CO8	Analyse the role of Puthresti Yajna, Varana Bandha, and Matangi Vidya in enhancing maternal psychology and preventing premature delivery.	2	Lecture	CAN	Knows-how	BS,L&GD,L
CO7,CO8	Demonstrate Pumsavana Karma and effectively communicate its benefits and ethical considerations.	2	Practical Training 5.4	PSY-GUD	Shows-how	D,CBL,RP
CO7,CO8	Perform Suprajanana Karma and communicate its benefits and ethics effectively.	2	Experiential-Learning 5.4	PSY-MEC	Does	PrBL,RLE,W

M 5 Unit 5 Ayur Genomics

- Formation of prakriti in Garbha

- Sharirika and Mansika Prakriti
- Prakriti and genetic potential
- Assessment of Prakriti
- Clinical application

References: 43,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO6,CO7,CO8	Analyse factors influencing Prakruti development from conception to birth.	1	Lecture	CAN	Knows-how	L,BS,L&GD
CO6,CO7,CO8	Demonstrate assessment of Garbha Prakruti and communicate its clinical and genetic relevance.	2	Practical Training 5.5	PSY-GUD	Shows-how	CBL,TBL
CO6,CO7,CO8	Conduct Prakruti assessment and apply its genetic and clinical insights.	4	Experiential-Learning 5.5	AFT-VAL	Does	FV,TPW,W

M 5 Unit 6 Garbha Prakriti and its development

- Pathya Apathya and Prakriti
- Congenial and non-congenial food and its influence over Prakriti
- Ensuring the Psychological- behavioural -emotional and social development
- Development of Mahat (Endowment), Ahankara (Id) , Freud's- Id, Ego , Super Ego

References: 3,31,41,42,43,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO6,CO8	Analyze factors influencing Avyakta Prakriti differentiation and the role of Ashta Prakriti in Garbha’s psycho-behavioural development.	1	Lecture	CAN	Knows-how	L&PPT , BS,L&GD
CO6,CO8	Demonstrate understanding of psychological, emotional, and social development in Garbha, including formation of Mahat, Ahankara, Id, Ego, and Superego.	2	Practical Training 5.6	CAN	Knows-how	D,IBL,PBL

CO6,CO8	Evaluate Garbha’s development via Mahat–Ahankara and modern psychological model mapping.	2	Experiential-Learning 5.6	CE	Does	LS,PrBL

Practical Training Activity

Practical Training 5.1 : Shareera Vridhikara Bhava and Ashta Prakriti

Demonstration
Teacher will demonstrate core concepts of Sharira Vriddhikara Bhavas and Ashta Prakriti using videos or activities. They will explain how these principles influence physical and mental growth. They will present case studies of children with varying genetic traits (e.g., height, weight, temperament).
Students will:

- Analyze the influence of Sharira Vriddhikara Bhava and Ashta Prakriti on growth and development.
- Observe the teacher’s demonstrations and identify variations in children's traits related to genetics (e.g., height, weight, temperament).

Teacher will summarize key learnings and clarify doubts. (Duration-3 hrs)
AND
Kinaesthetic Learning
Interactive Charting Activity

- Teacher will provide profiles of children with varied traits (e.g., body build, behavior, growth rates).
- Teacher will guide students to recall concepts of Vriddhikara Bhava and Ashta Prakriti.
- Students will classify each child’s profile according to Ashta Prakriti.
- Students will map influencing Vriddhikara Bhavas using a comparison chart.
- Students will discuss how these factors contribute to individualized growth and development. (Duration-2 hrs)

Practical Training 5.2 : Methods for Procuring Healthy Progeny

Demonstration Activity:
Teacher will present video lectures and reading materials covering personal and social hygiene, dietary regimens, and traditional concepts such as Sharira and Garbha Vriddhikara Bhavas that influence healthy progeny.
Students will:

- Observe and note key methodologies and regimens presented.
- Prepare a checklist integrating traditional and general practices for promoting healthy progeny.
- Analyze case examples or maternal histories to identify lifestyle and dietary factors contributing to healthy offspring and document their observations.

Teacher will summarise the session. (Duration- 2hrs)
Role Play Activity:
Teacher will demonstrate counseling of prospective parents on lifestyle, hygiene, and regimens supporting healthy progeny incorporating Sharira and Garbha Vriddhikara Bhavas.
Students will observe the demonstration carefully.Students will then practice counseling in pairs using provided case scenarios.They will prepare personalized lifestyle and dietary regimens for each case.Students will discuss their approaches and receive feedback from the teacher.(Duration- 3hrs)

Practical Training 5.3 : Care Practices for Fetal Well-being

Demonstration
The teacher will demonstrate care practices during the Douhrida stage (organogenesis), Garbhini Pricharaya (antenatal care), Garbha Samskara, and Seemanhonayana Samskara, emphasizing do’s and don’ts for fetal well-being.
Following the demonstration, students will:

- Practice counseling or role-play scenarios applying these care practices under the teacher’s guidance.
- Identify challenges faced while advising on these stages.
- Analyze and discuss the importance of each practice for fetal health.

Teacher will summarize the session.(Duration- 2 hrs)
AND
Case Based Learning

The teacher will present detailed case studies focusing on pregnant women at different stages—Douhrida, Garbhini Pricharaya, Garbha Samskara, and Seemanhonayana Samskara—with varying fetal health outcomes.
Following the presentation, students will:

- Analyze the cases to identify correct and incorrect care practices affecting fetal well-being.
- Discuss possible improvements or interventions based on traditional care principles.
- Prepare and present recommendations for optimizing fetal health in similar cases.

Teacher will summarize the session (Duration- 2hrs).

Practical Training 5.4 : Pumsavana Karma: Procedure, Benefits & Ethical Practice

Demonstration
The teacher will demonstrate the procedure of Pumsavana Karma, highlighting classical references, indications, preparation, and administration techniques, along with an explanation of its impact on fetal development and maternal psychology. Ethical considerations, including patient consent and the prevention of misuse for gender preference, will also be discussed.
Following the demonstration, students will:
• Practice mock administration techniques on a mannequin or peer under supervision.
• Communicate the benefits and ethical aspects through role-play or discussion.
• Reflect on the relevance of Pumsavana Karma in contemporary practice, analyzing its psychosomatic and preventive aspects.
The teacher will summarise the session. (Duration-2hrs)

Practical Training 5.5 : Garbha Prakruti Assessment and Genetic Correlation

Demonstration
The teacher will demonstrate various methods for assessing fetal and newborn characteristics, including maternal observation, fetal monitoring (movements and heart rate), and observation of physical, physiological, and behavioral traits in newborns. The teacher will also explain how Douhrida (maternal desires), physical and psychological changes during pregnancy, and family history/genetic markers contribute to determining the Shareerika and Manasika Prakruti of the Garbha.
Following the demonstration, students will:

- Conduct Prakriti assessment using structured questionnaires and protocols.

- Observe and record physical and psychological traits in newborns and design a Prakriti assessment protocol.
- Correlate maternal cues with fetal Prakruti and assess genetic potential through study of family history and markers.

The teacher will summarise the session. (Duration-2 hrs)

Practical Training 5.6 : Assessment of Psycho-behavioural Development in Newborns.

Demonstration
The teacher will demonstrate the assessment of psychological, behavioural, emotional, and social development in a newborn through examination of the newborn's activities. The demonstration will focus on identifying the roles of Mahat (Endowment) and Id (Ahamkara). Additionally, the teacher will demonstrate the interpretation of higher mental functions including Swara, Sara, Roopa, Guna, Mana, and other Prashasta Bala Lakshana.
Following the demonstration, students will:

- Observe and assess the newborn's activities under guidance.
- Identify the role of Mahat (Endowment) and Id (Ahamkara) using the prescribed textual references.
- Analyze and interpret their observations to understand the psychological and psycho-behavioural development in the newborn.

The teacher will summarize the session. (Duration- 2 hrs)

Experiential learning Activity

Experiential-Learning 5.1 : Clinical Evaluation of Vriddhikara Bhavas and Ashta Prakriti in Genetic Traits

Students will visit pediatric and antenatal clinics to observe dietary and lifestyle practices supporting Sharira and Garbha Vriddhikara Bhavas.They will document atleast five pregnant women's regimens and discuss their impact on fetal development.
Students will observe minimum of five children with different Ashta Prakriti types and record physical and mental traits. They will correlate these findings with hereditary trait formation.
All observations and reflections will be documented in logbook. (Duration- 6 hrs)
OR

Students will attend a workshop on Sharira and Garbha Vriddhikara Bhavas and Ashta Prakriti.They will engage in case discussions highlighting genetic trait variations in children.
Students will practice identifying Bhavas and Prakriti types from clinical profiles.

They will analyze the impact of these factors on physical and mental development.
Students will document their findings and insights in logbook. (Duration-6hrs)

Experiential-Learning 5.2 : Preventing Unplanned Pregnancy and Promoting Healthy Progeny

Students will identify and document at least five cases of unplanned pregnancy.
They will assess and analyze fetal outcomes and neonatal well-being for each case.
Findings will be compiled in logbook. (Duration-3 hrs)
AND
Students will plan and conduct one community awareness sessions focused on preventing unplanned pregnancies and promoting healthy progeny. They will prepare and present one poster and perform one role-play during these sessions to effectively communicate key messages. Students will reflect on the program's impact and document a summary report in logbook. (Duration-3 hrs)

Experiential-Learning 5.3 : Garbha Poshana through Garbhini Paricharya and Samskaras

Each student will conduct community-based interviews with a minimum of three mothers across different socioeconomic backgrounds who have experienced pregnancy. They will collect and document data on maternal desires (Douhrida), lifestyle, diet, emotional states, and antenatal practices (including Garbhini Paricharya, Garbha Samskara, and Seemantonayana Samskara). Students will analyze the perceived impact of these factors on the physical and psychological traits of their children.
They will document their findings and reflections, along with challenges encountered, in their logbooks. (Duration-4 hrs)
AND
Students will pair up to collectively design a Standard Operating Procedure (SOP) for Garbhini Paricharya, Douhrida Avastha, Garbha Samskara, and Seemantonayana.
They will utilize classical texts, evidence-based resources, and community insights.
Each team will discuss, draft, and present their SOP with justification for each step.
The teacher will act as a facilitator only, encouraging independent exploration.
The final SOPs will be peer-reviewed and refined based on feedback. (Duration-2hrs)

Experiential-Learning 5.4 : Pumsavana Karma and its ethical consideration.

Students will create one of the following: an educational leaflet, poster, or digital content (infographic or short video)based on classical and scientific evidence to educate at least two antenatal mothers about the procedure, benefits, and ethical aspects of Pumsavana Karma. Alternatively, they can participate in at least one awareness session focused on the role of Pumsavana Karma in fetal development and maternal well-being, addressing common misconceptions and ethical boundaries. Students will document their experience, communication strategies, and challenges faced during the counseling in a logbook.(Duration-2hrs)

Experiential-Learning 5.5 : Clinical Application of Shareerika and Manasika Prakruti

Students will develop a standardized protocol for assessing Shareerika and Manasika Prakruti in newborns, incorporating genetic and clinical factors. The teacher will facilitate discussions and assist students in applying the protocol during clinical rounds or neonatal ward visits. Students will collect relevant data (e.g., physical, psychological traits, family history) and document findings correlating Prakruti with genetic potential. They will record observations and analysis of atleast three newborns, in their logbook. (Duartion 2 hrs)
AND
Students shall assess the Shareerika and Manasika Prakruti in school going children in health camps and assess if the different prakurti affect school performance,differently. (Duration-2hrs)
OR
They will attend workshop on prakriti assessment and its clinical application and document their reflections in logbook (Duration-4 hrs)

Experiential-Learning 5.6 : Mahat–Ahankara and Modern Psychology in Garbha Development

Students will collect and review classical texts related to Mahat, Ahankara, Buddhi, and associated psychological constructs from texts like Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, and Sankhya Karika. Teacher will facilitate discussion and guide the students in mapping these concepts with modern psychological models such as Id, Ego, and Superego. Students will develop a comparative framework and apply it to analyze psycho-behavioural development in Garbha and neonates.They will present their findings through a report or presentation, focusing on clinical relevance in clinical practice and record reflections in the logbook. (Duration-2 hrs)

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. OSCE Stations: (Ecah Station x 10 marks = 50 marks) • Station 1: Preconception Case Analysis (Diabetes/Thyroid/HTN) – clinical reasoning & counseling. • Station 2: Interpret Lab Reports (e.g., HbA1c, TSH, semen analysis) for reproductive planning. • Station 3: Advise Supraja Measures – recommend lifestyle, samskaras, herbs. • Station 4: Communication Role Play – counsel a couple with fertility anxiety. • Station 5: Correlate Garbha Vriddhi with embryonic development. – map embryonic stages with Garbha Vriddhi OR Any practical in converted form can be taken for assessment. (25 marks) AND	4

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

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/ Knows how/Know)	3G Teaching Learning Methods

Module 6 : Garbhavakranti - Garbha Vriddhi & Vikasa (Embryology)

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

- Analyze the principles and stages of Garbha Vikasa (fetal development) from Garbha Sthapana to Prasava.
- Assess the factors influencing Garbha Poshana (fetal nourishment).
- Plan strategies to support optimal Garbha Vriddhi and Vikasa.

M 6 Unit 1 Garbhavkranti (Embryogenesis)

- Spermatogenesis Oogenesis
- Meiotic cell division
- Graba Sambhva Samagri
- Formation of Zygote, morula and germ layers
- Neural plate formation
- Care during embryogenesis

References: 3,31,43,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO8	Analyse Garbha formation with reference to Panchamahabhootas and Tridosha.	2	Lecture	CAN	Knows-how	L&GD,L&PPT ,BS
CO1,CO2,CO8	Evaluate the major phases of embryonic development.	1	Lecture	CE	Knows-how	L&PPT , L&GD,BS,L
CO1,CO2,CO8	Demonstrate and explain the critical phases of embryonic development.	4	Practical Training 6.1	CAN	Knows-how	PBL,D
CO1,CO2,CO8	Demonstrate tools to explore stem cell roles in Garbha Vriddhi and regeneration.	2	Practical Training 6.2	PSY-GUD	Shows-how	PBL,D
CO1,CO2,CO8	Counsel patients on embryogenesis, highlighting genetic and environmental influences on fetal health.	8	Experiential-Learning 6.1	AFT-VAL	Does	RLE,CBL ,RP

M 6 Unit 2 Garbha Avayava Utpatti (Organogenesis)

- Organogenesis- ectodermal- mesodermal – endodermal proliferation
- Neural tube differentiation to form the CNS and Peripheral nerve system
- Formation of fore -gut mid -gut and hind- gut
- Formation of skeletal system, vascular system , Respiratory , Genitourinary System
- Care during organogenesis

References: 31,60

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Analyze the process of Anga-Pratyanga formation and role of Tridosha in organogenesis.	3	Lecture	CAN	Knows-how	DIS,L&PPT ,L_VC
CO1,CO2	Demonstrate Beeja-bhaga correlation with organ development.	6	Practical	CE	Knows-	RP,D,PB

			Training 6.3		how	L
CO1,CO8	Assess developmental abnormalities in organogenesis and counsel patients on management and prevention.	8	Experiential-Learning 6.2	AFT-RES	Does	DIS,CBL,RLE

M 6 Unit 3 Apara

- Formation of Apara (Placenta)
- Nabhi Nadi (umbilical cord)

References: 31,60,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO5,CO8	Analyze the process of Apara formation and evaluate its role in fetal nourishment.	2	Lecture	CAN	Knows-how	L_VC,DIS
CO5,CO8	Demonstrate Nabhi Nadi formation and its role.	4	Practical Training 6.4	PSY-GUD	Shows-how	D,PER,DIS,CBL
CO5,CO8	Assess placental features to distinguish term from preterm neonates.	6	Experiential-Learning 6.3	CE	Knows-how	SIM,CBL

M 6 Unit 4 Garbha Poshana

- Fetal circulation and Garbha Poshana, ,
- Beeja-Shonita Roopi Oja (Feto-maternal immunity)

References: 3,31,43,60,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO1,CO7,CO8	Assess fetal circulation and its changes after birth.	2	Experiential-Learning 6.4	CE	Does	D,CBL

CO1,CO7,CO8	Analyze Garbha Poshana and impact of maternal desires' on organogenesis.	1	Lecture	CAN	Knows-how	L&PPT ,BS,DIS
CO1,CO7,CO8	Discuss Beeja-Shonita Roopi Oja and maternal immunity's effect on fetal health.	2	Practical Training 6.5	CE	Knows-how	DIS,D,PBL,CBL

M 6 Unit 5 Yamala Garbha

- Yamala Garbha,
- Multiple Pregnancy
- Benefits and risks of IVF.

References: 3,31,38,43,49,60,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO1,CO8	Analyze the concept of Yamala Garbha and evaluate its clinical signs.	1	Lecture	CAN	Knows-how	BS,L&PPT ,DIS,L_VC
CO1,CO8	Identify maternal and fetal complications in multiple pregnancy.	2	Practical Training 6.6	CE	Knows-how	D,CBL,PBL
CO1,CO8	Analyze role of IVF in integrated fertility care .	2	Experiential-Learning 6.5	AFT-VAL	Does	PBL,FV,RLE

Practical Training Activity

Practical Training 6.1 : Garbha Formation and Dosha Dynamics

Demonstration
The teacher will demonstrate the critical phases of embryonic development using diagrams, models, and multimedia resources, focusing on key events such as fertilization, cleavage, blastulation, gastrulation, and organogenesis to explain their significance in normal development and potential abnormalities.

Following the demonstration, students will:

- Practice identifying and sequencing the critical phases on provided diagrams/models or digital tools under the teacher's supervision.
- Discuss challenges encountered in distinguishing the phases or correlating clinical implications.
- Analyze case scenarios collaboratively to relate developmental phases with embryonic anomalies and clinical relevance.

Teacher will summarise the session, emphasizing the importance of each phase and its impact on fetal development. (Duration-2 hrs)
AND
Problem Based Learning
The teacher will present a scenario of early embryonic abnormalities causing recurrent miscarriage.
Students will discuss the critical embryonic phases affected and relate Panchamahabhootas and Tridosha involvement.
They will analyze clinical findings and Ayurvedic preventive approaches in small groups.
Students will collaboratively propose management plans integrating embryology and Ayurveda.
The teacher will facilitate, clarify concepts, and summarize the session. (Duration-2 hrs)

Practical Training 6.2 : Regenerative Insights in Garbha Vriddhi

Demonstration
The teacher will demonstrate the use of research tools and literature databases (e.g., PubMed, AYUSH research portals) to explore stem cell differentiation and its relevance in Garbha Vriddhi and regenerative therapy. Following the demonstration, students will:

- Practice searching and extracting data from scientific sources under guidance.
- Identify challenges in interpreting modern findings in the Ayurvedic context.
- Analyze selected studies to correlate stem cell roles with Ayurvedic concepts of fetal growth and tissue regeneration.

Teacher will summarise the session. (Duration-2 hrs)

Practical Training 6.3 : Organogenesis through Beeja-bhaga

Demonstration
The teacher will demonstrate selected clinical/genetic case studies or 3D anatomical models to show how defects or variations in Beeja-bhaga components influence specific

organ development. Teacher will then provide each student with two clinical scenarios.
Following the demonstration, students will:

- Practice mapping Beeja-bhaga components to organ structures using models or worksheets.
- Identify correlations in provided clinical scenarios.
- Discuss findings with peers and Teacher.

Teacher will conclude by summarizing key patterns and reinforcing Ayurvedic concepts. (Duration-3 hrs)
AND
PBL and Role Play
The teacher will initiate a PBL session using a clinical scenario of a congenital anomaly, guiding students to identify affected Beeja-bhaga components and their implications. Students will analyze the case in pairs, correlating organ development with Beeja-bhaga and Garbha Samagri. Next, students will perform a role-play simulating patient counseling, with peers acting as parents and clinicians. The teacher will observe, provide feedback, and facilitate a debrief on reasoning and communication clarity. (Duration-3 hrs)

Practical Training 6.4 : Nabhi Nadi & Fetal Circulation

Demonstration
The teacher will use anatomical models, diagrams, and/or digital animations to illustrate the formation of Nabhi Nadi and its involvement in utero-placental and feto-placental circulation.
Following the demonstration, students will:

- Label and trace Nabhi Nadi and related circulatory pathways on diagrams or models.
- Explain the functional significance of Nabhi Nadi in fetal nourishment.
- Discuss clinical implications of disruptions in Nabhi Nadi formation.

Teacher will summarise the session. (Duration-2hrs)
AND
CBL
Teacher will distribute clinical cases involving fetal growth restriction or placental insufficiency and provide key reference materials. Pairs will analyze the role of Nabhi Nadi abnormalities, guided by the teacher who will circulate to clarify concepts and prompt critical thinking.Each pair will present their analysis on Nabhi Nadi formation,

its role in fetal circulation, and clinical implications using diagrams or charts. The teacher will facilitate Q&A, encourage peer feedback, and provide constructive comments to deepen understanding. (Duration-2 hrs)

Practical Training 6.5 : Beeja-Shonita Oja & Maternal Immunity

Demonstration
The teacher will demonstrate the concept of Beeja-shonita roopi Oja and the role of maternal immunity in fetal health, integrating Ayurvedic principles and modern immunology.
Following the demonstration, students will:

- Review and discuss relevant case studies illustrating maternal-fetal immune interactions.
- Reflect on and analyze the impact of maternal immunity on fetal development through guided group discussions.
- Identify challenges and knowledge gaps encountered during analysis.

Teacher will summarize the session and clarify key points.(Duration-2 hrs)

Practical Training 6.6 : Yamal Garbha: Diagnosis and Management

Demonstration
The teacher will demonstrate the concept of Yamala Garbha, including Ayurvedic perspectives on twin fetal development and related clinical signs, integrating classical texts and modern observations.
Following the demonstration, students will:

- Examine case studies or clinical scenarios of multiple pregnancies (Yamal Garbha).
- Identify and document maternal and fetal complications.
- Discuss challenges in diagnosis and management, correlating Ayurvedic Dosha involvement and Samprapti.

Teacher will summarize the session. (Duration-2 hrs)

Experiential learning Activity

Experiential-Learning 6.1 : Counseling on Embryonic Health

Students will create an educational tool (leaflet, poster, video, or infographic) to counsel at least four expecting couples or women on embryogenesis, emphasizing the role of genetic and environmental factors in fetal health. They will document their counseling experience, questions raised by the participants, and feedback received in their logbook. (Duration-5 hrs)
AND
Students will participate in a role-play and group discussion session where they will counsel simulated patients (peers or actors) on embryogenesis, focusing on genetic and environmental influences on fetal health.
Activity breakdown:

- Teacher will provide a brief on scenarios.
- Students work in pairs/groups to conduct counseling sessions with simulated patients, applying communication skills and embryogenesis knowledge.
- Group debrief to discuss challenges faced, share feedback, and reflect on improvements.

Students will document their reflections, challenges, and patient responses in their logbook. (Duration-3hrs)

Experiential-Learning 6.2 : Patient Education in Organogenesis Issues

Each student will conduct detailed case analyses of developmental abnormalities related to organogenesis using a minimum of three case studies or simulated patient scenarios across different organ systems. They will perform diagnostic assessments, suggest appropriate Ayurvedic management plans, and document their observations, clinical reasoning, management strategies, and challenges encountered in their logbook. (Duration-4 hrs)
AND
Each student will conduct counseling sessions with at least three patients or caregivers dealing with developmental abnormalities related to organogenesis. They will explain the condition, its embryological basis, and discuss Ayurvedic management and preventive measures. Students will document counseling strategies used, patient queries, and feedback along with their reflections and challenges in the logbook. (Duration-4 hrs)

Experiential-Learning 6.3 : Placental Feature Assessment: Term vs. Preterm

Student will conduct examination of placenta from a minimum of three neonates (at least one term and one preterm) available during delivery or post-delivery period. They will assess macroscopic features (e.g. size, weight, color, consistency, vascular pattern, membranes, and cord insertion), and correlate with gestational age. Students will

document their findings, including gestational classification, specific distinguishing features, and any diagnostic challenges encountered, in the logbook. (Duration-4 hrs)
AND
Students will be paired and provided with one clinical case scenario of neonate (term or preterm) along with high-quality images or videos of their placentas. During session, each pair will:

- Review given case's clinical background and placental images.
- Identify and list distinguishing placental features indicating term or preterm status.
- Discuss the physiological and pathological implications of the features.
- Participate in a group discussion moderated by a facilitator to compare findings and reasoning.
- Correlate placental features with neonatal outcomes in the cases.

Students will document their observations, differential features, and conclusions for each case in a logbook or worksheet. (Duration-2 hrs)

Experiential-Learning 6.4 : Garbha Sharira: Circulation Before and After Birth

Student will conduct a hands-on examination or simulation of fetal circulation and its transition after birth using anatomical models, diagrams, or clinical imaging (e.g., echocardiography). They will assess key circulatory pathways, identify physiological changes occurring at birth, and correlate these with clinical significance. Students will document their observations, challenges faced, and reflections in a logbook.(Duration-2hrs)
OR
Students will be paired and each pair will review three neonatal cases illustrating fetal circulation transition, including normal and pathological adaptations. They will analyze clinical data and imaging, mapping circulatory changes with concepts like Nabhi Nadi and Prana Vata. Pairs will discuss physiological and clinical implications, then present their findings. The instructor will facilitate integration of thoughts. Each pair will submit a summary report and reflection on this integrative approach. (Duration-2hrs)

Experiential-Learning 6.5 : Integrated IVF-Ayurveda Case Analysis

Student will review and analyze a minimum of three clinical cases involving infertility,in college/postings where IVF and Ayurveda therapies have been applied either individually or in combination. The cases should cover varied patient profiles (age, fertility issues, duration) and treatment stages (pre-IVF, during IVF, post-IVF). They will document the procedures observed, Ayurveda interventions used, patient outcomes, and challenges encountered, including advantages and limitations of the integrated approach, in a logbook. (Duration-2 hrs)

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. Skill Stations: 4 in number Mark Distribution for each station Station1: Case Analysis of given Case Vignette/Simulated Case (15 marks) Station 2: Concept mapping-Create a concept map showing Garbha Vriddhi & Vikasa with influencing factors (10 marks) Station 3: Simulated Counseling-Role-play: counsel a pregnant woman and advice on Ahara, Vihara, Manasika Bhava or risks and benefits of IVF (10 marks) Station 4: Develop a written intervention plan to enhance Garbha Vriddhi and Vikasa. (15 marks) OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Semester No : 6

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/ Knows how/Know)	3G Teaching Learning Methods
Module 7 : Garbhopaghatakara Bhavas						
Module Learning Objectives **(At the end of the module, the students should be able to)** ◦ Analyze the role of Garbhopaghatakara Bhavas in influencing Garbha Vriddhi and Vikasa (fetal growth and development).						

- Correlate, understanding of Ahita Ahara-Vihara, Do?a-Prakopa, and Beeja-Dushti with modern concepts of teratogenic factors.
- Evaluate diagnostic markers and preventive strategies for Garbhopaghata (fetal impairment), integrating Samprapti, Chikitsa Siddhanta, and contemporary prenatal care.

M 7 Unit 1 Garbhavyapad

- Garbha Vikruthi,
- Grabhaja Vyadhi
- Jathaharinis
- Intrauterine infections and endocrinal problems
- Hygiene and aseptic measures, prevention of recurrent abortions, social ethics

References: 3,43,45,49,60,76,77,78,79,80,86,87

3A	3B	3C	3D	3E	3F	3G
CO6,CO7,CO8	Analyze Jathaharini types and symptoms in pregnancy.	2	Lecture	CAN	Knows-how	BS,L&PPT ,L&GD,L
CO6,CO7,CO8	Demonstrate assessment of Garbha Vikruti and Vyaadhi with psychological insight.	2	Practical Training 7.1	PSY-GUD	Shows-how	PBL,CBL ,D
CO6,CO7,CO8	Demonstrate assessment and interpretation of fetal and neonatal endocrine dysfunctions with etiopathogenesis and management.	2	Practical Training 7.2	PSY-GUD	Shows-how	D,CBL,PBL
CO6,CO7,CO8	Conduct assessments and perform diagnostics of intrauterine infections and fetal endocrine disorders.	2	Experiential-Learning 7.1	PSY-MEC	Does	RLE,PBL
CO6,CO7,CO8	Conduct evaluations on recurrent abortion prevention and discuss related social ethics.	4	Experiential-Learning 7.2	PSY-MEC	Does	PBL,RLE ,SIM

M 7 Unit 2 Effects of Garbhakara Bhava Dushti

- Atma Dosha
- Kala Dosha
- Beeja Dosha
- Ashaya Dosha

References: 3,43,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO6,CO8	Analyze various fetal disorders caused by Atma, Kala, Beeja, and Aashaya dosha disturbances.	2	Lecture	CAN	Knows-how	DIS,L&PPT
CO6,CO8	Demonstrate factors causing fetal disorders: maternal (Atma), uterine (Aashaya), gametogenesis (Beeja), and fertilization (Kala).	4	Practical Training 7.3	CAN	Shows-how	DIS,D,PBL
CO6,CO8	Evaluate factors causing fetal disorders: Atma, Aashaya, Beeja, and Kala.	6	Experiential-Learning 7.3	CE	Does	RLE,JC,TBL

M 7 Unit 3 Effects of Aahara, Vihara and Aushadha on Garbha

- Environmental factors (Satmyaja bhava)
- Adverse effects of procedures during pregnancy
- Maternal medication, diet and illness on foetus

References: 3,31,38,45,49,60,75,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO1,CO7,CO8	Analyze effects of Satmyaja Bhava (environmental) on fetal growth.	2	Lecture	CAN	Knows-how	BS,L&PPT ,L&GD
CO1,CO7,CO8	Analyze effects of Matru-Aushadha, Ahara, and Vyadhi on Garbha Vridhi.	1	Lecture	CAN	Knows-how	BS,L&PPT
CO1,CO7,CO8	Discuss the impact of Satmyaja Bhava (environmental factors) on fetal growth.	2	Practical	CE	Knows-	PBL,CBL

			Training 7.4		how	,D
CO1,CO7,CO8	Perform safe procedures during pregnancy and raise community awareness.	4	Experiential-Learning 7.4	PSY-MEC	Does	CBL,DIS,W,JC,RLE
CO1,CO7,CO8	Demonstrate safe administration of trimester-specific procedures in pregnancy.	4	Practical Training 7.5	PSY-GUD	Shows-how	JC,PBL,D
CO1,CO7,CO8	Evaluate the impact of Aushadha (medication), Ahara (diet), and Vyadhi (illness) on fetal development.	4	Experiential-Learning 7.5	CE	Knows-how	PrBL,RLE

M 7 Unit 4 Janmabala Pravritta Vyadhi

- Janmabala Pravritta Vyadhi
- Congenital anomalies- Fetus, placenta , umbilical cord
- Congenital anomalies of CNS , CVS , Renal and Skeletal System
- Teratogenicity

References: 31,38,60,75,76,77,86

3A	3B	3C	3D	3E	3F	3G
CO1,CO3,CO5,CO8	Analyze Janmakala pravrutha Vyadhi.	2	Lecture	CAN	Knows-how	BS,L&GD
CO1,CO3,CO5,CO8	Analyze the role of Garbhopghatakara Bhavas (principles and mechanisms) in teratogenicity.	1	Lecture	CAN	Knows-how	BS,L&GD
CO1,CO3,CO5,CO8	Identify, examine and discuss the management of congenital anomalies of the Garbha(fetus),Apara (placenta), and Nabhi Nadi (umbilical cord).	3	Practical Training 7.6	CE	Knows-how	D,PBL,CBL
CO1,CO3,CO5,CO7	Identify, examine and discuss the management of common congenital anomalies of the Srotas.	3	Practical Training 7.7	CE	Knows-how	D,PBL

CO1,CO3,CO5 ,CO8	Evaluate and manage anomalies of Garbha, Apara, and Nabhi Nadi, and counsel parents.	3	Experiential-Learning 7.6	CE	Does	RLE,CBL
CO1,CO3,CO5 ,CO8	Evaluate and manage congenital anomalies of Srotas (Vata-nadi, Rasa-Raktavaha, Mutravaha, Asthi-Majjavaha) and counsel parents.	3	Experiential-Learning 7.7	CE	Does	CBL,RLE

Practical Training Activity

Practical Training 7.1 : Integrated Assessment of Garbha Vikruti and Maternal Wellbeing

Demonstration
The teacher will demonstrate the assessment of Garbha Vikruti and Vyaadhi, focusing on dosha-specific lakshana, psychological responses, and clinical examination relevant to antenatal care. This includes history-taking with emotional sensitivity, abdominal palpation for fetal position/anomalies, examination for edema, pallor, BP recording, and observation of behavioral cues indicative of psychological distress.
Following the demonstration, students will:
• Practice the examination techniques on a patient, manikin, or peer under the teacher's supervision.
• Identify physical, emotional, and communication challenges encountered during the process.
• Analyze findings collaboratively to infer Samprapti Ghatakas and distinguish between physiological and pathological changes, incorporating psychological aspects.
Teacher will summarise the session. (Duration-2 hrs)

Practical Training 7.2 : Assessment and Management of Fetal and Neonatal Endocrine Dysfunctions

Demonstration
The teacher will demonstrate the assessment and interpretation of endocrine dysfunctions in the fetus and neonate, focusing on key etiopathogenesis and Ayurvedic management principles.
The demonstration will include:

- Identification of clinical signs and symptoms related to common fetal and neonatal endocrine disorders.
- Interpretation of relevant diagnostic markers and investigations.
- Explanation of concepts of Dosha, Dhatu, and Srotas involvement in endocrine dysfunctions.
- Presentation of management strategies including Aushadha, Ahara and therapeutic procedures relevant to fetal and neonatal endocrinopathies.

Following the demonstration, students will:

- Practice clinical assessment and interpretation techniques on case studies, patient scenarios, or simulated models under teacher supervision.
- Identify difficulties or uncertainties encountered during assessment and interpretation.
- Collaboratively analyze case findings to correlate with Ayurvedic Samprapti and devise management plans.

Teacher will summarise the session highlighting key learning points and clinical applications.(Duration-2 hrs)

Practical Training 7.3 : Recurrent Miscarriage: Nidanapanchaka and Chikitsa

Demonstration
The teacher will demonstrate the assessment of factors responsible for fetal disorders, focusing on maternal (Atma), uterine (Aashaya), gametogenesis (Beeja), and fertilization (Kala) aspects.
The demonstration will include:

- Identification of dosha-specific lakshanas linked to each factor.
- Explanation of the samprapti involved in fetal disorders caused by these factors.
- Techniques to clinically evaluate and correlate these factors in antenatal cases using principles.

Following the demonstration, students will:

- Practice assessing these factors through case discussions, simulated scenarios, or patient evaluations under the teacher's supervision.
- Identify challenges they encounter during assessment and interpretation.
- Collaboratively analyze findings to infer Samprapti Ghatakas and differentiate normal from pathological conditions.

Teacher will summarise the session. (Duration-2 hrs)
AND
PBL
The teacher will present a case of recurrent miscarriage linked to dosha imbalances in Atma and Aashaya.
Students will:

- Analyze the case details to identify etiological factors and Samprapti.
- Formulate Ayurvedic diagnostic and management plans.
- Discuss preventive strategies and social-ethical considerations.

Teacher will facilitate reflection and consolidate learning points. (Duration-2 hrs)

Practical Training 7.4 : Impact of Satmyaja Bhava (Environmental Factors) on Garbha Vriddhi

Demonstration
The teacher will demonstrate the assessment of Satmyaja Bhava (environmental factors) affecting fetal growth, focusing on Ritu (seasonal influences) , Desha (regional compatibility), Ahara-Vihara (habitual diet and lifestyle) , and psychosocial surroundings, while explaining their role in Garbha Vriddhi or Vikriti.
Following the demonstration, students will:

- Practice evaluating Satmyaja Bhava through case-based discussions or simulated antenatal profiles under teacher's supervision.
- Identify challenges in assessing environmental compatibility and its correlation with fetal outcomes.
- Analyze the influence of each factor to infer Samprapti Ghatakas and propose preventive or corrective measures.

Teacher will summarise the session.(Duration-2 hrs)

Practical Training 7.5 : Safe Procedures during Pregnancy

Demonstration
The teacher will demonstrate trimester-specific safe procedures during pregnancy, including appropriate Panchakarma therapies (e.g., Abhyanga, Matra Basti, Yoni Pichu), focusing on indications, contraindications, and dosha-specific considerations to ensure maternal and fetal safety.
Following the demonstration, students will:

- Practice performing these procedures on consenting antenatal volunteers or mannequins under the teacher's supervision.
- Identify challenges faced during procedure performance and patient interaction.
- Analyze outcomes and safety aspects collaboratively to understand clinical applicability and rationale.

Teacher will summarise the session.(Duration-2 hrs)

AND
Journal Article Review
Under the teacher's supervision, students will be paired and each pair will review one journal article related to safe procedures during pregnancy, focusing on Panchakarma and trimester-specific care.
Following the assignment, students will:

- Summarize key findings and correlations.
- Critically evaluate the methodology, strengths, and limitations of the article.
- Discuss clinical applicability and implications for practice collaboratively.

Teacher will facilitate discussion and summarise the session.(Duration-2hrs)

Practical Training 7.6 : Congenital Anomalies of Garbha, Apara & Nabhinadi: Identification and Management

Demonstration
The teacher will demonstrate the identification and examination of common congenital anomalies of the Garbha (fetus), Apara (placenta), and Nabhinadi (umbilical cord) using clinical cases, images, and anatomical models, emphasizing Ayurvedic concepts such as Beeja Dosha, Garbha Vikriti, and Dosha involvement.
Following the demonstration, students will:

- Practice recognizing anomalies related to Garbha, Apara, and Nabhinadi through case discussions, models, or clinical observations under supervision.
- Document findings along with Ayurvedic interpretations and diagnostic challenges in their logbooks.
- Collaboratively analyze clinical implications and correlate with Ayurvedic Samprapti and management principles.

Teacher will summarise the session. (Duration-3 hrs)

Practical Training 7.7 : Congenital Anomalies of Srotas: Identification & Management

Demonstration
The teacher will demonstrate identification, clinical examination, and management principles of common congenital anomalies of the Srotas: Vatanadi Samsthana (Central Nervous System), Rasa-Raktavaha Srotas (Cardiovascular System), Mutravaha Srotas (Renal System), and Asthi-Majjavaha Srotas (Skeletal System) using clinical cases, images, and anatomical models.

Following the demonstration, students will:

- Practice recognizing and examining these anomalies through supervised case discussions, models, or clinical observations.
- Document findings, Ayurvedic interpretations, management approaches, and challenges encountered in their logbooks.
- Collaboratively analyze clinical implications and Samprapti to suggest appropriate Ayurvedic treatments.

Teacher will summarise the session.(Duration-3 hrs)

Experiential learning Activity

Experiential-Learning 7.1 : Intrauterine infections and endocrinal problems during fetal devlopment.

Student will conduct clinical assessments and perform diagnostic evaluations of intrauterine infections and fetal endocrine disorders on a minimum of three antenatal or neonatal cases presenting with varied clinical features and etiopathogenesis.
They will:

- Document findings related to infection markers, endocrine dysfunction signs, and Dosha-Dushya parameters.
- Record challenges encountered during assessment and interpretation.
- Analyze the cases to formulate relevant Samprapti and apply management principles.

Maintain detailed records in their logbook. (Duration-2hrs)

Experiential-Learning 7.2 : Recurrent abortions and social ethics regarding abortion.

Students will conduct case-based evaluations on a minimum of three patients with a history of recurrent Garbha Haran (abortion) applying principles of Garbha Raksha and Dosha-Dhatu assessment.
They will:

- Perform detailed clinical assessments including examination of Garbha-sthana and associated Srotas (e.g., Artavavaha, Raktavaha).
- Identify and document the involvement of Dosha imbalance (Vata, Pitta, Kapha) contributing to Garbha Haran.
- Explore and apply preventive strategies based on Samprapti such as Rasayana therapy, Satvavajaya, and proper Ahara-Vihara.

- Discuss the social and ethical considerations related to abortion with patient and caregivers.

They will record findings, challenges, and reflections in their logbook. (Duration-4 hrs)

Experiential-Learning 7.3 : Evaluation of Factors in Fetal Disorders

Student will evaluate the contribution of Atma, Aashaya, Beeja, and Kala factors in a minimum of three fetal disorder cases, using integrated methods for (antenatal and neonatal) analysis.
Cases should represent varied etiologies (e.g., structural anomalies, growth restrictions, intrauterine deaths) and dosha involvement.
Students will:

- Document factor-wise assessment (dosha-specific), Samprapti Ghatakas, and diagnostic findings.
- Propose appropriate Nidana Parivarjana and Chikitsa plans (e.g., Garbhini Paricharya, Rasayana, Panchakarma, herbal formulations) based on each case.
- Record challenges encountered and reflect on clinical reasoning in their logbook. (Duration- 4 hrs)

AND
Students will be paired and each pair will critically review one journal article related to fetal disorders influenced by Atma, Aashaya, Beeja, or Kala factors.
They will summarize key findings and Ayurvedic relevance.
Analyze the strengths, limitations, and clinical applicability.
Reflect on how the insights support or challenge classical Ayurvedic understanding.
Document observations and reflections in their logbook for discussion. (Duration-2 hrs)

Experiential-Learning 7.4 : Safe Ayurvedic Practices and Awareness in Pregnancy

Student will perform trimester-specific safe procedures during pregnancy (such as Abhyanga, Matra Basti, Yoni Pichu, or mild Shamana Panchakarma) on a minimum of three antenatal cases under supervision, based on clinical indications and safety guidelines. They will:

- Document the procedure, indication, precautions taken, and dosha-specific relevance in logbook.
- Identify challenges encountered during performance or patient interaction. (Duration- 2hrs)

AND

Students will create one of the following: an educational leaflet, poster, or digital content (infographic or short video) based on texts and clinical evidence to educate at least two pregnant women or family members about safe, trimester-specific procedures during pregnancy (e.g., Abhyanga, Matra Basti, Yoni Pichu).
Alternatively, they can participate in at least one awareness session focused on the benefits, indications, and safety of Ayurvedic antenatal care practices.
Students will document their communication experience, feedback received, and challenges faced in delivering the information in their logbook. (Duration- 2 hrs)

Experiential-Learning 7.5 : Factors Affecting Fetal Growth

Each student will evaluate a minimum of three antenatal cases with a history of exposure to specific Aushadha (medications), Ahara (dietary patterns), or Vyadhi (maternal illnesses), across different trimesters.
They will:

- Document the observed or potential effects on Garbha Vridhi (fetal development), including general and Dosha-specific findings.
- Analyze the correlation between these factors and any Vikriti (deviations) using both Ayurvedic and biomedical frameworks.
- Reflect on challenges encountered in assessment, interpretation, and documentation in their logbook. (Duration- 4hrs)

OR
Each student will design and conduct a survey among a minimum of 10 antenatal women to gather information on exposure to Aushadha (medications), Ahara (dietary practices), and Vyadhi (illnesses) during pregnancy.
They will:

- Collect data on factors potentially affecting Garbha Vridhi (fetal growth), including use of over-the-counter drugs, food habits, and common illnesses.
- Analyze trends and classify findings based on congenial/non-congenial impact on fetal development.
- Present their findings in class and reflect on challenges in data collection, interpretation, and patient communication in their logbooks. (Duration-4 hrs)

Experiential-Learning 7.6 : Garbha–Apara–Nabhi Nadi Anomaly: Evaluation and Counselling

Each student will evaluate a minimum of two clinical cases with congenital anomalies involving Garbha (fetus), Apara (placenta), or Nabhi Nadi (umbilical cord) encountered in clinical settings (e.g., postnatal wards, NICU, or delivery units). They will conduct detailed examinations, assess clinical aspects, and document findings including diagnosis, suggested management , and challenges encountered. Each student will also counsel a minimum of two parents, focusing on the nature of the

anomaly, prognosis, and supportive care. All observations and reflections will be recorded in logbook.(Duration-3 hrs)

Experiential-Learning 7.7 : Congenital Anomalies of Srotas : Evaluation & Parent Counselling

Each student will evaluate a minimum of two clinical cases presenting with congenital anomalies of key Srotas—Vata-Nadi (Central Nervous System), Rasa-Raktavaha Srotas (Cardiovascular System), Mutravaha Srotas (Renal System),and Asthi-Majjavaha Srotas (Skeletal System)—in clinical settings such as pediatric or neonatal wards. They will conduct detailed examinations, assess clinical findings, and document diagnosis, management plans, and challenges encountered. Students will counsel a minimum of two parents regarding the nature of the anomalies, prognosis, and supportive care. All observations and reflections will be recorded in their logbooks. (Duration-3 hrs)

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. Skill Stations: 4 Stations. Marks Distribution per station- Station 1: Case Analysis- Analyse given case vignette of a pregnant woman with potential fetal risk due to environmental, dietary, psychological, or medicinal exposure. Include analysis, modern correlation and predicted outcomes on fetal growth or malformations.(20 marks) Station 2: Identify and Interpret - Five quick scenarios/terms- eg-Effect of Garbhini consuming excess Lavana Rasa, role of Garbhopghatakara Aushadhi, impact of maternal stress on Garbha satva. (10 marks) Station 3: Preventive Counseling Role-Play- Simulates 5-7 min counseling session for a pregnant woman at risk (eg, exposure to pollution, improper diet, OTC drug use). (10 Marks) Station 4: Design a Preventive Plan for minimizing fetal risk. (Pathya-Apathya for Sharir and Manas). (10 marks) OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning	3D Lecture/ Practical	3E Domain/ Sub	3F Level (Does/Sho	3G Teaching

		Hours	Training/ Experiential Learning	Domain	ws how/ Knows how/Know)	Learning Methods

Module 8 : Fetal monitoring and Disorders of Sexual Differentiation

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

- Analyze the significance of Early detection in Fetal Disorders
- Analyse the process of Sexual Differentiation
- Demonstrate effective counselling skills for parents and families of children with Disorders of Sexual Differentiation.

M 8 Unit 1 Foetal Monitoring

- Techniques of foetal monitoring
- Assessment of Masanumasika Garbha Vriddhi and Vikas

References: 3,38,45,49,76,77,78,79,80,81,86

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO8	Analyze fetal monitoring in early vs. late pregnancy.	2	Lecture	CAN	Knows-how	L&GD,BS
CO2,CO5,CO8	Differentiate and interpret methods of assessing Masa-anumasika Garbha Vriddhi and Vikasa.	1	Lecture	CAN	Knows-how	L&PPT , L,L&GD, BS
CO2,CO5,CO8	Demonstrate clinical, biophysical, and biochemical tests for fetal well-being and interpret the results.	4	Practical Training 8.1	PSY-GUD	Shows-how	CBL,D,PBL

CO2,CO5,CO8	Demonstrate assessment techniques for Masa-anumasika Garbha Vriddhi and Vikasa, and its interpretation.	2	Practical Training 8.2	PSY-GUD	Shows-how	D,CBL,REC
CO2,CO5,CO8	Perform and interpret clinical, biophysical, and biochemical tests for fetal well-being in a clinical setting.	4	Experiential-Learning 8.1	PSY-MEC	Does	RLE,DIS,CBL
CO2,CO5,CO8	Assess and document Masanumasika Garbha Vriddhi and Vikasa in antenatal cases with clinical correlation.	4	Experiential-Learning 8.2	PSY-MEC	Does	CBL

M 8 Unit 2 Prenatal and Perinatal Diagnosis

- Fundamentals of Prenatal Diagnosis
- Diagnostic tools and techniques
- Screening and identification of fetal abnormalities
- Ethical and legal aspects in Prenatal Diagnosis.
- Perinatal Diagnosis and Immediate newborn Evaluation

References: 31,34,35,38

3A	3B	3C	3D	3E	3F	3G
CO5,CO7,CO8	Analyze and compare prenatal and perinatal diagnostic methods.	2	Lecture	CAN	Knows-how	L&GD,L&PPT,BS
CO5,CO7,CO8	Demonstrate perinatal genetic screening methods.	4	Practical Training 8.3	PSY-GUD	Shows-how	PBL,D,LRI
CO5,CO7,CO8	Perform or observe prenatal and perinatal diagnostic procedures (e.g., ultrasound, amniocentesis) and interpret findings.	6	Experiential-Learning 8.3	PSY-MEC	Does	RLE,SDL

M 8 Unit 3 Disorders of sexual differentiation

- Ambiguous genitalia

- Hirsutism
- Congenital Adrenal Hyperplasia

References: 31,38,45,58,59,60,91

3A	3B	3C	3D	3E	3F	3G
CO2,CO6,CO7,CO8	Differentiate and evaluate disorders of sexual differentiation.	2	Lecture	CAN	Knows-how	L&GD,BS,L&PPT,L
CO2,CO6,CO7,CO8	Demonstrate clinical evaluation and basic management of Disorders of Sexual Differentiation(DSD).	4	Practical Training 8.4	CE	Knows-how	PBL,CBL,JC,DIS,TUT
CO2,CO6,CO7,CO8	Analyze and evaluate the causes, management strategies, and prevention of Duchenne Muscular Dystrophy (DMD).	1	Lecture	CAN	Knows-how	L&GD,L&PPT,BS
CO2,CO4,CO6,CO8	Demonstrate clinical evaluation and basic management of Disorders of Sexual Differentiation (DSD).	2	Practical Training 8.5	PSY-GUD	Shows-how	DIS,CBL,D
CO2,CO6,CO7,CO8	Evaluate Disorders of Sexual Differentiation (DSD) cases and counsel parents by creating educational tools to raise awareness.	6	Experiential-Learning 8.4	AFT-VAL	Does	W,CBL,PBL

M 8 Unit 4 Streekara and Purushakara Bhava Vikaras

- Streekara and Purushakara Bhava Vikaras
- Varta, Truna putrika, Pooti praja, Shanda

References: 3,76,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO3,CO8	Analyze Stree Kara and Purusha Kara Bhava Vikara.	2	Lecture	CAN	Knows-	L&PPT ,

					how	BS,L&GD
CO3,CO8	Demonstrate clinical evaluation and basic management of Stree Kara and Purusha Kara Bhava Vikara.	4	Practical Training 8.6	PSY-GUD	Shows-how	D,CBL
CO3,CO8	Evaluate Stree and Purusha Kara Bhava Vikara and educate parents/caregivers to raise awareness.	6	Experiential-Learning 8.5	AFT-VAL	Does	PBL,CBL,RLE

Practical Training Activity

Practical Training 8.1 : Clinical/biophysical/ biochemical tests for fetal well being.

Demonstration
The teacher will demonstrate the components of fetal well-being assessment, including clinical evaluation (maternal weight gain, blood pressure, fundal height, liquor assessment, abdominal girth), biochemical tests for pulmonary maturity (using lab reports, journal articles, and procedural videos), and biophysical tests for uteroplacental insufficiency screening such as NST (Non-Stress Test), BPP (Biophysical Profile), CST (Contraction Stress Test), and Doppler ultrasound (using radiological reports, videos, and literature review).
Following the demonstration, students will:
• Practice clinical assessment techniques and interpretation of biochemical and biophysical test findings on patients/mannequins/peers under the teacher's supervision.
• Identify challenges encountered during the assessment and testing procedures.
• Analyze and discuss findings collaboratively to interpret fetal well-being status and differentiate between normal and abnormal results.
The teacher will summarize the session. (Duration-4 hrs)

Practical Training 8.2 : Assessment of Masanumasik Garbha Vriddhi and Vikas.

Demonstration
The teacher will demonstrate assessment techniques for Masa-anumasika Garbha Vriddhi and Vikasa, focusing on clinical parameters and observational skills.
Following the demonstration, students will:

- Practice the assessment techniques on mannequins/peers under the teacher's supervision.
- Identify challenges encountered during the assessment process.
- Analyze and interpret the findings to evaluate fetal growth and development.

The teacher will summarize the session. (Duration-2 hrs)

Practical Training 8.3 : Perinatal Genetic Screening Methods

Demonstration
The teacher will demonstrate perinatal genetic screening tests performed in the first and second trimesters, explaining clinical indications, sample collection, and interpretation of reports. Ayurvedic concepts of Garbha Pariksha and Beejadosha assessment will be correlated during the demonstration.
Following the demonstration and discussions, students will:
• Practice sample collection and screening techniques on mannequins/peers under supervision.
• Engage in group discussions to analyze screening tests, interpret findings, and relate them to principles of fetal development and dosha imbalances.
• Identify challenges faced during procedures and in integrating biomedical and Beeja dosha perspectives for comprehensive fetal assessment.
The teacher will summarize the session. (Duration-4hrs)

Practical Training 8.4 : Management, cases and prevention of disorders of sexual differentiation.

Demonstration
The teacher will demonstrarte about surgical management , hormonal replacement therapy and it will be discuused in groups of students.
The teacher will demonstarte the causes like genetic mutation,chromosomal abnormalities, envirnomental factors responsible for DSD and it will be discussed in the groups of the students.

Practical Training 8.5 : Disorders of Sexual Differentiation (DSD): Diagnosis and Clinical Management

Demonstration
The teacher will demonstrate the diagnostic approach to various Disorders of Sexual Differentiation (DSD), including clinical examination techniques for conditions such as ambiguous genitalia and congenital adrenal hyperplasia. The session will include case-based discussion, diagnostic criteria, and interpretation of relevant findings.
Following the demonstration, students will:

- Practice clinical examination techniques on mannequins or peers under supervision.
- Identify challenges in recognizing and differentiating DSD presentations.
- Analyze case findings collaboratively to interpret diagnosis and outline initial management.

The teacher will summarize the session. (Duration-2hrs)

Practical Training 8.6 : Stree Kara and Purusha Kara Bhava Vikara

Demonstration
The teacher will demonstrate clinical evaluation and management of various Stree Kara and Purusha Kara Bhava Vikara such as Vartha, Varthaa, Truna Putrika, Pootipraja, and Shanda, referencing descriptions from different texts.
Following the demonstration, students will:

- Practice identifying and discussing these Bhava Vikaras through case scenarios and textual references under supervision.
- Engage in group discussions to correlate clinical features, Samprapti, and management principles.
- Analyze and interpret classical descriptions in relation to diagnosis and treatment.

The teacher will summarize the session. (Duration-4 hrs)

Experiential learning Activity

Experiential-Learning 8.1 : Assessment of Fetal Well-being in Antenatal Cases

Each student will conduct assessment of fetal well-being in a minimum of three antenatal cases using clinical (e.g., BP, fundal height, abdominal girth), biophysical (e.g., NST, BPP, Doppler), and biochemical (e.g., triple/quadruple markers) methods. They will select cases across different gestational ages or risk categories (e.g., high-risk pregnancy, IUGR suspicion, normal pregnancy). Findings will be interpreted and documented along with challenges encountered in logbook. (Duration-4 hrs)

Experiential-Learning 8.2 : Masanumasik Garbha Vriddhi and Vikas.

Each student will review and compare descriptions of Masanumasika Garbha Vriddhi and Vikasa across multiple texts. They will then correlate these textual concepts with clinical parameters by analyzing at least three antenatal case records. Students will prepare a detailed report including comparative charts, clinical interpretations, and propose integrative management strategies, documenting their findings in logbook. (Duration-4hrs)

Experiential-Learning 8.3 : Invasive and Non invasive, Prenatal and Perinatal Diagnostic Procedures.

Each student will perform or observe invasive and non-invasive prenatal and perinatal diagnostic procedures (e.g., ultrasound, amniocentesis, chorionic villus sampling) in at least three clinical cases. They will document procedural details, indications, contraindications, risks, and interpret findings, correlating them with clinical scenarios in their logbook. (Duration-6 hrs)

Experiential-Learning 8.4 : Disorders of Sexual Differentiation (DSD) Evaluation, Counseling, and Awareness

Each student will select and read one recent peer-reviewed journal article on Disorders of Sexual Differentiation (DSD). They will critically analyze the article's objectives, key findings, management approaches, and counseling methods. They will present a 5-minute oral summary to peers followed by a group discussion on clinical and Ayurvedic implications.They will document their learnings in logbook. (Duration-2 hrs)
AND
Student will attend a workshop on Disorders of Sexual Differentiation (DSD) covering clinical features and management strategies. They will participate in case discussions and role-play counseling sessions for patients and families. Students will collaborate in groups to analyze diagnostic challenges and treatment options. Each student will prepare a brief reflection on their learning and communication skills. They will document their learnings in logbook. (Duration-4 hrs)

Experiential-Learning 8.5 : Evaluation and Awareness of Stree and Purusha Kara Bhava Vikara

Each student will review at least three documented/simulated case studies/case reports of Stree Kara and Purush Kara Bhava Vikara (e.g., Vartha, Truna Putrika, Pooti Praja, Shanda). They will analyze clinical features and formulate samprapti for each case. (Duration- 3 hrs)
AND
Each student will create any one of the educational material (leaflet, poster, or infographic) to explain these conditions -Stree Kara and Purush Kara Bhava Vikara (e.g., Vartha, Truna Putrika, Pooti Praja, Shanda), in simple terms. They will participate in two mock counseling sessions with peers or standardized participants to practice awareness-building. Reflections and peer feedback will be documented in their logbook. (Duration- 4 hrs)

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. Skill-Based Assessment Plan (50 Marks)- 1. OSCE/OSPE Station: Fetal Monitoring - Fetal Heart Rate, USG reports or other diagnostic/Lab/radiological reports. (15 marks) 2. OSCE Station: Sexual Differentiation Pathway-Use a diagram or chart to explain the normal and abnormal pathways of sexual differentiation using both Ayurvedic (Beeja, Shukra-Artava) and modern views. (10 marks) 3. Simulated Counseling Session-DSD Case: (15 marks) 4. Mini Viva: Clinical questions related to early detection, monitoring strategies and management plans.(10 marks) OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Paper No : 2 Navajata Shishu Vigyana (Neonatology)

Semester No : 3

Module 9 : Navajata Parikshana, Paricharya and Poshana [Examination, Care, Management and Feeding of neonate (Normal/Sick)]

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

1. Interpret foetal growth and antenatal findings integrating Ayurveda and modern parameters to guide parental counselling.
2. Perform comprehensive neonatal examination integrating Navajata Pariksha with modern screening tools.
3. Advice immediate and appropriate neonatal care using Ayurvedic and modern interventions.
4. Apply principles of neonatal nutrition and manage neonatal units with clinical and administrative efficiency.

M 9 Unit 1 Transition from Garbhavastha to Navajata Shishu Avastha (Feto - Neonatal transition)

- Foetal growth from conception to expulsion of the foetus, at term.
- Physiological and biochemical changes in a neonate occurring in post natal period, different from foetal life
- Evaluation of ANC reports for anticipating foetal and neonatal outcome
- Anticipation of perinatal complications

References: 9,15,16,31,34,38,50,52,60,64,90

3A	3B	3C	3D	3E	3F	3G
CO2,CO8	Analyze fetal growth patterns and interpret monitoring findings from conception to term.	1	Lecture	CAN	Knows-how	LS,L_VC,BS,L&PPT
CO2,CO8	Identify the risk factors and early signs to anticipate perinatal complications.	1	Practical Training 9.1	CE	Knows-how	D-BED,PBL,D,LRI,CBL

CO2,CO8	Evaluate neonatal physiological and biochemical adaptations postnatally versus fetal life.	2	Experiential-Learning 9.1	CE	Does	RLE
CO2,CO8	Demonstrate ANC report evaluation to anticipate fetal and neonatal outcomes.	1	Practical Training 9.2	CE	Knows-how	D,CBL,PL,DIS
CO1	Demonstrate feeding techniques and counsel mothers on planning and training for appropriate feeding in infants with cleft lip and cleft palate.	2	Practical Training 9.3	PSY-GUD	Shows-how	D-BED,D,PrBL

M 9 Unit 2 Assessment of Navajta Shishu (Normal Neonate)

- Assessment of Gestational age
- New born reflexes
- Head to toe examination
- Significance of maternal, perinatal and postnatal history

References: 1,38,66,70,90

3A	3B	3C	3D	3E	3F	3G
CO5,CO8	Analyze gestational age using clinical tools and classify neonate as per standard categories.	1	Lecture	CAN	Knows-how	L&GD,BS,L&PPT
CO5,CO8	Conduct head-to-toe examination of a newborn to identify normal and abnormal findings.	3	Practical Training 9.4	PSY-GUD	Shows-how	D,D-BED
CO5,CO8	Evaluate newborn reflexes to interpret normal and abnormal neurodevelopmental patterns.	3	Experiential-Learning 9.2	PSY-MEC	Shows-how	RLE
CO5,CO8	Compile, analyze, and interpret maternal, perinatal, and postnatal history to identify risk factors affecting neonatal health.	2	Experiential-Learning 9.3	CAN	Knows-how	RLE,LRI,IBL

M 9 Unit 3 Navajata Lakshana Pariksha (Neonatal screening)

- Prashasta Bala Lakshana Pariksha

- Inborn errors of metabolism
- Disabilities of special senses
- Congenital chromosomal, genetic and hormonal disorders

References: 2,3,8,31,38,43,45,54,56,59,62,77,78,79,80,86

3A	3B	3C	3D	3E	3F	3G
CO3,CO5,CO6	Analyse Lakshana of Prashasta Balaka according to Lakshana adhyaya of Kashyapa Samhita.	2	Lecture	CAN	Knows-how	L&GD,L,BS
CO3,CO5,CO6	Identify red flag signs in neonates for early recognition of complications.	3	Practical Training 9.5	PSY-GUD	Shows-how	CBL,PBL,D
CO3,CO5,CO6	Manage suspected inborn errors of metabolism and sensory disabilities; refer appropriately and counsel parents.	2	Experiential-Learning 9.4	AFT-RES	Does	RLE
CO3,CO5,CO6	Manage congenital, genetic, and hormonal disorders, and communicate effectively with parents.	2	Experiential-Learning 9.5	AFT-RES	Does	RLE,SDL

M 9 Unit 4 Navajata Shishu Paricharya (Immediate and routine care measures)

- Care of the new born (Routine and ancillary procedures)
- Thermoregulation
- Neonatal feeding

References: 38,59

3A	3B	3C	3D	3E	3F	3G
CO1,CO4	Provide newborn care by assessing, stabilizing, and initiating essential interventions.	2	Experiential-Learning 9.6	PSY-MEC	Does	Mnt,PL
CO1,CO4	Demonstrate routine and ancillary newborn care procedures.	3	Practical Training 9.6	PSY-GUD	Shows-how	D-BED,D

CO1,CO4	Analyze the importance of thermoregulation and explore methods to maintain a thermoneutral environment.	2	Lecture	CAN	Knows-how	L_VC,L&GD
CO1,CO4	Assess the neonate’s readiness for feeding, identify contraindications, and plan appropriate feeding initiation.	4	Experiential-Learning 9.7	PSY-MEC	Does	RLE

M 9 Unit 5 Sutikagara, Kumaragara

- Navajata Shishu Kaksha Prabandhana (Nursery management) - Special Neonatal Intensive Care unit (SNICU), HDU and NICU
- Nursery and Neonatal ward
- Neonatal referral and transport
- Hazards of prolonged SNICU stay.
- Management and disposal of biomedical waste

References: 3,76,77,78,79,100

3A	3B	3C	3D	3E	3F	3G
CO5	Demonstrate setup of nursery/NICU and staff work allocation.	2	Practical Training 9.7	PSY-MEC	Shows-how	D,TBL
CO5	Plan and allocate staff effectively in neonatal ward and nursery based on patient needs and workload.	1	Experiential-Learning 9.8	PSY-MEC	Does	TBL,RLE
CO5	Analyze the importance of maintaining accurate medical records including OPD, IPD, referral, and death documentation.	1	Lecture	CAN	Knows-how	BS,L&GD
CO5	Demonstrate visankramnikarana (disinfection, sterilization) of wards and equipment, and proper biomedical waste management.	2	Practical Training 9.8	PSY-GUD	Shows-how	D
CO5	Identify neonates requiring referral, arrange safe transport with proper documentation and communication.	3	Experiential-Learning 9.9	PSY-MEC	Does	TBL,RLE

M 9 Unit 6 Shishu Poshana

- Feeding Schedule and Techniques, Alternative and complimentary feed
- Calculation of nutritional feed in healthy and sick neonate
- Total Parental Nutrition

References: 38,45,59,63,64,70

3A	3B	3C	3D	3E	3F	3G
CO1	Analyze and plan neonatal feed volume, energy, and nutrient requirements based on clinical status.	2	Lecture	CAN	Knows-how	L&GD,BS,L_VC
CO1	Analyze the need for alternative and complementary feeding and counsel the mother accordingly.	1	Lecture	CAN	Knows-how	SDL,BS,L&GD,CBL
CO1	Demonstrate various techniques and methods of neonatal feeding.	2	Practical Training 9.9	PSY-GUD	Shows-how	D,D-BED
CO1	Counsel, advise, and train mothers on neonatal feeding plans in special conditions like HIV, HBV, and maternal medication use.	5	Experiential-Learning 9.10	PSY-MEC	Does	RLE,RP
CO1	Demonstrate planning, calculation, preparation, and initiation of Total Parenteral Nutrition (TPN) in neonates.	1	Practical Training 9.10	PSY-GUD	Shows-how	D,PL

Practical Training Activity

Practical Training 9.1 : Perinatal complications and neonatal outcomes

Demonstration
The teacher will demonstrate focused clinical assessment techniques to identify risk factors and early signs of perinatal complications during antenatal and intrapartum care, interpret key investigations such as fetal monitoring and ultrasound, outline anticipatory management, and model clear communication of risks and plans to patients and families.
Students will then work in pairs on one clinical case vignette representing either an antenatal or intrapartum scenario.
Following demonstration, students will:

- Identify key risk factors and early warning signs
- Justify selected investigations and monitoring tools
- Briefly outline the pathophysiology and anticipate potential complications
- Propose an individualized preventive or early management plan
- Practice communicating risks and next steps through a brief role-play
- Present a summary of their findings and plan to the group for quick feedback

The teacher will conclude with key takeaways. (Duration-1hr)

Practical Training 9.2 : Evaluation of ANC Reports

Demonstration
The teacher will demonstrate the evaluation and interpretation of antenatal care (ANC) reports, focusing on identification of maternal risk factors, fetal well-being indicators (e.g., fetal growth parameters, Doppler studies, biophysical profile), and relevant lab investigations. The session will emphasize understanding the clinical implications for fetal and neonatal outcomes, formulating anticipatory management, and recognizing referral needs (e.g., IUGR, preeclampsia, abnormal Doppler findings).
Students will then work in pairs with one given ANC report representing different antenatal scenarios (e.g., high-risk pregnancy, borderline fetal growth, abnormal biochemistry).
Following demonstration, students will:

- Analyze the clinical cases and ANC findings
- Justify the use of specific investigations and monitoring tools
- Outline the pathophysiological basis for anticipated outcomes
- Plan individualized antenatal and perinatal care strategies
- Identify indications for timely referral or specialized intervention
- Role-play communication of risks and plans with the patient or caregiver
- Present their assessment and plan to peers and receive feedback

The teacher will summarise the session. (Duration-1hr)

Practical Training 9.3 : Feeding Support in Cleft Lip and Palate

Demonstration
The teacher will demonstrate feeding modalities and techniques for infants with cleft lip and/or cleft palate. This includes positioning, use of specialized bottles (e.g., Haberman, squeeze bottles), cup and spoon feeding, and strategies to ensure adequate nutrition and prevent aspiration. The demonstration will also include caregiver counseling techniques and practical tips to reduce feeding-related anxiety in mothers.
Students will:

- Observe and practice feeding techniques on mannequins or models with cleft conditions
- Plan individualized feeding approaches based on the infant's condition
- Role-play caregiver training, addressing concerns, positioning, hygiene, and technique
- Justify the choice of feeding method based on the type of cleft and associated factors
- Identify red flags requiring referral to pediatric surgery, lactation consultant, or nutritionist.

Teacher will summarise the session.(Duration-2 hrs)

Practical Training 9.4 : Head to toe Examination of Newborn

Demonstration
The teacher will demonstrate a systematic head-to-toe examination of a newborn, covering general appearance, vital signs, skin, head and fontanelles, eyes, ears, nose, mouth, neck, chest, cardiovascular and respiratory systems, abdomen, genitalia, limbs, spine, and neurological reflexes (e.g., Moro, rooting, sucking). The teacher will highlight normal vs. abnormal findings and explain their clinical relevance.
Students will then work in small groups to observe and practice the examination on standardized mannequins or under supervision in a neonatal unit, using a checklist.
Following demonstration, students will:

- Practice the head-to-toe examination under supervision
- Record and interpret key clinical findings
- Identify common deviations from normal (e.g., birth injuries, congenital anomalies)
- Correlate abnormal findings with possible underlying conditions
- Discuss the need for further evaluation/referral if abnormalities are detected
- Role-play caregiver communication explaining findings in simple terms

- Present one case to peers, highlighting key observations and clinical implications

The teacher will summarise the session. (Duration-3hrs)

Practical Training 9.5 : Navajata Lakshana Pariksha (Neonatal screening)

Demonstration
Teacher will:

- Demonstrate clinical examination techniques to identify key red flag signs in neonates (e.g., poor feeding, respiratory distress, seizures, jaundice, abnormal tone, birth trauma).
- Explain the significance and urgency of each sign.
- Show how to document findings and decide immediate actions or referrals.

Students will:

- Examine at least three neonates or case vignettes with varied presentations.
- Identify and record red flag signs.
- Justify clinical decisions regarding investigations or referrals.
- Communicate findings and urgency to caregivers through role-play.
- Discuss challenges faced during assessment.

Teacher will summarise the session.(Duration-3 hrs)

Practical Training 9.6 : Newborn Care Ancillary Procedures

Demonstration
The teacher will demonstrate:

- Routine newborn care procedures (e.g., temperature measurement, weight, length, head circumference, cord care)
- Ancillary procedures (e.g., administering vitamin K, eye prophylaxis, glucose monitoring, gavage feeding)
- Infection control and safety measures during procedures
- Documentation and communication with caregivers

Students will then:

- Practice each procedure on mannequins or simulated cases under supervision
- Perform documentation of findings and procedures done
- Discuss indications, contraindications, and precautions for each procedure
- Reflect on challenges and troubleshooting techniques

Teacher will summarise the session. (Duration-3hrs)

Practical Training 9.7 : Neonatal Unit Setup and Staffing

Demonstration
The teacher will demonstrate:

- Planning and layout design of Navajata Shishu Kaksha (nursery) and different levels of NICU (primary, secondary, tertiary)
- Zoning and organization of equipment, beds, and essential facilities as per standards
- List of essential instruments, drugs, and infection control measures for each level
- Manpower planning based on patient load and acuity
- Task-based work allocation to nursing and support staff
- Use of duty rosters, checklists, and escalation protocols

Students will then collectively:

- Create a mock layout for nursery and NICU zones using templates or diagrams
- Identify necessary equipment and resources for each zone

- Propose staff distribution and task allocation for a given case load
- Simulate brief role assignment and reporting plans
- Discuss challenges in setup and staffing in different healthcare settings

Teacher will summarise the session. (Duration-2 hrs)

Practical Training 9.8 : Infection Control and Biomedical Waste Management

Demonstration
The teacher will demonstrate:

- Techniques of disinfection and sterilization of neonatal wards and medical equipment
- Standard protocols for biomedical waste segregation, handling, and disposal according to guidelines
- Use of protective gear and safe practices to minimize infection risk

Students will then:

- Observe and practice disinfection and sterilization methods on sample equipment and ward areas
- Participate in a biomedical waste segregation exercise using color-coded bins and simulated waste materials
- Identify errors in waste disposal and suggest corrective actions
- Discuss challenges and safety measures in infection control

Teacher will summarise the session. (Duration- 2hrs)

Practical Training 9.9 : Neonatal Feeding Techniques

Demonstration
The teacher will demonstrate:

- Assessment of neonatal feeding requirements including volume, energy, macro- and micronutrients tailored to the neonate’s condition (e.g., prematurity, low birth

weight, illness)
- Various neonatal feeding techniques and methods such as breastfeeding, cup feeding, spoon feeding, syringe feeding, and use of feeding tubes

Students will then:

- Calculate and plan individualized feeding requirements based on provided case scenarios
- Practice feeding techniques on mannequins or under supervision
- Adjust feeding plans according to neonate's clinical status
- Role-play counseling caregivers on feeding plans and techniques

Teacher will summarise the session.(Duration-2hrs)

Practical Training 9.10 : Neonatal Total Parenteral Nutrition (TPN) Administration

Demonstration
The teacher will demonstrate the complete process of Total Parenteral Nutrition (TPN) in neonates, including planning nutritional requirements (fluids, glucose, amino acids, lipids, electrolytes), calculating volumes and rates, preparing TPN under aseptic precautions, and initiating infusion with appropriate monitoring. Emphasis will be placed on safety, accuracy, infection control, and recognition of complications (e.g., electrolyte imbalance, line sepsis).
Students will then work in pairs using simulated TPN preparation kits or virtual case scenarios.
Following demonstration, students will:

- Plan TPN requirements based on case-specific neonatal weight, condition, and age
- Calculate fluid volumes, nutrient needs, and infusion rates accurately
- Practice preparation of TPN under aseptic conditions (simulation or lab-based)
- Demonstrate safe initiation and line care for TPN
- Identify potential complications and monitoring protocols
- Present their TPN plan and justify calculations to peers
- Role-play caregiver communication regarding TPN use and monitoring

Teacher will summarise the session. (Duration-1hr)

Experiential learning Activity

Experiential-Learning 9.1 : Perinatal Physiology and Neonatal Outcomes

Each student will evaluate two antenatal clinical cases or case vignettes, representing varied gestational ages and risk categories. Over the session, they will:

- Analyze ANC reports to evaluate maternal and fetal health status
- Identify antenatal risk factors and anticipate possible fetal and neonatal outcomes
- Recognize early signs and consequences of potential perinatal complications
- Evaluate key physiological and biochemical changes in the neonate during the postnatal period, distinct from fetal life
- Interpret investigations (e.g., ultrasound, NST, lab parameters) to support clinical reasoning
- Formulate individualized management and anticipatory care plans
- Practice communicating findings and care plans to caregivers through role-play
- Identify referral criteria in high-risk or deteriorating scenarios and justify the decisions

Students will document:

- Clinical findings and interpretation of ANC data
- Anticipated outcomes and corresponding management plans
- Challenges encountered in assessment or decision-making
- Referral indicators and rationale

All reflections will be recorded in the student logbook. (Duration-2hrs)

Experiential-Learning 9.2 : Examination of Newborn Reflexes

Each student will evaluate a minimum of three newborns or clinical case vignettes, representing varied gestational ages or clinical conditions (e.g., term, preterm, birth asphyxia, suspected neurological delay). They will perform a complete assessment of neonatal reflexes (e.g., Moro, rooting, sucking, grasp, stepping), identify key clinical findings, and interpret the neurological significance of observed responses.
Students will:

- Perform clinical examination of newborn reflexes using standard techniques
- Identify normal and abnormal reflex patterns and correlate them with clinical context
- Justify the interpretation based on developmental norms and neurological assessment
- Analyze possible underlying causes for abnormal reflexes (e.g., prematurity, CNS insult)
- Suggest appropriate follow-up or referral where reflex abnormalities are noted
- Practice explaining findings to caregivers through role-play

Students will document:

- Key clinical findings and reflex response interpretation
- Diagnostic reasoning for identifying normal vs. abnormal patterns
- Challenges faced during assessment and interpretation
- Referral decisions with clinical justification

All reflections will be recorded in the logbook. (Duration-3hrs)

Experiential-Learning 9.3 : Neonatal Risk Assessment from Birth History

Each student will evaluate a minimum of two newborn clinical cases or vignettes presenting with varied outcomes (e.g., healthy term baby, preterm with complications, postnatal feeding issues). They will compile detailed maternal, perinatal, and postnatal history; analyze data; relate it to the neonate's current condition; and interpret its significance for diagnosis, early intervention, or referral.
Students will:

- Elicit and document structured maternal (antenatal), perinatal (labour and delivery), and postnatal history
- Identify significant risk factors and their relevance to neonatal outcomes
- Correlate historical findings with clinical condition of the neonate
- Justify their interpretation with evidence-based reasoning
- Identify when historical patterns indicate the need for further evaluation or referral
- Practice communicating history-based findings and risks to caregivers through role-play

Students will document:

- Key historical findings and their clinical relevance
- Diagnostic reasoning connecting history with neonatal presentation
- Challenges encountered in history interpretation or correlation
- Referral indicators identified through history and their justification

All reflections will be recorded in the student logbook. (Duration-2hrs)

Experiential-Learning 9.4 : Metabolic and Sensory Disorder Management

Each student will evaluate two case vignettes involving suspected inborn errors of metabolism (e.g., galactosemia, PKU) and sensory disabilities (e.g., congenital hearing or vision impairment).
Students will:

- Identify red flags from neonatal history and clinical presentation
- Select appropriate screening tools and initial investigations (e.g., Guthrie test, BERA, fundus exam)
- Interpret preliminary findings to plan further evaluation or referral
- Explain the suspected condition and next steps to caregivers using empathetic communication
- Discuss the importance of early detection and possible interventions

Students will document:

- Key clinical signs and reasoning for suspicion
- Screening approach and investigations ordered
- Referral indicators with justification
- Communication summary with parents
- Reflections on challenges in early detection and family counselling

All reflections will be recorded in the student logbook.(Duration-2hrs)

Experiential-Learning 9.5 : Management of Neonatal-Congenital, Genetic, and Hormonal Disorders

Demonstration
Each student will evaluate a minimum of two clinical cases or case vignettes involving congenital, chromosomal, genetic, or hormonal disorders (e.g., Down syndrome, Turner syndrome, congenital hypothyroidism, CAH).
Students will:

- Perform clinical assessment and identify key signs suggestive of genetic/hormonal disorders
- Justify selection of diagnostic investigations (e.g., karyotyping, hormonal assays, newborn screening)
- Analyze the pathophysiology and formulate individualized management plans
- Communicate diagnosis, prognosis, and long-term care to parents with empathy and clarity
- Recognize the need for referral to genetic counseling or endocrinology where appropriate

Students will document:

- Key clinical findings and diagnostic approach
- Management and follow-up plan
- Communication highlights and parental concerns addressed
- Referral decisions with justification
- Reflections on ethical, emotional, and practical aspects of care

All reflections will be recorded in the student logbook. (Duration-2 hrs)

Experiential-Learning 9.6 : Newborn Care

Each student will participate in a minimum of three case scenarios or simulated deliveries representing various birth conditions (e.g., normal, meconium-stained, asphyxiated).
Students will:

- Assess the newborn using APGAR scoring and identify need for interventions

- Provide immediate care (drying, warmth, cord clamping, skin-to-skin contact, early breastfeeding)
- Identify newborns requiring resuscitation or referral
- Document steps of immediate care and justify actions taken
- Communicate findings and care plan with caregiver/parent

Students will document:

- Key observations and APGAR assessment
- Interventions performed and rationale
- Referral indicators (if any)
- Communication summary with caregivers
- Reflections on decision-making and hands-on experience

All reflections will be recorded in the student logbook.(Duration-2 hrs)

Experiential-Learning 9.7 : Neonatal Feeding Assessment

Each student will assess a minimum of three neonates or case vignettes representing varied feeding readiness and challenges (e.g., preterm, low birth weight, respiratory distress, congenital anomalies).
Students will:

- Perform clinical assessment focusing on feeding cues, sucking/swallowing reflexes, and overall stability
- Identify conditions preventing feeding initiation (e.g., respiratory distress, neurological impairment, congenital malformations)
- Choose appropriate feeding methods (e.g., breastfeeding, expressed breast milk, tube feeding) based on neonate’s condition
- Formulate individualized feeding initiation and advancement plans
- Communicate feeding plans and precautions effectively with caregivers
- Document assessments, decisions, and caregiver instructions

Students will document:

- Key clinical findings and feeding readiness assessment
- Identified contraindications and rationale
- Feeding plan with method, volume, and frequency
- Communication summary with caregivers
- Reflections on challenges and decision-making process

All reflections to be recorded in the student logbook.(Duration-4 hrs)

Experiential-Learning 9.8 : Neonatal Ward Staffing and Work Allocation

Each student during their postings, will participate in a supervised observational visit to a tertiary care center. During the visit, they will study how work is allocated among healthcare providers in NICU/SNICU/HDU and how clinical workflows are managed.
Students will observe and document:

- Staffing patterns: Number and role of doctors, nurses, and support staff per shift
- Work allocation system: How tasks are assigned (e.g., nursing procedures, monitoring, reporting, infection control)
- Shift handover process: Communication strategies used between outgoing and incoming teams
- Emergency preparedness: Protocols in place for identifying and responding to danger signs
- Use of documentation tools: Duty rosters, handover sheets, and task charts

Students will document:

- Summary of observed staffing and task distribution
- Key takeaways on team coordination and communication
- One challenge identified and a suggested improvement
- Reflection on importance of structured work allotment in neonatal critical care

All reflections will be recorded in the student logbook. (Duration-1hr)

Experiential-Learning 9.9 : Neonatal Referral and Transport with Communication

Each student will evaluate a minimum of three clinical cases/mock drills/case vignettes of sick or high-risk neonates across varied conditions and severities. They will perform thorough clinical examination, identify neonates requiring referral to higher or super-speciality centres, and justify their decisions based on clinical findings and investigations.
Students will be required to:

- Assess the clinical status and identify key referral indicators (e.g., respiratory distress, sepsis, congenital anomalies)
- Justify the need for referral with evidence-based reasoning
- Plan and explain the logistics of arranging safe and smooth transport, including documentation and communication with the referral centre
- Communicate effectively with parents/caregivers about the referral, explaining the reasons, process, and addressing their concerns
- Discuss potential challenges in referral and transport and propose solutions

Students will document:

- Key clinical findings and diagnostic reasoning
- Referral decision with clear justification
- Challenges faced during assessment or referral planning
- Transport arrangement plan including documentation and communication
- Reflection on the mock drill experience and lessons learned

All reflections will be recorded in the student logbook. (Duration-3 hrs)

Experiential-Learning 9.10 : Neonatal Feeding in Special Maternal Conditions

Each student will evaluate a minimum of three clinical cases or case vignettes involving neonates born to mothers with conditions such as HIV infection, HBV infection, or those on specific medications contraindicated in breastfeeding. Cases will vary in maternal condition, treatment stage, and neonatal health status.
Students will:

- Assess the maternal condition and its implications for neonatal feeding
- Identify appropriate feeding recommendations based on national/international guidelines

- Plan individualized feeding strategies (e.g., exclusive breastfeeding, formula feeding, expressed milk with precautions)
- Counsel the mother/caregiver regarding feeding options, risks, and infection prevention
- Justify decisions based on maternal status, drug safety, and neonatal well-being
- Identify when specialist referral (e.g., infectious disease, lactation support) is indicated
- Role-play caregiver communication with attention to empathy and clarity

Students will document:

- Key clinical findings and diagnostic reasoning
- Feeding plan with justification and safety considerations
- Challenges in counseling or decision-making
- Referral criteria and rationale

All reflections will be recorded in the student logbook. (Duration-5hrs)

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. OSCE/OSPE Stations: (Each Station x 10 marks =50 marks) • Station 1: Clinical case analysis – Examine a newborn assess the gestational age / look for birth injuries • Station 2: Perform the Newborn Resuscitation and provide routine care • Station 3: Role Play – explain mother about feeding and nutrition • Station 4: Explain / counsel parent about need of newborn screening and OAE screening • Station 5: explain in short about feto – neonatal transition OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Module 10 : Samaya Purva-Paschat (Newborn -Preterm/Full Term/Post Term), Alpabhara Jatamatra-(SGA/AGA/LGA)Navajata Paricharya. Assessment of Normal and Sick Neonate)

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

1. Demonstrate skills in reviving and stabilizing asphyxiated neonates using appropriate tools and techniques.
2. Identify and manage high-risk, preterm, and post-term neonates.
3. Anticipate and treat complications of difficult deliveries.
4. Demonstrate proficiency in using resuscitation equipment effectively and counsel parents on neonatal outcomes.

M 10 Unit 1 Pranapratyagamana (Resuscitation) as per gestation and weight

- Resuscitation and pranapratyagaman chikitsa as per gestational age and birth weight and various perinatal conditions
- Appropriate care on scientific basis, post birth
- Comparison of ancient and current practices/ traditions

References: 15,19,38,39,52,59,64,65,66,67,68,69,70,71,93,103

3A	3B	3C	3D	3E	3F	3G
CO5,CO7,CO8	Analyze resuscitation and pranapratyagaman protocols by gestational age and condition.	2	Lecture	CAN	Knows-how	L_VC,L, L&PPT
CO5,CO7,CO8	Manage newborn care.	7	Experiential-Learning 10.1	PSY-MEC	Does	PSM,RLE
CO5,CO7,CO8	Apply the best ancient and modern child care practices/traditions using evidence-based methods.	2	Practical Training 10.1	CAN	Knows-how	TUT,SY, PL,D

CO2,CO3,CO5,CO6,CO8	Demonstrate management of high-risk newborns: preterm, IUGR/SGA, post-term, and multiples.	8	Practical Training 10.2	PSY-GUD	Shows-how	PL,CBL,SIM,D

M 10 Unit 2 Pranapratyagamana of Achesta Navajata and Paricharya

- Assessment tools of perinatal and birth asphyxia.
- Standard Guidelines for Resuscitation.
- TABC of Resuscitation, Golden hour management
- Management of birth asphyxia and co-morbidities
- Post resuscitation care
- Respiratory support invasive and non-invasive
- Surfactant therapy, recent techniques, and advances.

References: 38,64,101

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO7,CO8	Analyze use of assessment scales for birth asphyxia.	2	Lecture	CAN	Knows-how	L_VC,L&PPT
CO2,CO3,CO5,CO6,CO7,CO8	Perform immediate newborn resuscitation at birth and implement essential newborn care measures within the golden hour.	5	Experiential-Learning 10.2	PSY-MEC	Does	RLE
CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate the use of equipment and tools for newborn resuscitation, including post-resuscitation care.	7	Practical Training 10.3	PSY-GUD	Shows-how	D
CO2,CO3,CO5,CO6,CO7,CO8	Analyze invasive and non-invasive respiratory support principles and settings.	2	Lecture	CAN	Knows-how	SDL,W,TBL,L_VC

CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate judicious use of surfactants in neonatal care.	3	Practical Training 10.4	CE	Knows-how	D
CO2,CO3,CO5,CO6,CO7,CO8	Evaluate and implement appropriate evidence-based interventions for newborns with asphyxia.	4	Experiential-Learning 10.3	PSY-MEC	Shows-how	RLE

M 10 Unit 3 Anticipation, Evaluation and management and outcome and follow-up care

- Management of Samaya Purva Evam- Pashchat Jata Shishu Paricharya (Pre-term & Post-term Neonate)
- IUGR and Multiple Births, collodion baby,
- Neonate born to Diabetic mother, mother with PIH, HIV positive mother, HBsAg positive mother
- Mentally challenged, drug abused mother and special scenarios

References: 9,15,35,38,39,52,59,64,90

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Explore management strategies for preterm, IUGR/SGA, and post-term newborns.	4	Lecture	CAN	Knows-how	L&GD,L_VC,BS
CO2,CO3,CO5,CO6,CO8	Explain, plan, and demonstrate management of newborns from high-risk pregnancies such as maternal diabetes, PIH, HIV, or specific medication exposure.	3	Experiential-Learning 10.4	CE	Knows-how	SY,RLE
CO2,CO3,CO5,CO6,CO8	Manage preterm, IUGR/SGA, post-term, and multiple pregnancy neonates.	7	Experiential-Learning 10.5	PSY-GUD	Shows-how	RLE

Practical Training Activity

Practical Training 10.1 : Comparative resuscitation

Demonstration

The teacher will demonstrate the comparison and application of ancient and modern child care practices/traditions, highlighting evidence-based benefits (e.g., breastfeeding, natural remedies, immunization, developmental monitoring), and explain how to integrate these into holistic child care.
Students will then work in pairs with two case scenarios reflecting different cultural backgrounds and child health needs.
Following demonstration, students will:
• Compare the ancient and modern practices relevant to each case.
• Justify selection of best practices using evidence-based rationale.
• Develop a holistic care plan incorporating cultural sensitivity and scientific guidelines.
• Discuss potential challenges in integrating traditional and modern care.
• Role-play caregiver counseling to explain combined care approaches.
• Present their care plans to peers and receive constructive feedback.
The teacher will summarise the session.(Duration-2 hrs)

Practical Training 10.2 : Care of High-Risk Newborns

Demonstration
The teacher will demonstrate the comprehensive management of preterm, IUGR/SGA, and multiple pregnancy newborns, covering resuscitation, ongoing care in NICU and ward settings, and follow-up care including growth and development (G&D) assessment.
Students will work in pairs with case vignettes and simulated scenarios representing these high-risk newborns.
Following demonstration, students will:

- Practice neonatal resuscitation tailored to preterm and complicated newborns.
- Plan and implement ongoing NICU and ward care, including thermoregulation, feeding, and monitoring.
- Assess growth and development needs and plan appropriate follow-up care at OPD.
- Analyze differences in management between preterm, IUGR/SGA, post-term, and multiples.
- Discuss multidisciplinary approaches and family counseling.
- Role-play communication with caregivers regarding care plans and follow-up.
- Present group findings and receive feedback.

Teacher will summarise the session. (Duration-8hrs)

Practical Training 10.3 : Newborn Resuscitation Skills

Demonstration
The teacher will demonstrate the clinical use of newborn resuscitation equipment and tools (e.g., bag-valve-mask, suction devices, oxygen delivery systems), followed by essential steps in post-resuscitation care, including monitoring and supportive management.
Students will then work in small groups rotating through multiple practical stations simulating various newborn resuscitation scenarios.
Following demonstration, students will:

- Practice setting up and operating resuscitation machinery and tools.
- Perform simulated newborn resuscitation following current guidelines (e.g., Neonatal Resuscitation Program protocol).
- Manage airway clearance and ventilation techniques on mannequins.
- Identify signs requiring escalation or modification of care.
- Demonstrate post-resuscitation monitoring and supportive interventions (e.g., temperature control, glucose monitoring).
- Discuss decision-making and teamwork during resuscitation.
- Role-play communication with caregivers during and after resuscitation.
- Participate in debriefing sessions to reflect on performance and challenges.

Teacher will summarise the session. (Duration-7hrs)

Practical Training 10.4 : Surfactant Therapy

Demonstration
The teacher will demonstrate indications, timing, and techniques for surfactant administration in neonates with respiratory distress, including monitoring and managing potential complications.
Students will then work in pairs with simulated neonatal cases/case vignettes requiring surfactant therapy.
Following demonstration, students will:
• Assess clinical signs and criteria for surfactant use.
• Justify timing and dosage decisions based on case data.
• Practice surfactant administration techniques on mannequins or simulators.
• Monitor and interpret responses post-administration.
• Identify and manage possible complications.
• Role-play communication with caregivers about surfactant therapy.
• Present case analyses and receive feedback.

Teacher will summarise the session. (Duration-3hrs)

Experiential learning Activity

Experiential-Learning 10.1 : Holistic Newborn Resuscitation and Care

Each student will evaluate a minimum of five clinical cases or vignettes involving newborns requiring resuscitation and postnatal care (e.g., birth asphyxia, preterm, meconium-stained baby). They will perform clinical assessments (Apgar score, vitals), initiate appropriate resuscitation steps, and plan individualized postnatal care. Students will explain physiological changes at birth, identify referral indicators (e.g., poor response to resuscitation, respiratory distress), and counsel caregivers. They will document their learnings and experiences in logbook. (Duration-7 hrs)

Experiential-Learning 10.2 : Golden Hour Newborn Resuscitation

Each student will evaluate a minimum of two clinical cases or case vignettes of newborns requiring resuscitation during the golden hour. They will perform clinical assessment (e.g., Apgar score, vital signs), identify key findings, initiate timely and appropriate resuscitation steps (e.g., thermal protection, airway management, bag-mask ventilation), and monitor the newborn's response. Students will analyze the pathophysiological basis of each case, formulate individualized stabilization and post-resuscitation care plans, and explain them to caregivers. Referral indicators such as poor response to resuscitation, ongoing respiratory distress, or need for advanced support must be identified and justified. They will document their learnings and experience in logbook. (Duration-5 hrs)

Experiential-Learning 10.3 : Co-morbidities of birth asphyxia

Each student will evaluate a minimum of two clinical cases or case vignettes of newborns with birth asphyxia complicated by co-morbidities and complication (e.g., seizures, hypoglycemia, hypoxic-ischemic encephalopathy, SIADH) across varied severity levels. They will perform clinical assessments, identify key findings, select appropriate investigations (e.g., blood glucose, arterial blood gases, neuroimaging), analyze pathophysiological mechanisms, and formulate individualized evidence-based management plans. They will explain management strategies to caregivers, identify and justify referral indicators such as treatment resistance, worsening neurological status, or multi-organ involvement, and document the outcomes and challenges faced during treatment. They will document their learnings and experiences in logbook. (Duration-4hrs)

Experiential-Learning 10.4 : Care of Neonates from High-Risk Maternal Conditions

Each student will evaluate a minimum of three clinical cases or case vignettes involving newborns born to high-risk pregnancies (e.g., maternal diabetes, PIH, HIV, or exposure to specific medications). They will perform neonatal assessment, identify critical clinical findings, select appropriate interventions (e.g., resuscitation, glucose monitoring, infection control), and formulate individualized management plans covering NICU/ward care and follow-up.
Students will also demonstrate effective communication by explaining the treatment plan and prognosis to caregivers, including counseling on growth, neurodevelopmental surveillance, and infection prevention when applicable. Indicators for referral or escalation of care (e.g., persistent hypoglycemia, infection signs, growth failure) must be

recognized and justified.
All reflections and learning outcomes will be recorded in the student logbook. (Duration-3 hrs)

Experiential-Learning 10.5 : Management of Preterm, IUGR/SGA, Post-term, and Multiple Pregnancy Neonates: Protocol-Based Approach

Each student will evaluate two case vignettes involving:

- Two neonates with IUGR/SGA or born from multiple pregnancy or born preterm/post-term.

Students will:

- Identify clinical priorities based on birth history, maternal conditions, and neonatal findings
- Plan and justify steps of neonatal resuscitation, initial stabilization, and NICU/ward management
- Select appropriate monitoring and supportive care (e.g., temperature, blood glucose, feeding strategies)
- Plan post-discharge follow-up, including growth and neurodevelopmental surveillance
- Communicate with caregivers regarding the prognosis, immediate care, and long-term needs using empathetic and non-judgmental language

All reflections and care plans will be recorded in the student logbook. (Duration- 4hrs)
AND
Each student will present an article on managing neonates: IUGR/SGA, multiple pregnancies, and preterm/post-term neonates.
They will summarize the study objectives, methods, key findings, and relevance to evidence-based neonatal care—covering resuscitation, NICU/ward management, and follow-up with growth and development assessment. Focus will be on understanding disease mechanisms, individualized treatment plans, and parent counseling. Students will critically appraise the article’s strengths and limitations.Peer discussion, facilitated by the teacher, will enhance clinical reasoning and application.
Each student will document their learning and reflections in the logbook. (Duration-3hrs)

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. OSPE/OSCE Stations: (Each Station x 10 marks =50 marks)	4

- Station 1: Perform Resuscitation of newborn as per gestational age and weight
- Station 2: Perform the Resuscitation of Achesta Balaka / limp newborn
- Station 3: pereform newborn care/ explain newborn care to parents
- Station 4: Explain / counsel parent about prognosis/ outcome of newborn who required resuscitation
- Station 5: counsel parents about ongoing and further care of special child

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Semester No : 4

Module 11 : Prasava Kalina Abhighata/Vyadhi (Birth Injuries)

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

1. Identify clinical signs suggestive of Prasava Kalina Abhighata/ Vyadhi (Birth injuries) in neonates.
2. Diagnose various types of Prasava Kalina Abhighata/ Vyadhi (Birth injuries) through appropriate clinical and diagnostic methods.
3. Initiate and manage the common birth injuries as per clinical protocols and Ayurveda principles.
4. Counsel parents regarding the nature, prognosis, and management of birth injuries.

M 11 Unit 1 Prasava Kalina Abhighataja/Sanghatabala Pravritta Vyadhis (Birth injuries)

- Upashirshaka (Caput and Cephalhaematoma)
- Bhagna and Sandhichyuta
- Spinal injuries, Peripheral nerve injuries, Plexus injury
- Concealed hemorrhages
- Soft tissue injuries and Mechanical traumas

References: 1,9,15,16,38,39,46,58,59,76,77,78,79,80,90

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6	Analyze causes, features, and complications of upashirshaka, caput succedaneum, cephalohematoma, fractures, and dislocations.	3	Lecture	CAN	Knows-how	L,L_VC,X-Ray
CO2,CO3,CO5,CO8	Manage neonates with Prasava Kalina Abhighataja/Sanghatabala Pravritta Vyadhi (caput succedaneum and cephalohematoma).	3	Experiential-Learning 11.1	PSY-GUD	Shows-how	X-Ray,RLE
CO2,CO3,CO5,CO8	Demonstrate diagnosis of fractures, dislocations, spinal and nerve injuries using clinical and diagnostic tools.	4	Practical Training 11.1	PSY-GUD	Shows-how	D,CD,X-Ray,PBL
CO2,CO3,CO5,CO8	Manage fractures, dislocations, nerve injuries, and palsies; anticipate and plan for long-term outcomes.	6	Experiential-Learning 11.2	PSY-MEC	Does	X-Ray,RLE
CO2,CO3,CO5,CO8	Demonstrate diagnosis and holistic management of concealed hemorrhages.	3	Practical Training 11.2	PSY-GUD	Shows-how	X-Ray,CBL,D
CO2,CO3,CO5,CO8	Manage concealed hemorrhages with holistic assessment, intervention, and caregiver counseling.	4	Experiential-Learning 11.3	PSY-MEC	Shows-how	RLE,X-Ray
CO2,CO3,CO5,CO8	Analyze immediate and long-term effects of soft tissue injuries and mechanical traumas.	2	Lecture	CAN	Knows-how	L&PPT,L_VC
CO2,CO3,CO5,CO8	Identify and treat soft tissue injuries resulting from mechanical trauma.	3	Practical Training 11.3	PSY-GUD	Shows-how	DG,D-M,CBL

Practical Training Activity

Practical Training 11.1 : Prasava Kalina Abhighataja Vyadhi

Demonstration

The teacher will demonstrate clinical examination techniques and use of diagnostic tools (e.g., X-ray, MRI, nerve conduction studies) to identify fractures (bhagna), joint dislocations (sandhichyuta), spinal injuries, peripheral nerve injuries, plexus injuries, and various palsies.
Students will then work in pairs with case vignettes and simulated patients/models representing different musculoskeletal and neurological injuries.
Following demonstration, students will:
• Practice clinical assessment focusing on signs and symptoms of fractures, dislocations, spinal, and nerve injuries.
• Select and interpret appropriate diagnostic investigations.
• Differentiate between types of injuries based on findings.
• Formulate preliminary management plans.
• Role-play communication of diagnosis and management with patients/caregivers.
• Present case findings to peers and receive feedback.
Teacher will summarise the session.(Duration-4hrs)

Practical Training 11.2 : Birth injuries - Concealed haemorrhages

Demonstration
The teacher will demonstrate clinical assessment and use of diagnostic tools (e.g., cranial ultrasound, MRI, fundoscopy) to identify concealed hemorrhages in newborns, including mastishkantargata raktasrava (intracranial hemorrhage), subdural, subarachnoid, and aponeurotic hemorrhages. The teacher will also demonstrate holistic management tailored to neonates, including supportive care and monitoring.
Students will work in small groups with neonatal case vignettes or simulated scenarios presenting with signs of concealed hemorrhages.
Following demonstration, students will:

- Practice focused clinical assessments of newborns for signs of concealed hemorrhages.
- Select and interpret appropriate neonatal diagnostic investigations.
- Formulate holistic management plans including medical care, supportive monitoring, and referral criteria.
- Discuss prevention and complications specific to neonates.
- Role-play communication with caregivers about diagnosis and care.
- Present case analyses and receive feedback.

Teacher will summarise the session.(Duration-3 hrs)

Practical Training 11.3 : Soft tissue injury

Demonstration
The teacher will demonstrate clinical assessment and treatment of soft tissue injuries in newborns (e.g., bruises, abrasions, minor lacerations) resulting from mechanical trauma during delivery or care.
Students will work in pairs with neonatal case vignettes or mannequins simulating soft tissue injuries.
Following demonstration, students will:
• Identify types of soft tissue injuries common in newborns.
• Practice gentle wound cleaning, dressing, and pain management suitable for neonates.
• Recognize signs of complications requiring further care.
• Discuss safe handling and prevention strategies.
• Role-play communication with caregivers about injury care and monitoring.
• Present case findings and receive feedback.
Teacher will summarise the session.(Duration-3hrs)

Experiential learning Activity

Experiential-Learning 11.1 : Prasava Kalina Abhighataja/Sanghatabala Pravritta Vyadhi (Caput Succedaneum and Cephalohematoma)

Each student will evaluate a minimum of three neonates presenting with Prasava Kalina Abhighataja / Sanghatabala Pravritta Vyadhi (e.g., caput succedaneum, cephalohematoma). They will perform detailed clinical assessments, differentiate between the conditions, identify key diagnostic signs, and formulate individualized care plans based on evidence and Ayurvedic principles where applicable. Students will also identify warning signs for complications requiring referral and counsel caregivers regarding prognosis, home care, and follow-up. They will document their learnings and experiences in logbook. (Duration-3 hrs)

Experiential-Learning 11.2 : Management of Pediatric Musculoskeletal Injuries

Each student will evaluate a minimum of three clinical cases or case vignettes involving pediatric musculoskeletal injuries such as Bhagna (fractures), Sandhichyuta (dislocations), spinal injuries, peripheral nerve and plexus injuries, and various palsies. They will perform thorough clinical assessments, identify injury types and severities, select appropriate investigations (e.g., X-rays, nerve conduction studies), analyze injury mechanisms, and formulate individualized acute management and rehabilitation plans. Students will anticipate long-term outcomes, identify referral criteria, and counsel caregivers on prognosis and follow-up. All assessments, management decisions, and reflections will be documented in the logbook.(Duration-6hrs)

Experiential-Learning 11.3 : Holistic Management of Concealed Hemorrhages

Each student will evaluate a minimum of three clinical cases or vignettes involving concealed hemorrhages such as mastishkantargata raktasrava (intracranial hemorrhage), subdural hemorrhage, subarachnoid hemorrhage, and aponeurotic hemorrhage. They will analyze pathophysiology, and develop holistic management plans including

monitoring and intervention strategies. Students will identify complications and referral indications, explain the condition and care to caregivers, and document all findings and reflections in their logbook. (Duration-4hrs)

Modular Assessment

Assessment method	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 25 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. Case Evaluation - Distribution of marks – Each component x 05 marks = 25 marks • Clinical case analysis – Birth injury • Diagnostic interpretation of the child with birth injury • Treatment planning • Communication skills • Professionalism and documentation OR Any practical in converted form can be taken for assessment. (10 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (15 marks)	2

Module 12 : Sahaja Vyadhi and Anna Purisha Meda Asthi Majja Vaha Srotas Vikruti (Birth Injuries, Congenital anomalies and Diseases of The G.I. Tract, Musculo-Skeletal and Central Nervous System)

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

1. Demonstrate understanding of the nidana, samprapti, diagnosis, management, and complications of disorders related to Annavaha and Pureeshavaha srotas (Gastrointestinal tract) in neonates.

2. Describe the nidana-samprapti (etiopathogenesis), clinical features, diagnosis, and management of disorders related to Medovaha, Mutravaha, and Shukra-Artavavaha srotas (Genitourinary system) in the neonatal period.

3. Analyze diseases related to Mamsa, Asthi, and Majjavaha srotas (Musculoskeletal and Nervous systems), focusing on their congenital presentations, diagnosis, Ayurvedic and modern management, and possible complications.

4. Counsel parents or caregivers with empathy and clarity regarding the nature, prognosis, and management plan of the neonatal condition, incorporating Ayurvedic and biomedical perspectives.

M 12 Unit 1 Annavaha - Pureeshavaha Srotas Navajata Vyadhis

- Annavaha Srotas Vikara - Chhardi (Vomiting, Regurgitation), GERD, Atisara (Diarrhea), Necrotizing enterocolitis (NEC), Vibandha (Constipation), Udarshoola (Colic)
- Asamyaka Nabhinalakartanajanya Vyadhi
- Congenital Anomalies of Annavaha-Pureeshvaha Srotas

References: 3,9,14,16,19,38,39,46,49,58,65,76,77,78,79

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Analyze aetiopathogenesis of Annavaha Srotas Vikara (Chhardi, GERD, Atisara, NEC, Vibandha,Udarshoola) and explore its management.	5	Lecture	CAN	Knows-how	BS,L&GD
CO2,CO3,CO5,CO6,CO8	Manage Annavaha Srotas Vikara through assessment, aetiopathogenesis, and therapeutic care (Vomiting, Regurgitation), GERD, Atisara (Diarrhea), Necrotizing Enterocolitis (NEC), Vibandha (Constipation), Udarshoola (Colic).	10	Experiential-Learning 12.1	CE	Knows-how	RLE,CBL
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis of nabhi roga and umbilical cord complications using investigations.	6	Practical Training 12.1	PSY-GUD	Shows-how	D,D-BED,RLE
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis, investigation, and management of congenital anomalies of Annavaha and Pureeshvaha srotas.	4	Practical Training 12.2	PSY-GUD	Shows-how	D-BED,D,X-Ray,RLE

CO2,CO3,CO5,CO6,CO8	Manage congenital Annavaha-Pureeshavaha Sroto (Gastrointestinal Tract) Vikara anomalies and Nabhi Roga.	5	Experiential-Learning 12.2	PSY-MEC	Does	X-Ray,PAL,RLE

M 12 Unit 2 Medovaha, Mootravaha srotas and Jananganga Vikaras

- Medovaha, mootravaha srotas vikaras - UTI, UV reflux, acute renal failure
- Congenital anomalies of Medovaha, Mootravaha srotas and Jananganga

References: 9,38,39,52,60,76

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Analyze aetiopathogenesis of Medovaha and Mootravaha Srotas Vikara (UTI, UV reflux, ARF, and related Congenital Anomalies of Srotas and Jananganga).	5	Lecture	CAN	Knows-how	L,L&GD,SY,X-Ray,BS
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis and management of Medovaha, Mootravaha Srotas, and Jananga Vikara using appropriate investigations.	10	Practical Training 12.3	PSY-GUD	Shows-how	W,PL,D,X-Ray,D-BED
CO2,CO3,CO5,CO6,CO8	Manage or stabilize Medovaha, Mootravaha, and Jananganga Srotas Vikara, including congenital anomalies.	10	Experiential-Learning 12.3	PSY-MEC	Shows-how	PrBL,SY,RLE

M 12 Unit 3 Asthi Mamsa Majjavaha Srotas Vikriti

- Asthi majjavaha srotas - osteomyelitis, infective arthritis and other related diseases
- Congenital anomalies of the musculoskeletal system - TAR syndrome, Torticollis

References: 9,38,39,45,52,58,59

3A	3B	3C	3D	3E	3F	3G

CO2,CO3,CO5,CO6,CO8	Analyze the aetiopathogenesis of Asthi-Majjavaha Srotas Vikara (Osteomyelitis, Infective Arthritis, and Congenital Musculoskeletal Anomalies such as TAR syndrome and torticollis).	3	Lecture	CAN	Knows-how	L&GD,X-Ray,CBL
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis of Asthi, Mamsa, and Majjavaha Srotas Vikara, using appropriate investigations.	10	Practical Training 12.4	PSY-GUD	Shows-how	D-BED,D,X-Ray
CO2,CO3,CO5,CO6,CO8	Manage or stabilize Asthi, Mamsa, and Majjavaha Srotas Vikara.	7	Experiential-Learning 12.4	PSY-MEC	Shows-how	RLE,X-Ray,DIS

M 12 Unit 4 Anya Sahaja Vikriti (Other Congenital anomalies)

- Congenital anomalies based on ante natal scan
- Treatment modalities, complications, outcomes, future anticipated disabilities of the possessed congenital anomalies

References: 9,30,38,39,45,52,53,58,59

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Analyze antenatal scan findings to identify and anticipate congenital anomalies.	1	Lecture	CAN	Knows-how	RLE,L&GD
CO2,CO3,CO5,CO6,CO8	Analyze congenital anomalies based on their signs and symptoms.	1	Lecture	CAN	Knows-how	L&GD,CD
CO2,CO3,CO5,CO6,CO8	Plan and explain treatment, complications, and outcomes of congenital anomalies to parents.	7	Experiential-Learning 12.5	AFT-RES	Shows-how	RLE

Practical Training Activity

Practical Training 12.1 : Assessment of Nabhi and Cord Care Complications

Demonstration

The teacher will demonstrate clinical examination of the newborn umbilical region, recognition of signs of nabhi roga and complications arising from improper post-umbilical cord care. Demonstration will include use of investigative tools such as swab cultures, blood tests, ultrasound if needed, and interpretation of results.
Students will work in pairs or small groups using neonatal case vignettes or simulated scenarios presenting with omphalitis, granuloma, umbilical hernia, or sepsis related to cord care.
Following demonstration, students will:

- Conduct clinical assessment focused on umbilical region disorders.
- Select appropriate investigations to confirm diagnosis.
- Interpret investigative findings accurately.
- Formulate management plans including local care, antibiotics, and referral.
- Discuss prevention strategies for proper cord care.
- Role-play communication with caregivers about umbilical issues and care.
- Present findings and receive feedback.

Teacher will summarise the session. (Duration-6hrs)

Practical Training 12.2 : Congenital Disorders of Annavaha and Pureeshvaha Srotas

Demonstration
The teacher will demonstrate clinical assessment and use of investigative tools (e.g., neonatal abdominal ultrasound, contrast studies, X-rays, relevant lab tests) to diagnose congenital anomalies of the gastrointestinal (annavaha) and excretory (pureeshvaha) systems in newborns. The teacher will also demonstrate appropriate neonatal management and referral strategies.
Students will work in small groups with neonatal case vignettes or simulations featuring conditions such as imperforate anus, Hirschsprung disease, intestinal atresia, and renal anomalies.
Following demonstration, students will:

- Perform focused clinical assessment of newborns for digestive and excretory congenital anomalies.
- Select and interpret appropriate neonatal investigations.
- Formulate neonatal management and referral plans.
- Correlate concepts with clinical findings.
- Role-play communication with parents about diagnosis and care.

- Present case analyses and receive feedback.

Teacher will summarise the session.(Duration-4hrs)

Practical Training 12.3 : Diagnosis and Management of Medovaha & Mootravaha Disorders

Demonstration
The teacher will demonstrate the clinical assessment of newborns for disorders related to medovaha (fat metabolism) and mootravaha (urinary system) srotas, along with congenital anomalies of the urinary and genital systems. Investigations may include urine examination, renal ultrasound, serum electrolytes, voiding cystourethrogram (VCUG), and genetic testing where needed.
Students will work in pairs using real case/ case vignettes or neonatal simulation scenarios, including conditions like posterior urethral valve, hydronephrosis, ambiguous genitalia, and metabolic disorders such as congenital adrenal hyperplasia.
Following demonstration, students will:

- Perform clinical assessment for signs of mootravaha and medovaha disorders in neonates.
- Select and interpret relevant investigations.
- Identify and differentiate between structural and functional anomalies.
- Formulate initial management plans and identify referral needs.
- Correlate concepts of srotodusti with clinical findings.
- Role-play caregiver counseling for condition explanation and follow-up care.
- Present case findings and receive feedback.

Teacher will summarise the session. (Duration-10 hrs)

Practical Training 12.4 : Assessment of Asthi–Mamsa–Majja Vikara

Demonstration
The teacher will demonstrate the clinical assessment of newborns for disorders and congenital anomalies related to asthi (bones), mamsa (muscles), and majjavaha (nervous system) srotas. This will include the judicious selection and interpretation of diagnostic tools such as neonatal X-rays, cranial ultrasound, MRI, genetic testing, and nerve conduction studies.
Students will then work in small groups using neonatal case vignettes representing conditions like congenital talipes equinovarus, brachial plexus injury, spina bifida, or muscular hypotonia.

Following demonstration, students will:

- Conduct focused clinical assessments in newborns for musculoskeletal and neurological anomalies.
- Select and justify appropriate investigations based on the case.
- Interpret diagnostic reports in relation to srotas-specific findings.
- Correlate Ayurvedic and modern diagnostic perspectives.
- Discuss early intervention and referral needs.
- Role-play communication with parents regarding diagnosis and prognosis.
- • Present their findings and receive feedback.

Teacher will summarise the session. (Duration-10 hrs)

Experiential learning Activity

Experiential-Learning 12.1 : Management of Annavaha and Purishavaha Srotas (GIT) Vikara

Each student will evaluate a minimum of three clinical cases or case vignettes involving Annavaha Srotas Vikara such as Chhardi (vomiting), GERD, Atisara (diarrhea), Necrotizing Enterocolitis (NEC), Vibandha (constipation), and Udarshoola (colic). They will perform clinical assessments, identify key symptoms and aetiopathogenesis, select appropriate investigations (e.g., abdominal X-ray, stool analysis, pH studies), and formulate individualized therapeutic treatment plans using evidence-based and Ayurvedic approaches where applicable. Students will monitor clinical progress, anticipate complications, counsel caregivers, and document reflections and outcomes in their logbooks.(Duration-10hrs)

Experiential-Learning 12.2 : Management of Anomalies of Annavaha - Pureeshavaha Srotas Navajata Vyadhi (G.I.T.) and Nabhi roga

Each student will evaluate a minimum of two clinical cases or case vignettes of congenital anomalies of the Annavaha–Pureeshavaha Srotas Navajata Vyadhis (e.g., tracheoesophageal fistula, imperforate anus, duodenal atresia, omphalocele) and Nabhi Roga. Students will perform detailed clinical assessments, identify presenting features and doshic involvement, suggest relevant investigations (e.g., abdominal X-ray, USG, contrast studies), and formulate appropriate Samprapti and Samprapti Vighatana. They will develop individualized management plans or provide stabilizing initial care until surgical intervention. Students will demonstrate proficiency in neonatal care, justify referral decisions, and explain the condition and care approach to parents or caregivers.(Duration-5hrs)

Experiential-Learning 12.3 : Management of Medovaha, Mootravaha, and Jananaṅga Srotas Vikara

Each student will evaluate a minimum of three different clinical cases or case vignettes involving Medovaha, Mootravaha, or Jananganga Srotas Vikara and their congenital anomalies (e.g., hydronephrosis, posterior urethral valves, ambiguous genitalia, undescended testis, hypospadias). They will perform detailed clinical assessments, identify presenting features and doshic involvement, recommend appropriate investigations (e.g., USG KUB, MCU, hormonal assays), formulate Samprapti and Samprapti Vighatana, and develop individualized management plans. They will provide initial care or stabilization where surgical intervention is needed, demonstrate referral decision-making, and counsel caregivers on condition, care, and prognosis. They will document their learnings and experiences in logbook. (Duration-10hrs)

Experiential-Learning 12.4 : Management of Asthi, Mamsa, and Majjavaha Srotas Vikara.

Each student will evaluate a minimum of three clinical cases or case vignettes of Asthi, Mamsa, or Majjavaha Srotas Vyadhis in newborns (e.g., birth fractures, brachial plexus injury, spina bifida, muscular injuries, congenital contractures). Students will perform detailed case analysis, identify Nidana Panchaka, recommend appropriate investigations (e.g., X-ray, USG, MRI), formulate Samprapti and Samprapti Vighatana, and develop individualized Chikitsa/Management plans. They will provide initial stabilization or supportive care until surgical intervention when indicated, recognize and justify referral needs, and explain the condition and care to caregivers. They will document their learnings and experience in logbook. (Duration-7hrs)

Experiential-Learning 12.5 : Counseling on Congenital Anomalies: Treatment and Outcomes

Each student will evaluate a minimum of three clinical cases or case vignettes of congenital anomalies in newborns (e.g., neural tube defects, congenital heart defects, cleft lip/palate) across varied presentations and severities. Students will analyze clinical findings, advise appropriate investigations, formulate treatment plans, and explain treatment modalities, potential complications, outcomes, and long-term prognosis to parents/caregivers. They will also identify and justify referral criteria for specialized care or surgical intervention, and demonstrate effective counseling skills tailored to caregiver concerns. They will document their learnings and experiences in logbook.(Duration-7hrs)

Modular Assessment

Assessment method	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 75 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. Long Case Evaluation Distribution of marks – Each component x 15 marks = 75 marks • Clinical case analysis • Diagnostic interpretation of the child • Treatment planning • Communication skills	6

• Professionalism and documentation

OR
Any practical in converted form can be taken for assessment. (35 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (40 marks)

Semester No : 5

Module 13 : Prana, Majja Vaha Srotas Vikaras (Diseases of the Respiratory System and Central Nervous System)

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

1. Describe Shwasavarodha/asphyxia in a neonate and its causes.
2. Treat asphyxia on appropriate treatment protocols and prevent complications arising from it
3. Assess the severity of asphyxia
4. Anticipate and manage potential future complications or morbidities in the neonate.
5. Explain the causes of neonatal seizures (Akshepa/convulsions) and demonstrate appropriate management strategies.
6. Diagnose frank and subtle convulsions
7. Perform neonatal respiratory support using contemporary and advanced tools.
8. Explain therapeutic hypothermia and demonstrate its clinical application in newborn care.
9. Describe and implement recent advances in the management of neonatal respiratory and central nervous system disorders.

M 13 Unit 1 Shvasavarodha (Asphyxia)

- Perinatal/Birth Asphyxia
- Ulbaka (aspiration pneumonia), meconium aspiration syndrome, hyaline membrane disease, transient tachypnoea of new born and congenital pneumonias
- GERD

References: 38,79,90

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Analyze perinatal asphyxia and anticipate its clinical outcomes	2	Lecture	CAN	Knows-how	L&PPT ,SIM,PBL,L,CBL
CO2,CO3,CO5,CO6,CO8	Manage following neonatal respiratory diseases: • **Ulbaka (aspiration pneumonia),** • **Meconium aspiration syndrome,** • **Hyaline membrane disease,** • **Transient tachypnoea of new born** • **Pneumonias (Bacterial, Fungal, Viral; acquired or Congenital)**	6	Experiential-Learning 13.1	PSY-MEC	Does	RLE,D-M
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis, investigation, and management of neonatal respiratory distress syndrome.	4	Practical Training 13.1	PSY-GUD	Shows-how	L_VC,D-BED,SIM,D,PL
CO2,CO5,CO6,CO8	Demonstrate diagnosis and management of GERD in newborns.	1	Practical Training 13.2	PSY-GUD	Shows-how	PBL,L_VC,D-BED,D,LRI

M 13 Unit 2 Assessment scales for Respiratory Distress

- RDOS [Respiratory Distress Observation Scale]
- Silvermann-Anderson Score
- Borg Scale
- Downe’s Score
- Visual Function Scale for Low Respiratory Compliance

References: 26,35,38,65,66,68,71

3A	3B	3C	3D	3E	3F	3G
CO2,CO5	Assess and grade, respiratory distress severity using clinical scoring scales.	3	Practical Training 13.3	CAP	Knows-how	PBL,L_VC,BS,D-BED,CD
CO2,CO5	Analyze various scales used to assess respiratory distress.	1	Lecture	CAN	Knows-how	L_VC,CBL,L&GD,BS
CO2,CO5	Assess and interpret respiratory distress scores to guide newborn care.	3	Experiential-Learning 13.2	PSY-MEC	Does	RLE

M 13 Unit 3 RDOS [Respiratory Distress Observation Scale], Silvermann-Anderson Score, Borg Scale, Downe's Score, Visual Function Scale for Low Respiratory Compliance)

- Ventilators, C-PAP and their settings, Induction and Weaning, Monitoring
- ABG (Arterial Blood Gases)
- Complications related to assisted respiration

References: 35,37,45,67,68,69,71

3A	3B	3C	3D	3E	3F	3G
CO2	Analyze modern machines and recent advances used in respiratory support.	1	Lecture	CAN	Knows-how	L_VC,L&GD,BS
CO2	Demonstrate competent use of artificial respiration tools in neonatal resuscitation.	3	Practical Training 13.4	PSY-GUD	Shows-how	TUT,D-M,SIM
CO2	Interpret and apply investigation results to optimize management of neonates on assisted	4	Experiential-	PSY-	Does	X-Ray,L

	respiration.		Learning 13.3	MEC		RI,RLE
CO2	Manage ventilatory support in neonates based on clinical needs.	4	Experiential-Learning 13.4	PSY-MEC	Shows-how	SIM,RLE

M 13 Unit 4 Disorders of CNS

- Neonatal seizures/convulsions
- Infections of the CNS of the neonate

References: 35,38,45,59

3A	3B	3C	3D	3E	3F	3G
CO2	Demonstrate diagnosis and management of complications related to assisted respiration in neonates.	2	Practical Training 13.5	PSY-GUD	Shows-how	D,CBL,D-BED
CO2,CO3,CO5,CO6,CO8	Diagnose, investigate, and manage neonatal convulsions with individualized care plans and caregiver counseling.	6	Experiential-Learning 13.5	PSY-MEC	Does	RLE
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis, investigation, and management of neonatal CNS infections.	5	Practical Training 13.6	PSY-GUD	Shows-how	CBL,RLE,L_VC,SIM,D-BED
CO2,CO3,CO5,CO6,CO8	Analyze the causes, types, and clinical features of neonatal seizures.	3	Lecture	CAN	Knows-how	L_VC,RLE,BS,L&GD,PBL

M 13 Unit 5 HIE and its complications

- Asphyxia Neonatrum, complications and comorbidities

- SIADH
- Therapeutic hypothermia

References: 38,59,71,90

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Analyze the causes, features, and implications of asphyxia neonatorum.	2	Lecture	CAN	Knows-how	L_VC,RLE,L&GD,BS,PBL
CO2,CO3,CO5,CO6,CO8	Manage complications and comorbidities associated with HIE.	3	Experiential-Learning 13.6	PSY-MEC	Shows-how	SIM,RLE
CO2,CO3,CO5,CO6,CO8	Analyze the principles, indications, and effects of therapeutic hypothermia.	1	Lecture	CAN	Knows-how	L_VC,L&GD,RLE,BS

M 13 Unit 6 Navajata Dhanustambha (Neonatal tetanus) Navajata Dhanustambha (Neonatal tetanus)
References: 38,59,76,78

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate diagnosis, prevention, and management of neonatal tetanus.	2	Practical Training 13.7	PSY-GUD	Shows-how	SIM,L_VC,CBL,RLE

Practical Training Activity

Practical Training 13.1 : Diagnosis and Management of Neonatal Respiratory Distress Syndrome (RDS)

Demonstration
The teacher will demonstrate clinical assessment of neonates presenting with respiratory distress signs such as tachypnea, nasal flaring, grunting, and chest retractions. The demonstration will include the use of relevant investigations like chest X-ray, blood gases, and laboratory tests, with interpretation of findings typical for RDS. Management

techniques including oxygen therapy, CPAP, surfactant administration, and supportive care will be shown.
Students will work in pairs or small groups using neonatal case vignettes or simulated scenarios representing varied severities of RDS.
Following demonstration, students will:
• Perform focused clinical assessments for respiratory distress.
• Select and interpret appropriate investigations.
• Develop individualized management plans including respiratory support and medications.
• Monitor response to treatment and adjust care accordingly.
• Discuss preventive strategies like antenatal steroids.
• Role-play caregiver communication on diagnosis, treatment, and prognosis.
• Present case findings and receive feedback.
Teacher will summarise the session.(Duration-4hrs)

Practical Training 13.2 : Diagnosis and Management of GERD in Newborns

Demonstration
The teacher will demonstrate clinical assessment of newborns presenting with symptoms of GERD such as regurgitation, irritability, feeding difficulties, and poor weight gain. The demonstration will include use of diagnostic criteria, relevant investigations (e.g., pH monitoring if available), and interpretation of findings. Management strategies including feeding modifications, positioning, and medical therapy will be shown.
Students will work in pairs or small groups with neonatal case vignettes or simulated scenarios of GERD.
Following demonstration, students will:
• Perform focused clinical assessment for GERD symptoms.
• Justify the need for and interpret relevant investigations.
• Formulate appropriate management plans including non-pharmacological and pharmacological approaches.
• Discuss parental counseling and follow-up care.
• Present case assessments and receive feedback
Teacher will summarise the session. (Duration-1hr)

Practical Training 13.3 : Assessment and Grading of Respiratory Distress Severity in Newborns

Demonstration-
Teacher will demonstrate to thoroughly examine the neonate admitted in NICU to assess the severity of Respiratory distress and do the necessary examination on neonate.
Teacher will demonstrate to ascertain severity of the RD by using various scales like RDOS, Silverman-Anderson score, Borg scale, Downe’s score, Visual function scale (for lower respiratory compliance) of varied clinical concern and specific dosha. Students will observe and practice history-taking and application of scales used to

determine severity of RD in neonate in turns, under teacher's supervision. They will discuss the challenges faced during neonatal examination and application of scales of RD with teacher. (Duration-2 hrs)
CBL
Teacher will display video-clips demonstrating history-taking, general examination and respiratory system examination on neonate presenting with Respiratory distress of varied clinical concern and specific dosha. Students will observe and practice on simulated patients/manekins, taking turns. They will discuss the possible challenges with teacher that they encountered while performing respiratory system examination and applying various scales to determine severity of respiratory distress on navajata/ neonate. (Duration-1 hrs)

Practical Training 13.4 : Artificial Respiration Tools in Neonatal Resuscitation

Demonstration
The teacher will demonstrate the correct setup and use of artificial respiration tools such as bag-valve-mask (BVM) devices, neonatal resuscitators, and oxygen delivery systems during newborn resuscitation. The demonstration will include steps for airway management, effective ventilation techniques, and troubleshooting common issues.
Students will practice hands-on sessions using neonatal mannequins or simulators to perform artificial respiration, ensuring proper technique, timing, and coordination.
Following demonstration, students will:
• Set up and operate artificial respiration devices accurately.
• Practice effective ventilation on neonatal simulators.
• Identify and correct common errors and prevent hazards during artificial respiration.
• Demonstrate teamwork and communication in resuscitation scenarios.
• Participate in simulated neonatal resuscitation cases with role assignments.
• Receive feedback on technique and response time.
Teacher will summarise the session.(Duration-3 hrs)

Practical Training 13.5 : Diagnosis and Management of Complications from Assisted Respiration in Neonates

Demonstration
The teacher will demonstrate clinical monitoring of neonates on assisted respiration, identifying common complications such as pneumothorax, ventilator-associated pneumonia, bronchopulmonary dysplasia, and oxygen toxicity. Demonstration includes use of diagnostic tools like chest X-rays, blood gases, pulse oximetry, and interpretation of findings.
Students will work in pairs with neonatal case vignettes or simulations presenting with respiratory distress, suspected pneumothorax, or infection related to assisted ventilation.
Following demonstration, students will:
• Perform clinical assessment to detect respiratory complications.

• Select and interpret relevant diagnostic investigations.
• Develop management plans to address complications.
• Discuss prevention and supportive care strategies.
• Role-play communication with caregivers about risks and management.
• Present case analyses and receive feedback.
Teacher will summarise the session. (Duration-2hrs)

Practical Training 13.6 : Diagnosis and Management of Neonatal CNS Infections

Demonstration
The teacher will demonstrate clinical assessment of neonates with suspected central nervous system (CNS) infections, focusing on identifying signs like irritability, seizures, poor feeding, and bulging fontanelle. Investigations demonstrated will include sepsis screen, lumbar puncture for CSF analysis, blood culture, neuroimaging (ultrasound/MRI), and interpretation of findings.
Students will work in pairs using neonatal case vignettes or simulated cases such as meningitis, encephalitis, and brain abscess.
Following demonstration, students will:

- Perform focused clinical assessments for neonatal CNS infections.
- Select and justify appropriate investigations.
- Interpret CSF and imaging reports.
- Formulate immediate and supportive management plans.
- Identify referral criteria for complications like hydrocephalus or seizures.
- Role-play caregiver communication about prognosis and follow-up.
- Present cases and receive feedback.

Teacher will summarise the session.(Duration-5hrs)

Practical Training 13.7 : Neonatal tetanus

Demonstration-
Teacher will demonstrate the CNS examination in navajata/ neonate. Teacher will demonstrate history-taking, CNS examination, diagnosing, preventing and treating tetanus, on navajata/neonate presenting with tetanus like symptoms of varied clinical concern and specific dosha. Students will observe and practice history-taking, CNS examination, diagnosing, preventing and treating tetanus examination in turns, under teacher's supervision. They will discuss the challenges faced during CNS examination

in suspected cases of tetanus with teacher to understand prvention and treatment of tetanus in the navajata shishu (newborn). (Duration-1 hr)
CBL
Teacher will display video-clips demonstrating history-taking, CNS examination, diagnosing, preventing and treating tetanus in neonate presenting with symptoms of tetanus like clinical features of varied clinical concern and specific dosha. Students will observe and practice on simulated patients/manekins, taking turns. They will discuss the possible challenges with teacher that they encountered while performing CNS examination in suspected cases of tetanus and treatment of tetanus in navajata/ neonate. (Duration-1 hr)

Experiential learning Activity

Experiential-Learning 13.1 : Neonatal Respiratory Disease management

Each student will evaluate a minimum of three clinical cases or case vignettes of neonatal respiratory diseases (e.g., aspiration pneumonia, meconium aspiration syndrome, hyaline membrane disease, transient tachypnoea of newborn, bacterial/fungal/viral pneumonias), across varied presentations and severities. Students will perform detailed clinical assessments, recommend appropriate investigations (e.g., chest X-ray, blood cultures, ABG), formulate individualized management plans, and explain treatment modalities and prognosis to caregivers. They will also identify referral criteria such as respiratory failure, poor response to treatment, or complications, and justify these decisions.They will document their learnings and experiences in logbook.(Duration-6hrs)

Experiential-Learning 13.2 : Assessment of respiratory distress

Each student will perform respiratory assessments using various respiratory distress scoring scales (e.g., Silverman Anderson, Downes, Modified Respiratory Distress Score) on a minimum of three newborns with respiratory distress. Students will accurately record scores, interpret severity, correlate clinical findings, and use these assessments to guide management decisions. They will also explain the significance of scores and monitoring to caregivers and identify indications for referral or escalation of care. They will document their learnings and experience in logbook.(Duration-3 hrs)

Experiential-Learning 13.3 : Interpretation of Investigations in Assisted Neonatal Respiration

Each student will monitor and analyze investigation results (e.g., blood gases, electrolytes, chest X-rays) of a minimum of three neonates on assisted respiration. They will interpret these findings in relation to the clinical condition and respiratory status, adjust management plans accordingly, and communicate implications to the healthcare team and caregivers.(Duration-4 hrs)

Experiential-Learning 13.4 : Ventilatory Support in Neonates

Each student will manage the respiratory support of a minimum of three neonates on assisted ventilation. They will select and adjust appropriate ventilation modes and settings based on clinical assessment, initiate support, and carry out weaning as per clinical indications. Students will identify and document key clinical indicators guiding ventilator management, communicate care decisions with the healthcare team and caregivers, and record their learnings and reflections in the logbook. (Duration-4 hrs)

Experiential-Learning 13.5 : Management of Neonatal Convulsions

Each student will evaluate a minimum of three neonates presenting with convulsions. They will perform clinical assessments, select and interpret appropriate investigations (e.g., EEG, metabolic panels, neuroimaging), formulate individualized management plans, and explain treatment and prognosis to caregivers. Students will also identify referral criteria for specialized care.They will document their learnings and experiences in logbook. (Duration-6hrs)

Experiential-Learning 13.6 : Management of HIE and Complications

Student will conduct history taking, general, CNS, musculo skeletal Examination/ Pareekshana, on a minimum of 3 navajata/ neonates presenting with clinical features and symptoms of HIE, of varied clinical concern (acute or chronic) and specific dosha. student will counsel parents about the condition of the child like prognosis and complications that may arise if child suffers from hypoxia, which may lead to HIE and treatment options. Scholars shall be asked to counsel the parents about various lines of treatment to manage complications and comorbidities associated with HIE. They will document the findings (general and dosha specific) and challenges they encountered in logbook. (Duration-3 hrs)
OR
Teacher will divide students into pairs and provide each pair with a case vignette. Students will engage in role-play, with one acting as the examinee and the other as the examiner. The examinee will perform history taking, general, CNS, musculo skeletal Examination/ Pareekshana on simulated patient/manekin/peer, based on the given vignette, student will counsel parents about the condition of the child like prognosis and complications that may arise if child suffers from hypoxia, which may lead to HIE and treatment options, while the examiner observes and provides feedback. Students will document their experiences and learnings in their logbook.(Duration-3 hrs)

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. OSCE Stations: (Each Station x 10 marks =50 marks) • Station 1: Perform examination of a case of perinatal/ birth asphyxia and assess its severity using various scales • Station 2: Explain its treatment and demonstrate how to use contemporary and advance respiratory support • Station 3: Perform examination in a neonate with CNS disease and explain plan of treatment • Station 4: Explain and counsel parents about HIE and its treatment options • Station 5: Demonstrate measures to avoid neonatal tetanus OR Any practical in converted form can be taken for assessment. (25 marks)	4

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

Module 14 : Rasa Rakta Vaha Srotas Vikara (Disorders of the Cardiao Vascular and Circulatory System, and Haematology)

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

1. Discuss neonatal hyperbilirubinaemia, diagnose and investigate for its cause and treat it with appropriate necessary treatment modality
2. Discuss septicaemia and other infections transmitted vertically, diagnose and investigate for its cause and have an up to date knowledge to treat it with appropriate necessary treatment modality
3. Diagnose and treat haemorrhagic disease of the new born/neonate adequately
4. Diagnose and treat common metabolic disturbances occurring in the neonatal period including fluid and electrolyte disturbances and restore it in physiological limits to prevent further complications
5. Diagnose structural and functional cardiac diseases and provide immediately, appropriate and necessary required until the child is referred to a specialized centre
6. Screen and diagnose inborn errors of metabolism and provide immediately, appropriate and necessary required until the child is referred to a specialized centre

M 14 Unit 1 Navajata Shishu Kamala (Neonatal Hyperbilirubinaemia)

- Navajata Shishu Kamala - Neonatal hyperbilirubinaemia (Physiological, Pathological, Prolonged, Congenital, Breast Milk Jaundice)
- Neonatal Hepatitis
- Complications of Phototherapy and Exchange Blood Complications
- Phototherapy
- Exchange blood transfusion

References: 38,39,45

3A	3B	3C	3D	3E	3F	3G

CO2,CO3,CO5,CO6,CO8	Analyze the types, pathophysiology, and causes of neonatal hyperbilirubinemia (navajata shishu kamala).	2	Lecture	CAN	Knows-how	CBL,L&GD,L&PPT
CO2,CO3,CO5,CO6,CO7,CO8	Counsel caregivers and manage neonatal hyperbilirubinemia.	9	Experiential-Learning 14.1	PSY-MEC	Does	RLE,PBL
CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate safe treatment of neonatal jaundice and manage related complications.	2	Practical Training 14.1	PSY-GUD	Shows-how	SIM,CBL,D-BED

M 14 Unit 2 Raktavishamayta / Septicaemia

- Navajata Raktavishamayta - Septicemia (Early and Late), Septic Screening
- Congenital / Neonatal / Vertically transmitted infections
- STORCH Infections,
- Septic Shock, Complications
- Other Newborn and Neonatal Infections
- Sclerema
- Congenital Rubella Syndrome

References: 38,39,45,59,64

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO7,CO8	Analyze the types, pathophysiology, and diagnostic approach of Neonatal Septicaemia (Navajata Raktavishamayta).	3	Lecture	CAN	Knows-how	L&GD,RLE,CBL,L_VC
CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate the diagnosis and investigation of congenital, neonatal, and vertically transmitted infections, including neonatal sepsis and its complications.	2	Practical Training 14.2	PSY-GUD	Shows-how	CD,LRI,SIM,PBL,D-BED

CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate screening, investigation, and analysis of laboratory reports in suspected neonatal infections, including sepsis and congenital infections.	2	Practical Training 14.3	PSY-GUD	Shows-how	LRI,D-BED,CBL
CO2,CO3,CO5,CO6,CO7,CO8	Suspect, identify and diagnose complications of septicaemia or other infection	2	Practical Training 14.4	PSY-MEC	Shows-how	SIM,L_VC,PBL,D-BED,CBL
CO2,CO3,CO5,CO6,CO7,CO8	Treat neonatal infections and their complications using standard protocols and current advances in management.	7	Experiential-Learning 14.2	PSY-MEC	Does	RLE,LRI

M 14 Unit 3 Haemorrhagic disorders of new born

- Polycythaemia, Thrombocytopenia
- Hemolytic and Hemorrhagic diseases of newborn

References: 35,38,39,45,59,64

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO8	Analyze the physiology of coagulation and neonatal limitations in hemostasis.	1	Lecture	CAN	Knows-how	CBL,LRI,L&PPT,RLE,SIM
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis and management of neonatal polycythaemia and thrombocytopenia.	3	Practical Training 14.5	PSY-GUD	Shows-how	SIM,LRI,CBL,D-BED,RP
CO2,CO3,CO5,CO6,CO8	Demonstrate diagnosis and management of congenital / genetic haemorrhagic and haemolytic diseases in new born.	1	Practical Training 14.6	PSY-GUD	Shows-how	LRI,CBL,RLE,D-BED

M 14 Unit 4 Metabolic and Electrolyte disturbances

- Hypoglycemia
- Hypocalcemia
- Metabolic acidosis/alkalosis
- Fluid-electrolyte balance imbalance

References: 38,59,64

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6,CO8	Analyze the physiology of fluid and electrolyte balance.	1	Lecture	CAN	Knows-how	SIM,L&GD,CBL,L_VC
CO2,CO5,CO6,CO8	Identify and manage fluid and electrolyte imbalances in neonates.	6	Experiential-Learning 14.3	PSY-MEC	Does	RLE
CO2,CO5,CO6,CO8	Demonstrate identification, confirmation, and therapeutic management of metabolic deviations in neonates.	3	Practical Training 14.7	PSY-GUD	Shows-how	D-BED,PBL,SIM,LRI
CO2,CO5,CO6,CO8	Demonstrate management of complications from neonatal metabolic and electrolyte imbalances.	3	Practical Training 14.8	PSY-GUD	Shows-how	SIM,LRI,D-BED,CBL

M 14 Unit 5 Navajata Hridroga (Cardiac disorders)

- Nabhinadi Vikriti
- Sahaja Hridroga (approach to a child with murmur
- Congenital Heart Diseases (CHD) - Patent Ductus Arteriosis, Tetrology of fallot, Cyanotic and Acyanotic heart diseases)

References: 3,35,38,39,45,76,77,93

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6,CO8	Analyze clinical features to identify cardiac disorders in neonates.	1	Lecture	CAN	Knows-how	L_VC,L&GD,PBL,L&PPT
CO2,CO5,CO6,CO8	Manage suspected Navajata Hridroga through clinical assessment, investigation, diagnosis, and primary treatment.	3	Experiential-Learning 14.4	PSY-MEC	Shows-how	RLE,PBL
CO2,CO5,CO6,CO8	Demonstrate counseling and referral of neonates with cardiac issues.	2	Practical Training 14.9	PSY-GUD	Shows-how	CBL,SIM,D-BED

M 14 Unit 6 IEM Inborn errors of Metabolism and their primary management

References: 35,38,45,59

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6,CO8	Analyze the approach to suspect, screen, and diagnose inborn errors of metabolism in children.	2	Lecture	CAN	Knows-how	L_VC,LRI,L&GD,L&PPT
CO2,CO5,CO6,CO8	Counsel caregivers and refer neonates appropriately to specialty centers with clinical justification.	1	Experiential-Learning 14.5	PSY-MEC	Does	TBL,RLE

Practical Training Activity

Practical Training 14.1 : Navajata Shishu Kamala (Neonatal Hyperbilirubinemia)

Demonstration

The teacher will demonstrate the setup and use of phototherapy units (single, double, triple surface), including indications, precautions, positioning, and monitoring. The process of exchange transfusion will also be explained with a simulation model. Common complications such as dehydration, thermal imbalance, and bilirubin-induced neurological dysfunction will be discussed.

Students will work in pairs using case vignettes and simulation tools.
Following demonstration, students will:
• Identify indications for phototherapy and exchange transfusion.
• Practicice setting up and operate a phototherapy unit safely.
• Monitor vital signs and manage phototherapy-related complications.
• Simulate decision-making for escalating therapy (e.g., to exchange transfusion).
• Document procedures and counsel caregivers on precautions and follow-up.
• Present their case approach and receive feedback.
Teacher will summarise the session. (Duration-2 hrs)

Practical Training 14.2 : Diagnosis and Investigation of Neonatal Infections

Demonstration
The teacher will demonstrate the clinical approach to identifying congenital, neonatal, and vertically transmitted infections—including neonatal sepsis—using case-based teaching. This includes recognizing signs and symptoms, selecting appropriate laboratory and imaging investigations (e.g., CBC, CRP, blood cultures, TORCH screening, lumbar puncture, chest X-ray), and interpreting findings to confirm diagnosis and assess complications.
Students will work in pairs using simulated neonatal case vignettes.
Following the demonstration, students will:
• Identify clinical signs suggestive of sepsis or vertically transmitted infection.
• Decide on appropriate screening and confirmatory investigations.
• Analyze and interpret lab and imaging results.
• Recognize complications such as meningitis, pneumonia, or septic shock.
• Develop a stepwise management and follow-up plan.
• Present findings to peers and receive feedback.
Teacher will summarise the session.(Duration-2hrs)

Practical Training 14.3 : Screening and Investigation of Neonatal Infections

Demonstration
The teacher will demonstrate the process of identifying suspected neonatal infections—including sepsis, congenital, and vertically transmitted infections—through clinical signs, screening protocols, and interpretation of laboratory and imaging investigations. This will include guidance on advising tests such as CBC, CRP, blood cultures, TORCH panel, lumbar puncture, and relevant imaging (e.g., chest X-ray, cranial ultrasound).
Students will work in small groups using simulated case vignettes representing varied presentations of neonatal infections.

Following the demonstration, students will:

- Recognize clinical signs and risk factors suggestive of neonatal infections.
- Select and justify appropriate laboratory and radiological investigations.
- Analyze and interpret lab findings (e.g., leukocytosis, elevated CRP, culture results).
- Identify possible complications (e.g., meningitis, pneumonia, septic shock).
- Formulate a diagnostic summary and provisional management plan.
- Present their findings and receive peer and teacher feedback.

Teacher will summarise the session.(Duration-2 hrs)

Practical Training 14.4 : Suspect, identify and diagnose complications of septicaemia or other infection

Demonstration:
The teacher will demonstrate how to recognize and confirm complications of neonatal sepsis and other infections. This will include:

- Clinical signs pointing to complications (e.g., bulging fontanelle ? meningitis, respiratory distress ? pneumonia, poor perfusion/shock ? septic shock).
- Guidance on investigations specific to complications (e.g., CSF analysis, chest X-ray, cranial ultrasound, coagulation profile).
- Demonstrating interpretation of lab/imaging findings suggestive of complications.

Working in pairs with case vignettes focused on complications, students will:

- Suspect complications from given history and clinical findings.
- Identify which complication is most likely (e.g., meningitis, pneumonia, septic shock, osteomyelitis).
- Select and justify appropriate confirmatory investigations.
- Interpret results in the context of complications.
- Summarize a diagnostic impression highlighting the complication.
- Present their conclusions and receive feedback from peers and teacher.

Teacher will summarize red flag signs of complications, highlight key investigations for confirmation, and emphasize timely diagnosis to prevent mortality. (Duration: 2

hours)

Practical Training 14.5 : Diagnosis and Management of Neonatal Hematologic Disorders

Demonstration
The teacher will demonstrate the clinical approach to diagnosing and managing neonatal hematologic disorders, focusing on polycythaemia, thrombocytopenia, and congenital/genetic hemorrhagic and hemolytic conditions (e.g., G6PD deficiency, hemophilia, hereditary spherocytosis). The session will include interpretation of CBC, peripheral smear, reticulocyte count, and relevant genetic tests, as well as planning treatment and monitoring complications.
Students will be divided into pairs and provided with simulated case vignettes of neonates presenting with different hematologic disorders.
Following the demonstration, students will:

- Identify clinical signs suggestive of polycythaemia, thrombocytopenia, or congenital hemorrhagic/hemolytic conditions.
- Justify appropriate diagnostic tests and interpret results.
- Formulate diagnosis and outline a management plan.
- Recognize and manage potential complications (e.g., hyperviscosity, bleeding, anemia).
- Practice documentation and caregiver counseling.
- Present case analysis and receive feedback.

Teacher will summarise the session. (Duration-3 hrs)

Practical Training 14.6 : Congenital / Genetic Haemorrhagic and Haemolytic Diseases in New born

Demonstration
Teacher shows how to recognize and confirm neonatal haemorrhagic and haemolytic diseases:

- Clinical signs: bleeding from cord/skin vs jaundice, pallor, hepatosplenomegaly
- Investigations: CBC, Coombs, bilirubin, PT/INR, factor assays.
- Interpretation of labs and basic management (Vit K, FFP, phototherapy, exchange transfusion).

In pairs with case vignettes, students will:

- Identify likely disorder from history and exam.
- Choose and justify investigations.
- Interpret sample reports.
- Outline immediate management and prevention.
- Present findings and get feedback.

Teacher will summarise the session. (Duration 1 hr)

Practical Training 14.7 : Identification and Management of Neonatal Metabolic Deviations

Demonstration
The teacher will demonstrate clinical examination techniques to identify metabolic deviations in neonates, including signs of hypoglycemia, electrolyte imbalances, and acid-base disturbances. The teacher will also show how to confirm these clinical suspicions through laboratory investigations (e.g., blood glucose, serum electrolytes, blood gas analysis) and interpret the results to diagnose the underlying cause. Therapeutic interventions, including correction of metabolic imbalances and supportive care, will be demonstrated.
Students will work in pairs with simulated neonatal case vignettes exhibiting various metabolic disturbances.
Following demonstration, students will:

- Practice clinical assessment to identify signs of metabolic derangements.
- Recommend and interpret appropriate laboratory tests.
- Diagnose the underlying cause of metabolic deviations.
- Formulate and implement an individualized therapeutic plan.
- Discuss potential complications and preventive strategies.
- Present their management approach to peers for feedback.

Teacher will summarise the session. (Duration-3hrs)

Practical Training 14.8 : Management of Complications of Metabolic, Fluid, and Electrolyte Imbalances in Neonates

Demonstrate
The teacher will demonstrate clinical assessment to identify complications from metabolic, fluid, and electrolyte imbalances in neonates, confirm diagnosis through lab investigations, and initiate appropriate treatment.

Students will review simulated neonatal cases with such complications.
Following demonstration, students will:
• Identify clinical signs of complications.
• Select and interpret relevant lab tests.
• Formulate treatment plans addressing the underlying imbalance and complications.
• Discuss prevention and monitoring strategies.
• Present case management and receive feedback.
Teacher will summarise the session.(Duration-3hrs)

Practical Training 14.9 : Counseling and Referral of Neonates with Cardiac Disorders

Demonstration
The teacher will demonstrate thorough cardiovascular examination in neonates, identification of murmurs and cardiac signs indicating Navajata Hridroga (congenital heart disease), and effective counseling of parents regarding referral to pediatric cardiology or specialty centers.
Students will practice on simulated neonatal cases/case vignettes with suspected cardiac issues.
Following demonstration, students will:

- Practice cardiovascular exams to identify key signs.
- Recognize indications for referral.
- Conduct counseling sessions with simulated parents.
- Practice preparing referral documentation.
- Present their approach for peer and teacher feedback.

Teacher will summarise the session.(Duration-2hrs)

Experiential learning Activity

Experiential-Learning 14.1 : Navajata Shishu Kamala (Neonatal Hyperbilirubinemia)

Each student will evaluate a minimum of three neonates presenting with signs of neonatal hyperbilirubinemia (Navajata Shishu Kamala). They will assess risk factors, perform clinical evaluation including Kramer's staging, and advise relevant investigations (e.g., total and direct serum bilirubin, blood group, Coombs test). Students will differentiate physiological and pathological jaundice, select appropriate therapeutic interventions (e.g., phototherapy, hydration, referral if needed), and monitor response. Students will communicate diagnosis, treatment plan, possible complications like kernicterus, and follow-up advice effectively to caregivers, and record findings and

reflections in their logbook. (Duration-9 hrs)

Experiential-Learning 14.2 : Manage Neonatal Infections

Each student will evaluate a minimum of three neonates diagnosed with infections (e.g., neonatal sepsis, meningitis, pneumonia). They will conduct clinical assessments, identify key symptoms and signs, advise relevant investigations (e.g., blood culture, CRP, CSF analysis), and confirm the diagnosis. Students will initiate evidence-based treatment as per standard protocols and incorporate current advances in antimicrobial and supportive care. They will monitor for complications, assess treatment response, and document care plans, outcomes, and reflections in their logbook. Communication of the care plan and prognosis to caregivers will also be practiced.(Duration-7 hrs)

Experiential-Learning 14.3 : Management of Neonatal Fluid & Electrolyte Imbalances

Each student will evaluate a minimum of three neonates with suspected fluid and electrolyte imbalances during their NICU posting. They will perform detailed clinical assessments (hydration status, vitals, signs of electrolyte disturbance), advise and interpret relevant investigations (serum electrolytes, blood gases, urine output), and confirm the diagnosis. Based on findings, students will plan and administer appropriate therapeutic interventions (fluid replacement, electrolyte correction), monitor response to therapy, and communicate findings and care plans with caregivers. All steps and reflections will be recorded in the student logbook.(Duration-6hrs)

Experiential-Learning 14.4 : Manage Navajata Hridroga

Each student will investigate, diagnose, and provide primary treatment for a minimum of three neonates during their posting. They will perform detailed clinical assessments, including thorough cardiovascular system (CVS) examination on each neonate. Students will identify suspected cases of Navajata Hridroga, document clinical findings and justify probable diagnoses. They will advise appropriate investigations such as 2D-echo, interpret findings to reach a final diagnosis, and initiate primary treatment as indicated. All steps, clinical reasoning, and outcomes will be documented, including communication with caregivers and criteria for referral to higher centers. They will document their learnings and experience in logbook.(Duration-3hrs)

Experiential-Learning 14.5 : Neonatal Referral Documentation and Counseling

Each student will document, details of minimum one neonate referred to specialty centers, during there postings. They will document the clinical evaluation performed, justify indications for referral (e.g., surgical conditions, advanced respiratory or neurological support), and reflect on documentation requirements for referral. Students will document challenges experienced during counseling caregivers regarding the neonate’s condition, reason for referral, urgency, and expected course of care. They will document how did they coordinate with the referral center, ensured safe transfer protocols, and recorded all steps and reflections in their logbook. (Duration-1 hr)

Modular Assessment

Assessment method	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep structured marking pattern. Use different assessment	4

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.
OSCE Stations: (Each Station x 10 marks =50 marks)

- Station 1: Examine a child with Neonatal Jaundice using Kramer's index and plan treatment
- Station 2: Examine a child with septicemia and advise investigation
- Station 3: examine a bleeding neonate/ neonate with haemorrhagic disease of newborn and explain its management
- Station 4: counsel the parents of the child/ newborn with suspected CHD
- Station 5: counsel the parents of the child/ newborn with suspected Inborn error of metabolism

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Semester No : 6

Module 15 : Kshudra evam Anya Vikara (Minor Neonatal Ailments and Physiological Problems)

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

1. Demonstrate an understanding of various physiological adaptations and common problems encountered during the neonatal period.
2. Describe the aetio-pathogenesis, clinical features, and management of Navajata Twak Vikara (neonatal skin disorders).
3. Describe the aetio-pathogenesis, clinical features, and management of Navajata Karna and Kantha Roga (neonatal ear and throat disorders).
4. Describe the aetio-pathogenesis, clinical features, and management of Navajata Netra and Nasa Roga (neonatal eye and nasal disorders).

M 15 Unit 1 Physiological neonatal problems Common physiological neonatal problems and their management
References: 35,38,45

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6	Analyze common physiological conditions in neonates that may concern parents.	2	Lecture	CAN	Knows-	PBL,L&

,CO8					how	GD,L_VC,CBL,SIM
CO2,CO5,CO6,CO8	Manage the physiological conditions of parental concerns in newborn and counsel the caregivers.	5	Experiential-Learning 15.1	PSY-MEC	Shows-how	PBL,RLE,SIM,RP

M 15 Unit 2 Navajata Twaka Vikaras Erythema toxicum, Streptococcal Scalded Skin Syndrome, Congenital Icthyosis, Darunaka (Seborrheic dermatitis), Charmadala, Atopic dermatitis, Paridagdha Chhavi, Shishu Visarpa/Mahapadmaka, Ahiputana (Napkin rash), Paschadruja, Puya Sphota (Pyoderma), Visphota, Epidermolysis bullosa

References: 9,38,39,43,46,57,59,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6,CO8	Demonstrate assessment and management of neonatal skin diseases.	7	Practical Training 15.1	PSY-MEC	Shows-how	CBL,PBL,RLE,D-BED,SIM
CO2,CO5,CO6,CO8	Manage the skin diseases of neonates and counsel the caregivers.	4	Experiential-Learning 15.2	PSY-MEC	Shows-how	RLE,RP,PBL,CBL

M 15 Unit 3 Karna evam Kantha Rogas

- Karnashoola
- Sadanta Janma(Natal teeth), Laryngomalacia
- Nasolacrimal duct obstruction

References: 31,38,43,49,60,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6,CO8	Analyze diseases of the ear and throat observed in the neonatal period.	2	Lecture	CAN	Knows-how	RLE,L&PPT ,L&G

						D,L_VC
CO2,CO5,CO6,CO8	Manage the diseases of ear and throat of neonates and counsel the caregivers.	4	Experiential-Learning 15.3	PSY-MEC	Does	PBL,RLE,RP

M 15 Unit 4 Netra, Nasa Rogas Kukkunaka, Netrabhishyanda, Opthalmia neonatorum, coloboma, Congenital Cataract

References: 43

3A	3B	3C	3D	3E	3F	3G
CO2,CO5,CO6,CO8	Analyze ophthalmic and nasal diseases occurring in the neonatal period.	1	Lecture	CAN	Knows-how	RLE
CO2,CO5,CO6,CO8	Demonstrate counseling and management of ophthalmic and nasal diseases in neonates.	3	Practical Training 15.2	PSY-GUD	Shows-how	SIM,D,PBL,D-BED

Practical Training Activity

Practical Training 15.1 : Assessment and Management of Neonatal Skin Disease

Demonstration
Teacher will demonstrate the dermatological examination in navajata/ neonate. Teacher will demonstrate history-taking, dermatological examination on navajata/ neonate presenting with specific dermatological conditions of varied clinical concern (acute or chronic) and specific dosha, and teach how to counsel the parents about the condition of the child and the treatment options. Students will observe and practice history-taking and dermatological examination in turns, and will practise counselling the parents about treatment option and the condition of the child, under teacher's supervision. They will discuss the challenges faced during examination with teacher to understand difference between benign and serious/ pathological dermatological conditions/ diseases of the navajata shishu (newborn). (Duration-3 hrs)
CBL
Teacher will display video-clips demonstrating history-taking and dermatological examination on neonate presenting with specific dermatological conditions of varied clinical concern (acute or chronic) and
specific dosha. Students will observe and practice on simulated patients/manekins, taking turns. They will discuss the possible challenges with teacher that they encountered while performing dermatological examination and counselling partents on navajata/ neonate. (Duration-4 hrs)

Practical Training 15.2 : Management of Neonatal Eye and Nose Disease

Demonstration-
Teacher will demonstrate the use various instruments of ENT and ophthalmolgy in neonatal examination. Teacher will demonstrate history-taking, nasal and ophthalmic examination on navajata/neonate presenting with specific nasal and ophthalmological conditions of varied clinical concern (acute or chronic) and specific dosha. Students will observe and practice history-taking and ophthalmological and nasal examination in turns, under teacher's supervision. They will discuss the challenges faced during examination with teacher to understand difference between benign and serious/ pathological ophthalmic and nasal conditions/ diseases of the navajata shishu (newborn). (Duration-2 hrs)
AND

Teacher will display video-clips demonstrating history-taking and ophthalmic and nasal examination on neonate presenting with specific ophthalmological and nasal conditions of varied clinical concern (acute or chronic) and
specific dosha. Students will observe and practice on simulated patients/manekins, taking turns. They will discuss the possible challenges with teacher that they encountered while performing ophthalmological and nasal examination on navajata/ neonate. (Duration-1 hrs)

Experiential learning Activity

Experiential-Learning 15.1 : Management of Physiological Conditions of Parental Concerns in Neonates

Student will conduct history taking and perform the relevant examination/ Pareekshana on a minimum of 3 navajata/ neonates presenting with different physiological conditions like GER, colicky pain, transitional stool etc, of varied clinical concern (acute or
chronic) and specific dosha. student will counsel parents about the benign/ physiological condition of the child. They will document the findings (general and dosha specific) and challenges they encountered during diagnosis and counselling the parents about the physiological nature of the condition in logbook. (Duration-5 hrs)

OR
Teacher will divide students into pairs and provide each pair with a case vignette. Students will engage in role-play, with one acting as the examinee and the other as the examiner. The examinee will perform history taking, relevant examination on simulated patient/manekin/peer, based on the given vignette, student will counsel parents about the benign/ physiological condition of the complaint (like GER, colicky pain, transitional stool etc), while the examiner observes and provides feedback. Students will document their experiences and learnings in their logbook.(Duration-5 hrs)

Experiential-Learning 15.2 : Management of skin diseases of neonates.

Student will conduct history taking and dermatological examination/ Pareekshana on a minimum of 3 navajata/ neonates presenting with different dermatological conditions,

of varied clinical concern (acute or
chronic) and specific dosha. Student will counsel parents regarding the condition of the neonate and treatment options. They will document the findings (general and dosha specific) and challenges they encountered in logbook. (Duration-4 hrs)

OR
Teacher will divide students into pairs and provide each pair with a case vignette. Students will engage in role-play, with one acting as the examinee and the other as the examiner. The examinee will perform history taking, dermatological examination on simulated patient/manekin/peer, based on the given vignette. will counsel parents about the conditiond of the child and treatrment option, while the examiner observes and provides feedback. Students will document their experiences and learnings in their logbook.(Duration-4 hrs)

Experiential-Learning 15.3 : Management of diseases of Ear and Throat of neonates

Student will conduct history taking and Ear and Throat Examination/ Pareekshana on a minimum of 3 navajata/ neonates presenting with different ear and throat conditions, of varied clinical concern (acute or
chronic) and specific dosha. student will counsel parents about the condition of the child and treatment options. They will document the findings (general and dosha specific) and challenges they encountered in logbook. (Duration-4 hrs)
OR
Teacher will divide students into pairs and provide each pair with a case vignette. Students will engage in role-play, with one acting as the examinee and the other as the examiner. The examinee will perform history taking, ear and throat examination on simulated patient/manekin/peer, based on the given vignette, student will counsel parents about the condition of the child and treatment options, while the examiner observes and provides feedback. Students will document their experiences and learnings in their logbook.(Duration-4 hrs)

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. Distribution of marks – Each component x 10 marks = 50 marks (Long case) • Clinical case analysis of neonate with twak vikara • Clinical case analysis of neonate with karna roga • Clinical case analysis of neonate with kantha roga • Clinical case analysis of neonate with netra roga	2

• Clinical case analysis of neonate with nasa roga

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Module 16 : Navajata Atyayika Chikitsa evam Naidanik evam Chikitsiya Karmaabhyasa (Neonatal Emergencies, Therapeutic Procedures and Trainings)

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

1. Perform Basic and Advanced Life Support (BLS and ALS) in neonates.
2. Identify, assess, and manage common neonatal emergencies promptly and effectively.
3. Perform essential invasive procedures for diagnostic and therapeutic purposes in neonatal care.

M 16 Unit 1 Neonatal Emergencies

- Basic Life Support
- Neonatal Advanced Life Support
- Life-saving drugs

References: 9,14,16,37,38,39,52,64

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO7,CO8	Analyze the need, components, and differences between basic and advanced life support.	5	Lecture	CAN	Knows-how	L&GD,L_VC,CBL

CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate application of neonatal life support measures.	8	Practical Training 16.1	PSY-GUD	Shows-how	D-BED,CBL,D,PBL,RLE

M 16 Unit 2 Handling Emergencies

- Shock
- Raktasrava (Haemorrhages)
- Respiratory distress/ARDS
- Dagdha Vrana (Burns)
- Aspiration and choking
- Disseminated Intravascular Coagulation
- Acute Renal Failure
- Respiratory/Metabolic Acidosis/Alkalosis

References: 35,38,45,52,58,59,70

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5,CO6,CO7,CO8	Analyze the pathophysiology of emergency conditions and the necessity of their management.	4	Lecture	CAN	Knows-how	L_VC,L&GD,L&PPT ,RLE
CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate identification of stages of neonatal emergencies and its management.	10	Experiential-Learning 16.1	PSY-MEC	Does	RLE,CBL
CO2,CO3,CO5,CO6,CO7,CO8	Manage Intra Venous fluid and blood product therapy in neonatal emergencies.	10	Experiential-Learning 16.2	PSY-MEC	Shows-how	PBL,RLE,SIM,CBL
CO2,CO3,CO5,CO6,CO7,CO8	Demonstrate assessment and management of burn injuries.	6	Practical Training 16.2	PSY-GUD	Shows-how	RLE,D-BED,CBL,D

M 16 Unit 3 Neonatal Investigative/Therapeutic procedure

- Umbilical catheterization
- Rapid sequential intubation
- Femoral puncture
- Venesection
- Jugular canulation
- Lumbar Puncture
- Urethral catheterization
- Inter costal drain
- Blood and blood component/crystalloid/colloid infusion

References: 35,38,39,45,58,64

3A	3B	3C	3D	3E	3F	3G
CO2	Demonstrate selection and justification of diagnostic and therapeutic procedures in neonatal care.	5	Practical Training 16.3	PSY-GUD	Shows-how	D-BED,CBL,LRI,SIM,PBL
CO2	Perform appropriate diagnostic procedures with clinical reasoning.	10	Experiential-Learning 16.3	PSY-MEC	Does	D-M,RLE,SIM
CO2	Perform therapeutic procedures with clinical reasoning and adherence to protocols.	9	Experiential-Learning 16.4	PSY-MEC	Does	SIM,RLE
CO2,CO4	Demonstrate effective counseling, consent-taking, and documentation for diagnostic and therapeutic procedures.	3	Practical Training 16.4	AFT-RES	Shows-how	D-BED,RP,CBL

M 16 Unit 4 Ancillary Procedures

- Amashaya Dhawana (Stomach wash)

- Ksheerabasti, Stanyabasti
- Gudavarti, Medicated Suppositories

References: 16,20,26,27,38,89,104

3A	3B	3C	3D	3E	3F	3G
CO2,CO4	Analyze the theory and necessity of ancillary procedures.	6	Lecture	CAN	Knows-how	L_VC,RLE,L&PPT,L&GD
CO2,CO4	Demonstrate application of ancillary procedures in clinical practice.	8	Practical Training 16.5	PSY-MEC	Does	RLE,D-BED,L_VC,RP,D

Practical Training Activity

Practical Training 16.1 : Neonatal Life Support Application

Demonstration
The teacher will demonstrate stepwise neonatal life support using a manikin or simulation model, including initial assessment, airway positioning, positive pressure ventilation (PPV), chest compressions, and medication administration as per current NRP (Neonatal Resuscitation Program) guidelines.
Students will work in pairs with neonatal manikins or simulated cases.
Following demonstration, students will:

- Perform initial assessment (tone, breathing, heart rate).
- Apply correct airway positioning and initiate PPV.
- Practice coordinated chest compressions and ventilation.
- Demonstrate appropriate use of emergency medications.
- Role-play team communication during resuscitation.
- Rotate roles to experience team dynamics and decision-making.
- Receive structured feedback using performance checklists.

Teacher will summarise the session.(Duration-8hrs)

Practical Training 16.2 : Assessment and Management of Burn Injuries

Demonstration
The teacher will demonstrate the clinical evaluation of burn injuries, including assessment of depth, extent (using the Rule of Nines or Lund and Browder chart for infants), and classification of burns. The demonstration will cover initial stabilization (airway, breathing, circulation), fluid resuscitation, wound care, infection prevention, and pain management.
Students will work with simulated burn cases or mannequins depicting various types and severities of burns in neonates or infants.
Following demonstration, students will:

- Perform burn severity assessment using standard tools.
- Plan initial and ongoing management, including fluid calculations and topical care.
- Demonstrate application of dressings and infection control practices.
- Discuss pain relief strategies and nutrition support.
- Counsel caregivers on home care, complications, and follow-up.
- Present their case management plans and receive feedback.

Teacher will summarise the session.(Duration-6hrs)

Practical Training 16.3 : Selection and Justification of Diagnostic/Therapeutic Procedures in Neonates

Demonstration
The teacher will demonstrate how to assess clinical scenarios in neonates and select appropriate diagnostic (e.g., lumbar puncture, chest X-ray, blood cultures) or therapeutic procedures (e.g., surfactant therapy, oxygen administration, IV fluids). The rationale behind the selection, timing, and choice of each procedure will be discussed, based on evidence and clinical judgment.
Students will work in pairs with neonatal case vignettes representing different conditions such as sepsis, respiratory distress, or congenital anomalies.
Following demonstration, students will:

- Analyze neonatal case scenarios.
- Select suitable diagnostic and/or therapeutic procedures.

- Justify their choices based on clinical findings and current guidelines.
- Discuss alternatives and contraindications.
- Present their reasoning and plans to peers and faculty.
- Receive feedback on clinical decision-making.

Teacher will summarise the session. (Duration-5 hrs)

Practical Training 16.4 : Counseling, Consent, and Documentation in Neonatal Procedures

Demonstration
The teacher will demonstrate how to counsel parents or caregivers of neonates regarding the need for diagnostic or therapeutic procedures (e.g., lumbar puncture, mechanical ventilation, surgery). This will include explaining indications, risks, benefits, and alternatives in simple language. The teacher will also demonstrate how to obtain informed consent and maintain complete medical records.
Students will participate in simulated scenarios involving common neonatal procedures requiring parental consent.
Following demonstration, students will:

- Role-play caregiver counseling sessions for selected procedures.
- Practice obtaining informed written and verbal consent.
- Accurately document the procedure indication, parental communication, consent, and procedure details in simulated records.
- Review legal and ethical aspects of neonatal consent and documentation.
- Present mock scenarios and receive peer and faculty feedback.

Teacher will summarise the session. (Duration-3hrs)

Practical Training 16.5 : Application of Ancillary Procedures

Demonstration
The teacher will demonstrate various ancillary procedures relevant to neonatal care, such as obtaining and interpreting laboratory tests (CBC, blood gases), imaging techniques (X-ray, ultrasound), and special investigations (e.g., echocardiography, EEG). The rationale, indications, and limitations of these procedures will be explained.
Students will be given neonatal case vignettes requiring decision-making on appropriate ancillary investigations.
Following demonstration, students will:

- Identify indications for ancillary procedures based on clinical scenarios.
- Demonstrate correct preparation and execution of selected procedures (simulated or observed).
- Interpret investigation reports and correlate findings with clinical status.
- Justify the necessity of each ancillary procedure in diagnosis or management.
- Discuss limitations and risks associated with procedures.
- Present findings and management plans to peers and receive feedback.

Teacher will summarise the session.(Duration-8hrs)

Experiential learning Activity

Experiential-Learning 16.1 : Management of Neonatal Emergencies

Each student will assess and manage a minimum of three neonatal emergency cases across different stages of severity. They will identify the stage of emergency, initiate timely and appropriate management, monitor clinical response, and adjust interventions accordingly. Students will document key clinical findings, management decisions, and outcomes. They will also communicate effectively with the healthcare team and caregivers, and record reflections and learnings in their logbook.(Duration-10hrs)

Experiential-Learning 16.2 : Neonatal IV Fluid & Blood Therapy Management

Each student will manage IV fluid in a minimum of three neonates and observe blood product therapy in a minimum of one neonate presenting with emergencies. They will assess clinical status and laboratory findings to select appropriate fluids and blood components, administer them safely, monitor response and complications, and adjust treatment as needed. Students will document all interventions, rationale, and outcomes, communicate effectively with the healthcare team and caregivers, and record reflections in their logbook.(Duration-10hrs)

Experiential-Learning 16.3 : Diagnostic Procedure Performance

Each student will perform appropriate diagnostic procedures on a minimum of three patients, selecting the correct procedure based on clinical presentation. They will prepare the patient, execute the procedure following standard protocols, interpret preliminary findings, and document the process and outcomes. Students will also communicate procedure details and results to the healthcare team and caregivers, and reflect on their learning in the logbook.(Duration-10 hrs)

Experiential-Learning 16.4 : Therapeutic Procedure Performance

Each student will perform therapeutic procedures on a minimum of three patients, selecting appropriate techniques based on clinical indications. They will prepare the patient and required materials, execute the procedure following standard protocols, monitor patient response, identify and manage any complications, and document all steps and outcomes thoroughly. Students will communicate effectively with the healthcare team and caregivers, provide relevant counseling, and reflect on their experiences and

learning in the logbook.(Duration-9hrs)

Modular Assessment

Assessment method	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 75 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. OSCE Stations: (Each Station x 10 marks =50 marks) • Station 1: Perform steps in NALS • Station 2: Perform a procedure • Station 3: Counsel the parents about need of investigation and its probable outcome and the line of treatment of the same • Station 4: Perform an ancillary procedure • Station 5: Examine an child brought to emergency unit and explain steps of management. OR Any practical in converted form can be taken for assessment. (45 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (30 marks)	6

Paper No : 3 Balachikitsa Vigyana (Pediatric Medicine)

Semester No : 3

Module 17 : Pranavaha Srotovikara (Respiratory disorders)

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

1. Analyse anatomical and physiological concepts of Pranavaha Srotas and their relevance in respiratory health.
2. Analyze the Nidana, Samprapti, and Lakshana of respiratory disorders such as Kasa, Shwasa, and Rajayakshma.
3. Demonstrate clinical skills in diagnosing and formulating individualized treatment plans for respiratory conditions.
4. Integrate therapeutic approaches, including preventive and promotive measures, in the management of respiratory disorders.

M 17 Unit 1 Pranavaha Srotovikara I

- Kasa
- Shwasa
- Pratishyaya
- Kukkura Kasa
- Rajayakshma
- Choraka

References: 3,6,17,18,26,27,35,43,45,46,57,58,59,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Nidana Panchaka, formulate Samprapti Vighatana, and explore Chikitsa(management) strategies for following Pranavaha Srotas Vikara:	3	Lecture	CAN	Knows-how	L&GD,L &PPT ,CBL

	• **Kasa** • **Shwasa** • **Pratishyaya** • **Kukkura Kasa** • **Rajaykshama** • **Choraka**					
CO2,CO3,CO5	Demonstrate clinical examination (Atura pareeksha), formulation of Samprapti Vighatana, differential diagnosis and diagnosis (Vyadhi vinishchaya) and individualized Chikitsa for following Pranavaha Srotas Vikara: • **Kasa** • **Shwasa** • **Pratishyaya** • **Kukkura Kasa** • **Rajayakshama** • **Choraka**	6	Practical Training 17.1	PSY-GUD	Shows-how	D-BED,CBL,PBL
CO3	Evaluate Pranavaha Srotovikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	6	Experiential-Learning 17.1	CS	Shows-how	CBL,RLE

M 17 Unit 2 Pranavaha Srotovikara II(Upper Respiratory Tract Infections)–

- Rhinitis
- Pharyngitis
- Adenoids
- Tonsillitis
- Croup
- Laryngitis

- Epiglottitis

References: 1,29,35,44,45,58,59

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Nidana Panchaka, formulate Samprapti Vighatana, and explore Chikitsa(management) strategies for following Pranavaha Srotas Vikara (Upper Respiratory Tract conditions): • **Rhinitis** • **Pharyngitis** • **Adenoid hypertrophy** • **Tonsillitis** • **Croup** • **Laryngitis** • **Epiglottitis**	2	Lecture	CAN	Knows-how	BS,L&PPT ,L&GD
CO2,CO3	Demonstrate clinical examination (Atura pareeksha), formulation of Samprapti Vighatana, differential diagnosis and diagnosis (Vyadhi vinishchaya) and individualized Chikitsa for following Pranavaha Srotas Vikara (Upper Respiratory Tract conditions): • **Rhinitis** • **Pharyngitis** • **Adenoid hypertrophy** • **Tonsillitis** • **Croup** • **Laryngitis** • **Epiglottitis**	4	Practical Training 17.2	CE	Knows-how	CBL,D-BED,D

CO3	Evaluate Upper Respiratory Tract conditions to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	6	Experiential-Learning 17.2	CE	Does	RLE,JC,CBL

M 17 Unit 3 Pranavaha Srotovikara III(Lower Respiratory Tract Infections) –

- Bronchitis
- Bronchiolitis
- Pneumonia
- Tuberculosis (Pulmonary and Extra Pulmonary)

References: 1,5,29,35,44,45,58,59

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Nidana Panchaka, formulate Samprapti Vighatana, and explore Chikitsa(management) strategies for the following Lower Respiratory Tract Infections: • **Tuberculosis** • **Pnuemonia** • **Bronchitis** • **Bronchiolitis**	3	Lecture	CAN	Knows-how	L&GD,L&PPT,BS
CO2,CO3,CO5	Demonstrate clinical examination (Atura pareeksha), formulation of Samprapti Vighatana, differential diagnosis and diagnosis (Vyadhi vinishchaya) and individualized Chikitsa for following Pranavaha Srotas Vikara (Lower Respiratory Tract conditions): • **Bronchitis** • **Bronchiolitis**	5	Practical Training 17.3	PSY-GUD	Shows-how	D-BED,PBL,D,CBL

	• **Pneumonia** • **Pulmonary/Extra-pulmonary Tuberculosis**					
CO3	Evaluate Lower Respiratory Tract conditions, to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	6	Experiential-Learning 17.3	CS	Does	PBL,RLE

M 17 Unit 4 Pranavaha Srotovikara IV• Recurrent Allergic Respiratory disorders

- Reactive airway disorders – Asthma,
- Lung Parenchymal disorders

References: 1,5,29,35,44,45,58,59

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Nidana Panchaka (Etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa(management) strategies for the following Pranavaha Srotas Vikara (Recurrent and Chronic Respiratory Conditions): • **Recurrent Allergic Respiratory Disorders** • **Reactive Airway Disorders – Asthma** • **Lung Parenchymal Disorders**	2	Lecture	CAN	Knows-how	BS,L&PPT ,L&GD
CO2,CO3,CO5	Demonstrate clinical examination (Atura pareeksha), formulation of Samprapti Vighatana, differential diagnosis and diagnosis (Vyadhi vinishchaya) and individualized Chikitsa for the following Pranavaha Srotas Vikara (Recurrent and Chronic Respiratory Conditions): • **Recurrent Allergic Respiratory Disorders** • **Reactive Airway Disorders – Asthma** • **Lung Parenchymal Disorders**	5	Practical Training 17.4	CE	Knows-how	D,CBL,D-BED

CO3	Evaluate recurrent and chronic Pranavaha Srotas conditions—such as Recurrent Allergic Respiratory Disorders, Reactive Airway Disorders (Asthma), and Lung Parenchymal Disorders—to formulate Samprapti Vighatana and develop an individualized Chikitsa (management) plan.	4	Experiential-Learning 17.4	CS	Does	CBL,RLE,PBL
CO7	Appraise the indications, contraindications, interactions and outcome of different medications and procedures used in the management of Respiratory tract disorders in children	2	Experiential-Learning 17.5	CE	Knows-how	RLE,PBL,CBL
CO6,CO7	Demonstrate ethical standards while communicating with patient/ parents/caretaker and referal policy in Respiratory tract disorders in childern	2	Experiential-Learning 17.6	AFT-RES	Does	D,CBL

Practical Training Activity

Practical Training 17.1 : Management of Pranavaha Sroto Vikara- I

Demonstration
The teacher will demonstrate clinical assessment and interpretation of anyone Pranavaha Srotas Vikara (Kasa, Shwasa, Pratishyaya, Kukkura Kasa, Rajayakshama, Choraka), focusing on identifying Nidana Panchaka, selecting relevant investigations, formulating Samprapti and Samprapti Vighatana and planning individualised Chikitsa.
Teacher will then divide students into pairs and provide each pair with two different case vignettes.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Chikitsa (Shodhana/Shamana/Pathya)
- Role-play explaining Chikitsa and Pathya to patient and parents/caregivers
- Present findings and receive peer and teacher feedback.

The teacher will summarise the session. (Duration- 6 hrs)

Practical Training 17.2 : Management of Pranavaha Sroto Vikara-II

Demonstration
The teacher will demonstrate clinical assessment and interpretation of any one of the following Pranavaha Srotas Vikara (Upper Respiratory Tract condition-Rhinitis, Pharyngitis, Adenoid hypertrophy, Tonsillitis, Croup, Laryngitis, or Epiglottitis). The demonstration will focus on identifying the Nidana Panchaka, selecting relevant clinical and laboratory investigations, formulating Samprapti and Samprapti Vighatana, planning individualized Chikitsa, and discussing referral criteria where applicable.
The teacher will then divide students into pairs and provide each pair with two varied real cases/case vignettes representing different URTI conditions.
Following the demonstration, students will:

- Analyze the assigned clinical cases in pairs.
- Identify Nidana and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment/Shodhana / Shamana / Pathya) with rationale.
- Identify indications for referral (e.g., airway obstruction, suspected epiglottitis, recurrent tonsillitis).
- Role-play the communication of diagnosis, treatment, and Pathya to patients or caregivers.
- Present findings to the class and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-4 hrs)

Practical Training 17.3 : Management of Pranavaha Srotas Vikara-III

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Lower Respiratory Tract condition (e.g., Bronchitis, Bronchiolitis, Pneumonia, or Pulmonary Tuberculosis), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., chest X-ray, sputum AFB, CBC, CRP), formulating Samprapti and Samprapti Vighatana, planning an individualized Management(Chikitsa), and discussing criteria for referral (e.g., respiratory distress, suspected TB, non-resolving pneumonia).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.

- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management(Chikitsa) (Complementary/Alternative treatment/Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., TB suspicion, severe hypoxia, pleural effusion).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5hrs)

Practical Training 17.4 : Management of Pranavaha Srotas Vikara- IV

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one recurrent or chronic respiratory condition (e.g., Recurrent Allergic Respiratory Disorders, Reactive Airway Disorders such as Asthma, or Lung Parenchymal Disorders), focusing on identifying Nidana Panchaka, selecting relevant investigations (e.g., pulmonary function tests, allergy testing, chest imaging, blood eosinophil count), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., severe exacerbations, respiratory failure, need for specialist intervention).
The teacher will then divide students into pairs and provide each pair with two clinical cases or case vignettes representing different presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (including Complementary/Alternative treatment, Shodhana, Shamana, and Pathya-Apathya).
- Identify situations requiring referral (e.g., status asthmaticus, chronic respiratory insufficiency).
- Role-play explaining Chikitsa and Pathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5hrs)

Experiential learning Activity

Experiential-Learning 17.1 : Management of Pranavaha Sroto Vikara- I

Each student will evaluate a minimum of three clinical cases/case vignettes of Pranavaha Srotovikara (e.g., Kasa, Shwasa, Pratishyaya, Rajayakshama, Kukkura Kasa,

Choraka) across varied age groups or presentations (acute/chronic) with different doshic predominance. They will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigation, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa plan and explain it to patient and parents/caregivers.
Students will document:

- General and dosha-specific findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa plan (Shodhana/Shaman/Pathya-Apathya) with rationale
- Challenges encountered during assessment or planning

All findings and reflections will be recorded in logbook and discussed during a case review session. (Duration-4hrs)
AND
Each student will present an article on Pranavaha Srotovikara (e.g., Kasa, Shwasa, Pratishyaya, Rajayakshama, Kukkura Kasa, Choraka)focusing on newer advances in their integrated management.They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on Samprapti-based approach and evidence-supported Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by teacher. Student will document their learnings in logbook. (Duration-2 hrs)

Experiential-Learning 17.2 : Management of Pranavaha Sroto Vikara- II

Each student will evaluate a minimum of three clinical cases or case vignettes of Upper Respiratory Tract conditions(e.g., Rhinitis, Pharyngitis, Adenoid hypertrophy, Tonsillitis, Croup, Laryngitis, Epiglottitis), across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise aprropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and parents/caregivers. Students will also recognize and justify referral criteria such as stridor, airway compromise, systemic toxicity, or suspected complications.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment/Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-4 hrs)
AND
Each student will present an article on Upper Respiratory Tract conditions (e.g., Rhinitis, Pharyngitis, Adenoid hypertrophy, Tonsillitis, Croup, Laryngitis, Epiglottitis), focusing on newer advances in their integrated management. The presentation will cover the study objectives, methodology, key findings, and relevance to clinical practice, with special emphasis on a Samprapti-based approach and evidence-supported Chikitsa strategies (Ayurvedic and/or modern). Students will critically appraise the article's strengths and limitations, and participate in peer discussion facilitated by the teacher. Each student will document key learnings, reflections, and clinical applicability in their logbook. (Duration-2 hrs)

Experiential-Learning 17.3 : Management of Pranavaha Srotas -III

Each student will evaluate a minimum of three clinical cases or case vignettes of Lower Respiratory Tract conditions(e.g., Bronchitis, Bronchiolitis, Pneumonia, Pulmonary or Extra-pulmonary Tuberculosis), across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as respiratory distress, hypoxia, systemic toxicity, suspected tuberculosis, or complications like pleural effusion.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative-Complementary Treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or planning
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-4 hrs)
AND
Each student will present an article on Lower Respiratory Tract Infections(e.g., Bronchitis, Bronchiolitis, Pneumonia, Pulmonary/Extra-pulmonary Tuberculosis), focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Each student will document their learnings and reflections in the logbook. (Duration-2 hrs)

Experiential-Learning 17.4 : Management of Pranavaha Srotas- IV

Each student will evaluate a minimum of two clinical cases or case vignettes of recurrent and chronic Pranavaha Srotas conditions (e.g., Recurrent Allergic Respiratory Disorders, Reactive Airway Disorders – Asthma, Lung Parenchymal Disorders) across varied age groups and presentations (acute exacerbation/chronic state) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as persistent dyspnea, steroid non-responsiveness, severe hypoxia, or suspected interstitial or fibrotic lung changes.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment/Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-2 hrs)
AND
Each student will present a journal article related to recurrent and chronic Pranavaha Srotovikara (e.g., Recurrent Allergic Respiratory Disorders, Reactive Airway Disorders – Asthma, Lung Parenchymal Disorders), focusing on newer advances in their integrated management. The presentation will include a summary of the article's objectives, methodology, key findings, and clinical relevance. Emphasis will be placed on Samprapti-based understanding and evidence-informed Chikitsa strategies (Shodhana, Shamana, Pathya-Apathya, and integrative approaches).
Students will:

- Critically appraise the article's strengths and limitations
- Participate in peer discussion facilitated by the teacher
- Document their reflections and learnings in the logbook (Duration-2 hrs)

Experiential-Learning 17.5 : Pediatric Respiratory Interventions

Each student will appraise a minimum of two clinical cases or case vignettes of pediatric respiratory tract disorders(e.g., Asthma, Pneumonia, Bronchiolitis, Allergic

Rhinitis, or Chronic Suppurative Lung Disease) across varied age groups and presentations (acute vs chronic). For each case, students will:

- Perform detailed case evaluation with focus on clinical presentation, risk factors, and doshic predominance.
- Identify the medications and/or procedures indicated for that condition.
- Critically appraise their indications, contraindications, possible interactions, and expected outcomes.
- Compare different approaches (e.g., Shodhana/Shamana Chikitsa, Pathya–Apathya, supportive therapies, or integrative care).
- Recognize situations where interventions may fail or cause adverse outcomes, and identify referral criteria (e.g., respiratory distress not relieved by bronchodilators, steroid-resistant asthma, suspected interstitial changes).
- Discuss the rationale for chosen interventions with peers and practice explaining management options in simple terms as if addressing caregivers.

Students will document:Personal reflections on challenges in applying evidence-based or Ayurvedic principles in real/simulated scenarios.
Teacher will facilitate a group debrief, highlighting evidence-based perspectives on rational drug/procedure use and reinforcing safe, outcome-oriented clinical decision-making. (Duration: 2hrs)

Experiential-Learning 17.6 : Ethical Communication and Referral in Pediatric Respiratory Care

Each student will engage with a minimum of two simulated or real-life pediatric respiratory tract disorder scenarios(e.g., acute asthma exacerbation, recurrent pneumonia, suspected tuberculosis, or bronchiolitis) involving interaction with parents or caregivers.For each case, students will:

- Practice communicating the diagnosis, treatment plan, and prognosis using clear, empathetic, and culturally sensitive language.
- Demonstrate ethical standards such as honesty, respect for confidentiality, and obtaining informed consent.
- Explain referral needs (e.g., severe hypoxia, ventilatory support requirement, suspected malignancy, or resistant infection) in a way that builds trust and reduces parental anxiety.
- Role-play challenging situations, such as refusal of admission, parental mistrust, or demand for unnecessary medication/procedure.

Students will document, personal insights on balancing professional responsibility with empathy.
Teacher will moderate a feedback session where peers and faculty highlight strengths and gaps in communication, reinforce referral policies, and summarize key ethical principles in pediatric care.
(Duration: 2 hours)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation • Treatment planning • Communication Skills • Professionalism and Documentation OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Module 18 : Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders)

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

- Describe anatomical and physiological concepts of Annavaha and Pureeshavaha Srotas in the context of gastrointestinal health.
- Analyze the Nidana, Samprapti, and Lakshana of gastrointestinal disorders such as Ajeerna, Atisara, and Vibandha.
- Demonstrate clinical competence in diagnosing and managing gastrointestinal disorders in children through appropriate preventive,promotive and curative measures.
- Formulate and implement individualized treatment plans using principles of Ahara, Vihara, Aushadha, and Chikitsopakrama for effective management and prevention of gastrointestinal disorders.

M 18 Unit 1 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) - I

- Mukha Roga, Danta evam dantodbhedajanya roga, Kantha and Gala Roga
- Achalasia Cardia, Esophagitis.

References: 6,26,27,29,35,43,45,46,76,78,79

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for following Urdhwa Jatrugata Vikara: • **Mukha roga** • **Danta evam dantodbhedajanya roga** • **Kantha and Gala roga**	1	Lecture	CAN	Knows-how	L&GD,BS,L&PPT
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Chikitsa(management) for the following Urdhva Jatrugata Vikara: • **Mukha Roga** • **Danta evam Dantodbhedajanya Roga** • **Kantha-Gala Roga.**	2	Practical Training 18.1	CE	Knows-how	CBL,D-BED,D
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Annavaha-Puresshavaha Sroto Vikara: • **Achalasia Cardia** • **Esophagitis**	3	Practical Training 18.2	CE	Knows-how	CBL,D-BED,PL,D
CO3	Evaluate Urdhva Jatrugata Vikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	3	Experiential-Learning 18.1	CE	Does	RLE,PBL,CBL

CO2,CO3,CO5	Analyze the Samprapti (etiopathogenesis), formulate Samprapti Vighatana and explore individualized Chikitsa (management) strategies for the following conditions involving Annavaha-Pureeshavaha Sroto vikara (Achalasia Cardia, Esophagitis)	1	Lecture	CE	Knows-how	L&PPT , L&GD,BS
CO7	Evaluate Annavaha-Pureeshavaha Sroto Vikara (Upper Gastrointestinal Tract conditions) to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	5	Experiential-Learning 18.2	CE	Does	RLE,CBL,PBL

M 18 Unit 2 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) II

- Amlapitta,Acid Peptic disorders
- Grahanidosha-Malabsorption disorders, Celiac diseases
- Chhardi- vomiting
- Vibandha,-Constipation, Arochaka, Ajeerna
- Abdominal pain and distention -(Udara Shoola, Aanaha, Aatopa)
- Atisara- Visuchika, Alasaka - Diarrhoea
- Pravahika- Dysentry, Collitis, Inflammatory bowel disorders.

References: 1,3,6,43,45,46,57,58,76,79

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO5	Analyse Samprapti (Etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Annavaha–Pureeshavaha Srotovikara: • **Amlapitta, Acid Peptic Disorders** • **Grahani Dosha (Malabsorption disorders, Celiac disease)** • **Chhardi (Vomiting)** • **Vibandha, Arochaka, Ajeerna (Constipation, Loss of appetite, Indigestion)** • **Udara Shoola, Aanaha, Aatopa (Abdominal pain and distention)**	4	Lecture	CAN	Knows-how	BS,L&PPT ,L&GD

	• **Atisara, Visuchika, Alasaka (Diarrhea and associated conditions)**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Chikitsa(Management) for the following Annavaha–Pureeshavaha Srotovikara: • **Amlapitta, Acid Peptic Disorders** • **Grahani Dosha (Malabsorption disorders, Celiac disease)** • **Chhardi (Vomiting)** • **Vibandha, Arochaka, Ajeerna (Constipation, Loss of appetite, Indigestion)** • **Udara Shoola, Aanaha, Aatopa (Abdominal pain and distention)** • **Atisara, Visuchika, Alasaka (Diarrhea and associated conditions)**	6	Practical Training 18.3	CE	Knows-how	D-BED,CBL,D,PL
CO3	Evaluate Annavaha–Pureeshavaha Srotovikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	8	Experiential-Learning 18.3	CE	Does	CBL,RLE,JC

M 18 Unit 3 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) III

- Dehydration
- Dyselectrolytemia
- Food intolerance and Allergy
- Polyps, Tumors, Diverticulitis
- Guda-bhramsha- Rectal prolapse

References: 1,7,29,35,45

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Annavaha–Pureeshavaha Srotovikara:	3	Lecture	CAN	Knows-how	L&PPT , BS,L&GD

	• **Pravahika (Dysentery, Colitis, Inflammatory Bowel Disorders)** • **Dehydration (associated with Atisara, Visuchika)** • **Dyselectrolytemia (secondary to GI losses or systemic involvement)** • **Food Intolerance and Allergy (Agni Dusti, Ama Nirmiti-based disorders)** • **Polyps, Tumors, Diverticulitis (Krumi Vikara, Arbuda, Granthi mimic conditions)** • **Guda-Bhramsha (Rectal Prolapse)**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Annavaha–Pureeshavaha Srotovikara (Gastrointestinal and Anorectal Conditions): • **Pravahika (Dysentery, Colitis, Inflammatory Bowel Disorders)** • **Dehydration** • **Dyselectrolytemia** • **Food Intolerance and Allergy** • **Polyps, Tumors, Diverticulitis** • **Guda-Bhramsha (Rectal Prolapse)**	5	Practical Training 18.4	CE	Knows-how	CBL,D,D-BED,PL
CO3	Evaluate Annavaha–Pureeshavaha Srotovikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	5	Experiential-Learning 18.4	CE	Does	RLE,CBL,PBL
M 18 Unit 4 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) IV • Krimi Roga - Worm infestation **References:** 3,6,20,29,35,43,45,46,58,78						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**

CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Annavaha–Pureeshavaha Srotovikara: • **Krimi Roga (Worm infestation and related gastrointestinal manifestations)**	1	Lecture	CS	Knows-how	L&PPT
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Annavaha–Pureeshavaha Srotovikara: • **Krimi Roga – Worm Infestation**	4	Practical Training 18.5	CE	Knows-how	D,CBL,D-BED
CO3	Evaluate Krimi Roga to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	5	Experiential-Learning 18.5	CE	Does	RLE,CBL

Practical Training Activity

Practical Training 18.1 : Management of Urdhva Jatrugata Vikara

Demonstration
The teacher will demonstrate clinical assessment and interpretation of any one Urdhva Jatrugata Vikara (e.g., Mukha Roga, Danta evam Dantodbhedajanya Roga, Kantha or Gala Roga), focusing on identifying Nidana Panchaka, selecting relevant oral/throat/dental investigations, formulating Samprapti and Samprapti Vighatana, planning individualized Chikitsa, and discussing criteria for referral when required (e.g., suspected malignancy, abscess, or airway compromise).
The teacher will then divide students into pairs and provide each pair with one different real case/case vignette related to Urdhva Jatrugata Vikara.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify Nidana Panchaka and justify appropriate investigations (e.g., oral swab, throat exam, dental radiographs, blood tests).
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Chikitsa(managemnet) (Shodhana, Shamana, Sthanik Chikitsa, Pathya-Apathya).

- Identify referral indicators (e.g., spreading infection, persistent hoarseness, difficulty swallowing).
- Role-play patient education on Chikitsa, Pathya, and preventive care (e.g., dental hygiene, avoiding causative Aharas).
- Present findings and engage in peer and teacher feedback discussions.

The teacher will summarise the session. (Duration- 2 hrs)

Practical Training 18.2 : Management of Annavaha_Pureeshavaha Sroto Vikara-I

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Annavaha–Pureeshavaha Srotovikara condition (e.g., Achalasia Cardia or Esophagitis), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., Barium swallow, Endoscopy, Esophageal manometry, CBC, ESR), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., progressive dysphagia, weight loss, suspected malignancy, GI bleed).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., suspected carcinoma, severe dehydration, failure to thrive).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration- 3 hrs)

Practical Training 18.3 : Annavaha-Pureeshavaha Sroto Vikara-II

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Annavaha–Pureeshavaha Srotovikara condition (e.g., Amlapitta, Grahani, Chhardi, Vibandha, Udara Shoola, or Atisara), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., Upper GI endoscopy, stool examination, USG abdomen, CBC, LFT), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., GI

bleeding, suspected malignancy, severe dehydration, refractory symptoms).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., persistent vomiting, electrolyte imbalance, GI obstruction, blood in stool).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session.(Duration-6 hrs)

Practical Training 18.4 : Management of Annavaha–Pureeshavaha Srotovikara-III

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Annavaha–Pureeshavaha Srotovikara condition (e.g., Pravahika, Dehydration, Dyselectrolytemia, Food Allergy, Diverticulitis, or Guda-Bhramsha), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., stool routine and culture, serum electrolytes, colonoscopy, imaging), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., severe dehydration, suspected malignancy, prolapse complications).
The teacher will then divide students into pairs and provide each pair with two real cases or case vignettesrepresenting different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., electrolyte imbalance, GI bleeding, irreducible prolapse).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5 hrs)

Practical Training 18.5 : Management of Krimi Roga

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of a case of Krimi Roga (Worm Infestation), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., stool examination for ova/parasites, CBC with eosinophil count, nutritional assessment), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa) strategy, and discussing criteria for referral (e.g., chronic infestation, failure to thrive, severe anemia, extraintestinal symptoms).
The teacher will then divide students into pairs and provide each pair with two real or simulated cases/case vignettesreflecting different clinical presentations and doshic types.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (e.g., Krimighna Dravyas, Shodhana, Shamana, Pathya-Apathya, complementary therapies).
- Identify conditions requiring referral (e.g., suspected Tapeworm, severe nutritional compromise, neurological signs).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session.(Duration-4hrs)

Experiential learning Activity

Experiential-Learning 18.1 : Management of Urdhva Jatrugata Vikara

Each student will evaluate a minimum of two clinical cases or case vignettes of Urdhva Jatrugata Vikara (e.g., Mukha Roga, Danta evam Dantodbhedajanya Roga, Kantha Roga, Gala Roga) across varied age groups or presentations (e.g., infective, inflammatory, structural) with different dosha predominance. They will perform a detailed case examination, identify Nidana Panchaka, advise appropriate local/systemic investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa plan, and explain it to the patient or caregivers.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning including Samprapti Ghatakas
- Proposed Chikitsa plan (Shodhana / Shamana / Sthanik Chikitsa / Pathya-Apathya) with rationale
- Challenges encountered during assessment, diagnosis, or treatment planning

All findings and reflections will be recorded in the logbook. (Duration-3 hrs)

Experiential-Learning 18.2 : Management of Annavaha Pureeshavaha Sroto Vikara-I

Each student will evaluate a minimum of three clinical cases or case vignettes of Annavaha–Pureeshavaha Srotovikara (e.g., Achalasia Cardia, Esophagitis) across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and/or caregivers. Students will also recognize and justify referral criteria such as progressive dysphagia, weight loss, hematemesis, or suspected structural/malignant pathology.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-5hrs)

Experiential-Learning 18.3 : Annavaha Pureeshavaha Sroto Vikara-II

Each student will evaluate a minimum of four clinical cases or case vignettes of Annavaha–Pureeshavaha Srotovikara(e.g., Amlapitta, Grahani, Chhardi, Vibandha, Udara Shoola, Atisara), covering diverse clinical presentations (acute/chronic, age variations, and doshic predominance). Students will conduct a detailed clinical assessment, identify Nidana Panchaka, advise relevant investigations, formulate Samprapti and Samprapti Vighatana, and develop a personalized Chikitsa plan. They will also justify referral decisions based on alarm features (e.g., GI bleeding, persistent vomiting, malnutrition, dehydration).

Students will document:

- General and dosha-specific clinical findings
- Samprapti Ghatakas and diagnostic reasoning
- Chikitsa plan (Shodhana, Shamana, Complementary/Alternative, Pathya–Apathya) with rationale
- Referral criteria and clinical judgment
- Challenges and reflections from assessment and planning

All documentation will be maintained in the logbook. (Duration-5 hrs)
AND
Each student will present an article on Annavaha–Pureeshavaha Srotovikara (e.g., Amlapitta, Grahani, Chhardi, Vibandha, Udara Shoola, Atisara), focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies (Shodhana, Shamana, Pathya-Apathya, and complementary modalities).
Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings and reflections in the logbook.(Duration-3 hrs)

Experiential-Learning 18.4 : Mnagement of Annavaha–Pureeshavaha Srotovikara-III

Each student will evaluate a minimum of three clinical cases or case vignettes of Annavaha–Pureeshavaha Srotovikara(e.g., Pravahika, Dehydration, Dyselectrolytemia, Food Intolerance/Allergy, Diverticulitis, Guda-Bhramsha), covering diverse presentations (acute/chronic, pediatric/geriatric, doshic variations). Students will conduct detailed clinical examination, identify Nidana Panchaka, recommend appropriate investigations, formulate Samprapti and Samprapti Vighatana, and plan an individualized Chikitsa approach. They will recognize clinical referral indicators such as persistent bleeding, prolapse complications, or severe fluid-electrolyte imbalance.
Students will document:

- General and dosha-specific clinical features
- Samprapti Ghatakas and rationale
- Chikitsa plan (Shodhana, Shamana, Complementary/Alternative therapy, Pathya–Apathya)
- Referral decisions and justification
- Reflections on challenges faced during clinical decision-making

All findings and reflections will be recorded in the clinical logbook. (Duration-3 hrs)

AND
Each student will present an article on Annavaha–Pureeshavaha Srotovikara (e.g., Pravahika, Grahani, Atisara, Vibandha, Chhardi, Guda-Bhramsha) focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies (including Shodhana, Shamana, Pathya–Apathya, and complementary modalities).
Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings and reflections in the logbook.(Duration-2hrs)

Experiential-Learning 18.5 : Management of Krimi Roga

Each student will evaluate a minimum of three clinical cases or case vignettes of Krimi Roga (e.g., intestinal helminthiasis, protozoal infestation, recurrent worm infestations with systemic impact) across varied age groups and clinical presentations, reflecting different doshic predominance and stages (acute/chronic). Students will perform detailed history-taking and clinical examination, identify Nidana Panchaka, recommend appropriate investigations, formulate Samprapti and Samprapti Vighatana, and design a tailored Chikitsa plan.
Students will also assess clinical indicators for referral (e.g., persistent symptoms despite treatment, suspected extraintestinal krimi, severe anemia or malnutrition).
Students will document:

- Clinical and dosha-specific observations
- Samprapti Ghatakas and reasoning
- Planned Chikitsa (Shodhana, Shamana, Krimighna Dravyas, Complementary therapies, Pathya–Apathya) with rationale
- Referral decisions and justification
- Challenges encountered and reflections on clinical judgement

All findings will be recorded in the logbook. (Duration-5hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis	4

- Diagnostic Interpretation
- Treatment planning
- Communication Skills
- Professionalism and Documentation

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Semester No : 4

Module 19 : Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system)

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

- Describe anatomical and physiological concepts of Rasavaha and Raktavaha Srotas, including the structure and function of the Hridaya, in the context of circulatory and hemopoietic health.
- Analyze the Nidana, Samprapti, and Lakshana of circulatory and hemopoietic disorders such as Jwara, Pandu, and Hridroga.
- Demonstrate clinical competence in diagnosing and managing disorders of the circulatory and hemopoietic systems diagnostic and therapeutic approaches.
- Formulate and implement individualized treatment plans using principles of Ahara, Vihara, Aushadha, and Chikitsopakrama for the effective management and prevention of circulatory and hemopoietic disorders.

M 19 Unit 1 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) I

- Jwara, Fever of unknown origin
- Pandu-Anemia

References: 1,3,6,16,26,27,29,35,43,45,46,57,58,59,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Rasavaha and Raktavaha Srotas Vikaras (Disorders of Circulatory & Hemopoietic system): • **Jwara,Fever of Unknown Origin** • **Pandu,Anemia**	3	Lecture	CAN	Knows-how	L&GD,L&PPT,BS
CO2,CO3,CO4	Demonstrate formulation of Samprapti Vighatana and individualized Chikitsa for the following Rasavaha and Raktavaha Srotas Vikaras: • **Jwara Fever of Unknown Origin** • **Pandu,Anemia**	6	Practical Training 19.1	CE	Knows-how	CBL,D-BED,PBL,Mnt,D
CO3	Evaluate Rasavaha and Raktavaha Srotas Vikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	4	Experiential-Learning 19.1	CE	Does	D-BED,CBL,RLE

M 19 Unit 2 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) II

- Hrudroga- Structural, Functional, Positional defects
- Infective disorders of CVS
- Amavata, - Arthritis.

References: 1,3,6,16,26,27,29,31,35,43,45,46,57,58,59,60,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Rasavaha and Raktavaha Srotas Vikaras (Disorders of Circulatory &	2	Lecture	CE	Knows-how	L_VC,BS,L&PPT

	Hemopoietic system): • **Hrudroga- Structural, Functional, Positional defects** • **Infective disorders of CVS** • **Amavata - Arthritis.**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Hrudroga and related conditions: • **Structural, Functional, and Positional defects of the Cardiovascular System (CVS)** • **Infective disorders of CVS** • **Amavata (Arthritis)**	4	Practical Training 19.2	CE	Knows-how	D-BED,CBL
CO3	Evaluate Hrudroga and related conditions to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	7	Experiential-Learning 19.2	CE	Does	CBL,RLE
M 19 Unit 3 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) III • Rakta pitta Bleeding and Clotting disorders. Raktasrava - Hemophilia • Sahaja Pandu-. Disorders of Bone marrow Hemoglobinopathies **References:** 1,3,29,35,43,45,58,59,76,77,78,79,80						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Rasa-Raktavaha Srotovikara:	3	Lecture	CAN	Knows-how	L&PPT , BS,L&GD

	• **Raktapitta – Bleeding and Clotting Disorders** • **Raktasrava – Hemophilia** • **Sahaja Pandu – Bone Marrow Disorders and Hemoglobinopathies**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Rasa-Raktavaha Srotas Vikara: • **Raktapitta – Bleeding and Clotting Disorders** • **Raktasrava – Hemophilia** • **Sahaja Pandu – Bone Marrow Disorders and Hemoglobinopathies**	3	Practical Training 19.3	CE	Knows-how	CBL,D-BED,D
CO3	Evaluate Rasa-Raktavaha Sroto Vikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	7	Experiential-Learning 19.3	CE	Does	CBL,RLE

M 19 Unit 4 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) IV

- Udararoga, Kamala, Pleehavruddhi, Haleemaka-Disorders of hepatobiliary system Hepatitis
- Storage and Metabolic disorders of liver,
- Biliary disorders, Cholecystitis, Cholelithiasis.
- Hepatosplenomegaly

References: 1,3,6,26,29,35,43,45,46,58,59,75,76,77,78,79,80,81

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following conditions of Rasavaha-Raktavaha Srotas: • **Udara Roga (Ascites and abdominal distension)** • **Kamala (Hepatitis and hepatic dysfunction)**	2	Lecture	CAN	Knows-how	L&PPT , L&GD,BS

	• **Pleeha Vriddhi (Splenomegaly)** • **Haleemaka (Chronic or relapsing liver dysfunction)** • **Hepatobiliary Disorders (Hepatitis, Cholecystitis, Cholelithiasis, Storage and Metabolic Liver Disorders, Hepatosplenomegaly)**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Rasavaha, and Raktavaha Srotas Vikara (Chronic Liver and Hepatobiliary Conditions): • **Kamala – Hepatitis and Hepatic Dysfunction** • **Pleeha Vriddhi – Splenomegaly** • **Haleemaka – Chronic Relapsing Liver Disorders** • **Udararoga – Ascites and Abdominal Distension** • **Biliary Disorders – Cholecystitis, Cholelithiasis** • **Hepatosplenomegaly – Mixed Organomegaly**	7	Practical Training 19.4	CE	Knows-how	PL,D,D-BED,CBL
CO3	Evaluate Rasa-Raktavaha Sroto Vikara (hepatobiliary and abdominal conditions) to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	8	Experiential-Learning 19.4	CE	Does	CBL,L&GD,PrBL
Practical Training Activity						
Practical Training 19.1 : Management of Rasavaha and Raktavaha Srotas Vikaras-I						
Demonstration The teacher will demonstrate the clinical assessment and interpretation of any one Rasavaha or Raktavaha Srotas Vikara (e.g., Jwara - Fever of Unknown Origin or Pandu - Anemia), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., CBC, ESR, peripheral smear, serum iron studies), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., persistent fever, severe anemia, suspected underlying pathology). The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations. Following the demonstration, students will:						

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (including complementary/alternative treatments, Shodhana, Shamana, Pathya).
- Identify situations requiring referral (e.g., suspected malignancy, refractory anemia, persistent high-grade fever).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration- 6 hrs)

Practical Training 19.2 : Management of Hrudroga

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Hrudroga or related condition (e.g., Rheumatic Heart Disease, Infective Endocarditis, Cardiomyopathy, or Amavata with cardiac involvement), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., ECG, echocardiogram, CBC, ESR/CRP, RA factor, lipid profile), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., cardiac decompensation, suspected infective endocarditis, unresponsive joint symptoms).
The teacher will then divide students into pairs and provide each pair with one real case/case vignette representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., suspected structural defect, infective complications, heart failure).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session.(Duration-4 hrs)

Practical Training 19.3 : Rasa-Raktavaha Srotas Vikara

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Rasa-Raktavaha Sroto Vikara (e.g., Raktapitta – bleeding and clotting disorders, Hemophilia, or Sahaja Pandu – bone marrow disorders/hemoglobinopathies), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., CBC with peripheral smear, coagulation profile, bone marrow biopsy, hemoglobin electrophoresis), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., severe bleeding episodes, bone marrow failure, transfusion requirements).
The teacher will then divide students into pairs and provide each pair with one real case/case vignette representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., uncontrolled bleeding, suspected bone marrow failure).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-3 hrs)

Practical Training 19.4 : Management of Rasa-Raktavaha Vikara-III

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one hepatobiliary or related condition (e.g., Kamala – Hepatitis, Udararoga – Ascites, Pleeha Vriddhi – Splenomegaly, or Cholecystitis), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., LFTs, CBC, USG abdomen, viral markers, liver biopsy, coagulation profile), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., progressive jaundice, massive hepatosplenomegaly, ascites, suspected malignancy or biliary obstruction).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.

- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., liver failure, unresolving jaundice, suspected biliary obstruction).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-7hrs)

Experiential learning Activity

Experiential-Learning 19.1 : Management of Rasavaha and Raktavaha Srotas Vikara-I

Each student will evaluate a minimum of three clinical cases/case vignettes of Rasavaha and Raktavaha Srotovikara (e.g., Jwara – Fever of Unknown Origin, Pandu – Anemia) across varied age groups or clinical presentations (e.g., acute/chronic, nutritional/infective/idiopathic causes) with different doshic predominance. They will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa plan, and explain it to the patient and caregivers.
Students will document:
• General and dosha-specific findings
• Diagnostic reasoning (including Samprapti Ghatakas)
• Proposed Chikitsa plan (Shodhana / Shamana / Complementary/Alternative/Pathya-Apathya) with rationale
• Challenges encountered during assessment or planning
All findings and reflections will be recorded in the logbook. (Duration-4 hrs)
AND
Each student will present an article on Rasavaha and Raktavaha Srotovikara (e.g., Jwara – Fever of Unknown Origin, Pandu – Anemia) focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies (including Shodhana, Shamana, Pathya-Apathya, and integrative therapies).
Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher.
Each student will document their learnings, critical reflections, and potential applications in clinical settings in the logbook.(Duration-2hrs)

Experiential-Learning 19.2 : Management of Hrudroga

Each student will evaluate a minimum of three clinical cases or case vignettes of Hrudroga and related conditions(e.g., Structural Heart Disease, Infective Endocarditis, Rheumatic Heart Disease, Amavata with cardiac involvement), across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized

Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as chest pain with hemodynamic instability, new-onset murmur, signs of cardiac failure, or suspected infective complications.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative-Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-7hrs)

Experiential-Learning 19.3 : Management of Rasa-Raktavaha Sroto Vikara-II

Each student will evaluate a minimum of three clinical cases or case vignettes of Raktavaha Srotas conditions (e.g., Raktapitta – Bleeding and Clotting Disorders, Raktasrava – Hemophilia, Sahaja Pandu – Bone Marrow Disorders and Hemoglobinopathies) across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and parents/caregivers. Students will also recognize and justify referral criteria such as active bleeding, signs of marrow suppression, anemia unresponsive to therapy, or suspected genetic disorders.
Students will document:
• General and dosha-specific clinical findings
• Diagnostic reasoning (including Samprapti Ghatakas)
• Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
• Challenges encountered in assessment or management
• Referral indicators and decision-making process
All findings and reflections will be recorded in the logbook. (Duration-7hrs)

Experiential-Learning 19.4 : Management of Rasa-Raktavaha Sroto Vikara-III

Each student will evaluate a minimum of three clinical cases or case vignettes of Rasa-Raktavaha Sroto Vikara (hepatobiliary and abdominal conditions -e.g., Kamala, Udararoga, Pleeha Vriddhi, Haleemaka, Cholecystitis, Cholelithiasis, Hepatosplenomegaly) across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana,

develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as progressive hepatomegaly, ascites, jaundice with systemic features, or suspected malignancy.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-8hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation • Treatment planning • Communication Skills • Professionalism and Documentation OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Module 20 : Vata Rogas, Mastishka Vyadhis (Neurological disorders)

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

1. Describe anatomical and physiological concepts of the nervous system, with special reference to Vata dosha and its role in neurological functions.
2. Analyze the Nidana, Samprapti, and Lakshana of neurological disorders such as Pakshaghata, Apasmara, and Vata Nanatmaja Rogas.
3. Demonstrate clinical proficiency in assessing, diagnosing, and differentiating pediatric neurological disorders using appropriate diagnostic tools.
4. Formulate and justify individualized, evidence-informed treatment protocols based on principles of Ahara, Vihara, Aushadha, and Panchakarma, for effective management and prevention of neurological disorders.

M 20 Unit 1 Vata Rogas, Mastishka Vyadhis (Neurological disorders) I

- Akshepaka (Seizure Disorders)
- Febrile convulsions
- Apatanaka
- Aptantraka
- Apasmara (Epilepsy).

References: 3,7,26,35,45,58,59,75,76,77,78,79,106

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Vata Vyadhi-Mastishka Vyadhi conditions: • **Akshepaka (Seizure Disorders)** • **Febrile Convulsions** • **Apatanaka**	4	Lecture	CAN	Knows-how	BS,L&GD

	• **Aptantraka** • **Apasmara (Epilepsy)** Analyse the Nidana panchaka formulate the samprapti and critically analyse pathogenesis					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Vata Roga and Mastishka Vyadhi (Neurological Disorders): • Akshepaka (Seizure Disorders) • Febrile Convulsions • Apatanaka • Aptantraka • Apasmara (Epilepsy)	7	Practical Training 20.1	CE	Knows-how	D-BED,PBL,D,DIS,CBL
CO3	Evaluate Vata Roga-Mastishka Vyadhi to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	7	Experiential-Learning 20.1	CE	Does	RLE,PBL,CBL

M 20 Unit 2 Vata Rogas, Mastishka Vyadhis (Neurological disorders) II

- Neurodegenerative, Metabolic, Infective Neurological Conditions (Encephalitis, Meningitis, Storage disorders, Demyelination Disorders, Movement disorders, Gait disorders).
- Tremors and Ataxia

References: 3,29,35,45,58,59,106

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Vata Roga-Mastishka Vyadhi and related neurological conditions:	3	Lecture	CAN	Knows-how	L_VC,L&PPT ,BS

	• **Neurodegenerative, Metabolic, Infective Neurological Conditions (Encephalitis, Meningitis, Storage disorders, Demyelination Disorders, Movement disorders, Gait disorders).** • **Tremors and Ataxia**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Vata Roga – Mastishka Vyadhi and related neurological conditions: • Neurodegenerative Disorders • Metabolic Neurological Disorders • Infective Neurological Conditions (e.g., Encephalitis, Meningitis) • Storage Disorders • Demyelination Disorders • Movement Disorders • Gait Disorders • Tremors • Ataxia	6	Practical Training 20.2	CE	Knows-how	CBL,D,PBL,D-BED
CO3	Evaluate Vata Roga – Mastishka Vyadhi to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	10	Experiential-Learning 20.2	CE	Does	RLE,CBL,PBL

M 20 Unit 3 Vata Rogas, Mastishka Vyadhis (Neurological disorders) III

- Encephalopathies
- Shiro-Arbuda (Space Occupying Lesion)
- Sheershaambu Roga, Mastulunga Kshaya
- Guillain-Barre Syndrome
- Transverse myelitis, Traumatic neuritis, Syringomyelia.

References: 29,35,45,58,59,95

3A	3B	3C	3D	3E	3F	3G

CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Vata Roga – Mastishka Vyadhi (neurological conditions): • Encephalopathies • Shiro-Arbuda (Space Occupying Lesions) • Sheershaambu Roga • Mastulunga Kshaya • Guillain-Barré Syndrome • Transverse Myelitis • Traumatic Neuritis • Syringomyelia	3	Lecture	CAN	Knows-how	L_VC,L&PPT ,L&GD,BS
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Vata Roga – Mastishka Vyadhi (neurological conditions): • Encephalopathies • Shiro-Arbuda (Space Occupying Lesions) • Sheershaambu Roga • Mastulunga Kshaya • Guillain-Barré Syndrome • Transverse Myelitis • Traumatic Neuritis • Syringomyelia	7	Practical Training 20.3	CE	Knows-how	PBL,D-BED,D,CBL
CO3	Evaluate Vata Roga – Mastishka Vyadhi (neurological conditions) to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	9	Experiential-Learning 20.3	CE	Does	JC,RLE,CBL

Practical Training Activity

Practical Training 20.1 : Management of Vata Roga and Mastishka Vyadhi-I

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Mastishka Vyadhi (e.g., Apasmara, Akshepaka, or Aptantraka), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., EEG, neuroimaging, serum electrolytes, CBC), formulating Samprapti and Samprapti Vighatana,

planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., status epilepticus, first episode seizure, atypical features).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations of Vata Rogas (e.g., Febrile Convulsions in a child and recurrent Apasmara in an adult).
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (e.g., Shodhana, Shamana, Medhya Rasayana, Pathya-Apathya).
- Identify situations requiring referral (e.g., recurrent seizures, altered sensorium, unresponsive to treatment).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-7hrs)

Practical Training 20.2 : Management of Vata Roga – Mastishka Vyadhi-II

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Mastishka Vyadhi (e.g., Ataxia, Tremors, Encephalitis, or Demyelination Disorder), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., EEG, MRI, CSF analysis, CBC, metabolic panel), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., progressive neurological deficit, altered mental status, suspected CNS infection or genetic/metabolic disorder).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations (e.g., infective vs degenerative, childhood vs adult onset).
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., CNS infection, uncontrolled seizures, progressive ataxia, neurodevelopmental delay).

- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-6 hrs)

Practical Training 20.3 : Management of Vata Roga – Mastishka Vyadhi-III

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one neurological condition (e.g., Guillain-Barré Syndrome, Encephalopathy, Transverse Myelitis, or Shiro-Arbuda), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., MRI brain/spine, NCV, CSF analysis, CBC, metabolic panel), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., respiratory paralysis, progressive neurological deficit, raised intracranial pressure, altered consciousness).
The teacher will then divide students into pairs and provide each pair with two real cases or case vignettes representing different neurological presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., signs of raised ICP, worsening weakness, suspected mass lesion).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session.(Duration-7hrs)

Experiential learning Activity

Experiential-Learning 20.1 : Management of Vata Roga-Mastishka Vyadhi-I

Each student will evaluate a minimum of two clinical cases or case vignettes of Vata Rogas / Mastishka Vyadhis (e.g., Akshepaka, Febrile Convulsions, Apatanaka, Aptantraka, Apasmara) across varied age groups or presentations(acute/chronic) with different dosha predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations (e.g., EEG, MRI/CT, CBC, metabolic panel), formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as status

epilepticus, altered consciousness, neuroregression, or suspected intracranial pathology.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration- 4 hrs)
AND
Each student will present an article on Vata Rogas / Mastishka Vyadhis (e.g., Apasmara, Akshepaka, Febrile Convulsions, Aptantraka, Apatanaka) focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies (e.g., role of Medhya Rasayana, integration with neuroprotective or anticonvulsant therapies, emerging diagnostic insights).
Students will critically appraise the article's strengths and limitations.
Peer discussion will be facilitated by the teacher.
Students will document their learnings and reflections in the logbook. (Duration-3 hrs)

Experiential-Learning 20.2 : Management of Vata Roga – Mastishka Vyadhi-II

Each student will evaluate a minimum of three clinical cases or case vignettes of Vata Roga – Mastishka Vyadhi (e.g., Encephalitis, Meningitis, Storage disorders, Demyelination disorders, Movement disorders, Tremors, Ataxia), across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations (e.g., EEG, MRI, CSF analysis, CBC, metabolic tests), formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as status epilepticus, progressive neurological deficit, altered sensorium, or suspected intracranial pathology.
Students will document:
• General and dosha-specific clinical findings
• Diagnostic reasoning (including Samprapti Ghatakas)
• Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
• Challenges encountered in assessment or management
• Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-7hrs)
AND
Each student will present an article on Vata Roga – Mastishka Vyadhi (e.g., Apasmara, Encephalitis, Ataxia, Demyelination Disorders, Movement Disorders), focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies, including the role of Medhya Rasayana, Shamana Chikitsa, and integrative neurorehabilitative practices.
Students will critically appraise the article's strengths and limitations.
Peer discussion will be facilitated by the teacher.
Students will document their learnings in the logbook. (Duration-3 hrs)

Experiential-Learning 20.3 : Management of Vata Roga – Mastishka Vyadhi-III

Each student will evaluate a minimum of three clinical cases or case vignettes of neurological conditions (e.g., Encephalopathies, Guillain-Barré Syndrome, Transverse Myelitis, Shiro-Arbuda, Syringomyelia), across varied age groups or presentations (e.g., acute/chronic, progressive/static, Vata-predominant or mixed doshic conditions).
Students will:

- Perform detailed case examination and neurological assessment.
- Identify Nidana Panchaka.
- Advise appropriate investigations (e.g., MRI, NCV, CSF analysis, metabolic panel).
- Formulate Samprapti and Samprapti Vighatana.
- Develop an individualized Chikitsa/Management plan (including Shodhana, Shamana, Rasayana, complementary modalities, and Pathya-Apathya).
- Explain the plan to the patient and/or caregivers using appropriate communication.
- Recognize and justify referral criteria such as altered sensorium, rapid progression, suspected mass lesion, or spinal cord compression.

Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook.(Duration-6hrs)
AND
Each student will present an article on Vata Roga – Mastishka and Meru-Majj?gata Vyadhi (e.g., Encephalopathies, Guillain-Barré Syndrome, Shiro-Arbuda, Syringomyelia, Transverse Myelitis) focusing on newer advances in their integrated management.
They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on the Samprapti-based approach and evidence-supported Chikitsa strategies (Shamana, Shodhana, Rasayana, or integrative therapies).
Students will critically appraise the article's strengths and limitations.
Peer discussion will be facilitated by the teacher.
Students will document their learnings in the logbook. (Duration- 3hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation • Treatment planning • Communication Skills • Professionalism and Documentation OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Semester No : 5

Module 21 : Mutravaha Srotovikaras & Twaka Vikara (Nephrological, Genito-Urinary disorders & Skin disorders)

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

- Describe the anatomical and physiological concepts of Mutravaha Srotas and Twaka.
- Analyze the Nidana, Samprapti, and Lakshana of urogenital and dermatological conditions such as Mutrakricha, Shayyamutra, Kushtha, and Twaka Vikara.
- Demonstrate competence in diagnosing and formulating differential diagnoses for Mutravaha and Twak Vikaras using appropriate clinical methods and relevant tools.
- Design and implement individualized treatment protocols incorporating principles of Ahara, Vihara, Aushadha, and Shodhana therapies to manage and prevent Mutravaha and Twak Vikaras.

M 21 Unit 1 Mutravaha Srotovikaras (Nephrological, Genito-Urinary disorders) I

- Vrikka Roga,-Vrikka Shotha, Nephrotic syndrome, Glomerular nephritis
- Mutraghata- Acute and Chronic renal failure, Renal tubular disorders,
- Renal malignancies.
- Proteinuria, Anuria and Haematuria

References: 29,35,45,58,59,75,105

3A	3B	3C	3D	3E	3F	3G
CO6,CO7,CO8	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Mutravaha Srotas Vikara (Renal & Genito-Urinary conditions): • **Vrikka Roga,-Vrikka Shotha, Nephrotic syndrome, Glomerular nephritis** • **Mutraghata- Acute and Chronic renal failure, Renal tubular disorders,** • **Renal malignancies.**	3	Lecture	CAN	Knows-how	L&GD

	• **Proteinuria, Anuria and Haematuria**					
CO7	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Mutravaha Srotas Vikara (Recurrent and Chronic Renal and Genito-Urinary Conditions): • **Recurrent Nephrotic Syndrome** • **Glomerulonephritis** • **Chronic Renal Failure** • **Renal Tubular Disorders** • **Renal Malignancies** • **Proteinuria** • **Anuria** • **Haematuria**	5	Practical Training 21.1	CE	Knows-how	PL,D-BED
CO2,CO7	Evaluate Mutravaha Srotas Vikara to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	8	Experiential-Learning 21.1	CE	Does	CBL,RLE
M 21 Unit 2 Mutravaha Srotovikaras (Nephrological, Genito-Urinary disorders) II • Mutrakricchra, -Disorders of Ureter-Bladder-Urethra • Urinary tract infections • Structural Anomalies & Obstructive disorders • Renal & bladder stone • Voiding dysfunctions,Nirudhha Prakash, Dysuria • Hydrocoele **References:** 3,7,26,29,35,45,57,58,59,76,77,78,79,80,105,109						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**

CO2,CO7	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Mutravaha Srotas Vikara : • **Mutrakricchra-Ureter-Bladder-Urethra Disorders** • **Urinary Tract Infections** • **Structural Anomalies & Obstructive Disorders** • **Renal & Bladder Stones** • **Voiding Dysfunctions, Niruddha Prakash, Dysuria** • **Hydrocoele**	3	Lecture	CAN	Knows-how	CBL,D-BED,D
CO2,CO7	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Mutravaha Srotas Vikara (Recurrent and Chronic Genito-Urinary Conditions): • **Mutrakricchra-(Ureter-Bladder-Urethra Disorders)** • **Recurrent Urinary Tract Infections** • **Structural Anomalies & Obstructive Disorders** • **Renal & Bladder Stones** • **Voiding Dysfunctions (e.g., Niruddha Prakash, Dysuria)** • **Hydrocoele**	5	Practical Training 21.2	CE	Shows-how	PL,D-BED,CBL
CO2,CO7,CO8	Evaluate Mutravaha Srotas conditions to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	8	Experiential-Learning 21.2	CE	Does	CBL

M 21 Unit 3 Twaka Vikara (Skin disorders)

- Ahiputana/ Gudakutta/ Pashchadruj -Napkin Rashes and perianal infections,
- Visarpa Mahapadma- Fever with rash conditions,

- Kushtha, Kitibha ,Ekakustha- Psoriasis, Ichthyosis , Shvitra,- Vitiligo, Visphota-Pemphigusvulgaris, Impetigo, Sidhma, Vicharchika,- Eczema, Charmadala,-Atopic dermatitis, Sheetapitta – Udarda – Kotha, Urticaria- Urticarial and hypersensitive skin disorders, Youvan Pidika,-Acne Vulgaris, Vasculitis /Vascular lesions, Dadru, Pama, Vipadika – Scabies, Hand foot mouth disease, Molluscum contagiosum, Warts, Indralupta- Alopecia, Steven Johnson syndrome, Fungal Infections.

References: 6,20,21,26,27,35,43,45,46,49,58,59,75,76,77,78,79,80,105,111

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO7	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Twak Vikara (Skin Disorders): • **Ahiputana / Gudakutta / Pashchadruj – Napkin Rashes and Perianal Infections** • **Visarpa / Mahapadma – Fever with Rash Conditions** • **Kushtha, Kitibha, Ekakustha – Psoriasis, Ichthyosis** • **Shvitra – Vitiligo** • **Visphota – Pemphigus vulgaris, Impetigo** • **Sidhma, Vicharchika – Eczema** • **Charmadala – Atopic Dermatitis** • **Sheetapitta, Udarda, Kotha – Urticaria and Hypersensitive Skin Disorders** • **Youvan Pidika – Acne Vulgaris** • **Vasculitis / Vascular Lesions** • **Dadru, Pama, Vipadika – Scabies** • **Hand Foot Mouth Disease, Molluscum Contagiosum, Warts** • **Indralupta – Alopecia** • **Steven Johnson Syndrome** • **Fungal Infections**	4	Lecture	CAN	Knows-how	BS,L&GD,L&PPT
CO1,CO2,CO7	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Twak Vikara:	10	Practical Training 21.3	CE	Knows-how	D-BED,D,CBL

	• **Ahiputana / Gudakutta / Pashchadruj – Napkin Rashes and Perianal Infections** • **Visarpa / Mahapadma – Fever with Rash Conditions** • **Kushtha, Kitibha, Ekakustha – Psoriasis, Ichthyosis** • **Shvitra – Vitiligo** • **Visphota – Pemphigus vulgaris, Impetigo** • **Sidhma, Vicharchika – Eczema** • **Charmadala – Atopic Dermatitis** • **Sheetapitta, Udarda, Kotha – Urticaria and Hypersensitive Skin Disorders** • **Youvan Pidika – Acne Vulgaris** • **Vasculitis / Vascular Lesions** • **Dadru, Pama, Vipadika – Scabies** • **Hand Foot Mouth Disease, Molluscum Contagiosum, Warts** • **Indralupta – Alopecia** • **Steven Johnson Syndrome** • **Fungal Infections**					
CO2,CO7	Evaluate Twak Vikara (Skin Disorders) to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	10	Experiential-Learning 21.3	CE	Does	JC,RLE
Practical Training Activity						
Practical Training 21.1 : Management of Mutravaha Srotas Vikara- I						
The teacher will demonstrate the clinical assessment and interpretation of any one Mutravaha Srotas condition (e.g., Chronic Renal Failure, Nephrotic Syndrome, or Haematuria), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., Urine routine and microscopy, serum creatinine, USG KUB, 24-hour urine protein), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., rapidly deteriorating renal function, suspected malignancy, persistent haematuria, or anuria).						

The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment/Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., anuria, nephrotic crisis, progressive renal failure).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5hrs)

Practical Training 21.2 : Management of Mutravaha Srotas Vikara-II

The teacher will demonstrate the clinical assessment and interpretation of any one Mutravaha Srotas condition (e.g., Urinary Tract Infection, Bladder Outlet Obstruction, Renal Calculi), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., urine routine and culture, USG KUB, serum creatinine, uroflowmetry), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., obstructive uropathy, recurrent infections, non-resolving symptoms, suspected malignancy).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., obstructive uropathy, anatomical anomalies, systemic signs of infection).
- Role-play explaining Chikitsa and Pathya-Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5hrs)

Practical Training 21.3 : Management of Twaka Vikara

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any of common skin condition (e.g., Vicharchika, Kitibha, Shvitra, or Atopic Dermatitis), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., skin scraping/KOH mount, biopsy, allergy testing, CBC, ESR), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., extensive spread, suspected secondary infection, treatment-resistant lesions).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment / Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., suspected autoimmune skin disorders, extensive or non-healing lesions).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration- 6 hrs)
AND
Kinaesthetic Learning
Teacher Demonstration:
The teacher will show examples of effective educational posters/charts on common skin disorders, highlighting key Nidana, symptoms, and simple preventive tips.
Student Activity:
Students will create their own posters or charts on a selected Twak Vikara condition, focusing on causes, symptoms, Ayurvedic management, and prevention. These will be displayed for peer review and discussion. (Duration-4 hrs)

Experiential learning Activity

Experiential-Learning 21.1 : Management of Mutravaha Srotas Vikara-I

Each student will evaluate a minimum of three clinical cases or case vignettes of Mutravaha Srotas conditions (e.g., Nephrotic Syndrome, Chronic Renal Failure, Renal

Tubular Disorders, Proteinuria, Anuria, Haematuria), across varied age groups or presentations (acute/chronic) with different Doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as persistent anuria, suspected malignancy, nephrotic crisis, or rapidly deteriorating renal function.
Students will document:

- General and Dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-6 hrs)
AND
Each student will present an article on Mutravaha Srotovikara (e.g., Vrikka Shotha, Mutraghata, Proteinuria, Anuria, Haematuria, Renal Tubular Disorders) focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies. Students will critically appraisethe article’s strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings in the logbook. (Duration-2hrs)

Experiential-Learning 21.2 : Management of Mutravaha Sroto Vikara-II

Each student will evaluate a minimum of three clinical cases or case vignettes of Mutravaha Srotas conditions (e.g., Mutrakricchra, Urinary Tract Infections, Structural Anomalies, Renal or Bladder Stones, Voiding Dysfunctions, Hydrocoele), across varied age groups or presentations (acute/chronic) with different Doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as obstructive uropathy, recurrent infections, persistent haematuria, or suspected malignancy.
Students will document:

- General and Dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale

- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook.(Duration-6hrs)
AND
Each student will present an article on Mutravaha Srotovikara (e.g., Mutrakricchra, Urinary Tract Infections, Renal/Bladder Calculi, Voiding Dysfunctions, Structural or Obstructive Disorders, Hydrocoele), focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on a Samprapti-based approach and evidence-supported Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings in the logbook.(Duration-2hrs)

Experiential-Learning 21.3 : Management of Twaka Vikara

Each student will evaluate a minimum of five clinical cases or case vignettes of Twak Vikara (e.g., Vicharchika, Shvitra, Kitibha, Udarda, Youvan Pidika, Dadru, Indralupta), across varied age groups or presentations (acute/chronic) with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations (e.g., KOH mount, biopsy, CBC, ESR, IgE levels), formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and parents/caregivers. Students will also recognize and justify referral criteria such as rapidly spreading lesions, suspected autoimmune pathology, systemic involvement, or poor response to treatment.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-8 hrs)
AND
Each student will present an article on Twak Vikara (e.g., Vicharchika, Kushtha, Shvitra, Udarda, Youvan Pidika, Dadru), focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on the Samprapti-based approach and evidence-supported Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings in the logbook. (Duration-2 hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation • Treatment planning • Communication Skills • Professionalism and Documentation OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Module 22 : Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders)

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

1. Describe the concepts of endocrine, metabolic, and nutritional physiology.
2. Analyze the Nidana, Samprapti, and Lakshana of disorders such as Madhumeha, Galaganda, Ksheerajanya Vikara, and growth-related conditions.
3. Demonstrate clinical skills in diagnosis and evaluation of pediatric endocrinal, metabolic, and nutritional disorders.
4. Formulate and implement individualized treatment plans incorporating Ahara, Vihara, Aushadha, and preventive strategies for effective management.

M 22 Unit 1 Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders) I

- Ashtha Nindita Purusha and Endocrinal Disorders
- Hypo and hyper Pitutarism and pituitary gland disorders
- Hypo Thyoridsim and Hyper Thyoridsim disorders and Thyroid gland disorders
- Hypo Adrenalism and Hyper Adrenalism disorders and Adrenal gland Disorders
- Sahaja Prameha - Type 1 Diabetes Mellitus
- Approach to a child with (Abnormal stature, Kubja – Vamana- Short stature, Sthoulya - Obesity, Delayed & Precocious Puberty)

References: 3,35,43,45,58,59,75,80,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the Samprapti of Antahsravi and Chayapachayajanya Roga (Endocrinal, Metabolic Disorders), formulate Samprapti Vighatana, and explore individualized Chikitsa strategies for the following conditions: • **Ashtha Nindita Purusha and Endocrinal Disorders** • **Hypo- and Hyper-Pituitarism including Pituitary gland disorders** • **Hypo- and Hyper-Thyroidism including Thyroid gland disorders** • **Hypo- and Hyper-Adrenalism including Adrenal gland disorders** • **Sahaja Prameha (Type 1 Diabetes Mellitus)** • **Pediatric Endocrinal conditions: Abnormal stature, Kubja, Vamana (Short stature), Sthoulya (Obesity), Delayed and Precocious Puberty**	3	Lecture	CAN	Knows-how	L&GD,BS,L&PPT,L_VC
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana (treatment protocol) and individualized Management (Chikitsa) for the following Antahsravi and Chayapachayajanya Roga (Endocrinal and Metabolic Disorders): • **Ashtha Nindita Purusha and related Endocrinal Disorders** • **Hypopituitarism and Hyperpituitarism** • **Hypothyroidism and Hyperthyroidism**	5	Practical Training 22.1	CE	Knows-how	PBL,D-BED,CBL,D

	• **Hypoadrenalism and Hyperadrenalism** • **Sahaja Prameha (Type 1 Diabetes Mellitus)** • **Abnormal stature (Kubja, Vamana), Sthoulya, Delayed & Precocious Puberty**					
CO3	Evaluate Antahsravi and Chayapachayajanya Roga (Endocrinal and Metabolic Disorders) in children to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	7	Experiential-Learning 22.1	CE	Does	RLE,JC

M 22 Unit 2 Kuposhanajanya Rogas (Nutritional Disorders) I

- Phakka
- Balashosha
- Parigarbhika
- Shuska Revati
- Karshya

References: 3,4,6,10,11,12,22,23,24,25,26,27,30,35,43,45,46,57,58,59,76,78,79,81

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Kuposhanajanya Balavikaras (Nutritional Disorders in Children): • **Phakka** • **Balashosha** • **Parigarbhika** • **Shuska Revati** • **Karshya**	2	Lecture	CAN	Knows-how	L&PPT , L_VC,BS ,L&GD
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following Kuposhanajanya Roga (Pediatric Nutritional Disorders):	5	Practical Training 22.2	CE	Knows-how	PBL,D-BED,CB

	• **Phakka** • **Balashosha** • **Parigarbhika** • **Shuska Revati** • **Karshya**					L
CO6,CO7	Evaluate Kuposhanajanya Roga to formulate Samprapti Vighatana and develop an individualized Chikitsa (management) plan.	6	Experiential-Learning 22.2	CE	Does	JC,RLE

M 22 Unit 3 Kuposhanajanya Rogas (Nutritional Disorders) II

- Protein-Energy Malnutrition (PEM)
- Severe Acute Malnutrition (SAM)
- Moderate Acute Malnutrition (MAM)
- Failure to thrive
- Refeeding Syndrome
- Nutritional oedema

References: 7,29,35,45,58,59,75,105,109

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the Samprapti(etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa(management) strategies for the following nutritional disorders: • Protein Energy Malnutrition (PEM) • Severe Acute Malnutrition (SAM) • Moderate Acute Malnutrition (MAM) • Failure to Thrive • Refeeding Syndrome • Nutritional Oedema	3	Lecture	CAN	Knows-how	L&GD,L&PPT,L_VC,BS

CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana (treatment protocol) and individualized Chikitsa (Management) for the following Kuposhanajanya Roga (Pediatric Nutritional Disorders): • **Protein Energy Malnutrition (PEM)** • **Severe Acute Malnutrition (SAM)** • **Moderate Acute Malnutrition (MAM)** • **Failure to Thrive** • **Refeeding Syndrome** • **Nutritional Oedema**	5	Practical Training 22.3	CE	Knows-how	CD,CBL,PSM,PBL,D-BED
CO3	Evaluate Nutritional Disorders to formulate Samprapti Vighatana(Treatment Protocol) and develop an individualized Chikitsa (management).	7	Experiential-Learning 22.3	CE	Does	PBL,JC,RLE

M 22 Unit 4 Kuposhanajanya Rogas (Nutritional Disorders) III

- Nutritional deficiency disorders (Macronutrient deficiency - Micronutrient deficiency)
- Vitamin deficiency disorders
- Hypervitaminosis
- Rickets.

References: 35,45,58,59,75,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the Samprapti(etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa(management) strategies for the following nutritional deficiency disorders: • **Macronutrient and Micronutrient Deficiencies**	2	Lecture	CAN	Knows-how	BS,L&GD,L&PPT,L_VC

	• **Vitamin Deficiency Disorders** • **Hypervitaminosis** • **Rickets**					
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana (Treatment protocol) and individualized Chikitsa (Management) for the following nutritional disorders: • **Macronutrient and Micronutrient Deficiency Disorders** • **Vitamin Deficiency Disorders** • **Hypervitaminosis** • **Rickets**	5	Practical Training 22.4	CE	Knows-how	PBL,D-BED,CBL
CO7	Evaluate nutritional disorders to formulate Samprapti Vighatana and develop an individualized Chikitsa (management) plan based on Ayurvedic principles and integrated clinical reasoning.	6	Experiential-Learning 22.4	CE	Does	JC,PBL,RLE

Practical Training Activity

Practical Training 22.1 : Management of Antahsravi and Chayapachayajanya Roga

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any of Endocrinal, Metabolic, or Nutritional Disorder (e.g., Hypothyroidism, Type 1 Diabetes Mellitus, Childhood Obesity), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., thyroid profile, blood glucose, insulin levels, anthropometric assessment), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., growth failure, diabetic ketoacidosis, suspected adrenal crisis).
The teacher will then divide students into pairs and provide each pair with three real cases or case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.

- Plan individualized Management (Chikitsa) (Shodhana / Shamana / Pathya / Alternative or Complementary approaches).
- Identify situations requiring referral (e.g., hormonal emergencies, endocrine tumors, non-responding cases).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5 hrs)

Practical Training 22.2 : Management of Kuposhanajanya Roga

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one Nutritional Disorder (e.g., Phakka or Karshya), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., anthropometric measurements, hemoglobin, serum proteins, dietary recall), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., severe malnutrition, failure to thrive, systemic infections).
The teacher will then divide students into pairs and provide each pair with two real cases or case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Shodhana / Shamana / Pathya / Complementary interventions).
- Identify situations requiring referral (e.g., severe wasting, nutritional edema, co-existing infections).
- Role-play explaining Chikitsa and Pathya–Apathya to parents or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5 hrs)

Practical Training 22.3 : Management of Kuposhanajanya Roga-II

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one nutritional disorder (e.g., SAM, PEM, or Failure to Thrive), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., anthropometry, serum albumin, CBC, electrolytes), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa) strategy (including Ahara Kalpana, Poshana Yoga, Shamana, Shodhana, and Pathya-Apathya), and discussing criteria for

referral (e.g., severe wasting, nutritional oedema, complications like hypoglycemia or infection).
The teacher will then divide students into pairs and provide each pair with two real cases or case vignettes representing different clinical presentations.
Following the demonstration, students will:
• Analyze clinical cases in pairs
• Identify and justify appropriate investigations
• Formulate Samprapti and Samprapti Vighatana
• Plan individualized Management (Chikitsa) (Shodhana / Shamana / Alternative / Complementary treatment / Pathya)
• Identify situations requiring referral (e.g., SAM with complications, non-responsiveness)
• Role-play explaining Chikitsa and Pathya–Apathya to caregivers
• Present findings and receive peer and teacher feedback
The teacher will summarize the session. (Duration-5hrs)

Practical Training 22.4 : Manangement of Nutritional Disorders

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any Nutritional Disorder (e.g., Rickets, Iron Deficiency Anemia, or Vitamin A Deficiency), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., serum vitamin levels, CBC, serum calcium/phosphorus, X-ray), formulating Sampraptiand Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., non-responsiveness to therapy, suspected metabolic bone disease, failure to thrive).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different nutritional deficiency presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment/Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., severe growth retardation, developmental delays, metabolic derangements).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-5 hrs)

Experiential learning Activity

Experiential-Learning 22.1 : Management of Antahsravi and Chayapachayajanya Roga

Each student will evaluate a minimum of three clinical cases or case vignettes of endocrine, metabolic, and nutritional disorders (e.g., Hypothyroidism, Type 1 Diabetes Mellitus, Obesity, Short stature, Rickets, Malnutrition), across varied pediatric age groups and clinical presentations, with different doshic predominance. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to the patient and caregivers. Students will also recognize and justify referral criteria such as persistent growth failure, complications of metabolic derangement, or signs of hormonal crisis.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-4 hrs)
AND
Each student will present a journal article on an Endocrinal and Metabolic Disorder (e.g., Type 1 DM, Obesity, Rickets), highlighting study objectives, methodology, findings, and Samprapti-based, evidence-supported Chikitsa. They will critically appraise the article's strengths and limitations. Peer discussion will be guided by the teacher, and key learnings will be documented in the logbook. (Duration-3 hrs)

Experiential-Learning 22.2 : Management of Kuposhanajanya Roga

Each student will evaluate a minimum of three clinical cases or case vignettes of Kuposhanajanya Roga (nutritional disorders) in children (e.g., Phakka, Balashosha, Parigarbhika, Shuska Revati, Karshya) across different age groups and nutritional backgrounds. Students will perform detailed examinations, identify Nidana Panchaka, suggest appropriate investigations, formulate Samprapti and Samprapti Vighatana, and plan individualized Chikitsa. They will explain their plan to caregivers and identify referral needs (e.g., severe malnutrition, developmental delay, systemic complications).
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Chikitsa plan with rationale (Shodhana/Shamana/Pathya-Apathya/Alternative)
- Challenges faced
- Referral criteria and justification

All reflections and findings will be recorded in the logbook. (Duration-4 hrs)
AND
Each student will present an article on disorders such as Phakka, Balashosha, Parigarbhika, Shuska Revati, or Karshya, focusing on newer insights in their integrated management. They will outline the study objectives, methodology, key findings, and relevance to Ayurvedic clinical practice. Emphasis will be placed on Samprapti-based approaches and evidence-supported Chikitsa strategies. Students will critically evaluate the article's strengths and limitations. Peer discussion will be facilitated by the teacher, and learnings will be recorded in the logbook.(Duration-2hrs)

Experiential-Learning 22.3 : Management of Nutritional Disorders

Each student will evaluate a minimum of three clinical cases or case vignettes of pediatric nutritional disorders (e.g., PEM, SAM, MAM, Failure to Thrive, Refeeding Syndrome, Nutritional Oedema) across varied age groups and nutritional statuses. Students will conduct detailed clinical assessments, identify Nidana Panchaka, recommend suitable investigations, formulate Samprapti and Samprapti Vighatana, and plan individualized Chikitsa. They will explain the management plan to caregivers and identify indications for referral (e.g., severe malnutrition, electrolyte imbalance, failure to respond to initial treatment).
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa plan with rationale (Shodhana / Shamana / Pathya–Apathya / Alternative/Complementary approaches)
- Challenges faced during assessment or management
- Referral criteria and justification

All reflections and clinical reasoning will be recorded in the logbook. (Duration-5 hrs)
AND
Each student will present an article on pediatric nutritional disorders such as PEM, SAM, MAM, Failure to Thrive, Refeeding Syndrome, or Nutritional Oedema, focusing on newer insights in their integrated management. They will outline the study objectives, methodology, key findings, and their relevance to Ayurvedic clinical practice. Emphasis will be on Samprapti-based interpretation and evidence-supported Chikitsa strategies. Students will critically evaluate the article's strengths and limitations.

A peer discussion will be facilitated by the teacher, and learnings will be recorded in the logbook.(Duration-2 hrs)

Experiential-Learning 22.4 : Management of Nutritional Disorders-II

Each student will evaluate a minimum of two clinical cases or case vignettes of nutritional disorders (e.g., macronutrient deficiency, micronutrient deficiency disorders, hypervitaminosis, and rickets) across different age groups and presentations. Students will perform detailed case examinations, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to patients or caregivers. Students will also identify and justify referral criteria such as neurological symptoms, bone deformities, or systemic complications.
Students will document:
• General and dosha-specific clinical findings
• Diagnostic reasoning (including Samprapti Ghatakas)
• Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
• Challenges encountered in assessment or management
• Referral indicators and decision-making process
All findings and reflections will be recorded in the logbook.(Duration-4 hrs)
AND
Each student will present an article on nutritional disorders (e.g., macronutrient deficiency, micronutrient deficiency, vitamin deficiency disorders, hypervitaminosis, or rickets), focusing on newer insights in their integrated management. They will outline the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis will be placed on Samprapti-based approaches and evidence-supported Chikitsa strategies. Students will critically evaluate the article's strengths and limitations. Peer discussion will be facilitated by the teacher, and learnings will be recorded in the logbook. (Duration-2 hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation • Treatment planning • Communication Skills • Professionalism and Documentation	4

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Semester No : 6

Module 23 : Atyayika Balaroga prabandhana (Pediatric emergency management)

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

1. Demonstrate skills in identification of signs and symptoms (Dosha-prakopa, Avastha, Bala) of common pediatric emergencies and perform rapid clinical assessment.
2. Demonstrate prompt and effective emergency interventions using individualized integrative approaches.
3. Integrate Ayurvedic principles (Dosha-prakopa, Avastha, Bala) in planning individualized emergency care.
4. Apply ethical and communicative competencies in handling emergencies.

M 23 Unit 1 Atyayika Balaroga prabandhana (Pediatric emergency management) I

- Unconscious Child, Mada -Intoxication, Moorchha -Syncope, –Sanyasa -Coma, Shock and Anaphylaxis,
- Fluid and electrolyte management, Acidosis and alkalosis, Diabetic ketoacidosis,
- Acute Respiratory Distress Syndrome, Acute Abdomen.

References: 1,3,5,7,29,35,39,45,58,59,76,77,78,79,80,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for pediatric emergencies (Atyayika B?laroga) including:	3	Lecture	CAN	Knows-how	BS,L&GD,L&PPT

	• **Unconscious child (Mada, Moorchha, Sanyasa)** • **Shock and Anaphylaxis** • **Fluid and electrolyte imbalances (Acidosis, Alkalosis, Diabetic Ketoacidosis)** • **Acute Respiratory Distress Syndrome (ARDS)** • **Acute Abdomen**					,PL
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Chikitsa (Management) for Atyayika Balaroga (pediatric emergency) conditions including: • **Unconscious states (Mada, Moorchha, Sanyasa)** • **Shock and Anaphylaxis** • **Fluid and electrolyte imbalances (Acidosis, Alkalosis, Diabetic Ketoacidosis)** • **Acute Respiratory Distress Syndrome** • **Acute Abdomen**	6	Practical Training 23.1	CE	Knows-how	CBL,D-BED,PL
CO3	Design and evaluate clinically applicable management protocol for paediatric patients.	1	Lecture	CE	Knows-how	L&PPT ,L&GD
CO3	Evaluate pediatric emergency conditions to formulate Samprapti Vighatana and develop an individualized Chikitsa (management) plan.	8	Experiential-Learning 23.1	CE	Does	PBL,RLE ,JC
M 23 Unit 2 Atyayika Balaroga prabandhana (Pediatric emergency management) II • Hypothermia • Heat stroke • Status epilepticus						

- Status asthmaticus,Seizure and Convulsion
- Foreign body aspiration
- Foreign body in eye, ear and nose
- Acute haemorrhages
- Torsion of testis

References: 35,39,45,58,59,75,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Atyayika B?laroga (Pediatric Emergencies): • **Hypothermia** • **Heat Stroke** • **Status Epilepticus** • **Status Asthmaticus, Seizures and Convulsions** • **Foreign Body Aspiration** • **Foreign Body in Eye, Ear, and Nose** • **Acute Hemorrhages** • **Torsion of Testis**	3	Lecture	CAN	Knows-how	TBL,BS, L&GD,L &PPT
CO2,CO3,CO5	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following pediatric emergencies: • **Hypothermia** • **Heat stroke** • **Status epilepticus** • **Status asthmaticus, Seizure and Convulsion** • **Foreign body aspiration**	7	Practical Training 23.2	CE	Knows-how	CBL,D,PBL,D-BED

	• **Foreign body in eye, ear, and nose** • **Acute haemorrhages** • **Torsion of testis**					
CO3	Evaluate pediatric emergency conditions to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	9	Experiential-Learning 23.2	CE	Does	PBL,CBL,D-BED

M 23 Unit 3 Atyayika Balaroga prabandhana (Pediatric emergency management) III

- Daghdha vrana (Burn)
- Visha (Acute poisoning)
- Drowning
- Damsha (Dog bite, Snake bite, Scorpion bite, Human bite & Unknown bite)
- Apaghata (Accidents)
- Aghata (Injuries, Trauma).
- Life saving drugs

References: 35,37,39,45,58,59,75,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyse Samprapti, formulate Samprapti Vighatana, and explore Chikitsa strategies for the following Atyayika Balaroga (Pediatric emergencies): • **Daghdha Vrana (Burns)** • **Visha (Acute poisoning)** • **Drowning** • **Damsha (Dog bite, Snake bite, Scorpion bite, Human bite & Unknown bite)** • **Apaghata (Accidents)**	3	Lecture	CAN	Knows-how	L&PPT ,L_VC,BS,L&GD

	• **Aghata (Injuries, Trauma)** • **Use of life-saving drugs in emergency management**					
CO6,CO7	Demonstrate formulation of Samprapti Vighatana and individualized Management (Chikitsa) for the following pediatric emergency: • **Daghdha Vrana (Burns)** • **Visha (Acute poisoning)** • **Drowning** • **Damsha (Dog bite, Snake bite, Scorpion bite, Human bite & Unknown bite)** • **Apaghata (Accidents)** • **Aghata (Injuries, Trauma)** • **Administration and monitoring of life-saving drugs in emergency situations**	7	Practical Training 23.3	CE	Knows-how	D,CBL,PBL,D-BED
CO6,CO7	Evaluate pediatric emergency to formulate Samprapti Vighatana and develop an individualized emergency management (Chikitsa) plan.	9	Experiential-Learning 23.3	CE	Does	JC,RLE

Practical Training Activity

Practical Training 23.1 : Management of Atyayik Balaroga-I

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of one pediatric emergency condition (e.g., Unconscious Child—Mada, Moorchha, Sanyasa; Shock; or Anaphylaxis), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., blood gas analysis, serum electrolytes, blood glucose, ECG), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for urgent referral (e.g., severe shock, respiratory failure, altered consciousness).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different emergency presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (including Shodhana/Shamana, supportive care, diet, and emergency interventions).
- Identify situations requiring referral (e.g., respiratory distress, persistent coma, diabetic ketoacidosis).
- Role-play explaining Chikitsa and emergency care instructions to patients' caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-6 hrs)

Practical Training 23.2 : Management of Atyayika Balroga-II

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any of pediatric emergency condition (e.g., Hypothermia, Heat stroke, Status epilepticus, Status asthmaticus, Foreign body aspiration, Acute hemorrhage, or Torsion of testis), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., ABG, serum electrolytes, imaging, EEG, CBC), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa), and discussing criteria for referral (e.g., status condition, airway obstruction, circulatory compromise, or surgical emergencies).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different clinical presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment/Shodhana / Shamana / Pathya).
- Identify situations requiring referral (e.g., persistent seizures, airway compromise, surgical need, unresponsive shock).
- Role-play explaining Chikitsa and Pathya–Apathya to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session.(Duration-7 hrs)

Practical Training 23.3 : Management of Atyayika Balaroga- III

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any one pediatric emergency or trauma-related condition (e.g., Daghdha Vrana [Burn], Visha [Acute poisoning], Drowning, Damsha [Dog bite, Snake bite, Scorpion bite, Human bite], Apaghata [Accidents], or Aghata [Injuries/Trauma]), focusing on identifying Nidana Panchaka, selecting appropriate investigations (e.g., wound cultures, toxicology screening, imaging, blood tests), formulating Samprapti and Samprapti Vighatana, planning an individualized Management (Chikitsa) including emergency interventions and administration of life-saving drugs, and discussing criteria for referral (e.g., airway compromise, systemic toxicity, uncontrolled bleeding).
The teacher will then divide students into pairs and provide each pair with two real cases/case vignettes representing different emergency presentations.
Following the demonstration, students will:

- Analyze clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana.
- Plan individualized Management (Chikitsa) (Complementary/Alternative treatment/Shodhana/Shamana/Pathya-Apathya).
- Identify situations requiring urgent referral (e.g., shock, severe envenomation, extensive burns).
- Role-play explaining Chikitsa and emergency care instructions to patients or caregivers.
- Present findings and receive peer and teacher feedback.

The teacher will summarize the session. (Duration-7 hrs)

Experiential learning Activity

Experiential-Learning 23.1 : Management of Atyayik Balaroga-II

Each student will evaluate a minimum of three clinical cases or case vignettes of pediatric emergency conditions (e.g., Unconscious Child - Mada, Moorchha, Sanyasa; Shock and Anaphylaxis; Diabetic Ketoacidosis; Acute Abdomen; ARDS), across varied age groups and etiologies. Students will perform a detailed clinical assessment, identify Nidana Panchaka, suggest appropriate investigations (e.g., ABG, electrolytes, RBS, chest X-ray, ECG), formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan (Ayurvedic and integrative), and explain it to caregivers. Students will also identify and justify criteria for emergency referral (e.g., altered sensorium, respiratory failure, unresponsive shock, severe dehydration).
Students will document:

- General and dosha-specific clinical findings

- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment / Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration- 5 hrs)
AND
Each student will present an article on Atyayika B?laroga (Pediatric Emergency Conditions) such as Unconscious Child (Mada, Moorchha, Sanyasa), Shock, Anaphylaxis, Diabetic Ketoacidosis, Acute Abdomen, or ARDS, focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis will be placed on Samprapti-based understanding and evidence-supported Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings and reflections in the logbook. (Duration-3 hrs)

Experiential-Learning 23.2 : Management of Atyayika Balroga-II

Each student will evaluate a minimum of three clinical cases or case vignettes of pediatric emergency conditions (e.g., Hypothermia, Heat stroke, Status epilepticus, Status asthmaticus, Seizure and Convulsion, Foreign body aspiration, Foreign body in eye/ear/nose, Acute haemorrhages, Torsion of testis), across varied age groups and presentations. Students will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa/Management plan, and explain the plan to caregivers. Students will also recognize and justify referral criteria such as airway compromise, systemic toxicity, or surgical emergencies.
Students will document:

- General and dosha-specific clinical findings
- Diagnostic reasoning (including Samprapti Ghatakas)
- Proposed Chikitsa/Management plan (Shodhana / Shamana / Alternative/Complementary treatment/Pathya–Apathya) with rationale
- Challenges encountered in assessment or management
- Referral indicators and decision-making process

All findings and reflections will be recorded in the logbook. (Duration-6 hrs)
AND
Each student will present an article on pediatric emergencies (e.g., Hypothermia, Heat stroke, Status epilepticus, Status asthmaticus, Seizure and Convulsion, Foreign body aspiration, Acute haemorrhages, Torsion of testis) focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key

findings, and relevance to Ayurvedic clinical practice. Emphasis should be placed on Samprapti-based approaches and evidence-supported Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings in the logbook. (Duration-3 hrs)

Experiential-Learning 23.3 : Management of Atyayika Balaroga-III

Each student will evaluate a minimum of three clinical cases or case vignettes of pediatric emergency and trauma conditions (e.g., Daghdha Vrana - burns, Visha - acute poisoning, Drowning, Damsha - animal bites, Apaghata - accidents, Aghata - injuries, and related emergencies), across varied age groups and severity levels. Students will perform detailed clinical assessment, identify Nidana Panchaka, recommend appropriate emergency investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized emergency management (Chikitsa) plan, and communicate the management approach effectively to caregivers. Students will also recognize and justify referral criteria such as airway compromise, systemic toxicity, or life-threatening complications.
Students will document:
• General and dosha-specific clinical findings
• Diagnostic reasoning (including Samprapti Ghatakas)
• Proposed emergency Chikitsa/Management plan (First aid measures, Shodhana/Shamana, supportive care, and Pathya–Apathya) with rationale
• Challenges faced during assessment or management
• Referral indicators and clinical decision-making process
All findings and reflections will be recorded in the logbook. (Duration-5 hrs)
AND
Each student will present an article on Pediatric Emergency and Trauma Management (e.g., Daghdha Vrana - burns, Visha - acute poisoning, Drowning, Damsha - animal bites, Apaghata - accidents, Aghata - injuries), focusing on newer advances in their integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on Samprapti-based approach and evidence-supported emergency Chikitsa strategies. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Students will document their learnings in the logbook. (Duration-4 hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis	4

- Diagnostic Interpretation
- Treatment planning
- Communication Skills
- Professionalism and Documentation

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Module 24 : Anya Vyadhyi (Miscellaneous disorders)

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

- Describe integrative perspectives on the pathogenesis and progression of miscellaneous disorders including malignancies, autoimmune diseases, and lifestyle-related conditions.
- Demonstrate clinical skills in the diagnosis and differential diagnosis of rare and complex pediatric disorders using integrative diagnostic frameworks.
- Formulate and evaluate individualized, integrative treatment plans incorporating Ahara, Vihara, Aushadha, and Shastra Chikitsa for miscellaneous pediatric conditions.
- Critically appraise recent research and advancements relevant to pediatric oncology, autoimmune conditions, and surgical pediatric concerns to inform evidence-based practice.

M 24 Unit 1 Pediatric Malignancies

- Pediatric Malignancies (Leukemia, Hodgkin’s & Non-Hodgkin’s Lymphoma).

References: 35,45,58,59,75,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the clinical features, diagnostic findings, and explore treatment strategies of pediatric leukemia, Hodgkin’s lymphoma, and Non-Hodgkin’s lymphoma.	2	Lecture	CAN	Knows-how	L&PPT ,BS
CO2,CO3,CO5	Demonstrate clinical evaluation, diagnosis, staging, and management of pediatric leukemia and lymphomas.	5	Practical Training 24.1	CE	Knows-how	D-BED,CBL,PBL
CO3	Evaluate hematologic malignancies to analyze disease mechanisms and develop an individualized evidence-based management plan.	6	Experiential-Learning 24.1	CE	Does	CBL,DIS,D-BED,PBL

M 24 Unit 2 Autoimmune disorders

- Autoimmune disorders (SLE, Kawasaki, IgG Nephropathy)
- Rheumatological disorders (Juvenile idiopathic Arthritis)

References: 35,45,58,59,75,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the clinical features, diagnostic findings, and explore treatment strategies of pediatric autoimmune and rheumatological disorders.	2	Lecture	CAN	Knows-how	L&GD,L&PPT ,L_VC,BS
CO2,CO3,CO5	Demonstrate clinical evaluation, diagnosis, and management of autoimmune and rheumatological disorders.	5	Practical Training 24.2	CE	Knows-how	CD,D-BED,CBL
CO3	Evaluate autoimmune and rheumatological disorders to analyze disease mechanisms , and develop an individualized, evidence-based integrated management plan.	7	Experiential-Learning 24.2	CE	Does	JC,RLE,W

M 24 Unit 3 Life style Disorders

- Uccha Raktachapa, Hypertension
- Lifestyle Disorders.

References: 35,45,58,59,75,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the clinical features, diagnostic criteria, and explore integrated management strategies of lifestyle disorders.	3	Lecture	CAN	Knows-how	L&GD,L&PPT,BS
CO2,CO3,CO5	Demonstrate clinical evaluation, diagnosis, risk assessment, and integrated management of and common lifestyle disorders .	5	Practical Training 24.3	CE	Knows-how	D-BED,SDL,CBL
CO3	Evaluate lifestyle disorders to analyze disease mechanisms and develop an individualized, evidence-based integrated management plan.	6	Experiential-Learning 24.3	CE	Does	JC,RLE

M 24 Unit 4 Granthi, Vriddhi and Apachi, Gandamala

- Lasika Granthi Vikara (Lymphatic disorders), Gandamala, Apachi
- Vridhhi, Hernia
- Unduka Puchha Shotha, Appendicitis
- Vidradhi, Abscess

References: 35,45,58,59,75,76,77,78,79,80,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze the clinical features, diagnostic findings, and explore treatment strategies of following disorders: • **Lasika Granthi Vikara (Lymphatic disorders),**	3	Lecture	CAN	Knows-how	L&GD,BS,L&PPT

	• **Vriddhi (Hernia),** • **Unduka Puchha Shotha (Appendicitis)** • **Vidradhi (Abscess).**					
CO2,CO3,CO5	Demonstrate clinical evaluation, diagnosis, staging, and management of following Vikara: • **Lasika Granthi Vikara (Lymphatic disorders), Gandamala, Apachi** • **Vridhhi (Hernia)** • **Unduka puchha shotha (Appendicitis)** • **Vidradhi (Abscess)**	5	Practical Training 24.4	CE	Knows-how	CBL,SIM ,D-BED,PBL
CO3	Evaluate Granthi-Shotha-Vriddhi Vikara (e.g., Gandamala, Apachi, Vriddhi, Unduka Puchha Shotha, Vidradhi) to analyze disease mechanisms and develop an individualized, evidence-based integrated management plan.	7	Experiential-Learning 24.4	CE	Does	JC,RLE

Practical Training Activity

Practical Training 24.1 : Management of Pediatric Leukemia and Lymphomas.

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of a pediatric malignancy (e.g., ALL, Hodgkin's or Non-Hodgkin's Lymphoma), focusing on clinical features, relevant investigations (e.g., CBC, peripheral smear, bone marrow/lymph node biopsy, imaging), understanding pathophysiology, planning individualized management (chemotherapy, supportive care), and identifying referral criteria (e.g., CNS involvement, complications, relapse).
Students will then work in pairs with two case vignettes representing varied presentations.
Following demonstration, students will:

- Analyze the clinical cases.
- Justify appropriate investigations.
- Outline pathophysiology and treatment rationale.
- Plan individualized management strategies.

- Identify indications for referral.
- Role-play patient/caregiver communication.
- Present to peers and receive feedback.

The teacher will summarise the session. (Duration-5hrs).

Practical Training 24.2 : Management of Autoimmune and Rheumatological disorders

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of any autoimmune or rheumatological disorder (e.g., Systemic Lupus Erythematosus, Kawasaki disease, IgA nephropathy, or Juvenile Idiopathic Arthritis), focusing on clinical features, relevant investigations (e.g., ANA, dsDNA, CRP, ESR, urinalysis, renal function tests, echocardiography, joint imaging), understanding the underlying pathophysiology , planning individualized integrated management (e.g., immunosuppressants, IVIG, NSAIDs, combined with Dosha-Samprapti assessment, Rasayana therapy, Panchakarma where indicated, and dietary/lifestyle counseling), and identifying referral criteria (e.g., renal/CNS involvement, cardiac complications, progressive disability).
Students will then work in pairs with two case vignettes representing varied clinical presentations and integrative treatment needs (e.g., multisystem SLE requiring immunosuppression and Rasayana support; monoarticular JIA managed with NSAIDs and local treatments like Snehana and Basti).
Following demonstration, students will:

- Analyze the clinical cases from both biomedical and Ayurvedic viewpoints.
- Justify appropriate investigations.
- Outline pathophysiology and treatment rationale from both systems.
- Plan individualized integrated management strategies combining evidence-based approaches.
- Identify indications for specialist referral or higher center management.
- Role-play patient/caregiver communication (e.g., explaining chronic nature, integrating therapies safely, emphasizing compliance).
- Present to peers and receive feedback.

The teacher will summarise the session. (Duration-5hrs)

Practical Training 24.3 : Management of and Common Lifestyle Disorders

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of lifestyle disorders (e.g., obesity, diabetes), focusing on clinical features, relevant investigations

(e.g., blood pressure measurement, lipid profile, blood glucose, BMI,Nadi Pariksha, Agni evaluation), understanding pathophysiology, planning individualized integrated management (pharmacotherapy, lifestyle modification, Shamana, Shodhana, Rasayana, Yoga), and identifying referral criteria (e.g., hypertensive crisis, end-organ damage, uncontrolled comorbidities).
Students will then work in pairs with two case vignettes representing varied presentations.
Following demonstration, students will:
• Analyze the clinical cases.
• Justify appropriate investigations.
• Outline pathophysiology and treatment rationale.
• Plan individualized integrated management strategies.
• Identify indications for referral.
• Role-play patient/caregiver communication.
• Present to peers and receive feedback.
The teacher will summarise the session. (Duration-5 hrs)

Practical Training 24.4 : Management of Granthi-Shotha-Vriddhi Vikara

Demonstration
The teacher will demonstrate the clinical assessment and interpretation of Granthi-Shotha-Vriddhi Vikaras (e.g., Gandamala, Apachi, Vriddhi, Unduka Puchha Shotha, Vidradhi), focusing on clinical features, relevant investigations (e.g., local examination, systemic signs of inflammation, ultrasound, blood parameters like CBC/ESR, and Ayurvedic assessments such as Nadi Pariksha, Dashavidha Pariksha), understanding pathophysiology based on Dosha-Dushya Samoorchana and modern inflammatory mechanisms, planning individualized integrated management (e.g., Shamana, Shodhana, surgical interventions, antibiotics, and supportive care), and identifying referral criteria (e.g., abscess rupture, obstructed hernia, systemic spread, non-resolving swelling).
Students will then work in pairs with two case vignettes representing varied presentations.
Following demonstration, students will:
• Analyze the clinical cases.
• Justify appropriate investigations.
• Outline pathophysiology and treatment rationale.
• Plan individualized management strategies.
• Identify indications for referral.
• Role-play patient/caregiver communication.
• Present to peers and receive feedback.
The teacher will summarise the session. (Duration-5hrs)

Experiential learning Activity

Experiential-Learning 24.1 : Management of Hematologic Malignancies

Each student will evaluate a minimum of three clinical cases or case vignettes of pediatric hematologic malignancies (e.g., ALL, Hodgkin's, Non-Hodgkin's Lymphoma) across varied age groups and stages. They will perform clinical assessment, identify key findings, select appropriate investigations (e.g., CBC, peripheral smear, bone marrow/lymph node biopsy, imaging), analyze disease mechanisms, formulate individualized management plans, and explain them to caregivers. Referral indicators such as CNS involvement, complications, or treatment resistance must be identified and justified.
Students will document:

- Key clinical findings and diagnostic reasoning
- Management plan with justification
- Challenges in assessment or treatment
- Referral criteria and decision-making

All reflections will be recorded in the student logbook. (Duration-4hrs)
AND
Each student will present an article on pediatric hematologic malignancies (e.g., Acute Lymphoblastic Leukemia, Hodgkin's Lymphoma, Non-Hodgkin's Lymphoma) focusing on newer advances in their evidence-based management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on understanding disease mechanisms and formulating an individualized management plan based on current clinical guidelines and therapeutic advancements. Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher. Each student will document their learning and reflections in the logbook. (Duration-2hrs)

Experiential-Learning 24.2 : Management of Autoimmune and Rheumatological Disorders

Each student will evaluate a minimum of three clinical cases or case vignettes of pediatric autoimmune and rheumatological disorders (e.g., Systemic Lupus Erythematosus, Kawasaki disease, IgA nephropathy, Juvenile Idiopathic Arthritis) across varied age groups and clinical stages. They will perform clinical assessment, identify key findings, select appropriate investigations (e.g., ANA, dsDNA, CRP, ESR, urine analysis, renal function tests, imaging), analyze disease mechanisms, formulate individualized integrated management plans, and explain them to caregivers. Referral indicators such as renal or CNS involvement, cardiac complications, progressive joint damage, or treatment resistance must be identified and justified.
Students will document:
• Key clinical findings and diagnostic reasoning

• Management plan with justification (including integrative approach)
• Challenges in assessment or treatment (e.g., overlapping symptoms, compliance)
• Referral criteria and decision-making
All reflections will be recorded in the student logbook. (Duration-5hrs)
AND
Each student will present an article on pediatric autoimmune and rheumatological disorders (e.g., Systemic Lupus Erythematosus, Kawasaki disease, IgA nephropathy, Juvenile Idiopathic Arthritis), focusing on newer advances in their integrated evidence-based management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on understanding the disease mechanisms, and formulating an individualized management planbased on current clinical guidelines, research advancements, and integrative therapeutic approaches.
Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher.
Each student will document their learning and reflections in the logbook.(Duration-2 hrs)

Experiential-Learning 24.3 : Management of Lifestyle Disorders.

Each student will evaluate a minimum of three clinical cases or case vignettes of lifestyle disorders (e.g., hypertension, obesity, type 2 diabetes, dyslipidemia) across varied age groups and stages. They will perform clinical assessment, identify key findings, select appropriate investigations (e.g., blood pressure measurement, BMI, waist-hip ratio, fasting blood sugar, lipid profile, Ayurvedic assessments like Nadi Pariksha, Agni and Srotas evaluation), analyze disease mechanisms, formulate individualized integrated management plans (modern and Ayurvedic), and explain them to caregivers. Referral indicators such as hypertensive crisis, uncontrolled diabetes, or complications like nephropathy or cardiovascular involvement must be identified and justified.
Students will document:
• Key clinical findings and diagnostic reasoning
• Management plan with justification
• Challenges in assessment or treatment
• Referral criteria and decision-making
All reflections will be recorded in the student logbook.(Duration-4hrs)
AND
Each student will present an article on lifestyle disorders (e.g., hypertension, obesity, diabetes, dyslipidemia) focusing on newer advances in their evidence-based integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on understanding disease mechanisms and formulating an individualized management plan based on current clinical guidelines, research findings, and therapeutic advancements including diet, lifestyle, pharmacotherapy, and Shamana, Shodhana and Rasayana interventions.
Students will critically appraise the article's strengths and limitations. Peer discussion will be facilitated by the teacher.
Each student will document their learning and reflections in the logbook. (Duration-2 hrs)

Experiential-Learning 24.4 : Management of Granthi-Shotha-Vriddhi Vikara

Each student will evaluate a minimum of three clinical cases or case vignettes of Granthi-Shotha-Vriddhi Vikaras(e.g., Gandamala, Apachi, Vriddhi, Unduka Puchha Shotha, Vidradhi) across varied age groups and clinical stages. They will perform clinical assessment, identify key findings, select appropriate investigations (e.g., local examination, CBC, ESR, USG, Nadi Pariksha, Dashavidha Pariksha), analyze disease mechanisms (including Dosha-Dushya involvement and modern pathophysiology), formulate individualized integrated management plans (e.g., Shamana, Shodhana, surgical interventions, antibiotics), and explain them to caregivers. Referral indicators such as obstructed hernia, abscess rupture, recurrent lymphadenitis, or systemic complications must be identified and justified.
Students will document:
• Key clinical findings and diagnostic reasoning
• Management plan with justification
• Challenges in assessment or treatment
• Referral criteria and decision-making
All reflections will be recorded in the student logbook. (Duration-5 hrs)
AND

Each student will present an article on Granthi-Shotha-Vriddhi Vikara (e.g., Gandamala, Apachi, Vriddhi, Unduka Puchha Shotha, Vidradhi) focusing on newer advances in their evidence-based integrated management. They will highlight the study objectives, methodology, key findings, and relevance to clinical practice. Emphasis should be placed on understanding disease mechanisms and formulating an individualized management plan based on current clinical guidelines, Chikitsa principles, and therapeutic advancements (e.g., Shodhana, Shamana, surgical options, antibiotics, supportive care).
Students will critically appraise the article's strengths and limitations.
Peer discussion will be facilitated by the teacher.
Each student will document their learning and reflections in the logbook. (Duration-2 hrs)

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. Long Case Evaluation - 50 marks Distribution of marks- Each component x 10 marks = 50 marks • Clinical Case Analysis • Diagnostic Interpretation	4

• Treatment planning • Communication Skills • Professionalism and Documentation OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	

Paper No : 4 Bala Samvardhana and Samrakshan (Developmental and community paediatrics)

Semester No : 3

Module 25 : Pediatric developmental disabilities.

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

1. Analyse the etiological factors influencing pediatric developmental disabilities.
2. Evaluate tools and therapies for early diagnosis and management of developmental disabilities.
3. Analyze challenges (ethical, social, and cultural) in caring for children with developmental disabilities.
4. Demonstrate leadership in multidisciplinary team-based pediatric disability care.

M 25 Unit 1 Beeja Dusti Janya Vikara (Congenital, Chromosomal, Hereditary) Mamsavaha Srotodusti Janya Vikara, Myopathies and Dystrophies.

- Beeja Dushti Janya (Congenital, Chromosomal, Hereditary) Mamsavaha Srotodushti Janya Vikara, Myopathies and Dystrophies.

References: 3,20,35,45,58,59,75,85,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Analyze Beeja Dushti and Mamsavaha Srotas in relation to following genetic myopathies: • **Limb-Girdle Muscular Dystrophy (LGMD),** • **Myotonic Dystrophy,** • **Nemaline Myopathy,** • **Congenital Myopathies,** • **DMD, and BMD.**	2	Lecture	CAN	Knows-how	L&GD,L&PPT,L_VC

CO4,CO5	Demonstrate diagnosis and integrative management of Beeja Dushti Janya Mamsavaha Sroto Vikara (Myopathies).	4	Practical Training 25.1	PSY-GUD	Shows-how	PBL,CD,RP,CBL,SIM
CO5,CO6,CO7,CO8	Evaluate Beeja Dushti Janya Mamsavaha Sroto Vikara (congenital, chromosomal, and hereditary myopathies and dystrophies) formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	4	Experiential-Learning 25.1	CE	Does	SIM,RLE

M 25 Unit 2 Asthi-Majjavaha Sroto Vikara (Skeletal deformities, Musculo Skeletal Problems).

- Asthimajjavaha sroto Vikara (Skeletal deformities, Musculo-skeletal problems).

References: 3,20,35,45,58,59,75,83,85,101,105

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyze Asthi-Majjavaha Dushti and Dosha vikalpa in relation to musculoskeletal growth and disorders: • **Skeletal Dysplasia** • **Osteomyelities** • **Inflamatory Arthritis** • **Progressive muscle disorder**	2	Lecture	CAN	Knows-how	L&GD,L_VC,L&PPT ,L
CO2,CO3,CO4	Demonstrate assessment and management of skeletal deformities and musculoskeletal disorders.	4	Practical Training 25.2	PSY-GUD	Shows-how	D-BED,CBL,RP,SIM
CO4,CO5,CO6,CO7,CO8	Evaluate skeletal deformities and musculoskeletal disorders to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	6	Experiential-Learning 25.2	CE	Does	RLE

M 25 Unit 3 Mastishka Agahata janya Vyadhis (Neurological and CNS injuries), Cerebral palsy.

- Mastishka Agahata Janya Vyadhi (Neurological and CNS injuries), Cerebral palsy.

References: 3,4,5,10,11,12,35,45,51,58,59,61,75,76,85,101,105

3A	3B	3C	3D	3E	3F	3G
CO2	Explain Mastiska Agahata Janya Vyadhi (neurological and CNS injuries) with emphasis on TBIs, infections, and other CNS insults, and discuss research advances on their impact on brain development and long-term disabilities.	2	Lecture	CAN	Knows-how	L&PPT , L,L&GD, L_VC
CO4,CO5	Demonstrate interpretation and management of Mastiska Agahata Janya Vikara (neurological and CNS injuries).	4	Practical Training 25.3	PSY-GUD	Shows-how	RP,SIM,PBL
CO4,CO5,CO7 ,CO8	Evaluate Mastiska Agahata Janya Vikara (Neurological and CNS injuries) to formulate Samprapti Vighatana and develop an individualized Chikitsa plans.	6	Experiential-Learning 25.3	CE	Knows-how	RLE,SIM

M 25 Unit 4 Sarvanga, Ekanga and Adhranga Vata.

- Sarvanga, Ekanga and Adhranga Vata.

References: 3,75,76,77,78,79,80,95,96

3A	3B	3C	3D	3E	3F	3G
CO3,CO4,CO5 ,CO6,CO7,CO 8	Evaluate Vatavaha Srotas Vikara to formulate Samprapti Vighatana and develop Chikitsa plan.	3	Experiential-Learning 25.4	PSY-MEC	Does	RLE,SIM
CO3,CO4,CO6	Demonstrate evaluation and management of following Vata Vyadhi	4	Practical Training 25.4	PSY-GUD	Shows-how	RP,PER, CBL,D-BED,SIM

	• **Sarvanga Vata (Generalized Neurological Disorders)** • **Ekanga Vata (Localized Neuromuscular Disorders)** • **Adhranga Vata (Lower Limb Neuromuscular Disorders**					
CO1,CO2	Analyze Sarvanga-Adhranga Vata in correlation with Neurological Paralytic Conditions (Paraplegia and Quadriplegia).	2	Lecture	CAN	Knows-how	L,L&GD,L&PPT,BS,L_VC

M 25 Unit 5 Pakshavadha, (Quadriplegia , diplegia, Hemiplegia, paraplegia, mono plegia), Ardita (facial palsy).

- Pakshavadha, (Quadriplegia , diplegia, Hemiplegia, paraplegia, mono plegia)
- Ardita (facial palsy).

References: 3,4,20,35,45,58,59,75,76,77,78,79,80,85,95,96,97,110

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Analyze Pakshavadha in Ayurveda and correlate with types of Neurological Paralysis (Quadriplegia, Diplegia, Hemiplegia, Paraplegia, and Monoplegia).	2	Lecture	CAN	Knows-how	L&GD,L,L&PPT,L_VC
CO2,CO3,CO4,CO5	Demonstrate assessment, diagnosis, and management of following: • **Pakshvadha, Quadriplegia, Diplegia, Hemiplegia, Paraplegia, Monoplegia** • **Ardita Vata, Facial Palsy in supervised clinical settings.** Investigate, diagnose, and carry out appropriate management strategies for Pakshvadha	4	Practical Training 25.5	PSY-GUD	Shows-how	RP,D-BED,SIM,CBL

	(Quadriplegia, Diplegia, Hemiplegia, Paraplegia, Monoplegia) and Ardita vata (facial palsy) in in supervised practical settings.					
CO4,CO5,CO6,CO7,CO8	Evaluate conditions like Pakshavadha and Ardita to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	3	Experiential-Learning 25.5	CE	Knows-how	RLE
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Pakshavadha and Ardita Vata to formulate Samprapti Vighatana and design a Chikitsa plan.	4	Experiential-Learning 25.6	CE	Knows-how	RLE

M 25 Unit 6 Neurodevelopmental disabilities

- Neurodevelopmental disabilities.

References: 3,35,45,75,110

3A	3B	3C	3D	3E	3F	3G

Practical Training Activity

Practical Training 25.1 : Integrative Management of Beeja Dushti Janya Mamsavaha Sroto Vikara (Myopathies)

Demonstration
The teacher will demonstrate the assessment of pediatric myopathies using diagnostic tools (across different avasthas of vyadhi) and techniques (e.g., genetic testing, muscle biopsy, EMG). Interpretation will be correlated with hereditary factors and dosha vikalpa. An integrative treatment plan combining therapies like Abhyanga, Shashtika Shali Pinda Sweda, Virechana, Basti, Rasayana, along with physiotherapy, genetic counseling, and rehabilitative support will be discussed.
Students will work in pairs on given simulated or real case vignettes of children with suspected or diagnosed myopathies.
Following the demonstration, students will:
• Analyze symptoms using integrated frameworks.
• Practice interpreting clinical/genetic investigation findings.
• Identify dosha involvement and hereditary patterns.
• Practice designing individualized integrative treatment plans.
• Practice counseling of parents/caregivers regarding diagnosis, prognosis, and multidisciplinary care.

• Present their management plan and receive structured faculty feedback.
Teacher will summarize the session. (Duration-4hrs)

Practical Training 25.2 : Skeletal Deformities & Musculoskeletal Disorders

Demonstration
The teacher will demonstrate the clinical assessment of a pediatric musculoskeletal condition (e.g., rickets, scoliosis, congenital talipes, juvenile arthritis), focusing on identifying Nidana Panchaka, structural deformities, gait abnormalities, and musculoskeletal limitations. The demonstration will include selection and interpretation of investigations (e.g., X-ray, serum calcium, vitamin D3, ESR), formulation of Samprapti and Samprapti Vighatana, and planning of a holistic management strategy including Shodhana (e.g., Basti), Shamana (e.g., Asthi-Majjavardhaka dravyas), Rasayana, physiotherapy, bracing/splinting, and guidance on diet and lifestyle (Pathya-Apathya). Referral indicators (e.g., progressive deformity, neurological involvement) will also be discussed.
Students will be divided into pairs and given 2 case vignettes each.
Following the demonstration, students will:

- Analyze the given clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana for each case.
- Plan an individualized integrative management strategy (Ayurvedic and supportive).
- Identify criteria for referral (e.g., spinal involvement, progression of deformity, suspected neuromuscular pathology).
- Role-play counseling caregivers on prognosis, treatment options, home care, and dietary/lifestyle changes.
- Present findings to the group and receive peer and faculty feedback.

Teacher will summarise the session.(Duration-4 hrs)

Practical Training 25.3 : Management of Mastiska Agahata Janya vikaras (Neurological and CNS injuries)

Demonstration
Teacher’s Demonstration:
The teacher will demonstrate the clinical assessment of a neonate or child with suspected CNS injury (e.g., cerebral palsy), emphasizing signs such as delayed milestones,

abnormal tone/posture, or seizure activity. Using both Ayurvedic (e.g., Dosha Dushti, Avayava Vikriti) and modern frameworks (e.g., neuroimaging, reflex assessment, perinatal history), the teacher will explain how to identify Nidana Panchaka, formulate Samprapti and Samprapti Vighatana, and plan individualized management. Treatment modalities discussed will include Ayurvedic therapies (e.g., Abhyanga, Shashtika Shali Pinda Sweda, Basti, Rasayana) along with physiotherapy, rehabilitation strategies, and referral guidelines.
Student Practical Activity:
Students will be divided into small groups and assigned case vignettes or observed real-time NICU/PICU follow-ups of children with CNS injury or suspected cerebral palsy.
Following the demonstration, students will:

- Analyze the case using Ayurvedic and biomedical perspectives.
- Identify relevant clinical signs and appropriate diagnostic investigations (MRI, developmental scales, etc.).
- Formulate Samprapti and Samprapti Vighatana.
- Design a stepwise, individualized, integrative management plan.
- Simulate caregiver counseling on long-term care, therapies, and lifestyle modifications.
- Discuss indications for referral (e.g., refractory seizures, progressive motor loss, need for advanced rehab).
- Present findings and receive structured feedback from peers and faculty.

Teacher will summarise the session.(Duration-4hrs)

Practical Training 25.4 : Management of Vata Vyadhi

Demonstration
The teacher will demonstrate the clinical assessment of a patient presenting with Sarvanga Vata (generalized involvement), Ekanga Vata (localized involvement), or Adhranga Vata (lower limb involvement). Analysing concepts of Dosha Dushti, Avayava Vikriti, Nidana Panchaka alongside modern neurological examinations (e.g., muscle strength testing, reflexes, electromyography), the teacher will explain the identification of disease stage (Avastha), Samprapti, and Samprapti Vighatana. The teacher will demonstrate how to formulate an integrative management plan including Shamana, Abhyanga, Shashtika Shali Pinda Sweda, Virechana, Basti, and Rasayana, complemented with rehabilitative physiotherapy and supportive care.
Students will be then divided into pairs and provided with real or simulated case vignettes representing Sarvanga Vata, Ekanga Vata, and Adhranga Vata presentations.
Following the demonstration, students will:

- Perform clinical evaluation using Ayurvedic and biomedical frameworks.

- Identify key signs and symptoms specific to each Vata type.
- Formulate Samprapti and Samprapti Vighatana for each case.
- Develop individualized integrative management plans combining Ayurvedic and modern therapies.
- Simulate counseling sessions with patients or caregivers explaining the condition, treatment options, and prognosis.
- Discuss indications for referral or multidisciplinary intervention.
- Present their assessment and management plans to peers and faculty for feedback.

Teacher will summarise the session.(Duration-4hrs)

Practical Training 25.5 : Diagnosis and Management of Pakshavadha (Various Forms of Paralysis) and Ardita (Facial Palsy)

Demonstration
The teacher will demonstrate the clinical assessment of Pakshvadha (Quadriplegia, Diplegia, Hemiplegia, Paraplegia, Monoplegia) or Ardita Vata (facial palsy), focusing on identifying Nidana Panchaka, neurological deficits, muscle tone abnormalities, motor and sensory impairments, and functional limitations. The demonstration will include selection and interpretation of investigations (e.g., MRI/CT brain and spine, nerve conduction studies, relevant blood tests), formulation of Samprapti and Samprapti Vighatana, and planning of a holistic management strategy including Shodhana (e.g., Basti, Nasya), Shamana (e.g., Vatahara and Rasayana dravyas), physiotherapy, supportive devices, and guidance on diet and lifestyle (Pathya-Apathya). Referral criteria (e.g., worsening neurological signs, respiratory compromise) will also be discussed.
Students will be divided into pairs and given 2 case vignettes each.
Following the demonstration, students will:
• Analyze the clinical cases in pairs.
• Identify and justify appropriate investigations.
• Formulate Samprapti and Samprapti Vighatana for each case.
• Plan an individualized management strategy.
• Identify criteria for referral (e.g., progressive neurological deficit, autonomic involvement).
• Role-play counseling caregivers on prognosis, treatment options, home care, and dietary/lifestyle modifications.
• Present findings to the group and receive peer and faculty feedback.
The teacher will summarize the session.
(Duration:4hrs)

Experiential learning Activity

Experiential-Learning 25.1 : Management of Beeja Dushti Janya Mamsavaha sroto vikaras (myopathies and dystrophies)

Evaluate a minimum of three clinical cases or case vignettes of congenital, chromosomal, and hereditary myopathies and dystrophies (e.g., Duchenne Muscular Dystrophy, Spinal Muscular Atrophy, congenital myopathies) across varied presentations (e.g., early-onset/late-onset, progressive/stationary, genetic/familial) and doshic predominance. Perform detailed clinical examination, identify Nidana Panchaka, recommend appropriate investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan to the patient and caregivers, incorporating integrated strategies such as Shamana, Shodhana, Sattvavajaya, Pathya-Apathya, and physiotherapy or rehabilitation support. All findings and reflections will be compiled in the clinical logbook. (Duration-4hrs)
Experiential-Learning 25.2 : Management of Skeletal Deformities and Musculoskeletal Disorders
Each student will evaluate a minimum of three clinical cases or case vignettes of skeletal deformities and musculoskeletal disorders (e.g., scoliosis, rickets, juvenile arthritis, congenital talipes) across varied presentations (e.g., congenital/acquired, acute/chronic, nutritional/traumatic/inflammatory) and doshic predominance. They will perform detailed clinical examination, assess Asthivaha, Mamsavaha, Rasavaha, and Raktavaha Srotas involvement, identify Nidana Panchaka, advise relevant investigations, and formulate Samprapti and Samprapti Vighatana. Students will design an individualized Chikitsa plan (Shodhana / Shamana / Alternative/Complementary/Sattvavajaya / Pathya-Apathya) and communicate it effectively to caregivers within supervised clinical settings. All findings and reflections will be compiled in the clinical logbook. (Duration-6hrs)
Experiential-Learning 25.3 : Management of Mastiska Agahata Janya Vikara (neurological and CNS injuries).
Each student will evaluate a minimum of three clinical cases or case vignettes of Mastishka Aghata Janya Vikara (e.g., cerebral palsy, post-traumatic brain injury, CNS infections) across varied presentations (e.g., congenital/acquired, acute/chronic, ischemic/traumatic/degenerative) and doshic predominance. They will perform detailed clinical examination, assess Vatavaha, Rasavaha, and Raktavaha Srotas involvement, identify Nidana Panchaka, advise relevant investigations, and formulate Samprapti and Samprapti Vighatana. Students will design an individualized Chikitsa plan (Shodhana / Shamana / Alternative/Complementary/Sattvavajaya / Pathya-Apathya) and communicate it effectively to caregivers within supervised clinical settings. All findings and reflections will be compiled in the clinical logbook. (Duration-6hrs)
Experiential-Learning 25.4 : Management of Vatavaha Srotas Vikara
Each student will evaluate a minimum of three clinical cases or case vignettes of Vatavyadhi (e.g., Sarvanga Vata – Generalized Neurological Disorders, Ekanga Vata – Localized Neuromuscular Disorders, Adhranga Vata – Lower Limb Neuromuscular Disorders) with varied clinical profiles (e.g., acute/chronic, traumatic/degenerative/autoimmune origins) and doshic predominance. They will conduct a detailed clinical examination, assess involvement of Vatavaha and related Srotas, identify Nidana Panchaka, recommend appropriate investigations, and formulate Samprapti and Samprapti Vighatana. Based on this, students will develop and explain an individualized Chikitsa plan to the patient and caregivers. All findings and reflections will be maintained in the clinical logbook. (Duration-3 hrs)
Experiential-Learning 25.5 : Management of Pakshavadha and Ardita.

Each student will evaluate a minimum of three clinical cases or case vignettes of Vatavaha Srotovikara (e.g., Pakshavadha – Hemiplegia/Paraplegia, Ardita – Facial Palsy) across varied presentations (e.g., acute/chronic, ischemic/traumatic/degenerative) and doshic predominance. They will perform detailed clinical examination, assess Vatavaha and related Srotas involvement, identify Nidana Panchaka, advise relevant investigations, and formulate Samprapti and Samprapti Vighatana. Students will design an individualized Chikitsa plan (Shodhana / Shamana / Alternative/Complementary/Sattvavajaya / Pathya-Apathya) and communicate it effectively to the patient and caregivers.
All findings and reflections will be compiled in the clinical logbook. (Duration-3hrs)

Experiential-Learning 25.6 : Management of Pakshavadha and Ardita Vata .

Each student will evaluate a minimum of three clinical cases or case vignettes of Vatavyadhi (e.g., Pakshavadha – Hemiplegia/Paraplegia, Ardita Vata – Facial Palsy) across varied clinical presentations (e.g., acute/chronic onset, post-traumatic/post-infective/degenerative) with different doshic predominance. They will perform detailed case examination, identify Nidana Panchaka, advise appropriate investigations, formulate Samprapti and Samprapti Vighatana, develop an individualized Chikitsa plan(Shodhana / Shamana / Complementary/Alternative/Pathya-Apathya), and explain it to the patient and caregivers.All findings and reflections will be recorded in the logbook. (Duration-4 hrs)

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. OSCE Stations : Each station x 10 marks=50 marks Station 1: Case – Congenital myopathy (Bheeja Dushti Janya mamsa kshaya) evaluation Station 2: Match Mamsavaha Srotodushti signs with clinical patterns Station 3: Prescribe Ayurvedic management for CP/Vata Vyadhi Station 4: Interpret neuroimaging reports in light of Mastishka Agahata Station 5: Role Play – Parental counseling in neurodevelopmental delay OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Module 26 : Manovaha Sroto Vikaras, Psychiatric and Behavioral Disorders-I

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

- Discuss Manasika Vikara in children from Ayurvedic and contemporary perspectives.
- Assess Beejabhaga (genetic), Dosha, and Parivesha (environmental) factors in Manasika Vikara.
- Formulate individualized treatment using Ayurvedic therapies like Medhya Rasayana and modern approaches.
- Counsel parents with holistic counseling on Aahara, Vihara, and Chikitsa for sustained Manasika Bala.

M 26 Unit 1 Unmada, Childhood psychosis (Catatonia, Phobic and Hallucination disorders).

- Unmada
- Childhood psychosis (Catatonia, Phobic and Hallucination disorders).

References: 3,35,43,45,58,59,75,76,77,78,79,80,95,96

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4 ,CO5	Analyze the Samprapti (Etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa (Management) strategies for Unmada(Psychosis).	2	Lecture	CAN	Knows-how	L&PPT , L,L&GD, BS,L_VC
CO2,CO3,CO4 ,CO5,CO6,CO 7	Demonstrate assessment and management of Unmada and Childhood Psychotic Disorders (e.g., catatonia, phobias, hallucinations).	4	Practical Training 26.1	PSY-GUD	Shows-how	D,CBL,SI M,PBL,R P
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Evaluate and apply appropriate diagnostic and management strategies for Unmada, and childhood psychosis.	5	Experiential-Learning 26. 1	CE	Does	RLE,CBL

M 26 Unit 2 Atatwabhinivesha (Schizophrenia spectrum disorders) Suicide and attempted suicide.

- Atatwabhinivesha (Schizophrenia spectrum disorders)
- Suicide and attempted suicide.

References: 3,35,45,58,59,75

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5	Analyze the integrated assessment of Atatwabhinivesha, Schizophrenia Spectrum Disorders and Suicidal Tendencies.	1	Lecture	CAN	Knows-how	L_VC,L&GD,L&PPT
CO2,CO3,CO4,CO5,CO6,CO7	Demonstrate assessment and integrative management of Atatwabhinivesha, Schizophrenia Spectrum Disorders, and Suicidal Behaviors.	3	Practical Training 26.2	PSY-MEC	Shows-how	CBL,SIM,PBL,D,RP
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate and implement effective management strategies for Atatwabhinivesha, Schizophrenia Spectrum Disorders and Suicide Prevention.	4	Experiential-Learning 26.2	PSY-MEC	Does	PBL,JC,SIM,D-BED,CBL

M 26 Unit 3 Psychosomatic Disorders, Manas Taapa (Anxiety Disorders, Mood Disorders),

- Psychosomatic Disorders
- Manas Taapa (Anxiety Disorders, Mood Disorders)

References: 3,35,41,42,45,58,59,75,76,78,79

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze the assessment and diagnosis of Psychosomatic Disorders and Manastapa (Anxiety and Mood Disorders).	2	Lecture	CAN	Knows-how	L&PPT , L_VC,L&GD
CO2,CO3,CO4,CO5,CO6	Demonstrate assessment and integrative management of psychosomatic disorders and Manas Taapa	4	Practical Training 26.3	PSY-GUD	Shows-how	PBL,D-BED,RP,C

						D,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate and apply appropriate management strategies for Psychosomatic Disorders and Manastaapa(anxiety or mood disorders) in clinical practice.	5	Experiential-Learning 26.3	CE	Does	CBL,RLE

M 26 Unit 4 Vishada (Depression), Jagarukata, Nidra-luptata (Sleep Disorders), Eating Disorders.

- Vishada (Depression)
- Jagarukata
- Nidra-luptata (Sleep Disorders)
- Eating Disorders.

References: 3,4,26,35,45,58,59

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized management (Chikitsa) strategies for following Manovaha Srotas Vikara: • **Vishada (Depression)** • **Jagarukata (Insomnia)** • **Nidra-luptata (Sleep disturbances)** • **Eating Disorders**	2	Lecture	CAN	Knows-how	L&PPT , L_VC,L&GD
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assessment and management of Vishada, Sleep Disorders, and Eating Disorders.	4	Practical Training 26.4	PSY-GUD	Shows-how	PBL,PAL,D,SIM,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Formulate Samprapti Vighatana and develop an individualized Chikitsa plan for following:	5	Experiential-Learning 26.4	CS	Does	D-BED,W,CBL,RP,PBL

	• **Vishaada, Depression** • **Jaagarukata, Insomnia** • **Nidra Luptata, Sleep disorders** • **Eating Disorders**					

M 26 Unit 5 Anaaryata (Disruptive impulse - control and Conduct disorders).

- Anaaryata (Disruptive impulse - control and Conduct disorders)

References: 4,32,35,41,42,45,58,59,75,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized Chikitsa (management) strategies for the following Manovaha Srotas Vikara in children: • Anaryata (Conduct Disorder) • Intermittent Explosive Disorder • Oppositional Defiant Disorder (ODD)	1	Lecture	CAN	Knows-how	L&PPT , L_VC,L&GD
CO2,CO3,CO4,CO5,CO6,CO7	Demonstrate assessment and integrative management of Anaaryata(Disruptive Impulse-Control and Conduct Disorders) and related disruptive impulse-control disorders: • **Oppositional Defiant Disorder** • **Conduct Disorder** • **Intermittent Explosive Disorder**	3	Practical Training 26.5	PSY-GUD	Shows-how	CBL,SIM,D,PBL,W
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Recognize and differentiate types of Anaaryata (Disruptive Impulse-Control and Conduct Disorders) to formulate Samprapti Vighatana and develop Chikitsa plan	4	Experiential-Learning 26.5	CS	Knows-how	PBL,CBL,RLE

M 26 Unit 6 Tantrum and breath holding spells

- Temper Tantrum
- Breath holding spells

References: 4,32,35,41,42,45,58,59,75,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized management (Chikitsa) strategies for the following Manovaha Srotas Vikara: • **Temper Tantrums** • **Breath Holding Spells**	2	Lecture	CAN	Knows-how	L&GD,L_VC,L&PPT
CO2,CO3,CO4,CO5,CO6	Demonstrate assessment and management of tantrums and breath-holding spells.	2	Practical Training 26.6	PSY-GUD	Shows-how	SIM,D,RP,PBL,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Temper tantrums and Breath-holding spells to formulate Samprapti Vighatana and develop a Chikitsa plan.	3	Experiential-Learning 26.6	CE	Knows-how	PBL,RLE,CBL

Practical Training Activity

Practical Training 26.1 : Assessment and Management of Unmada, Childhood Psychosis.

Demonstration
The teacher will demonstrate the clinical assessment of Unmada and childhood psychotic conditions (e.g., catatonia, phobic states, hallucinations), focusing on identifying Nidana Panchaka, behavioral and emotional disturbances, cognitive impairments, and altered perception or response patterns. The demonstration will include selection and interpretation of investigations (e.g., psychological assessments, EEG, neuroimaging, serum electrolytes), formulation of Samprapti and Samprapti Vighatana, and planning of a holistic management strategy including Shodhana (e.g., Virechana, Nasya), Shamana (e.g., Medhya Rasayana, Manonukulakar dravyas), Satvavajaya Chikitsa,

environmental modifications, and guidance on diet, lifestyle (Pathya-Apathya), and family support systems. Referral indicators (e.g., risk of harm, lack of response to treatment, suspected organic cause) will also be discussed.
Student Activity:
Students will be divided into pairs and given 2 case vignettes each.
Following the demonstration, students will:
• Analyze the given clinical cases in pairs.
• Identify and justify appropriate investigations.
• Formulate Samprapti and Samprapti Vighatana for each case.
• Plan an individualized integrative management strategy (Ayurvedic and supportive).
• Identify criteria for referral (e.g., severe aggression, persistent psychosis, suspected neurodevelopmental comorbidity).
• Role-play counseling caregivers on prognosis, treatment options, home care strategies, and lifestyle/dietary adjustments.
• Present findings to the group and receive peer and faculty feedback.
The teacher will summarize the session. (Duration-4hrs)

Description: Presentation/Demo_Bedside/CBL/Role-play/Simulation
Instructions: Under the supervision of the teacher, using either of the above-mentioned methods, scholars shall be able to
Examine, diagnose, and apply appropriate management strategies for Unmada, Atatwabhinivesha, and childhood psychosis (including Catatonia, Phobic, and Hallucination disorders) in clinical or educational settings.

1. Interactive Simulation and Observation for Symptom Recognition
Activity: Scholars engage in simulations of childhood psychosis, focusing on catatonic symptoms (rigidity, posturing), phobic reactions (intense fears and avoidances), and hallucinations (sensory misperceptions). Each scholar alternates between performing and observing, using a structured checklist to track behaviors and note critical symptoms. This exercise enhances diagnostic observation skills and highlights subtle symptom variations. Faculty led a debrief session afterward, discussing symptom recognition, differentiating psychotic symptoms, and understanding the Ayurvedic perspective of Rajas, Tamas, and Pitta-Vata Dosha Vaishamya in Unmada.

2. Skill Stations for Ayurvedic Interventions:
Activity: Scholars rotate through skill stations where they practice Ayurvedic treatments tailored for managing symptoms of Unmada. Each station focuses on:

Sattvavajaya (mind therapy) for emotional support,
Medhya Rasayana (herbal cognitive enhancers like Brahmi and Shankhapushpi for mental clarity),
Panchakarma therapies including:
Vamana (therapeutic emesis for clearing excess Kapha),
Virechana (therapeutic purgation for Pitta pacification),
Basti Karma (therapeutic enema for Vata balancing),
Nasya (nasal administration to promote mental clarity and balance).
At each station, scholars practice application techniques under faculty supervision, focusing on safety, dosage, and therapeutic indications. This hands-on experience helps scholars understand how Panchakarma therapies, alongside Sattvavajaya and Medhya Rasayana, address Rajas, Tamas, and Pitta-Vata Dosha Vaishamya in managing psychotic symptoms.

3. Problem-Based Learning (PBL) for Integrative Treatment Planning
Activity: Using a Problem-Based Learning (PBL) format, scholars work in small groups on case scenarios involving childhood psychosis, with symptom profiles that include catatonia, phobias, and hallucinations. They analyze the case details, identify underlying Ayurvedic causes, and develop integrative treatment plans that incorporate Ayurvedic therapies (Sattvavajaya, Panchakarma) and supportive techniques, such as behavioral approaches for managing phobias. Each group presents its treatment approach, fostering collaborative learning. Faculty guide discussions on creating patient-specific, holistic care plans that account for Rajas, Tamas, and Pitta-Vata Dosha Vaishamya.
4. Roleplay for Family Counseling with 360-Degree Feedback
Activity: Scholars participate in roleplay sessions to practice counseling family members of children with Unmada, focusing on explaining symptoms like hallucinations, phobias, and catatonia in understandable terms. They discuss Ayurvedic lifestyle adjustments, therapeutic options (e.g., Sattvavajaya for mental strength, Panchakarma therapies), and practical home care strategies. Faculty and peers provide 360-degree feedback on communication style, empathy, and clarity, helping scholars refine their family-centered counseling skills.

5. Reflective Journaling and Portfolio Development
Activity: Scholars maintain a reflective portfolio documenting their experiences with clinical observations, case simulations, skill practice, and counseling sessions. Each entry includes reflections on the impact of Rajas, Tamas, and Pitta-Vata Dosha Vaishamya in Unmada, as well as insights on treatment effectiveness and personal growth in managing pediatric psychosis. Faculty periodically review these portfolios, offering feedback that encourages self-reflection and critical thinking in handling psychotic disorders compassionately and skillfully.

Practical Training 26.2 : Assessment and Management of Atatwabhinivesha, Schizophrenia Spectrum Disorders, and Suicidal Behaviors.

Demonstration
The teacher will demonstrate the clinical assessment of Atatwabhinivesha, schizophrenia spectrum disorders, and suicidal behaviors (e.g., delusions, hallucinations,

withdrawal, suicidal ideation), focusing on identifying Nidana Panchaka, Manasika Dosha involvement, risk factors, and red flag symptoms. The demonstration will include selection and interpretation of relevant investigations (e.g., psychiatric evaluation tools, mental status examination, neuroimaging if indicated), formulation of Samprapti and Samprapti Vighatana, and planning of a holistic management strategy including Satvavajaya Chikitsa, Yukti Vyapashraya Chikitsa (e.g., Medhya Rasayana, Manovaha Srotoshodhaka drugs), supportive psychotherapy, safety planning, and dietary/lifestyle guidance (Pathya-Apathya). Indicators for emergency referral (e.g., active suicidal intent, severe psychosis) will also be discussed.
Student Activity:
Students will be divided into pairs and given 2 anonymized case vignettes each.
Following the demonstration, students will:

- Analyze the clinical cases in pairs.
- Identify and justify appropriate investigations.
- Formulate Samprapti and Samprapti Vighatana for each case.
- Plan an integrative management strategy (Ayurvedic and supportive).
- Identify criteria for urgent referral (e.g., suicidal risk, psychotic break).
- Role-play caregiver or patient counseling on prognosis, treatment adherence, crisis response, and home support.
- Present findings to the group and receive peer and faculty feedback.

The teacher will summarize the session.(Duration-3hrs)

Description: Presentation/Demo_Bedside/CBL/Role-play/Simulation
Instructions: Under the supervision of the teacher, using either of the above-mentioned methods, scholars shall be able to
Assess, diagnose, and implement appropriate interventions for Atatwabhinivesha,Schizophrenia spectrum disorders, as well as the management of suicide and attempted

suicide cases in clinical or educational settings.

1. Simulation Exercise for Recognizing Symptoms and Assessing Suicide Risk

Activity: Scholars participate in simulated cases displaying symptoms of Atatwabhinivesha, such as distorted reasoning, hallucinations, and delusions, alongside suicide risk behaviors. They use tools like the Positive and Negative Syndrome Scale (PANSS) and the Columbia-Suicide Severity Rating Scale (C-SSRS) to assess symptoms and document findings. Conventional treatment methods are discussed post-simulation, where faculty introduce antipsychotic medications (e.g., Risperidone, Olanzapine) as primary treatment options for managing psychotic symptoms. Faculty also explain the importance of cognitive behavioral therapy (CBT) in managing negative thoughts and behaviors. A debrief session reinforces understanding of symptom recognition, conventional treatment roles, and the Ayurvedic perspective on symptom interpretation.

2. Skill Stations for Ayurvedic and Conventional Interventions

Activity: Scholars rotate through skill stations to practice Ayurvedic interventions like Shodhana (e.g., Vamana for Dosha balancing), Panchagavya Ghrita Paana (medicated ghee), Medhya Rasayana (cognitive-supportive herbs like Brahmi), and Sattvavajaya (mind-strengthening practices). Conventional treatments are also practiced, including roleplay scenarios for psychoeducation and social skills training to improve family understanding and patient interaction skills. Faculty demonstrate each approach, showing how Ayurvedic and conventional methods can complement each other in a holistic care plan.

3. Case-Based Group Discussions on Integrative Treatment Planning

Activity: Scholars work in groups on case studies of patients with Atatwabhinivesha, examining symptoms like hallucinations, distorted thinking, and suicidal ideation. They review the clinical history and assessment results (PANSS, C-SSRS) and develop a combined treatment plan. Conventional options such as antipsychotic medications, CBT, and family therapy are integrated alongside Ayurvedic interventions (Shodhana, Medhya Rasayana). Each group discusses the rationale for each treatment and how it addresses specific symptoms, while faculty guide discussions on balancing Ayurvedic and conventional methods in individualized care plans.

4. Scenario-Based Suicide Prevention Counseling Roleplay

Activity: Scholars participate in roleplay sessions to simulate suicide prevention counseling for patients exhibiting suicidal ideation and distorted perceptions. Using the C-SSRS, they assess suicide risk and practice creating a safety plan. Faculty introduce supportive strategies from both conventional and Ayurvedic perspectives, emphasizing CBT techniques for managing negative thoughts and Sattvavajaya therapy for mental resilience. Faculty and peers provide feedback on empathy, communication clarity, and the effectiveness of integrating both counseling methods.

5. Reflective Journaling and Portfolio Development

Activity: Scholars maintain a portfolio to record their experiences, reflections, and learning points from diagnostic assessments, therapy practices, and counseling activities. Entries include reflections on managing symptoms through antipsychotic medications, insights on CBT, and the use of Ayurvedic therapies. Faculty periodically review journals, offering feedback to encourage self-assessment and understanding of a blended approach in treating Atatwabhinivesha.

Practical Training 26.3 : Management of Psychosomatic disorders and Manas Taapa.

Demonstration
The teacher will demonstrate the clinical assessment of psychosomatic disorders and Manas Taapa (e.g., anxiety-induced gastritis, stress-related headaches, depressive somatic symptoms), focusing on identifying Nidana Panchaka, Manasika Dosha imbalance, psychosocial triggers, and presenting somatic complaints. The demonstration will include selection and interpretation of relevant investigations (e.g., stress scales, HRV analysis, relevant biochemical tests), formulation of Samprapti and Samprapti Vighatana, and planning of a comprehensive management strategy including Satvavajaya Chikitsa, Yukti Vyapashraya Chikitsa (e.g., Medhya Rasayana, Vata-Pittahara drugs), relaxation therapies, and guidance on diet, lifestyle (Pathya-Apathya), and stress management. Referral indicators (e.g., worsening psychological state, need for psychiatric support) will also be discussed.
Student Activity:
Students will be divided into pairs and given 2 case vignettes each.
Following the demonstration, students will:
• Analyze the given clinical cases in pairs.
• Identify and justify appropriate investigations.
• Formulate Samprapti and Samprapti Vighatana for each case.
• Plan an individualized integrative management strategy (Ayurvedic and supportive).
• Identify referral criteria (e.g., persistent or worsening symptoms, risk of psychiatric comorbidity).
• Role-play counseling for stress reduction, lifestyle modifications, and emotional support.
• Present findings to the group and receive peer and faculty feedback.
The teacher will summarize the session.(Duration-4 hrs)

Description: Presentation/Demo_Bedside/CBL/Role-play/Simulation
Instructions: Under the supervision of the teacher, using either of the above-mentioned methods, scholars shall be able to
Explore, diagnose, and formulate management strategies for psychosomatic disorders and Manas Taapa (Anxiety Disorders, Mood Disorders) in clinical or educational settings.

Simulation Exercise for Recognizing Psychosomatic and Emotional Symptoms
Activity: Scholars engage in simulations of psychosomatic disorders, focusing on symptoms of anxiety (excessive worry, restlessness) and mood disorders (depression, irritability). They use assessment tools like the Hamilton Anxiety Rating Scale (HAM-A) for anxiety and the Patient Health Questionnaire (PHQ-9) for mood assessment.

After assessing and documenting each case, scholars participate in a faculty-led discussion on interpreting these symptoms in relation to Rajas, Tamas, and Vata Dosha imbalances as described in Ayurveda.

2. Skill Stations for Ayurvedic Treatments:
Activity: Scholars rotate through skill stations to practice Ayurvedic interventions for psychosomatic symptoms. They learn to apply:
Sattvavajaya (mind-strengthening techniques like meditation and guided imagery),
Medhya Rasayana (herbs such as Brahmi and Shankhapushpi for cognitive support), and
Panchakarma therapies like Shirodhara (calming oil flow therapy) and Abhyanga (therapeutic massage).

At each station, scholars focus on correct technique, timing, and dosage for each therapy. Faculty discuss how these therapies support mental clarity, reduce emotional tension, and address the psychosomatic connections of Manas Taapa.

3. Case-Based Group Discussions for Integrative Treatment Planning
Activity: In groups, scholars analyze case studies of patients with symptoms of anxiety and mood disorders in psychosomatic contexts. Each group reviews the clinical presentation, assessment findings, and underlying Ayurvedic concepts of Dosha imbalances (Rajas and Tamas). They develop a comprehensive treatment plan incorporating Ayurvedic therapies (Medhya Rasayana, Sattvavajaya) and supportive practices like cognitive-behavioral techniques for emotional regulation. Faculty guide discussions on adapting treatment plans for individual patient needs, emphasizing an integrated approach to mental health.

4. Roleplay for Patient Counseling with 360-Degree Feedback
Activity: Scholars participate in roleplay sessions to practice counseling for patients with anxiety and mood disorders, focusing on effective communication, empathy, and practical guidance. They introduce Ayurvedic recommendations for managing stress, including dietary and lifestyle modifications, along with relaxation practices. Faculty and peers provide 360-degree feedback on communication style, clarity, and responsiveness to patient concerns, helping scholars improve their counseling skills for psychosomatic conditions.

5. Reflective Journaling and Portfolio Development
Activity: Throughout the unit, scholars keep a reflective journal documenting their experiences in assessment, treatment, and counseling for psychosomatic symptoms. They write about the relation that they observe between mental health and Dosha vaishamyata and reflect on their learning progress. Faculty periodically review journals, offering feedback to support self-reflection, critical thinking, and continuous growth in addressing psychosomatic disorders.

Practical Training 26.4 : Assessment and Mangement of Vishada (Depression), sleep disorders, and eating disorders

Demonstration

The teacher will demonstrate clinical assessment of Vishada (depression), sleep disorders (e.g., insomnia, poor sleep quality), and eating disorders (e.g., loss of appetite, binge eating), focusing on identifying Nidana Panchaka, Manasika Dosha imbalances (Rajas, Tamas, Vata), and symptom patterns. The demonstration will include the use and interpretation of assessment tools such as Beck Depression Inventory (BDI), Pittsburgh Sleep Quality Index (PSQI), and Eating Attitudes Test (EAT-26), formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy including Satvavajaya Chikitsa, Yukti Vyapashraya Chikitsa, Rasayana therapy, and lifestyle guidance (Pathya-Apathya). Referral indicators (e.g., severe symptoms, risk of complications) will also be discussed.
Student Activity:
Scholars will engage in simulated cases illustrating symptoms of Vishada, sleep disorders, and eating disorders. Using assessment tools (BDI, PSQI, EAT-26), they will assess and document findings.
Following the demonstration, students will:
• Analyze the clinical cases in pairs.
• Identify and justify appropriate investigations and assessment tools.
• Formulate Samprapti and Samprapti Vighatana for each case.
• Plan an individualized integrative management strategy (Ayurvedic and supportive).
• Identify criteria for referral (e.g., severe depression, chronic insomnia, disordered eating complications).
• Participate in faculty-led discussion on Ayurvedic understanding of Rajas, Tamas, and Vata Dosha imbalances in relation to the symptoms.
• Role-play counseling patients and caregivers on prognosis, treatment adherence, and lifestyle modifications.
• Present findings to the group and receive peer and faculty feedback.
The teacher will summarize the session. (Duration-4hrs)

Practical Training 26.5 : Assessment and Management of Anaaryata (conduct disorder) disruptive impulse-control disorders,

Demonstration
The teacher will demonstrate clinical assessment of Anaaryata disorders (e.g., Oppositional Defiant Disorder, Conduct Disorder, Intermittent Explosive Disorder), focusing on identifying behavioral patterns, Nidana Panchaka, Manasika Dosha imbalances, and psychosocial triggers. The demonstration will include use of behavioral rating scales, formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy involving therapies (Satvavajaya Chikitsa, Medhya drugs), behavioral interventions, and communication techniques. Referral indicators (e.g., risk to self/others, comorbidities) will be discussed.
Student Activity:
Students will work in pairs with case vignettes demonstrating different Anaaryata disorders.
Following the demonstration, students will:
• Analyze behavioral symptoms and triggers.
• Identify and justify appropriate assessment tools.
• Formulate Samprapti and Samprapti Vighatana for each case.
• Plan an integrative management strategy.

• Identify referral criteria.
• Role-play communication with caregivers emphasizing empathy and behavior management.
• Present findings and receive feedback.
The teacher will summarize the session.(Duration-3 hrs)

Practical Training 26.6 : Temper tantrum and Breath holding spells.

Demonstration
The teacher will demonstrate clinical assessment of tantrums and breath-holding spells in children, focusing on identification of triggers, clinical features, and differential diagnosis. The demonstration will include formulation of Samprapti and Samprapti Vighatana, planning of an integrative management strategy incorporating behavioral interventions, supportive Ayurvedic therapies including Abhyanga (massage) and Padabhyanga (foot massage), and guidance on parental counseling and lifestyle modifications. Referral indicators (e.g., recurrent cyanotic spells, seizures) will also be discussed.
Student Activity:
Students will be divided into pairs and given 1 case vignettes each.
Following the demonstration, students will:
• Analyze the clinical presentations in pairs.
• Identify appropriate investigations and differential diagnoses.
• Formulate Samprapti and Samprapti Vighatana for each case.
• Plan an integrative management strategy.
• Practice Abhyanga and Padabhyanga techniques on peers under supervision.
• Role-play counseling caregivers on home care, trigger avoidance, and treatment adherence.
• Present findings to the group and receive peer and faculty feedback.
The teacher will summarize the session.(Duration-2hrs)

Experiential learning Activity

Experiential-Learning 26.1 : Management of Unmada, and Childhood Psychosis .

Evaluate a minimum of three clinical cases or case vignettes of Unmada and childhood psychosis across varied presentations (e.g., acute/chronic, mild/severe, onset patterns) and doshic predominance. Perform detailed clinical examination, identify Nidana Panchaka, utilize appropriate diagnostic tools, recommend relevant investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive psychotherapeutic interventions within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-5hrs)

Experiential-Learning 26.2 : Management of Atatwabhinivesha, Schizophrenia Spectrum Disorders and Suicide Prevention

Evaluate a minimum of three clinical cases or case vignettes of Atatwabhinivesha, Schizophrenia Spectrum Disorders, and Suicide Risk across varied presentations (e.g., acute/chronic, episodic/continuous, severity levels) and doshic predominance. Perform detailed clinical examination,identify Nidana Panchaka, utilize appropriate diagnostic tools and suicide risk assessments, recommend relevant investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, psychosocial interventions, and suicide prevention strategies within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-4hrs)

Description: Presentation/CBL/Role-play/Simulation/Mini-CEX/OMP/JAR
Instructions: Using either of the above-mentioned methods, scholars shall be asked to
Analyze and justify the assessment and management approaches for schizophrenia spectrum disorders, suicide, and attempted suicide, using current therapeutic guidelines and best practices.

1. Clinical Observation and Reflective Journaling
Activity: Scholars observe clinicians working with patients who show symptoms of Atatwabhinivesha, such as distorted thinking, hallucinations, delusions, and suicidal behaviors. They watch the use of assessment tools like the PANSS for psychotic symptoms and the C-SSRS for suicide risk. After each session, scholars document their reflections, noting key insights, patient interactions, and how symptoms reflect Ayurvedic concepts of Rajas, Tamas, and Vata imbalances. Faculty review these journals to provide further insights and deepen scholars' understanding.

2. Community-Based Workshop on Mental Health Awareness and Supportive Therapies
Activity: Under faculty guidance, scholars conduct a community workshop to educate families, caregivers, and the public on recognizing early signs of Atatwabhinivesha and suicide risk. They present both Ayurvedic approaches (such as Sattvavajaya for mental strength and Medhya Rasayana herbs for cognitive support) and conventional treatments (like antipsychotic medications and CBT). After the workshop, scholars participate in a group debrief to discuss their experiences and reflect on the challenges and insights from engaging with the community.

3. Roleplay and 360-Degree Feedback for Suicide Prevention Counseling
Activity: Scholars participate in roleplay simulations to practice counseling patients with suicidal thoughts. They use the C-SSRS to assess risk, create safety plans, and apply techniques from both conventional counseling (like CBT) and Ayurvedic Sattvavajaya therapy for building mental strength. Faculty and peers provide 360-degree feedback, helping scholars reflect on their communication, empathy, and how well they combine these approaches.

4. Bedside Learning with Problem-Based Learning (PBL) for Treatment Planning
Activity: Scholars work with real or simulated patients showing symptoms of Atatwabhinivesha. They use a Problem-Based Learning (PBL) approach to assess symptoms, discuss integrative treatment plans, and combine Ayurvedic therapies (such as Shodhana and Medhya Rasayana) with conventional treatments (like antipsychotic medications and family therapy). Scholars present their treatment plans, with faculty offering feedback on how they address each patient's unique needs.

5. Portfolio Development with Reflective Journaling
Activity: Scholars maintain a portfolio throughout the unit, recording clinical observations, community workshop reflections, roleplay experiences, and bedside learning insights. They analyze their progress, document challenges, and reflect on how they integrate Ayurvedic and conventional methods. Faculty periodically review these portfolios, providing feedback to help scholars refine their approach and build a balanced perspective on mental health care.

Experiential-Learning 26.3 : Management of Psychosomatic Disorders and Manastaapa(anxiety or mood disorders).

Evaluate a minimum of three clinical cases or case vignettes of Psychosomatic Disorders and Manastaapa (anxiety and mood disorders) across varied presentations (e.g., acute/chronic, mild/severe, situational/idiopathic) and doshic predominance. Perform detailed clinical examination, assess Manovaha, Pranavaha, and Rasavaha Srotas involvement, identify Nidana Panchaka, utilize diagnostic scales such as the Hamilton Anxiety Rating Scale (HAM-A) and Patient Health Questionnaire (PHQ-9), recommend appropriate investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive psychotherapeutic approaches within supervised clinical settings. All findings and reflections will be compiled in the clinical logbook.
(Duration-5hrs)

Experiential-Learning 26.4 : Vishaada(depression),jaagarukata (Insomnia) nidra luptata (sleep disorders) and eating disorders in clinical settings.

Evaluate a minimum of three clinical cases or case vignettes of Vishaada, Jaagarukata, Nidra Luptata, and eating disorders across varied presentations (e.g., acute/chronic, mild/severe, psychological/physiological) and doshic predominance. Perform detailed clinical examination, assess Manovaha, Pranavaha, and Rasavaha Srotas involvement, identify Nidana Panchaka, recommend relevant investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive behavioral therapies within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-5hrs)

Experiential-Learning 26.5 : Anaaryata (Disruptive Impulse-Control and Conduct Disorders),

Evaluate a minimum of three clinical cases or case vignettes of Anaaryata, including Oppositional Defiant Disorder, Conduct Disorder, and Intermittent Explosive Disorder, across varied presentations (e.g., severity, chronicity, comorbid conditions) and doshic predominance. Perform detailed clinical assessment, assess Manovaha and related Srotas involvement, identify Nidana Panchaka, recommend appropriate investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan integrating Ayurvedic therapies, behavioral strategies, empathetic communication, and family-centered care.

All findings and reflections will be compiled in the clinical logbook.(Duration-4 hrs)

Experiential-Learning 26.6 : Temper tantrum and Breath-Holding spells

Evaluate a minimum of three clinical cases or case vignettes of pediatric behavioral and autonomic conditions such as tantrums and breath-holding spells across varied presentations (e.g., emotional, neurological, developmental) and doshic predominance. Perform detailed clinical assessment, examine involvement of Manovaha, Pranavaha, and Rasavaha Srotas, identify Nidana Panchaka, advise relevant investigations where applicable, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan to the caregivers, integrating approaches such as Sattvavajaya Chikitsa, behavioral counseling, supportive Shamana therapies, and Pathya-Apathya.
All findings and reflections will be compiled in the clinical logbook.(Duration-3 hrs)

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. OSCE Stations: (5 Station x 10 marks=50marks) • Station 1: Case vignette/Simulated Case – Schizophrenia with Ayurvedic diagnosis (Manovaha Dushti) • Station 2: Interpret child behavior under Satva-Rajas-Tamas framework • Station 3: Plan Trividha Chikitsa for Vishada/Anxiety in given case • Station 4: Role Play – Manage tantrum behavior using Satvavajaya chikitsa • Station 5: Correlate Unmada/Atattwabhinevesha with psychiatric categories OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Semester No : 4

Module 27 : Manovaha Sroto Vikaras, Psychiatric and behavioral Disorders-II

Module Learning Objectives

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

1. Discuss causes, classification, and diagnosis of Manasika Vikara in children from Ayurvedic and modern perspectives.
2. Evaluate Beejabhaga, Dosha (especially Vata and Pitta), and Parivesha factors in the development of these disorders.
3. Assess the impact of Manasika Vikara on Sharirika, Manasika, and Samajika well-being and long-term Prabhava.
4. Develop counseling and individualized management plans using Medhya Rasayana, Aahara-Vihara, and integrative therapies.

M 27 Unit 1 Durupacharata and Krodhajanya Vyadhis, Aggression, Stena, Lying, Stealing and Truancy.

- Durupacharata and Krodhajanya Vyadhis
- Aggression, Stena, Lying, Stealing and Truancy.

References: 35,45,58,59,63,75,105,107

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa (management) strategies for the following Manovaha Srotas Vikara: • Durupacharata (Difficult-to-treat conditions) • Krodhajanya Vyadhi (Aggression-related disorders)	2	Lecture	CAN	Knows-how	L,L&GD,L&PPT,L_VC
CO2,CO3,CO4,CO5,CO6	Demonstrate assessment and management of for Durupacharata, Krodhajanya Vyadhi, aggression, and behavioral disorders (Aggression, Lying, Stealing, Truancy)	4	Practical Training 27.1	PSY-GUD	Shows-how	DIS,D,L_VC,PBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Durupacharata and Krodhajanya Vyadhis, including aggression, stena (lying, stealing), and truancy, to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	6	Experiential-Learning 27.1	CE	Knows-how	D-BED,CBL,PL,BS

M 27 Unit 2 Self-Injurious behavior, Stress Disorders.

- Self-Injurious behavior
- Stress Disorders.

References: 4,35,41,42,45,58,59,63,75,105,107

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa (management) strategies for the following Manovaha Srotas Vikara in children, emphasizing the role of Vata and Tamas imbalances: • Self-Injurious Behaviour	2	Lecture	CAN	Knows-how	L_VC,L&GD,L&PPT ,L
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assessment and management of self-injurious behavior and stress disorders.	4	Practical Training 27.2	PSY-GUD	Shows-how	SIM,CBL,RP,D
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate self-injurious behavior and stress disorders to formulate Samprapti Vighatana and develop an individualized Chikitsa plan for clinical application.	6	Experiential-Learning 27.2	PSY-MEC	Does	SIM,CBL,GBL

M 27 Unit 3 (3). Acharya Agnivesha, Charaka Samhita, e, (35). Keligman Robert M, Nelson Textbook of, (38). Meharban Singh, Care of the Newborn, , (39). Meharban Singh, Medical Emergencies i, (45). Piyush Gupta, PG Textbook of Pediatri, (76). Ambikadatta Shashtri, Susruta Samhita, (77). Prof. K.R. Srikantha Murthy, Illustra, (93). Dr Lal Krishnan, Arogya Raksha Kalpad

- Mrudbhakshana (Pica and rumination disorders),
- Shayyamutra (Enuresis)
- Ayukta Mala Visarjana (Encopresis).

References: 3,4,16,35,41,42,45,58,59,63,75,76,77,78,79,80,95,96,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized Chikitsa (management) strategies for the following Manovaha Srotas Vikara (Behavioral Disorders): • Mrudbhakshana (Pica) • Rumination	2	Lecture	CAN	Knows-how	L,L&PPT,L_VC,L&GD

	• Shayyamutra (Enuresis) • Ayuktamalavisarjana (Encopresis)					
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assessment and management of Mrudbhakshana (Pica and rumination disorders), Shayyamutra (Enuresis), and Ayukta Mala Visarjana (Encopresis).	4	Practical Training 27.3	PSY-GUD	Shows-how	CBL,SIM
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Mrudbhakshana (Pica and rumination disorders), Shayyamutra (Enuresis), and Ayukta Mala Visarjana (Encopresis) to formulate Samprapti Vighatana and develop an individualized Chikitsa plan for clinical application.	3	Experiential-Learning 27.3	CE	Knows-how	PrBL,CD

M 27 Unit 4 Pragnyaparadha Janya Vyadhis(Screen and Gaming Disorder).

- Pragnyaparadha Janya Vyadhis(Screen and Gaming Disorder).

References: 3,45,58,59,63

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore Chikitsa (management) strategies for the following Manovaha Srotas Vikara: • Pragnyaparadha (Intellectual blasphemy or misuse of intellect) in screen and gaming disorders	2	Lecture	CAN	Knows-how	L&GD,L&PPT,L,L_VC
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assessment and management of Pragnyaparadha Janya Vyadhis (Screen and Gaming Disorder)	4	Practical Training 27.4	PSY-GUD	Shows-how	CBL,PBL,SIM
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate, and implement appropriate management strategies for Pragnyaparadha Janya Vyadhi (Screen and Gaming Disorder).	6	Experiential-Learning 27.4	PSY-MEC	Does	D-M,CBL,FV,JC,D

M 27 Unit 5 Atanashealata, Motor and habit disorders, , Nakha Khadi (Bruxism).

- Atanashealata,

- Motor and habit disorders,
- Nakha Khadi (Bruxism).

References: 3,41,42,45,46,58,59,63,75

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized Chikitsa (management) strategies for the following Manovaha Srotas Vikara: • Nakha Khadi (Bruxism) • Motor and Habit Disorders • Apathy	2	Lecture	CAN	Knows-how	L&PPT , L_VC,L, L&GD
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assessment and management of motor and habit disorders, including Atanasheelata and Nakha Khadi (Bruxism).	4	Practical Training 27.5	PSY-GUD	Shows-how	DIS,PBL, CBL,SIM
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate motor and habit disorders, including Atanashealata and Nakha Khadi (Bruxism), to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	5	Experiential-Learning 27.5	CE	Does	PBL,D,D-M,TBL,CBL

Practical Training Activity

Practical Training 27.1 : Behavioral disorders such as Aggression, Lying, Stealing, and Truancy .

Demonstration
The teacher will demonstrate clinical assessment of behavioral disorders such as aggression, lying, stealing, and truancy, focusing on recognizing behavioral patterns, Nidana Panchaka, and Manasika Dosha imbalances. The demonstration will cover formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy including Ayurvedic therapies (e.g., Satvavajaya Chikitsa), behavioral techniques, and caregiver communication. Referral criteria (e.g., risk behaviors, comorbidities) will be discussed.
Student Activity:
Students will be divided into pairs and given case vignettes illustrating various behavioral disorders.
Following the demonstration, students will:

• Analyze clinical presentations in pairs.
• Identify and justify appropriate assessments.
• Formulate Samprapti and Samprapti Vighatana.
• Plan integrative management strategies.
• Role-play counseling caregivers on behavior management and treatment adherence.
• Present findings and receive feedback.
The teacher will summarize the session.(Duration-4hrs)

Practical Training 27.2 : Self-injurious behavior and stress disorders

Demonstration
The teacher will demonstrate clinical assessment of self-injurious behavior and stress disorders, focusing on identifying behavioral patterns, Nidana Panchaka, Manasika Dosha involvement, and psychosocial triggers. The demonstration will include formulation of Samprapti and Samprapti Vighatana and planning an integrative management strategy involving Ayurvedic therapies (e.g., Satvavajaya Chikitsa, Manovaha drugs), stress management techniques, and counseling. Referral indicators (e.g., risk of harm, psychiatric comorbidity) will also be discussed.
Student Activity:
Students will be divided into pairs and given case vignettes illustrating self-injurious behavior and stress disorders.
Following the demonstration, students will:
• Analyze clinical presentations in pairs.
• Identify and justify appropriate assessments.
• Formulate Samprapti and Samprapti Vighatana.
• Plan integrative management strategies.
• Role-play counseling patients and caregivers on coping strategies and treatment adherence.
• Present findings and receive feedback.
The teacher will summarize the session.(Duration-4hrs)

Practical Training 27.3 : Mrudbhakshana (Pica and rumination disorders), Shayyamutra (Enuresis), and Ayukta Mala Visarjana (Encopresis)

Demonstration
The teacher will demonstrate clinical assessment of Pica, enuresis, and encopresis, focusing on identification of symptoms, Nidana Panchaka, and Manasika Dosha imbalances. The demonstration will include selection and interpretation of relevant investigations, formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy involving Ayurvedic therapies, behavioral interventions, dietary modifications, and counseling. Referral indicators (e.g., underlying medical conditions, persistent symptoms) will also be discussed.

Student Activity:
Students will be divided into pairs and given case vignettes illustrating Pica, enuresis, and encopresis.
Following the demonstration, students will:
• Analyze clinical presentations in pairs.
• Identify and justify appropriate investigations.
• Formulate Samprapti and Samprapti Vighatana.
• Plan integrative management strategies.
• Role-play counseling caregivers on treatment adherence and lifestyle modifications.
• Present findings and receive peer and faculty feedback.
The teacher will summarize the session.(Duration-4 hrs)

Practical Training 27.4 : Pragnyaparadha Janya Vyadhis (Screen and Gaming Disorder)

Demonstration
The teacher will demonstrate clinical assessment of Pragnyaparadha Janya Vyadhis (Screen and Gaming Disorder), focusing on identifying behavioral patterns, Nidana Panchaka, Manasika Dosha imbalances, and psychosocial triggers. The demonstration will include the use of diagnostic criteria and screening tools, formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy involving Ayurvedic therapies (e.g., Satvavajaya Chikitsa), behavioral modifications, family counseling, and lifestyle guidance. Referral criteria (e.g., severe addiction, comorbid mental health issues) will be discussed.
Student Activity:
Students will be divided into pairs and given case vignettes illustrating screen and gaming disorder.
Following the demonstration, students will:
• Analyze clinical presentations in pairs.
• Identify and justify appropriate diagnostic and screening tools.
• Formulate Samprapti and Samprapti Vighatana.
• Plan integrative management strategies.
• Role-play counseling patients and families on behavioral change and treatment adherence.
• Present findings and receive peer and faculty feedback.
The teacher will summarize the session. (Duration-4hrs)

Practical Training 27.5 : Atanasheelata (roaming\habitual indifference), Motor and habit disorders , Nakha khadi bruxism.

Demonstration
The teacher will demonstrate clinical assessment of motor and habit disorders such as Atanashealata and Nakha Khadi (Bruxism), focusing on recognition of clinical

features, Nidana Panchaka, and Manasika Dosha imbalances. The demonstration will include diagnostic evaluation, formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy involving Ayurvedic therapies, behavioral modification techniques, and patient/caregiver counseling. Referral indicators (e.g., persistent symptoms, dental complications) will also be discussed.
Student Activity:
Students will be divided into pairs and given case vignettes illustrating motor and habit disorders.
Following the demonstration, students will:
• Analyze clinical presentations in pairs.
• Identify appropriate diagnostic criteria and investigations.
• Formulate Samprapti and Samprapti Vighatana.
• Plan integrative management strategies.
• Role-play counseling patients and caregivers on treatment adherence and lifestyle modifications.
• Present findings and receive peer and faculty feedback.
The teacher will summarize the session.(Duration-4hrs)

Experiential learning Activity

Experiential-Learning 27.1 : Strategies for managing Aggression, Lying, Stealing, and Truancy in practical, real-world settings.

Evaluate a minimum of three clinical cases or case vignettes of Durupacharata and Krodhajanya Vyadhis, including aggression, stena (lying, stealing), and truancy, across varied presentations (e.g., acute/chronic, mild/severe, behavioral patterns) and doshic predominance. Perform detailed clinical examination, identify Nidana Panchaka, recommend relevant investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, behavioral modification techniques, Pathya-Apathya, and family counseling.
All findings and reflections will be compiled in the clinical logbook.(Duration-6hrs)

Experiential-Learning 27.2 : Self-injurious behavior and stress disorders

Evaluate a minimum of three clinical cases or case vignettes of self-injurious behavior and stress disorders across varied presentations (e.g., acute/chronic, mild/severe, situational/idiopathic) and doshic predominance. Perform detailed clinical examination, identify Nidana Panchaka, recommend appropriate investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and evidence-based psychotherapeutic approaches.
All findings and reflections will be compiled in the clinical logbook.(Duration-6hrs)

Experiential-Learning 27.3 : Mrudbhakshana (Pica), Shayyamutra (enuresis), and Ayuktamala visarjana (encopresis)

Evaluate a minimum of three clinical cases or case vignettes of Mrudbhakshana, Shayyamutra, and Ayukta Mala Visarjana across varied presentations (e.g., age groups, severity, acute/chronic) and doshic predominance. Perform detailed clinical examination, assess involvement of Manovaha, Mutravaha, and Purishavaha Srotas, identify Nidana Panchaka, recommend relevant investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and behavioral interventions within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-3 hrs)

Experiential-Learning 27.4 : Pragnyaparadhajanya Vyadhi (screen and gaming disorders)

Evaluate a minimum of three clinical cases or case vignettes of Pragnyaparadha Janya Vyadhi (Screen and Gaming Disorder) across varied presentations (e.g., severity, duration, comorbidities) and doshic predominance. Perform detailed clinical assessment, identify Nidana Panchaka, recommend relevant investigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, behavioral modification strategies, Pathya-Apathya, and caregiver counseling within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-6hrs)

Experiential-Learning 27.5 : Management of Motor and Habit disorders, such as Atanashealata and Bruxism

Evaluate a minimum of three clinical cases or case vignettes of motor and habit disorders, including Atanashealata and Nakha Khadi (Bruxism), across varied presentations (e.g., acute/chronic, mild/severe, idiopathic/secondary) and doshic predominance. Perform detailed clinical examination, assess involvement of Vatavaha, Manovaha, and Rasavaha Srotas, identify Nidana Panchaka, recommend appropriate inves(tigations, and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive behavioral therapies within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook. (Duration-5hrs)

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. OSCE Stations: (5 Stations x 10 marks=50 marks) Station 1: Case – Child with Enuresis/Shayyamutra evaluation Station 2: Design chikitsa for Mrudbhakshana and self-injurious behavior Station 3: Demonstrate management plan for stress disorder Station 4: Role Play – Counseling in gaming/screen addiction (Pragnyaparadha) Station 5: Match behavioral symptoms with Manovikara	4

OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Module 28 : Vriddhi Vipratipatti - Learning and Developmental Disorders

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

1. Analyse Nidana, Varga, and Pratyaksha Lakshanas of learning and developmental disabilities.
2. Evaluate effects of Beejabhaga, Dosha (Vata, Kapha), and Parivesha in autism, ADHD, and learning disorders.
3. Assess the impact of Vikara on Manasika, Samajika, and Adhyayana Kshamata (learning ability) of affected child.
4. Develop counseling and personalized Chikitsa plans.

M 28 Unit 1 Chitta Chaanchalya, Chittodvega, Anvasthita Chittata, ADHD.

- Chitta Chaanchalya
- Chittodvega
- Anvasthita Chittata
- ADHD

References: 3,16,35,41,42,45,58,59,63,76

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized Chikitsa (management) strategies for the following Manovaha Srotas Vikara with Vata and Rajas imbalances: • Chitta Chanchalya (Restlessness)	2	Lecture	CAN	Knows-how	PBL,L&PPT ,L,L&GD,L_VC

	• Chittodvega (Anxiety) • Anavasthita Chitta (Inability to focus)					
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate the assessment, diagnosis, and management strategies for conditions such as Chitta Chaanchalya, Chittodvega, Anavasthita Chittata, and ADHD.	4	Practical Training 28.1	PSY-GUD	Shows-how	PBL,SIM,CD,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Chitta Chanchalya, Chittodvega, Anavasthita Chittata, and ADHD to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	6	Experiential-Learning 28.1	AFT-VAL	Does	PBL,D-BED,CBL,BS

M 28 Unit 2 Neuro-developmental disorders, Executive function and dysfunction disorder

- Neuro-developmental disorders
- Executive function and dysfunction disorder

References: 35,45,58,59,63,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze Samprapti (etiopathogenesis), formulate Samprapti Vighatana, and explore individualized Chikitsa (management) strategies for the following Manovaha Srotas Vikara with Vata and Kapha imbalances : • Neurodevelopmental Disorders	2	Lecture	CAN	Knows-how	CBL,L_VC,L&PPT,L&GD,L
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate the application of diagnostic and therapeutic approaches in managing neuro-developmental disorders and executive function dysfunction under supervised clinical settings.	5	Practical Training 28.2	PSY-GUD	Shows-how	CBL,SIM
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate neuro-developmental disorders and executive function dysfunction disorders to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	3	Experiential-Learning 28.2	CE	Does	CBL,PBL,CD,SIM

M 28 Unit 3 Adhyanana akshamata - Dyslexia, Maths and writing disabilities.

- Dyslexia
- Maths and writing disabilities.

References: 32,35,41,42,45,58,59,63

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4 ,CO5	Analyze the types, Samprapti, and individualized Chikitsa of Adhyayana Akshamata (learning disabilities): • **Dyslexia** • **Dysgraphia** • **Dyscalculia.**	1	Lecture	CAN	Knows-how	L_VC,L& PPT ,L& GD,L,CD
CO2,CO3,CO4 ,CO5,CO6	Demonstrate the assessment, diagnosis, and management strategies for dyslexia, and math and writing disabilities.	2	Practical Training 28.3	PSY-GUD	Shows-how	PrBL,FV, D-BED,S IM,CBL
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Evaluate dyslexia, and math and writing disabilities to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	3	Experiential-Learning 28. 3	CE	Knows-how	CD,PAL, RP,PBL, BS

M 28 Unit 4 (9). Cloherty & Stark's Manual o, (38). Meharban Singh, Care of the Newborn, , (39). Meharban Singh, Medical Emergencies i, (43). Pandit Hemraj Sharma, Kashyapa Samhit, (46). Prof. Devendra Nath Mishra, Kaumarbhr, (57). Shilpi Gupta, Kaumarbhritya, Te, (59). Vinod K Paul and Arvind Bagga, Ghai, , (76). Ambikadatta Shashtri, Susruta Samhita, (77). Prof. K.R. Srikantha Murthy, Illustra, (78). Prof. K.R. Srikantha Murthy, Astanga , (79). Dr. S.Suresh Babu, Astanga Samgraham , (80). Dr. R.K. Sharma, Vaidya Bhagawan Dash

- Language development
- Communication disorders.

References: 18,32,35,45,58,59,63,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5	Analyze language development milestones and impact of Dosha Vaigunya on speech and language acquisition in children.	1	Lecture	CAN	Knows-how	L&PPT , L,L&GD, L_VC
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate the assessment, diagnosis, and management strategies for language development and communication disorders.	2	Practical Training 28.4	PSY-MEC	Shows-how	CBL,D,SIM,PrBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate language development and communication disorders to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	3	Experiential-Learning 28.4	PSY-MEC	Does	D-BED,PrBL,PL,RP,CBL
M 28 Unit 5 Vakagraha -Hearing Disabilities Vakagraha -Hearing Disabilities **References:** 3,4,32,35,45,58,59,63						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO2,CO3,CO4,CO5,CO6	Analyze Samprapti and Chikitsa of Vakagraha (speech disorders) and hearing impairment in children, focusing on Dosha Vaigunya.	1	Lecture	CAN	Knows-how	CBL,L&PPT ,L&GD,L,L_VC
CO2,CO3,CO4,CO5,CO6,CO7	Demonstrate the assessment, diagnosis, and management strategies for hearing disabilities and Vakagraha.	2	Practical Training 28.5	PSY-GUD	Shows-how	CBL,PBL,RP,D
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate hearing disabilities and Vakagraha (speech disorders) to formulate Samprapti Vighatana and develop Chikitsa plan.	3	Experiential-Learning 28.5	PSY-MEC	Does	CBL,PAL,CD,RP,PBL
M 28 Unit 6 Buddhi Nirodha (Intellectual Disability), Vriddhi Vyakshepa -Developmental Delay						

- Buddhi Nirodha (Intellectual Disability)
- Vriddhi vyakshepa -Developmental Delay

References: 4,32,35,45,58,59,63

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze Samprapti and explore Chikitsa strategies for Buddhi Nirodha (intellectual disability).	1	Lecture	CE	Knows-how	L&PPT , L_VC,L& GD,L
CO2,CO3,CO4	Demonstrate the assessment, diagnosis, and management strategies for developmental delay and Buddhi Nirodha (Intellectual Disability).	2	Practical Training 28.6	PSY-GUD	Shows-how	D,CBL,P BL,PAL
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Evaluate developmental delay and Buddhi Nirodha (Intellectual Disability) to formulate Samprapti Vighatana and develop Chikitsa plan.	3	Experiential-Learning 28. 6	AFT-RES	Does	PAL,SIM, D,CD,CB L

M 28 Unit 7 Chhitavibhrama / Unmada - Autism Spectrum Disorders

- Chhitavibhrama / Unmada
- Autism Spectrum Disorders

References: 3,4,26,35,45,58,59,63,76

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4 ,CO5	Analyze Samprapti and explore Chikitsa strategies for Chitta Vibhrama – Baalonmada (Autism Spectrum Disorders).	2	Lecture	CAN	Knows-how	L_VC,L& PPT ,L& GD,L,CD
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Demonstrate the assessment, diagnosis, and management strategies for Chittavibhrama, Baalonmada, and Autism Spectrum Disorders.	3	Practical Training 28.7	PSY-GUD	Shows-how	PBL,RP, CBL,SIM ,W

CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Chittavibhrama – Baalonmada and Autism Spectrum Disorders to formulate Samprapti Vighatana and develop an individualized Chikitsa plan.	5	Experiential-Learning 28.7	CS	Does	CBL,W,PSM,D-BED,SIM

Practical Training Activity

Practical Training 28.1 : Chitta Chaanchalya, Chittodvega, Anavasthita Chittata, and ADHD

Demonstration
The teacher will demonstrate the clinical assessment of pediatric attention and emotional regulation disorders such as Chitta Chaanchalya, Chittodvega, Anavasthita Chittata, and ADHD. Focus will be on identifying presenting features, Nidana Panchaka, Manasika Dosha involvement (Rajas–Tamas–Vata), and correlating Ayurvedic understanding with DSM-5 diagnostic criteria for ADHD. The demonstration will include the use of tools such as the Vanderbilt ADHD Diagnostic Rating Scale, formulation of Samprapti and Samprapti Vighatana, and planning a holistic management approach involving Satvavajaya Chikitsa, Medhya Rasayana, counseling techniques, sensory diet recommendations, and lifestyle regulation. Indicators for referral (e.g., academic decline, aggressive behavior) will also be discussed.
Students will be divided into small groups and given 2 case vignettes illustrating different aspects of attention and behavioral dysregulation. Following the demonstration, students will:
• Analyze the given cases and identify diagnostic features.
• Select appropriate assessment tools (e.g., ADHD scales, behavioral checklists).
• Correlate interpretations of the condition.
• Formulate Samprapti and Samprapti Vighatana.
• Plan an appropriate management strategy.
• Role-play caregiver counseling, including academic support, behavior reinforcement, and Dinacharya-based routines.
• Present case findings and receive feedback from peers and faculty.
Teacher will summarize the session (Duration: 4 hours)

Practical Training 28.2 : Neuro-developmental Disorders, Executive function and dysfunction Disorder,

Demonstration:
The teacher will demonstrate how to assess and manage neuro-developmental disorders and executive function dysfunction in children. This will include:

- Recognizing key developmental delays and behavioral red flags through history and examination.
- Demonstrating standardized diagnostic tools (e.g., Denver Developmental Screening, IQ tests, executive function checklists).

- Explaining how to apply investigations such as EEG, neuroimaging, or metabolic screening when appropriate.
- Formulating Samprapti and strategies for its Vighatana.
- Demonstrating therapeutic approaches (appropriate Shamana and Shodhana therapies along with behavioral therapy modules, occupational therapy strategies, cognitive exercise).
- Highlighting referral pathways (multidisciplinary team, child psychologist, neurologist, rehabilitation services).

Working in small groups with simulated or real case vignettes of neuro-developmental disorders, students will:

- Identify developmental delays and signs of executive dysfunction from case material.
- Select and justify appropriate diagnostic assessments and investigations.
- Apply diagnostic tools under supervision (e.g., developmental checklist, executive function screening).
- Develop a therapeutic plan integrating pharmacological, behavioral, and supportive interventions.
- Present their diagnostic impression and management strategy to peers and teacher.
- Receive structured feedback on diagnostic accuracy, therapeutic planning, and communication with caregivers.

The teacher will summarize key diagnostic frameworks, highlight evidence-based therapeutic strategies, and reinforce the importance of early intervention and multidisciplinary care.
(Duration: 5 hours)

Practical Training 28.3 : Adhyayana Akshamata, Dyslexia, Dysgraphia,Dyscalculia .

Demonstration
The teacher will demonstrate clinical assessment of dyslexia, and math and writing disabilities, focusing on learning difficulties, Nidana Panchaka, Manasika Dosha imbalances, and functional evaluation. The demonstration will include use of diagnostic tools (e.g., standardized reading and math tests, writing assessments), formulation of Samprapti and Samprapti Vighatana, and planning an integrative management approach involving Shamana therapies, cognitive retraining, educational interventions, and caregiver counseling. Referral indicators (e.g., persistent academic difficulties, associated behavioral issues) will be discussed.
Students will be divided into pairs and given case vignettes illustrating various presentations of learning disabilities.Following the demonstration, students will:

- Analyze clinical features and academic history.
- Select appropriate diagnostic tools and justify their use.
- Formulate Samprapti and Samprapti Vighatana.

- Plan a holistic management strategy.
- Role-play caregiver counseling focusing on educational support and home strategies.
- Present findings and receive peer and faculty feedback.

Teacher will summarize the session.(Duration-2hrs)

Practical Training 28.4 : Language Development and Communication Disorders.

Demonstration
The teacher will demonstrate clinical assessment of language development and communication disorders, focusing on speech and language milestones, Nidana Panchaka, Manasika Dosha imbalances, and functional evaluation. The demonstration will include use of diagnostic tools (e.g., speech-language assessments, developmental checklists), formulation of Samprapti and Samprapti Vighatana, and planning an integrative management approach involving Shamana and Shodhana therapies, speech therapy, augmentative communication techniques, and caregiver counseling. Referral indicators (e.g., lack of progress, associated cognitive delays) will be discussed.

Students will be divided into pairs and given case vignettes illustrating various presentations of language and communication disorders. Following the demonstration, students will:

- Analyze clinical features and developmental history.
- Select appropriate diagnostic tools and justify their use.
- Formulate Samprapti and Samprapti Vighatana.
- Plan a holistic management strategy.
- Role-play caregiver counseling focusing on communication enhancement and home interventions.
- Present findings and receive peer and faculty feedback.

Teacher will summarize the session.(Duration-2hrs)

Practical Training 28.5 : Hearing Disabilities and Vakagraha

Demonstrate
The teacher will demonstrate clinical assessment of hearing disabilities and Vakagraha, focusing on auditory and speech impairments, Nidana Panchaka, Manasika Dosha imbalances, and functional evaluation. The demonstration will include use of diagnostic tools (e.g., audiometry, speech assessment scales), formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy involving Shamana and Shodhana therapies, speech therapy, auditory training, and caregiver

counseling. Referral indicators (e.g., progressive hearing loss, associated neurological deficits) will be discussed.
Student Activity:
Students will be divided into pairs and given case vignettes illustrating various presentations of hearing disabilities and Vakagraha.
Following the demonstration, students will:
• Analyze clinical features and patient history.
• Select appropriate diagnostic tools and justify their use.
• Formulate Samprapti and Samprapti Vighatana.
• Plan a holistic management strategy.
• Role-play caregiver counseling focusing on communication strategies and home support.
• Present findings and receive peer and faculty feedback.

Teacher will summarize the session.

Description: Presentation/Demo_Bedside/CBL/Role-play/Simulation
Instructions: Under the supervision of the teacher, using either of the above-mentioned methods, scholars shall be able to
Assess, diagnose, and implement appropriate management strategies for hearing disabilities and Vakagraha in clinical or educational settings.
1. Simulation Exercises for Assessing Speech and Hearing Separately
Activity: Under faculty supervision, scholars work in pairs to practice assessments for Vakgraha (speech deformities) and hearing disabilities as separate conditions. One scholar performs a simulated speech assessment, focusing on articulation and clarity, while the other conducts a simulated hearing assessment, observing techniques to identify different levels of hearing loss. Faculty provide feedback to refine diagnostic accuracy for both conditions, as well as discuss how hearing impairment can impact speech.
2. Demonstration and Hands-On Practice of Ayurvedic Therapies for Speech and Hearing Support
Activity: Faculty guide scholars in demonstrations of Ayurvedic therapies specifically tailored for speech and hearing. For Vakgraha, therapies include Pranayama (breathing exercises) and Dhyana (meditation for mental clarity), while for hearing disabilities, they focus on Karnapoorana (ear oiling) and Nasya (nasal therapy). After demonstrations, scholars practice these therapies on models or simulated patients, focusing on proper technique, safety, and understanding of the therapeutic benefits.
3. Roleplay and 360-Degree Feedback for Family Counseling on Speech and Hearing Issues
Activity: Scholars participate in roleplay sessions simulating family counseling scenarios for patients with either Vakgraha (speech deformities) or hearing disabilities, or both. They combine Ayurvedic recommendations, such as dietary advice for cognitive and speech support, with conventional guidance on speech therapy or hearing aids. Feedback is gathered from faculty, peers, and standardized patients to help scholars develop skills in empathetic communication and clarity when discussing therapeutic options and addressing family concerns about both conditions.

4. Case-Based Group Discussions on Integrative Management of Speech and Hearing Disorders
Activity: Scholars, under faculty guidance, work in small groups to discuss complex cases involving either Vakgraha, hearing disabilities, or cases where both conditions co-exist. Each group develops an integrative management plan, combining Ayurvedic therapies (e.g., Medhya Rasayana for cognitive support) with conventional speech and hearing therapies. The discussion emphasizes how hearing impairment can influence speech development and requires targeted intervention to address both conditions. Faculty guide scholars in collaborative problem-solving, ensuring that each treatment plan is patient-centered and holistic.
5. Community-Based Awareness Programs on Speech and Hearing Health
Activity: Scholars, supervised by faculty, conduct community-based awareness sessions focusing on the importance of early detection and intervention for Vakgraha and hearing disabilities. They educate community members on signs to watch for in speech and hearing development, the role of Ayurvedic and conventional therapies, and the interrelationship between hearing health and speech development. This activity helps scholars build community engagement and educational outreach skills.

Practical Training 28.6 : Developmental delay and Buddhi Nirodha (intellectual disability)

Demonstration
The teacher will demonstrate clinical assessment of Buddhi Nirodha (intellectual disability) and Vriddhi Vyakshepa (developmental delay) as separate conditions, focusing on developmental milestones, cognitive evaluation, Nidana Panchaka, and Manasika Dosha imbalances. The demonstration will include selection and interpretation of developmental screening tools (e.g., Denver Developmental Screening Test), formulation of Samprapti and Samprapti Vighatana. Faculty will then guide scholars through demonstrations of therapies beneficial for intellectual and developmental support. For Buddhi Nirodha, therapies include Medhya Rasayana (herbal cognitive enhancers), Pragnya Yoga (practices for intelligence enhancement), and Sattvavajaya (mind-strengthening techniques such as counseling and meditation). Relevant Panchakarma therapies like Nasya (nasal therapy for mental clarity) and Shirodhara (forehead oil flow therapy) will also be demonstrated. For Vriddhi Vyakshepa, therapies such as Abhyanga (therapeutic massage) and balanced dietary plans to support physical and mental growth are included. Students will then practice these therapies on models, focusing on safety, proper technique, and understanding of therapeutic benefits, with faculty providing feedback.
Teacher will summarize key learning points and clarify doubts. (Duration-2 hrs)

Practical Training 28.7 : Chittavibhrama - Baalonmada Autism Spectrum Disorders

Demonstration
The teacher will demonstrate clinical assessment of Chittavibhrama, Baalonmada, and Autism Spectrum Disorders, focusing on behavioral features, Nidana Panchaka, Manasika Dosha imbalances, and developmental evaluation. The demonstration will include use of diagnostic criteria and screening tools (e.g., DSM-5 criteria, Autism Diagnostic Observation Schedule), formulation of Samprapti and Samprapti Vighatana, and planning an integrative management strategy involving Shamana, Shodhana therapies, behavioral interventions, speech therapy, sensory integration, and caregiver counseling. Referral indicators will be discussed.Students will be divided into pairs and given case vignettes illustrating various presentations of the above disorders. Following the demonstration, students will:

- Analyze clinical features and developmental history.
- Select appropriate diagnostic tools and justify their use.
- Formulate Samprapti and Samprapti Vighatana.
- Plan a holistic management strategy.
- Role-play caregiver counseling focusing on behavior management and home interventions.
- Present findings and receive peer and faculty feedback.

Teacher will summarize the session.(Duration-3 hrs)

Experiential learning Activity

Experiential-Learning 28.1 : Chitta Chaanchalya, Chittodvega, Anvasthita Chittata, and ADHD in real-world clinical settings.

Evaluate a minimum of three clinical cases or case vignettes of Chitta Chanchalya, Chittodvega, Anavasthita Chittata, and ADHD across varied presentations (e.g., inattentive/hyperactive/combined types, comorbid behavioral or emotional issues) and doshic predominance. Perform detailed clinical examination, assess involvement of Manovaha, Rasavaha, and Pranavaha Srotas, identify Nidana Panchaka, recommend appropriate investigations (e.g., Vanderbilt ADHD Rating Scale, clinical behavior assessments), and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, behavioral therapies, and caregiver education within supervised clinical settings.
All findings and reflections will be compiled in logbook.(Duration-6hrs)

Experiential-Learning 28.2 : Neuro-developmental disorders and Executive Function Dysfunction

Evaluate a minimum of three clinical cases or case vignettes of neuro-developmental disorders and executive function dysfunction disorders (e.g., Autism Spectrum Disorder, ADHD, Intellectual Disability, working memory and planning deficits) across varied presentations (e.g., cognitive, behavioral, social communication challenges) and doshic predominance. Perform detailed clinical examination, assess involvement of Manovaha, Rasavaha, and Majjavaha Srotas, identify Nidana Panchaka, recommend appropriate investigations (e.g., neurodevelopmental assessments, executive function screening tools), and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized long term Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, occupational/behavioral therapies, and caregiver support strategies within supervised clinical settings.Formulate strategies to educate parents and teachers on managing executive function disorder in children, focusing on building structured routines, improving organization skills, and providing consistent guidance to support cognitive and emotional development.
All findings and reflections will be compiled in logbook.(Duration-3hrs)

Experiential-Learning 28.3 : Approach to Adhyayana akshamata,dyslexia, and math and writing disabilities

Evaluate a minimum of three clinical cases or case vignettes of Adhyayana akshamata,dyslexia, and math and writing disabilities (e.g., Specific Learning Disorders) across

varied presentations (e.g., reading/writing/calculation deficits, associated attention or behavioral concerns) and doshic predominance. Perform detailed clinical examination, assess involvement of Manovaha, Rasavaha, and Majjavaha Srotas, identify Nidana Panchaka, recommend appropriate investigations (e.g., psychoeducational assessments, academic screening tools), and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and educational interventions (e.g., remedial teaching, learning strategies) within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-3hrs)

OR
Students will conduct a community-based survey to understand the prevalence and awareness of Adhyayana Akshamata (learning disabilities), specifically focusing on dyslexia, dysgraphia, and dyscalculia. Working in small teams, they will collect and analyze data on community perceptions and awareness. They will present their findings and discuss practical challenges and solutions faced by caregivers and educators in managing these learning disorders. They will document their experience in logbook. (Duration-3 hrs)

Experiential-Learning 28.4 : Language Development and Communication Disorders

Evaluate a minimum of three clinical cases or case vignettes of language development and communication disorders across varied presentations (e.g., receptive/expressive/mixed, developmental/acquired, verbal/non-verbal) and doshic predominance. Perform detailed clinical examination, assess involvement of Manovaha, Rasavaha, and Pranavaha Srotas, identify Nidana Panchaka, recommend appropriate investigations (e.g., speech-language evaluation, developmental screening tools), and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive therapies such as speech-language therapy and parental counseling within supervised clinical settings.
All findings and reflections will be compiled in the clinical logbook.(Duration-3hrs)

Experiential-Learning 28.5 : Hearing disabilities and Vakagraha in clinical settings.

Evaluate a minimum of three clinical cases or case vignettes of hearing disabilities and Vakagraha (speech disorders) across varied presentations (e.g., congenital/acquired, partial/complete impairment, expressive/receptive/mixed speech issues) and doshic predominance. Perform detailed clinical examination, assess involvement of Srotas such as Shravanendriya, Rasavaha, Pranavaha, and Manovaha, identify Nidana Panchaka, recommend relevant investigations (e.g., audiometry, speech-language assessment), and formulate Samprapti and Samprapti Vighatana. Develop and communicate Chikitsa plan integrating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive therapies such as speech therapy and auditory training within supervised clinical settings.
All findings and reflections will be compiled in logbook.(Duration-3 hrs)

Description: Presentation/CBL/Role-play/Simulation/Mini-CEX/OMP/JAR
Instructions: Using either of the above-mentioned methods, scholars shall be asked to

Explore and justify diagnostic and therapeutic approaches for hearing disabilities and Vakagraha, in alignment with current clinical standards and practices.
1. Clinical Observation and Reflective Journaling
Activity: Scholars participate in clinical observation sessions under faculty supervision, where they observe practitioners working with pediatric patients who have either Vakgraha (speech deformities) or hearing disabilities. Scholars observe diagnostic approaches, communication with patients and families, and therapy techniques specific to each condition. After each observation, scholars document their reflections in a journal, noting key learnings and insights, including how hearing disabilities can affect speech. This promotes critical thinking and self-reflection on the differences and connections between speech and hearing challenges.
2. Roleplay with 360-Degree Feedback for Counseling Skills
Activity: Scholars engage in roleplay sessions to simulate counseling sessions with families of children with Vakgraha (speech deformities), hearing disabilities, or both. They practice explaining Ayurvedic recommendations (such as dietary adjustments and cognitive support) alongside conventional treatments like speech therapy or hearing aids. Feedback from faculty, peers, and standardized patients allows scholars to refine their counseling skills, emphasizing empathy, clarity, and culturally sensitive guidance.
3. Community-Based Learning through Awareness and Screening Programs
Activity: Scholars, guided by faculty, organize and conduct a community-based awareness and screening program to educate families on Vakgraha and hearing disabilities. They offer screenings, provide informational materials, and discuss signs of speech and hearing issues with parents. Scholars also explain the importance of early detection and present both Ayurvedic and conventional approaches for management. This hands-on experience develops their public engagement and community health skills, while also highlighting real-world challenges in early identification and care.
4. Bedside Learning with Problem-Based Learning (PBL) Sessions
Activity: Scholars participate in bedside learning sessions with real or simulated patients presenting Vakgraha or hearing disabilities, with guidance from faculty. Through Problem-Based Learning (PBL), scholars collaboratively assess symptoms, discuss Ayurvedic and conventional interventions, and develop tailored care plans. Faculty encourage critical thinking and help scholars understand how to adapt treatment strategies for each patient's unique needs, especially in cases where hearing impairment may impact speech.
5. Case-Based Learning (CBL) with Portfolio Development
Activity: Scholars engage in case-based learning under faculty supervision, working on cases that involve either Vakgraha, hearing disabilities, or both. For each case, scholars develop a portfolio that includes their diagnostic reasoning, treatment plan, reflections on what they learned, and follow-up care strategies. The portfolio helps scholars build a deeper understanding of managing speech and hearing issues, both independently and in relation to each other, encouraging ongoing self-assessment and skill refinement.

Experiential-Learning 28.6 : Developmental delay and intellectual disability in clinical settings.

Evaluate a minimum of two clinical cases or case vignettes of developmental delay and Buddhi Nirodha (Intellectual Disability) across varied presentations (e.g., mild/moderate/severe, syndromic/non-syndromic, with/without comorbidities) and doshic predominance. Perform detailed clinical examination, identify Nidana Panchaka, recommend appropriate investigations (including IQ/developmental assessment tools), and formulate Samprapti and Samprapti Vighatana. Develop and communicate an

individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, Pathya-Apathya, and supportive therapies (e.g., special education, cognitive stimulation) within supervised clinical settings.
All findings and reflections will be compiled in logbook.(Duration-2 hrs)
AND
Scholars will participate in roleplay sessions to practice family counseling for children with Buddhi Nirodha or Vriddhi Vyakshepa. They will learn to communicate IQ assessment results and developmental findings with empathy and clarity, combining Ayurvedic suggestions (like Sattvavajaya for mental wellness and Pragnya Yoga for cognitive support) with guidance on physical or cognitive therapy options. Faculty and peers will provide feedback, helping scholars enhance their communication, empathy, and counseling skills. (Duration-1 hrs)

Experiential-Learning 28.7 : Chittavibhrama -Baalonmada Autism Spectrum Disorders in clinical practice.

Evaluate a minimum of three clinical cases or case vignettes of Chittavibhrama – Baalonmada and Autism Spectrum Disorders across varied presentations (e.g., early/late onset, verbal/non-verbal, mild/moderate/severe spectrum) and doshic predominance. Perform detailed clinical examination, assess involvement of Manovaha, Rasavaha, and Pranavaha Srotas, identify Nidana Panchaka, recommend relevant investigations (including developmental screening tools), and formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shodhana, Shamana, Sattvavajaya, occupational/behavioral therapies, Pathya-Apathya, and caregiver education within supervised clinical settings.
All findings and reflections will be compiled in the logbook.(Duration-5hrs)
OR
Students, supervised by faculty, will organize and conduct a community-based screening and awareness program focused on identifying early signs of ASD. They will perform basic screenings, educate families on the importance of early intervention, and share information about different approaches to managing ASD. Students will then participate in a debriefing session, reflecting on their experience and discussing ways to enhance community engagement. They will document their experience in logbook. (Duration-5hrs)

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. OSCE Stations: (Each Station x 10 marks=50 marks) Station 1: Case/Case Vignette/Simulated Case – ADHD with Dhi-Dhriti-Smruti analysis Station 2: Assess language and communication disorders (Vakvikara) Station 3: Match neuro psycho developmental conditions with Buddhi Nirodha/Medha Kshaya Station 4: Role Play – Teacher-parent counseling on learning disabilities	4

Station 5: Plan Ayurvedic + cognitive intervention using Medhya Rasayana
OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Semester No : 5

Module 29 : Pediatric Rehabilitation

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

1. Discuss principles of Paediatric Rehabilitation focusing on Sharirika and Manasika restoration in children with Vikara.
2. Analyze interdisciplinary approaches integrating Shalya, Shalakya, Bhaishajya, and Manasika Chikitsa for comprehensive pediatric rehabilitation.
3. Evaluate effectiveness of therapies for conditions like Balaroga and Janmja Vikara.
4. Develop personalized rehabilitation plans with family counseling.

M 29 Unit 1 Panchakarma (Rehabilitation medicine), Rasayana , Daiva Vyapashrya chikitsa

- Panchakarma (Rehabilitation medicine)
- Rasayana
- Daiva Vyapashrya chikitsa

References: 3,20,26,27,76,77,78,79,80,83,85,95,96

3A	3B	3C	3D	3E	3F	3G
CO4	Analyze the role of Panchakarma (Vamana, Virechana, Basti, Nasya, Raktamokshana) as rehabilitative strategies in pediatric care.	3	Lecture	CAN	Knows-how	L,L&GD, L&PPT ,L_VC

CO4,CO6,CO7,CO8	Demonstrate application of Panchakarma, Rasayana, and Daiva Vyapashrya Chikitsa techniques in children.	7	Practical Training 29.1	PSY-GUD	Shows-how	PBL,D-BED,CBL,D
CO4,CO5,CO6,CO7,CO8	Evaluate the role of Panchakarma (Rehabilitation Medicine), Rasayana, and Daiva Vyapashraya Chikitsa in Chronic and Developmental Disorders.	9	Experiential-Learning 29.1	CE	Does	D-BED,PBL,CBL

M 29 Unit 2 Satvavajaya (Cognitive behavioural therapy) chikitsa, Therapeutic Yoga.

- Satvavajaya (Cognitive Behavioral Therapy) Chikitsa
- Therapeutic Yoga.

References: 3,4,16,26,27

3A	3B	3C	3D	3E	3F	3G
CO1,CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze the principles and application of Satvavajaya Chikitsa in pediatric rehabilitation.	3	Lecture	CAN	Knows-how	L&GD,L,L&PPT,L_VC
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate application of Sattvavajaya Chikitsa and Therapeutic Yoga in rehabilitation of children.	6	Practical Training 29.2	PSY-GUD	Shows-how	PBL,PrBL,PL,PAL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate Satvavajaya Chikitsa and Therapeutic Yoga applications in mental health conditions.	7	Experiential-Learning 29.2	PSY-MEC	Does	BS,CBL,RP,PBL

M 29 Unit 3 Physiotherapy, Speech Therapy, Behavioural Therapy, Occupational Therapy

- Physiotherapy
- Speech therapy
- Behavioural therapy

- Occupational therapy

References: 26,27,35,45,58,59,61,107

3A	3B	3C	3D	3E	3F	3G
CO3,CO4,CO5,CO6	Analyze the integrative role of physiotherapy, speech therapy, behavioural therapy, and occupational therapy.	4	Lecture	CAN	Knows-how	L_VC,L&PPT,L&GD
CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate application of Physiotherapy, Speech Therapy, Behavioral Therapy, and Occupational Therapy techniques in children.	7	Practical Training 29.3	PSY-GUD	Shows-how	CBL,W,D-BED,PSM,CD
CO3,CO4,CO5,CO6,CO7,CO8	Evaluate therapeutic applications of physiotherapy, speech therapy, behavioral therapy, and occupational therapy.	10	Experiential-Learning 29.3	CE	Does	D,CBL,D-BED

Practical Training Activity

Practical Training 29.1 : Panchakarma, Rasayana, and Daiva Vyapashrya Chikitsa

Demonstration
The teacher will demonstrate the practical application of Panchakarma (e.g., Basti, Shirodhara), Rasayana therapies, and Daiva Vyapashrya Chikitsa tailored for pediatric conditions, focusing on indications, contraindications, dose adjustments, and safety precautions specific to children. The demonstration will cover assessment of Dosha imbalances and Samprapti in children, formulation of age-appropriate treatment plans, and integration with nutrition and lifestyle counseling. Emphasis will be placed on monitoring therapeutic responses and managing adverse reactions.
Students will be divided into small groups and given pediatric case vignettes requiring Panchakarma, Rasayana, or Daiva Vyapashrya interventions. Following the demonstration, students will:

- Analyze pediatric cases and justify therapy choice and modifications.
- Plan and simulate pediatric treatment protocols considering developmental stages.
- Counsel caregivers on procedure benefits, safety, and supportive care.

- Discuss integration with pediatric nutrition and preventive strategies.
- Present their management plan and receive peer and faculty feedback.

Teacher will summarize the session. (Duration-7hrs)

Practical Training 29.2 : Applicability of Satvavajaya Chikitsa and Therapeutic yoga

Demonstration
The teacher will demonstrate the application of Sattvavajaya Chikitsa techniques (e.g., behavioral therapy, positive reinforcement, meditative focus) and child-appropriate Therapeutic Yoga (e.g., simple asanas, pranayama, guided relaxation) for pediatric rehabilitation. Focus will be on selecting suitable techniques based on Manasika Bhavas, Bala, and clinical conditions such as anxiety, attention deficits, developmental delays, or behavioral issues. Demonstration will include integration with Ayurvedic principles of mind-body healing and individualized therapeutic planning.
Students will be grouped and assigned pediatric case scenarios involving rehabilitation needs. Following the demonstration, students will:

- Identify psychological and behavioral components of each case.
- Select and justify appropriate Sattvavajaya Chikitsa techniques.
- Design a simple, age-appropriate therapeutic yoga module.
- Role-play caregiver instruction and child motivation strategies.
- Present and discuss their plans, receiving peer and faculty feedback.

The teacher will summarize the session.(Duration-6hrs)

Practical Training 29.3 : Physiotherapy, Speech Therapy, Behavioral Therapy, and Occupational Therapy

Workshop
1. Faculty Demonstration (Clinical Setting or Lab Simulation):
The faculty will demonstrate:

- Physiotherapy: Passive and active exercises, balance and coordination training for conditions like cerebral palsy and hypotonia.
- Speech Therapy: Oro-motor stimulation, articulation exercises, and communication enhancement strategies for children with delayed speech or stammering.
- Behavioral Therapy: Use of reinforcement techniques, token economy, and behavior modification for children with ADHD, autism, and conduct disorders.

- Occupational Therapy: Activities to improve fine motor skills, hand-eye coordination, and sensory integration in developmental delay and sensory processing disorders.

Each demonstration will include:

- Clinical assessment tools and red flags
- Age-appropriate technique selection and safety considerations
- Goal setting and documentation practices
- Integration with Ayurvedic supportive therapies (e.g., Sattvavajaya, Rasayana, Abhyanga)

2. Student Hands-on Activities:
Students will be divided into small groups and rotated through four therapy stations:

- Station 1: Simulated physiotherapy sessions using pediatric mannequins or real-case demonstrations
- Station 2: Speech therapy articulation and play-based communication tasks
- Station 3: Role-play of behavioral interventions with peer volunteers
- Station 4: Fine motor and sensory tasks using occupational therapy kits

At each station, students will:

- Practice core techniques under supervision
- Document observations and therapy planning
- Engage in role-play with caregiver interaction and home-program education

Faculty will summarize key learning points, clarify doubts, and provide handouts with therapy charts, red flags, and home guidance templates.(Duration-7hrs)
OR
Demonstration
The teacher will organise sessions in integration with Physiotherapist, Speech Therapist, Behaviour Therapist and Occupational Therapist to demonstrate key pediatric rehabilitation techniques including physiotherapy (e.g., passive range-of-motion, gross motor exercises), speech therapy (e.g., articulation, oro-motor exercises)linking these

challenges to Vata and Kapha imbalances affecting speech and language functions., behavioral therapy (e.g., reinforcement, behavior shaping), and occupational therapy (e.g., fine motor skill development, sensory integration activities). Demonstration will focus on condition-specific needs such as cerebral palsy, developmental delay, autism spectrum disorder, and speech-language impairments. Emphasis will be given on assessment parameters, therapy goals, age-appropriate modifications, and caregiver involvement.
Student Activity:
Students will work in small groups on case vignettes representing different neurodevelopmental and functional deficits.
Following the demonstration, students will:
• Identify therapy needs based on clinical presentation.
• Select and simulate appropriate techniques.
• Plan a short-term and long-term therapy strategy.
• Role-play caregiver training and engagement in home-based exercises.
• Present their plan and receive structured peer and faculty feedback.
Conclusion:
Teacher will summarize the session. (Duration-7hrs)

Experiential learning Activity

Experiential-Learning 29.1 : Integrated Management of Chronic and Developmental Disorders

Each student will evaluate a minimum of three different clinical cases or case vignettes of chronic or developmental disorders (e.g., cerebral palsy, autism spectrum disorders, recurrent respiratory or digestive illnesses) across varied presentations (e.g., congenital/acquired, progressive, refractory) and doshic predominance. Perform a detailed clinical examination, assess the involvement of affected Srotas, identify Nidana Panchaka, and recommend relevant investigations. Formulate Samprapti and Samprapti Vighatana. Develop and communicate a personalized Chikitsa plan integrating age-appropriate Panchakarma therapies (as rehabilitative measures), Rasayana interventions, and Daiva Vyapashraya Chikitsa (e.g., mantra, rituals, parental involvement), focusing on creating a supportive environment that fosters emotional resilience, mental clarity, and spiritual balance in children, aligned with current pediatric clinical practices and family context.
All findings and reflections will be documented in logbook.(Duration-9hrs)

Experiential-Learning 29.2 : Applicability of Satvavajaya Chikitsa and Therapeutic Yoga

Each student will engage with a minimum of two simulated or real-life mental health case scenarios (e.g., anxiety disorders, depression, psychosomatic disorders, ADHD, or stress-related conditions). For each case, students will:

- Practice assessing mental health status, including history taking, psychosocial context, and doshic imbalance.

- Apply and evaluate the role of Satvavajaya Chikitsa (counseling, guidance, behavioral regulation, mindfulness, lifestyle modification).
- Explore and demonstrate the use of Therapeutic Yoga techniques (asanas, pranayama, relaxation, meditation) tailored to the condition.
- Discuss indications, limitations, and possible contraindications of these interventions.
- Role-play communication with patients/caregivers to explain the rationale and expected outcomes in a supportive and empathetic manner.

Students will document:

- Summary of the case scenario and assessment findings.
- Application and evaluation of Satvavajaya Chikitsa strategies.
- Selection and justification of appropriate Therapeutic Yoga techniques.
- Reflection on effectiveness, challenges, and limitations of the interventions.
- Insights on integrative care and referral indicators (e.g., severe depression, suicidal ideation, psychosis).

Teacher will facilitate a debriefing session where students share reflections, receive peer and faculty feedback, and consolidate understanding of Satvavajaya and Yoga as therapeutic modalities in mental health care. (Duration: 2 hours)

Experiential-Learning 29.3 : Physiotherapy, Speech Therapy, Behavioral Therapy, and Occupational Therapy.

Each student will engage with a minimum of four simulated or real-life pediatric rehabilitation cases representing children with diverse challenges (e.g., cerebral palsy, autism spectrum disorder, speech delay, ADHD, developmental coordination disorder).For each case, students will
Physiotherapy:

- Develop individualized physiotherapy programs tailored to developmental stage, physical condition, and rehabilitation goals.
- Focus on improving movement, flexibility, posture, and coordination.
- Counsel parents on how regular physiotherapy enhances quality of life and independence, while preventing complications.

Speech Therapy:

- Analyze the child’s communication difficulties and select appropriate interventions (articulation therapy, language activities, AAC systems).
- Develop personalized therapy plans focusing on speech clarity, comprehension, and social communication.

- Counsel caregivers on their role in reinforcing therapy at home.

Behavioral Therapy:

- Develop individualized behavioral therapy plans addressing emotional regulation, maladaptive behaviors, and social interaction.
- Incorporate family-centered interventions and structured routines.
- Counsel parents on the importance of early intervention, consistent behavior management techniques, and supportive environments.

Occupational Therapy:

- Create tailored OT programs to improve hand–eye coordination, sensory processing, motor planning, and daily living skills.
- Emphasize therapeutic play as a medium for intervention.
- Counsel parents on how OT improves independence and participation in school and home activities.

Students will document:

- Case summary and identified therapeutic needs.
- Proposed individualized therapy program (PT, ST, BT, OT) with justification.
- Counseling strategies applied with parents/caregivers.
- Challenges encountered in selecting or applying interventions.
- Reflections on integrating multiple therapies for holistic care.

Teacher will moderate a group reflection where students present their therapy plans, share counseling strategies, receive peer and faculty feedback, and consolidate understanding of evidence-based and integrative approaches to pediatric rehabilitation. (Duration: 3 hours)
OR
Conduct a survey involving a minimum of three clinical settings or rehabilitation centers that utilize physiotherapy, speech therapy, behavioral therapy, and occupational therapy for managing various health conditions (e.g., neurological, developmental, musculoskeletal disorders). Collect data on the types of therapies employed, indications, protocols followed, patient outcomes, and integration with Ayurvedic management. Analyze the findings to identify common therapeutic approaches, challenges, and best practices. Evaluate the role of these therapies in the context of Samprapti Vighatana and develop recommendations for integrating them into individualized Chikitsa plans.

Present a detailed report including reflections, evidence-based rationale, and potential improvements.
All data, analysis, and reflections should be compiled in logbook.(Duration-10hrs)

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. OSCE Stations: (Each station x 10 marks=50 marks) Station 1: Plan Panchakarma for child with Vata Vyadhi Station 2: Identify Rasayana and their role in neurorehabilitation Station 3: Demonstrate a therapeutic yoga sequence for CP Station 4: Role Play – Explaining rehabilitation approach to caregiver Station 5: Match modern rehab therapies with Ayurvedic equivalents OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Module 30 : Kishora Swasthya Vijnana, Adolescent Medicine

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

1. Analyse Kaumaryaavastha Sharirika and Manasika Vikasa with focus on Rasayana Kala and hormonal influences.
2. Analyze Ahara, Nidra, and Vihara patterns affecting Yauvana health, including Medha, Bala, and Ojas.
3. Assess challenges like Pandu, Sthaulya, Manoavastha, and reproductive issues; emphasize nidanaparivarjana and early intervention.
4. Formulate Yauvana-Raksha plans with guidance, counselling, and preventive Yukti-based chikitsa.

M 30 Unit 1 Behavioral Adolescent Problems

- Physiological, Psychological and Behavioral Adolescent Problems.

References: 4,35,41,42,45,53,58,59,75,107

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Discuss physiological changes occurring during adolescence, focusing on the role of Pitta and Vata dosha imbalances in driving the hormonal, physical, and metabolic transformations in adolescents.	2	Lecture	CAP	Knows-how	TPW,L&PPT ,L,L&GD,TBL
CO1,CO2,CO3,CO4,CO5	Demonstrate assessment and management of adolescent physiological, psychological, and behavioural problems.	4	Practical Training 30.1	PSY-GUD	Shows-how	CD,FV,D-M,GBL,JC
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Assess and implement effective management strategies for addressing physiological, psychological, and behavioural issues in adolescents in clinical and educational settings.	6	Experiential-Learning 30.1	AFT-RES	Does	CBL,D

M 30 Unit 2 Adolescent Nutrition.

- Adolescent Sexuality
- Adolescent Nutrition.

References: 35,42,45,58,59,75

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Describe adolescent sexual development, focusing on the hormonal, physical, and emotional changes associated with puberty, driven by Pitta and Vata dosha influences.	2	Lecture	CE	Knows-how	L&PPT ,L_VC,L,L&GD

CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assessment and management of issues related to adolescent sexuality and nutrition.	4	Practical Training 30.2	PSY-GUD	Shows-how	PL,PBL
CO1,CO2,CO3,CO4,CO5,CO6,CO7,CO8	Examine and apply appropriate strategies for addressing adolescent sexuality and nutrition in clinical and educational settings.	6	Experiential-Learning 30.2	AFT-SET	Does	PSM,CBL,PBL,SIM,BS

M 30 Unit 3 : Adolescent Mental Health

- Adolescent Mental Health
- Adolescent Behavioral Problems

References: 35,42,45,58,59,75,107

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Discuss mental health challenges faced by adolescents with special emphasis on emotional instability, stress, and mood disorders.	2	Lecture	CE	Knows-how	L_VC,L,L&PPT,L&GD
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate assement and management of adolescent mental health and behavioural issues.	4	Practical Training 30.3	PSY-MEC	Shows-how	CBL,PL,SIM,BS
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Assess and implement effective management strategies for adolescent mental health and behavioural problems in clinical settings.	6	Experiential-Learning 30.3	CE	Does	PrBL,SIM,D-BED,TPW,SY

M 30 Unit 4 Adolescent Friendly Health Services

- Drug Abuses, (Adolescent Friendly Health Services (AFHS).

References: 35,45,58,59,75,107

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Discuss drug abuse among adolescents, focusing on how Vata , pitta and Rajas imbalances contribute to impulsive behaviours, addiction, and emotional instability.	2	Lecture	CE	Knows-how	L_VC,L&PPT,L&GD,L
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Identify and address drug abuse issues in adolescents while integrating Adolescent Friendly Health Services (AFHS).	4	Practical Training 30.4	PSY-GUD	Shows-how	PBL,CBL,D-BED
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate and apply appropriate management and preventive strategies for drug abuse through the integration of Adolescent Friendly Health Services (AFHS) in clinical settings.	4	Experiential-Learning 30.4	CE	Does	SIM,FV,PBL,JC,CBL

M 30 Unit 5 National Programs for Adolescent Health

- National Programs for Adolescent Health

References: 26,35,45,58,100

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Discuss national programs like RKSK, NAEP, SHP, and ARSH contribute to adolescent health, integrating both modern public health strategies and Ayurvedic principles to provide holistic care.	2	Lecture	CE	Knows-how	L&PPT , L&GD,L, L_VC
CO3,CO4,CO5,CO6,CO7,CO8	Review and apply the principles and strategies of national programs aimed at improving adolescent health.	4	Practical Training 30.5	CE	Knows-how	JC,L&GD,PER,FV, PSM
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate and apply the principles and strategies of national programs aimed at improving adolescent health in practical and community-based settings.	4	Experiential-Learning 30.5	AFT-RES	Does	TBL,PBL,PSM,C_L

Practical Training Activity

Practical Training 30.1 : Identification of Physiological, Psychological, and Behavioural Problems

Demonstration:
Teacher will demonstrate adolescent assessment using real/simulated cases:

- Growth & Development: Measuring height, weight, BMI, plotting on growth chart, identifying growth spurts and sexual maturation (Tanner staging).
- Ayurvedic Perspective: Linking findings with shareera vriddhi, vikasa, and dhatu poshana (focus on Rasa and Rakta dhatu).
- Common Issues: Showcase assessment of acne, obesity, menstrual irregularities, or delayed puberty using both Ayurvedic (nidana panchaka, dosha involvement) and modern frameworks.
- Management Demonstration: Outline lifestyle advice, diet, stress management, Satvavajaya-based counseling, and referral indicators.

Under supervision, students practice on case vignettes or role-play scenarios:

- Record anthropometry and interpret growth charts.
- Take menstrual history and identify normal vs abnormal patterns.
- Identify dosha involvement in acne/obesity/menstrual disorders and map to diagnosis.
- Draft and role-play a short counseling session with adolescent/parent (healthy lifestyle, diet, emotional support).

Teacher will summarise the session. (Duration: 4 hours)

Practical Training 30.2 : Adolescent Sexuality, Adolescent Nutrition

Demonstration
Teacher will showcase case examples of adolescent sexual maturation, identity, and nutritional challenges. Link issues like early puberty, menstrual irregularities, STIs, undernutrition, obesity, and eating disorders with concepts of Rakta, Shukra, Ahara, Agni and Dosha. Demonstrate counselling approaches focusing on safe sexual practices, open communication, body positivity, balanced diet, and prevention of eating disorders.
Students will work in pairs on case vignettes to assess sexual and nutritional health, integrate Ayurvedic and modern reasoning, and role-play counselling adolescents and parents using empathetic communication. Present management strategies and referral indicators.
Teacher will provide feedback, highlight red flags, and conclude with key preventive and management strategies. (Duration: 4 hours)

Practical Training 30.3 : Adolescent mental health and behavioural issues.

Demonstration
Teacher will present simulated cases showing academic stress, peer pressure, family conflict, and identity struggles linked to imbalances in Manovaha Srotas. Demonstrate assessment of common mental health conditions (anxiety, depression, mood disorders) and behavioural issues (substance use, defiance, risky behaviours) using different approaches. Model counselling and early intervention strategies.
Following the demonstration students will work in pairs to analyze case vignettes, identify psychological, social, and environmental contributors, and link them to Manovaha Srotas imbalance. They will assess for early signs of mental or behavioural disorders, draft a management plan combining different strategies, and role-play adolescent/parent counselling.
Teacher will provide feedback on case analysis, integration of frameworks, and counselling communication. Summarize red flags, referral indicators, and key strategies for prevention and early management. (Duration: 4 hours)

Practical Training 30.4 : Development of Adoescent Friendly Health Services

Demonstration
Teacher will present case vignettes of adolescents with substance abuse influenced by peer pressure, family conflict, or mental health issues. Demonstrate assessment of common substances like alcohol, tobacco, cannabis, prescription misuse, explaining their impact on body and mind through dosha imbalance, manovaha srotas vitiation and other frameworks.Showcase how AFHS addresses adolescent needs through counselling, sexual health education, mental health support, and substance abuse prevention, linking with Ayurvedic principles of balance and holistic well-being. Following the demonstration students will work in pairs to-

- Analyze given case scenarios, identify psychosocial and environmental risk factors, and assess the type and impact of substance use.
- They will map out integrated management strategies combining counselling, rehabilitation, referral with Satvavajaya, lifestyle modification, diet regulation.
- Students will also design a mini AFHS service plan focusing on counselling, education, and prevention for adolescents in their community.

Teacher will summarize the role of AFHS in addressing adolescent health comprehensively and emphasize preventive, promotive, and rehabilitative care. (Duration: 4 hours)

Practical Training 30.5 : National Programme for Adolescent Health

Demonstration
The teacher will present case vignettes of adolescents with varied health needs and demonstrate how national programs such as RKSK, NAEP, SHP, and ARSH address them. For each program, the teacher will explain its key components (e.g., AFHCs, peer education, outreach, life skills-based curricula, school check-ups, counselling, STI

prevention) and align these with principles of holistic health, preventive care, and reproductive well-being. The teacher will also illustrate opportunities to integrate therapies like Shatavari, Ashwagandha, Panchakarma, and Rasayana for supportive care.
Following the demonstration students will work in pairs to analyze program components through case-based discussions, identify how national strategies can be applied in clinical and educational settings, and design integrative intervention plans that combine modern program services with Ayurvedic perspectives. They will role-play counselling sessions for adolescents and parents, focusing on sensitive issues such as SRH, mental health, anemia, or menstrual health, ensuring cultural sensitivity and program alignment.
The teacher will review student presentations, highlight strengths and gaps, and summarize how each national program (RKSK, NAEP, SHP, ARSH) contributes to adolescent health.
Duration: 4 hours

Experiential learning Activity

Experiential-Learning 30.1 : Physiological , Psychological and Behavioral issues in adolescents

Each student will work with at least two adolescent case scenarios (real or simulated) representing physiological (e.g., obesity, acne, menstrual irregularities), psychological (e.g., stress, low self-esteem), and behavioural issues (e.g., peer influence, screen overuse). Students will assess growth parameters, pubertal stage, and relevant history, apply Ayurvedic principles of dhatu poshana, and use structured tools for psychological/behavioural evaluation. They will then formulate individualized management plans incorporating diet, lifestyle,herbal supplements (e.g., Shatavari for menstrual health and Ashwagandha for vitality), therapies, Satvavajaya Chikitsa(mind control therapies), stress management, and counselling, while also identifying red flag indicators for referral. Role-play exercises will allow practice in adolescent and parent counselling using empathetic, age-appropriate communication. All findings, plans, and reflections will be documented in the logbook. The teacher will close the session with feedback, summary of strategies, and emphasis on holistic integration of clinical and educational approaches. (Duration: 6 hrs)

Experiential-Learning 30.2 : Adolescent sexuality and Adolescent nutrition

Each student will engage with either three real / simulated / adolescent case vignettes that highlight challenges in sexuality and nutrition. They will examine and develop educational and therapeutic strategies such as using Shatavari and Ashwagandha for reproductive health, integrating Sattvic Ahara and seasonal diets, and promoting sex education, contraceptive counselling, STI prevention, and balanced nutrition planning. Students will counsel adolescents and their parents to practice open communication, body positivity, respect for boundaries, safe sexual practices, and healthy eating behaviours. Students will formulate dietary guidelines tailored to developmental needs (e.g., high-protein diets for growth, iron-rich foods for menstruating girls, hydration, and supplements) while addressing risks like disordered eating. They will document their assessment, management plan, and reflections in the logbook. The teacher will conclude with a debrief, reinforcing best practices and ethical communication. (Duration: 6 hrs)

Experiential-Learning 30.3 : Management strategies for adolescent mental health and behavioural problems in clinical settings.

Each student will work with at least two adolescent case scenarios (real, simulated, or role-play) representing mental health issues (e.g., anxiety, depression, mood disturbances, low self-esteem) and behavioural concerns (e.g., substance use, defiance, risky behaviours). Students will identify contributing psychological, social, and environmental factors such as academic pressure, peer influence, family conflict, or identity struggles, and link these to Manovaha Srotas imbalance and disruptions in emotional regulation from an Ayurvedic perspective. They will apply modern diagnostic reasoning alongside Ayurvedic principles to draft individualized management and counselling strategies, including lifestyle guidance, Satvavajaya Chikitsa, diet modifications, and referral indicators. Students will also practice counselling adolescents and parents through role-play, focusing on empathetic communication, confidentiality, and stigma reduction. All assessments, plans, and reflections will be documented in the logbook. The teacher will provide feedback, highlight preventive strategies, and ethical considerations in adolescent mental health care. (Duration-6 hrs)

Experiential-Learning 30.4 : Adolescent Friendly Health Services (AFHS) in clinical settings.

Students will engage with simulated or real-life adolescent cases of drug abuse to explore diagnostic, preventive, and therapeutic strategies using both Ayurvedic and modern approaches. They will develop management plans incorporating Panchakarma detox, Nasya, Shirodhara, Rasayana, dietary guidance, and herbal support, alongside counselling, behaviour modification, and rehabilitation services. Through role-play, students will practice counselling adolescents and families on prevention, resilience building, boundary setting, and recovery support. They will also design strategies to integrate Ayurvedic principles into AFHS and educate families on the benefits of AFHS in providing confidential, holistic, and adolescent-friendly care. Reflections and case findings will be documented in the logbook, followed by faculty feedback and discussion. (Duration: 4 hrs)

Experiential-Learning 30.5 : National programs aimed at improving adolescent health

Each student will work with adolescent case vignettes to analyze how national programs like RKSK, NAEP, SHP, and ARSH can be applied while integrating principles such as Dinacharya, Sattvic diet, Rasayana, Yoga, and Pranayama for holistic care. Students in groups will evaluate and justify which program fits, design integrative strategies, and role-play counselling either adolescents or their parents, emphasizing preventive care, accessibility, and holistic well-being. The session concludes with a reflection where students compare approaches, discuss challenges, and link their strategies back to national guidelines and Ayurveda concepts, ensuring they can critically evaluate, justify, and implement adolescent health programs in a practical, culturally sensitive way. Students will document their experience in logbook. (Duration: 4 hrs)

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. OSCE Stations: (Each Station x 10 marks=50 marks) Station 1: Case – Adolescent with mood disturbance: Satva + Dosha analysis Station 2: Evaluate adolescent nutrition via Rasavaha-Raktavaha Dushti	4

Station 3: Role Play – Address peer pressure/drug use with Achara Rasayana
Station 4: Match adolescent disorders to Ayurvedic Nidanas
Station 5: Counseling simulation for AFHS or reproductive health
OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Semester No : 6

Module 31 : Social And Community Pediatrics

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

1. Analyse community-based approaches to child health and social determinants.
2. Analyze the role of family, society, and environment in pediatric health.
3. Evaluate public health programs like vaccination and school health services.
4. Plan and implement community pediatric initiatives using modern and traditional strategies.

M 31 Unit 1 Child Protection and Parenting: Understanding Care, Abuse, and Rights

- Art of Parenting
- Child Abuse
- Trafficking
- Sexual abuse
- Labour,
- Violence and Child Neglect, Domestic, Foster Care.

References: 35,45,58,59,63,75,100

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5,CO6	Analyze parenting principles, types of child abuse, and evaluate protective and intervention strategies for child safety and well-being.	2	Lecture	CAN	Knows-how	L_VC,CBL,L&PPT,L&GD,L
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate appropriate intervention strategies for cases involving parenting challenges, child abuse, trafficking, neglect, and foster care.	4	Practical Training 31.1	PSY-GUD	Shows-how	RP,PBL,W,TBL,GBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Justify intervention strategies in adherence to current legal, ethical, and clinical guidelines for following issues: • **Parenting,** • **Child abuse** • **Trafficking** • **Sexual abuse** • **Child labor** • **Violence** • **Child Neglect** • **Domestic issues** • **Foster Care**	5	Experiential-Learning 31.1	AFT-RES	Does	W,TBL,RP,CBL,PBL
M 31 Unit 2 Child Adoption • International adoption • Safety healthcare Practice for children • Ethics. **References:** 35,45,58,59,63,100						

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO5	Analyze legal, ethical, and procedural aspects of international adoption, and evaluate best practices for safeguarding children’s health and rights across caregiving settings.	2	Lecture	CAN	Knows-how	L&PPT ,CBL,L&GD,JC,L
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate appropriate strategies for international adoption, child safety in healthcare, and ethical decision-making under supervision.	4	Practical Training 31.2	PSY-GUD	Shows-how	FV,CBL,W,TBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Investigate and justify ethical considerations and safe healthcare practices for children in international adoption.	5	Experiential-Learning 31.2	PSY-MEC	Does	TBL,CBL,RP,W

M 31 Unit 3 Vital Statistics

- Global child care(Vital statistics)
- Cultural Issues

References: 35,45,58,59,75,100,101

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze global child care practices, the role of vital statistics and culturally sensitive strategies to support child well-being across diverse populations.	2	Lecture	CAN	Knows-how	L_VC,CBL,L&PPT,L&GD,L
CO2,CO3,CO4,CO5,CO6,CO7	Investigate and interpret global child care practices, vital statistics, and cultural issues.	4	Practical Training 31.3	PSY-GUD	Shows-how	TBL,DIS,SIM,D,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate role of vital statistics and cultural factors in global child care, integrating health guidelines with cultural sensitivity.	5	Experiential-Learning 31.3	PSY-MEC	Does	CBL,RP,W,TBL,FV

M 31 Unit 4 National Health Mission

- National Health Mission.

References: 45,58,75,100

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4,CO6	Analyze the objectives, strategies, and impact of the National Health Mission on: • **Maternal-child health** • **Disease control** • **Healthcare equity in India's primary care system.**	2	Lecture	CAN	Knows-how	CBL,L,L&GD,L&PPT,L_VC
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Analyze and apply the principles and strategies of the National Health Mission through practical experience in supervised environments.	4	Practical Training 31.4	PSY-GUD	Shows-how	TBL,W,SIM,FV,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate the implementation and impact of the National Health Mission in strengthening healthcare delivery, especially for vulnerable populations.	6	Experiential-Learning 31.4	PSY-MEC	Does	FV,SIM,CBL,RP,TBL

M 31 Unit 5 Disinfection

- Application of aseptic and community disinfection principles of Graha Roga.

References: 6,16,26,27,43,46,57,72,76,77,78,79,80,81,96

3A	3B	3C	3D	3E	3F	3G

CO2,CO3,CO4,CO5,CO6	Analyze principles and methods of asepsis and disinfection in preventing and managing Graha Roga, integrating traditional and modern approaches to enhance community health.	2	Lecture	CAN	Knows-how	L&GD,L_VC,CBL,L&PPT,L
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Practice aseptic and community disinfection principles for the prevention and management of Graha Roga.	4	Practical Training 31.5	PSY-MEC	Shows-how	FV,SIM,PBL,RP,CBL
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Explore and justify the role of aseptic techniques and community disinfection in preventing and managing Graha Roga.	5	Experiential-Learning 31.5	PSY-MEC	Does	W,FV,SIM,CBL,TBL

Practical Training Activity

Practical Training 31.1 : Child Protection and Family Welfare

Role-Play
Teacher will introduce key issues like child abuse, neglect, trafficking, and foster care with legal and ethical context. They will explain the simulation activity structure and expected outcomes. They will guide students during group work and role-play, ensuring practical application. Students will be divided into pairs and given realistic, anonymized case scenarios involving children affected by issues such as abuse, neglect, trafficking, or parenting challenges. Under supervision, each group will:

- Analyze the case using relevant legal, ethical, and psychosocial frameworks
- Identify risk factors and needs of the child/family
- Develop a multidisciplinary intervention plan
- Role-play a professional consultation (e.g., home visit, team meeting, caregiver interview)
- Peers and Teacher will provide feedback.

Teacher will summarise the session. (Duration-4hrs)
OR
Workshop
Students will attend a workshop on Child Protection and Family Welfare. They will work in interdisciplinary teams to analyze rotating case scenarios involving child abuse, neglect, trafficking, parenting challenges, and foster care. After a teacher-led demonstration of assessment and intervention planning, teams will identify issues, propose

supervised intervention strategies, role-play caregiver counseling, and present their case findings. Facilitators will assess using structured checklists. The session will conclude with group feedback and a summary of key principles and referral pathways.(Duration-4hrs)

Practical Training 31.2 : Adoption and Child Safety

Case Based Learning
Students will be divided into pairs and presented with a composite case scenario,each, involving an international adoption process or a child safety concern in a healthcare setting. Under faculty supervision, they will:

- Identify legal, procedural, and ethical considerations
- Simulate stakeholder consultations (e.g., healthcare providers, legal authorities, adoptive parents) emphasizing on addressing cultural differences sensitively and looking into healthcare access challenges or unique health risks these children usually face.
- Propose and demonstrate appropriate interventions ensuring child safety and rights considering adoption transition (challenges children may face in adjusting to new environments and discuss how healthcare providers can support this transition).
- Reflect on ethical dilemmas and justify decision-making pathways.

Teacher will summarise the session.(Duration-4hrs)
OR
Ethics Workshop on Informed Consent and Confidentiality in Pediatric Care

- Activity:In this workshop, students will engage in discussions and practice scenarios related to ethical issues in pediatric healthcare.
- Informed Consent: Students will explore scenarios where scholars must ensure that both the child (when age-appropriate) and caregivers understand treatment options and consent.
- Confidentiality: They will practice handling sensitive information, especially in cases involving international adoption, where background details may impact the child’s care and privacy.

Scholars will work in pairs to discuss these ethical scenarios, followed by a faculty-led debriefing to reinforce ethical guidelines, legal responsibilities, and strategies for maintaining trust and transparency in pediatric care. (Duration-4 hrs)

Practical Training 31.3 : Global child care practices, vital statistics, and cultural issues through

Demonstration
The teacher will presents examples of culturally adapted health education materials, highlighting effective approaches in nutritional education (addressing deficiencies, incorporating local diets) and preventive health (vaccination, hygiene, disease prevention). Demonstration focuses on design, language, visuals, and strategies for making content accessible and culturally relevant.
Following demonstration students will work in teams to create their own culturally inclusive health education resources targeting child nutrition or preventive health. They will incorporate local dietary practices, cultural beliefs, and community norms while ensuring scientific accuracy. Teams will then present their materials to the class, demonstrating clarity, cultural sensitivity, and practical applicability.
The teacher provides feedback on the content, cultural inclusivity, and presentation quality. Key principles of designing globally relevant, accessible, and effective child health education materials are reinforced.
Duration: 2 hours

Practical Training 31.4 : National Health Mission

Demonstration
The teacher will model a community health workshop, showcasing how to educate the public on NHM initiatives. Demonstration will include presenting educational materials on maternal and child health (safe motherhood, nutrition, newborn care) and sanitation/hygiene (handwashing, clean water, Swachh Bharat practices), highlighting strategies for tailoring messages to local cultural contexts and engaging diverse audiences.
Following demonstration students will work in teams to design and present educational materials such as posters, flyers, or short presentations on maternal/child health and sanitation, linking content to NHM objectives. Teams will demonstrate engagement techniques for community members, adapting messaging to cultural norms and local needs.
Teacher will provide feedback on clarity, cultural sensitivity, engagement strategies, and overall effectiveness. Key principles of public health communication, NHM goals, and community engagement are reinforced.
Duration: 4 hours

Practical Training 31.5 : Application of Aseptic and Community Disinfection Principles.

Demonstration
The teacher will model outbreak management in a simulated setting, showing proper implementation of isolation and quarantine measures and demonstrating environmental disinfection techniques for rooms, surfaces, and common areas. Emphasis will be placed on procedural accuracy, safety, and preventing further transmission.
Following the demonstration, students will work in small groups to replicate the isolation setup and practice disinfection protocols in the simulated environment. Each group will perform room and surface disinfection, applying quarantine procedures, and follow step-by-step infection control measures.

Faculty will observe and provide feedback on accuracy, thoroughness, and adherence to infection control standards. Key principles of outbreak management, procedural consistency, and prevention of transmission are reinforced.
Duration: 2 hours

Experiential learning Activity

Experiential-Learning 31.1 : Child Protection & Intervention Strategies

Scholars will visit an NGO, child helpline center, or shelter home to understand real-world practices in handling child welfare cases. They will observe intervention protocols, support services, and inter-agency coordination. All observations and insights will be recorded in the logbook and reviewed by faculty. (Duration-5hrs)
OR
Students will divided into pairs, each assigned one issue—parenting, child abuse, trafficking, sexual abuse, child labor, violence, neglect, domestic issues, or foster care. Each group will be given a short case scenario related to their issue and tasked with analyzing it using current legal, ethical, and clinical guidelines. They will identify the immediate concerns, outline intervention strategies, and justify their choices by referencing relevant acts, ethical principles, and clinical practices. After group discussion, each team will present their intervention plan to the class, followed by a peer-led Q&A session where other students critically appraise and add insights. The activity concludes with all groups jointly creating a quick comparative chart of intervention strategies across issues, reinforcing integration and application of guidelines. Students will document their learnings in logbook. (Duration-5hrs)

Experiential-Learning 31.2 : Ethics & Child Healthcare in International Adoption

Scholars will design and conduct a structured survey with professionals involved in child welfare, adoption agencies, or pediatric care to explore ethical concerns, safety measures, and healthcare protocols in international adoption.
They will analyze responses to identify common practices, challenges, and compliance with legal and clinical guidelines. Findings and reflections will be documented in the logbook for faculty review.(Duration-5hrs)
OR
Scholars will visit an adoption agency or child welfare institution to observe healthcare protocols and ethical practices ensuring the well-being of adopted children.
They will interact with staff to understand screening procedures, cultural integration efforts, and legal safeguards for child health and safety. All key observations and insights will be recorded in the logbook and discussed with faculty.(Duration-5hrs)

Experiential-Learning 31.3 : Vital Stats & Culture in Global Child Care

Students will visit community health centers or culturally diverse neighborhoods to observe how cultural beliefs influence child health practices. They will focus on family

interactions with healthcare providers, attitudes toward nutrition, hygiene, vaccination, and the use of local health resources. Following the visit, scholars reflect on cultural differences, healthcare practices, and their own perspectives on culturally sensitive care. All observations and reflections are documented in the logbook for faculty review and feedback.(Duration-5hrs)
OR
Students will work in pairs to create educational materials promoting child health, tailored to a specific cultural context. Topics include hand hygiene, nutrition, breastfeeding, anemia, and vaccination, with content designed using culturally appropriate language, symbols, and visuals.
Each team will present their materials to peers and faculty, who will provide feedback on clarity, cultural sensitivity, and practical application. Students will document their learnings and experience in logbook. (Duration-5hrs)

Experiential-Learning 31.4 : Implimentation of National Health Mission,

Students will visit a local public health facility implementing NHM initiatives, observing key services like immunization drives and maternal-child health programs (ANC, PNC, nutrition counseling, growth monitoring). They will reflect on strengths, gaps, and real-world challenges observed during the visit. All observations and insights are to be documented in the logbook.(Duration-6hrs)
OR
Students will analyze real or simulated data on NHM indicators such as child mortality, immunization coverage, and maternal health. They will identify trends, evaluate program effectiveness, and suggest areas for improvement. All findings and interpretations are to be documented in the logbook. (Duration-6hrs)

Experiential-Learning 31.5 : Analysis of Community Disinfection Practices.

Students will visit a community health center to observe hand hygiene, PPE use, and environmental disinfection practices. They will then submit a reflective journal analyzing the effectiveness and challenges of these protocols. (Duration-5 hrs)
OR
Students will work in teams to design a community disinfection plan, including public awareness campaigns and disinfection kit distribution. Teams will present their strategies, receive faculty feedback, and refine their plans for practical application. (Duration-5 hrs).

Description: Presentation/CBL/Role-play/Simulation/Mini-CEX/OMP/JAR
Instructions: Using either of the above-mentioned methods, scholars shall be asked to
Explore and justify the application of aseptic techniques and community disinfection principles in the prevention and management of Graha Roga, following current health

and safety guidelines.
1. Field Observation and Reflective Journaling on Disinfection Practices in Community Health Settings
Activity:
Scholars visit a community health center, observing real-life applications of aseptic and disinfection practices to prevent the spread of infectious diseases:
Hand Hygiene and PPE Use: Observe healthcare workers' adherence to handwashing protocols and PPE usage, particularly in patient contact areas.
Environmental Disinfection: Watch how surfaces, medical equipment, and high-touch areas are routinely disinfected, noting protocols for both patient and community safety.

Following the visit, scholars document their reflections, focusing on the effectiveness of these practices in minimizing infection risk. Faculty review journals to help scholars deepen their understanding of practical disinfection measures and encourage reflections on how these can be applied in various settings.
2. Simulation of Community-Based Outbreak Disinfection Protocols
Activity:
In a simulated environment, scholars practice implementing disinfection protocols to manage a hypothetical Graha Roga outbreak in a community setting:
Setting Up Isolation Zones: Simulate isolating high-contact areas to control the spread of infection within a community or household.
Environmental Decontamination: Practice cleaning and disinfecting common areas, such as simulated households or community rooms, using correct disinfection techniques.

After the simulation, faculty provide feedback on the accuracy and thoroughness of the disinfection measures. This activity prepares scholars to apply disinfection protocols during real-life outbreak situations, focusing on safety, efficiency, and prevention.
3. Community Education Workshop on Home and Personal Hygiene for Graha Roga Prevention
Activity:
Scholars organize a community workshop to educate caregivers on basic home hygiene practices that can prevent Graha Roga infections:
Hand Hygiene and Surface Cleaning: Demonstrate effective handwashing techniques and proper cleaning of high-touch surfaces in the home.
Safe Waste Disposal and Sanitation: Educate caregivers on safe disposal of household waste and maintaining clean surroundings to reduce infection risk.

Scholars interact with community members in a hands-on workshop setting, receiving real-time feedback from participants and faculty on the clarity and practicality of the educational materials. This activity helps scholars build skills in community engagement and health education, emphasizing the role of hygiene in infection prevention.
4. Role-Play on Advising Families on Aseptic Techniques and Disinfection in the Home
Activity:
Scholars participate in role-play sessions to practice advising families on maintaining aseptic and disinfection standards within the home, focusing on practical and accessible methods:
Advising on Routine Cleaning: Practice discussions on cleaning techniques for commonly touched surfaces, such as doorknobs, countertops, and shared devices.

Handling Contaminated Items: Role-play educating families on handling and disinfecting items that may have been exposed to infection, such as linens, clothes, and utensils.

Faculty provide feedback on the effectiveness, empathy, and practicality of each role-play scenario, helping scholars develop culturally sensitive approaches to household disinfection education.
5. Team-Based Learning (TBL) for Developing a Community-Wide Disinfection Strategy
Activity:
In teams, scholars design a comprehensive community disinfection strategy aimed at reducing Graha Roga transmission in public spaces:
Public Awareness Campaign: Develop materials to educate the community on the importance of maintaining hygiene in public places, such as schools, markets, and places of worship.

Community Disinfection Kit: Create a plan for distributing basic disinfection kits (hand sanitizer, cleaning agents) to households, especially in high-risk areas, and instructions on how to use them effectively.

Each team presents their strategy to peers and faculty, who provide feedback on the feasibility, clarity, and potential impact of the plan. This activity strengthens scholars' ability to design actionable public health initiatives and builds their confidence in addressing community-wide health issues.
6. Interactive Data Analysis on Disinfection Effectiveness in Controlling Graha Roga Outbreaks
Activity:
Scholars work with simulated data on infection rates in communities before and after implementing disinfection practices, analyzing the impact of these interventions on disease transmission:
Data Interpretation: Scholars examine trends in infection rates, identify key outcomes, and discuss factors contributing to the success or limitations of disinfection measures.
Evaluation and Recommendations: Based on the data, scholars develop recommendations for improving disinfection practices to enhance community health outcomes.
Faculty guide the data analysis, helping scholars understand how disinfection protocols contribute to reducing infection rates and supporting evidence-based recommendations. This activity enhances scholars’ skills in using data to evaluate the effectiveness of public health interventions.

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. OSCE Stations: (Each Station x 10 marks = 50 marks) Station 1: Identify signs of abuse and relate to Aabhighata in Ayurveda	4

Station 2: Role Play – Counseling for neglected child from Ayurvedic psychology view
Station 3: Match NHM schemes with child wellness (Balopachara Bhavas)
Station 4: Ethics – Decision-making in child care scenarios
Station 5: List and explain Graha Roga (infection) preventive practices
OR
Any practical in converted form can be taken for assessment. (25 marks)
AND
Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)

Module 32 : Aupsargika Roga (Infections)

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

1. Analyse Bala Graha Siddhanta and Tatjanya Roga in Kaumarabhritya.
2. Evaluate Graha Utpatti and Lakshana Utpatti in afflicted children.
3. Analyze Dosha-Dushya Sammurchana and Samprapti of Graha Roga.
4. Develop treatment protocol and parental guidance for prevention and management.

M 32 Unit 1 Diagnosis and management of Graha Rogas

- Skanda
- Skanda Apasmara
- Naigamesha
- Shwa Graha

References: 6,26,43,46,48,57,76,77,78,79,80,81,96

3A	3B	3C	3D	3E	3F	3G

CO2,CO3,CO4	Analyze clinical features, diagnostic criteria, Samprapti, and explore management strategies for following Graha Roga: • **Skanda (Polio Myelitis)** • **Skandaapasmara (Febrile Seizures)** • **Naigamesha (Meningitis)** • **Shwa Graha (Rabies)**	2	Lecture	CAN	Knows-how	CBL,L&PPT ,L,L&GD,L_VC
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate diagnosis and management of following Graha Roga: • **Skanda (Polio Myelitis)** • **Skandaapasmara (Infectious Febrile Seizures)** • **Naigamesha (Meningitis)** • **Shwa Graha (Rabies)**	4	Practical Training 32.1	PSY-GUD	Shows-how	RP,PBL,CBL,SIM,CD
CO2,CO3,CO4,CO6,CO7,CO8	Assess and apply diagnostic and management strategies for following Graha Rogas: • **Skanda,** • **Skanda Apasmara,** • **Naigamesha,** • **Shwa Graha**	5	Experiential-Learning 32.1	PSY-MEC	Does	RLE,D-BED,PBL,TBL
M 32 Unit 2 Diagnosis and management of Graha Rogas • Putana and its types • Pithru						

- Mukha mandika
- Shushkha Revati
- Shakuni
- Revati

References: 6,16,26,27,43,46,48,57,76,77,78,79,80,81,96

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4 ,CO5	Analyze the etiology, classifications, diagnostic approaches and explore Chikitsa and preventive strategies for the following Graha Roga: • **Putana** • **Pithru** • **Mukha Mandika** • **Shushkha Revati** • **Shakuni** • **Revati**	2	Lecture	CAN	Knows-how	L,L_VC, L&PPT , CBL,L& GD
CO3,CO4,CO5 ,CO6,CO7	Demonstrate the ability to evaluate and manage following Graha Roga: • **Putana** • **Pithru** • **Mukha Mandika** • **Shushkha Revati** • **Shakuni** • **Revati**	4	Practical Training 32.2	PSY-GUD	Shows-how	CBL,PBL ,SIM

CO2,CO3,CO4,CO5,CO6,CO7,CO8	Investigate and implement appropriate diagnostic and therapeutic strategies for managing Graha Rogas: • **Putana,** • **Pithru,** • **Mukha Mandika,** • **Shushkha Revati,** • **Shakuni, and** • **Revati in clinical practice.**	5	Experiential-Learning 32.2	PSY-MEC	Does	RP,RLE,PBL,TBL
M 32 Unit 3 Diagnosis and management of Aupsargika-Roga (Infectious Disorders): • Antrika Jwara- Typhoid, Paratyphoid, • Rohini- Diphtheria, Kukkura kasa - Whooping cough, • Danurvata -Tetanus, neonatal tetanus, • Karna shola / srava - Otitis Media. **References:** 6,35,45,46,58,59,76,77,78,79,80						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO2,CO3,CO4,CO5	Analyze the clinical presentation, diagnostic criteria, and explore management strategies for following Aupsargika Rogas (infectious disorders): • **Typhoid** • **Paratyphoid** • **Diphtheria** • **Whooping Cough** • **Tetanus**	2	Lecture	CAN	Knows-how	CBL,L&GD,L_VC,L,L&PPT

	• **Neonatal Tetanus** • **Otitis Media.**					
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Demonstrate diagnosis and management of following Aupsargika Roga (Infectious Disorder): • **Antrika Jwara (Typhoid, Paratyphoid)** • **Rohini (Diphtheria)** • **Kukkura Kasa (Whooping Cough)** • **Danurvata (Tetanus, Neonatal Tetanus)** • **Karna Shola/Srava (Otitis Media)**	4	Practical Training 32.3	PSY-GUD	Shows-how	PBL,CD,CBL,SIM
CO2,CO3,CO4,CO5,CO6,CO7,CO8	Evaluate and implement appropriate Ayurvedic diagnostic and therapeutic strategies for following Aupsargika Roga (Infectious Disorders): • **Antrika Jwara (Typhoid)** • **Rohini (Diphtheria)** • **Kukkura Kasa (Whooping Cough)** • **Danurvata (Tetanus)** • **Karna Shola/Srava (Otitis Media)**	6	Experiential-Learning 32.3	PSY-MEC	Does	TBL,RLE

M 32 Unit 4 Diagnosis and management of Aupsargika-Roga (Infectious Disorders):

- Romantika-Measles
- Karnamula Shotha-Mumps
- Rubella
- Masurika, Chickenpox
- Viral hepatitis
- Weil’s Disease,
- COVID

- HIV
- AIDS
- Poliomyelitis.

References: 1,3,35,45,46,58,59,63,75,100,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze the clinical presentation, diagnostic criteria, and explore management strategies for following Aupsargika Rogas (infectious disorders): • **Romantika (Measles)** • **Karnamula Shotha (Mumps)** • **Rubella** • **Masurika (Chickenpox)** • **Viral Hepatitis** • **Weil's Disease** • **COVID-19** • **HIV** • **AIDS** • **Poliomyelitis**	2	Lecture	CAN	Knows-how	CBL,L_VC,L,L&GD,L&PPT
CO2,CO3,CO4,CO5,CO6,CO7	Demonstrate diagnosis and management of following Aupsargika-Roga (Infectious Disorders): • **Romantika (Measles)** • **Karnamula Shotha (Mumps)** • **Rubella** • **Masurika (Chickenpox)** • **Viral Hepatitis**	4	Practical Training 32.4	PSY-GUD	Shows-how	SIM,PBL,TBL,CBL

	• **Weil's Disease** • **COVID** • **HIV** • **AIDS** • **Poliomyelitis**					
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Evaluate and justify diagnostic and management approaches for following Aupsargika-Roga (Infectious Disorders): • **Romantika (Measles)** • **Karnamula Shotha (Mumps)** • **Rubella, Masurika (Chickenpox)** • **Viral Hepatitis** • **Weil's Disease** • **COVID** • **HIV/AIDS,** • **Poliomyelitis**	5	Experiential-Learning 32. 4	PSY-MEC	Does	TBL,RP, RLE,PBL

M 32 Unit 5 Diagnosis and management of Aupsargika-Roga (Infectious Disorders):

- Vishama Jwar- Malaria, Kala-azar
- Dengue fever
- Chikungunya,
- Zika
- Rickettsial fever, Typhus fever.

References: 1,3,35,45,58,59,63,75,100,101,105

3A	3B	3C	3D	3E	3F	3G
CO2,CO3,CO4	Analyze the clinical presentation, diagnostic criteria, and explore management strategies	2	Lecture	CAN	Knows-	L&PPT ,

,CO5	for following Aupsargika Rogas (infectious disorders): • **Vishama Jwar (Malaria and Kala-azar)** • **Dengue Fever** • **Chikungunya** • **Zika** • **Rickettsial Fever** • **Typhus Fever**				how	L,L&GD, CBL,L_VC
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Demonstrate diagnosis and management of following Aupsargika Roga (Infectious Disorders): • **Vishama Jwar (Malaria, Kala-azar)** • **Dengue fever** • **Chikungunya** • **Zika** • **Rickettsial fever** • **Typhus fever**	4	Practical Training 32.5	PSY-GUD	Shows-how	SIM,RP,CBL
CO2,CO3,CO4 ,CO5,CO6,CO 7,CO8	Evaluate and manage the following Aupsargika-Roga (Infectious Disorders): • **Vishama Jwar (Malaria, Kala-azar),** • **Dengue Fever** • **Chikungunya** • **Zika** • **Rickettsial Fever**	5	Experiential-Learning 32.5	PSY-MEC	Does	W,CBL,PBL

	• **Typhus Fever**					

Practical Training Activity

Practical Training 32.1 : Diagnosis and Management of Graha Roga-I

Demonstration
The teacher will demonstrate the clinical assessment of a child with suspected Graha Roga (e.g., Skanda, Skanda Apasmara, Naigamesha, Shwa Graha), focusing on identifying Nidana Panchaka, clinical features, differential diagnosis, and interpreting key investigations. The session will cover Samprapti Vighatana and a holistic management approach including Daivavyapashraya, Satvavajaya, and Yukti Vyapashraya Chikitsa. Referral criteria will also be discussed.
Students will:

- Work in pairs on 2 case vignettes.
- Identify Lakshanas, investigations, and Samprapti.
- Plan integrative management and justify its rationale.
- Role-play caregiver counseling.
- Present findings and receive feedback.

Teacher will summarise the session.(Duration-4 hrs)

Practical Training 32.2 : Diagnosis and Management of Graha Roga-II

Demonstration
The teacher will demonstrate the clinical approach to children presenting with symptoms suggestive of Graha Rogas such as Putana, Pithru, Mukha Mandika, Shushkha Revati, Shakuni, and Revati. The focus will be on identifying Nidana Panchaka, Graha-specific Lakshanas, clinical differentiation, and interpreting basic investigations. The session will include formulation of Samprapti and Vighatana, and planning of individualized management incorporating Daivavyapashraya (e.g., Bali, Homa), Yukti Vyapashraya (e.g., Shamana,Shodhana, Panchakarma), and Satvavajaya measures. Referral indicators (e.g., worsening behavior, failure to respond) will also be highlighted.
Students will:

- Analyze assigned Graha Roga vignettes in pairs.
- Identify Lakshanas and formulate Samprapti.
- Propose integrated treatment plans alonwith its rationale.

- Simulate caregiver counseling.
- Present case analysis and receive feedback.

Teacher will summarise key clinical and therapeutic insights.(Duration-4hrs)

Practical Training 32.3 : Diagnosis and Management of Aupsargika-Roga (Infectious Disorders)

Demonstration
The teacher will demonstrate the clinical assessment of pediatric infectious conditions such as Typhoid, Diphtheria, Whooping Cough, Tetanus, and Otitis Media, focusing on eliciting history, identifying classical signs/symptoms, and selecting relevant investigations (e.g., Widal test, throat swab, CBC, otoscopic exam, culture reports). The demonstration will include formulation of Samprapti and Samprapti Vighatana, followed by a treatment plan combining Ayurvedic modalities (e.g., Jwarahara, Shothahara, Krimighna dravyas, Pratisarana, Karnapurana) and supportive care. Referral indicators (e.g., airway compromise, high-grade fever with complications) will also be discussed.
Students will:

- Work in pairs on given clinical vignettes.
- Identify key symptoms and appropriate investigations.
- Formulate Samprapti and Vighatana.
- Plan an integrative management strategy (Ayurveda + supportive care).
- Role-play caregiver education on disease course, treatment, and preventive measures.
- Present findings for peer and faculty feedback.

Teacher will summarise the session.(Duration-4hrs)

Practical Training 32.4 : Diagnosis and Management of Aupsargika-Roga (Infectious Disorders)-II

Demonstration
The teacher will demonstrate the clinical evaluation of pediatric Aupsargika Rogas such as Romantika (Measles), Karnamula Shotha (Mumps), Rubella, Masurika (Chickenpox), Viral Hepatitis, Weil’s Disease, COVID, HIV/AIDS, and Poliomyelitis. The demonstration will include eliciting clinical history, identification of Nidana Panchaka, examination of classical signs (e.g., Koplik spots, parotid swelling, rashes, jaundice, paralysis), and interpretation of relevant investigations (e.g., ELISA, LFTs, PCR, serology, rapid antigen tests). Samprapti and Samprapti Vighatana will be discussed for each condition. The teacher will outline an integrative treatment plan using Ayurvedic modalities (e.g., Jwarahara, Rasayana, Krimighna dravyas, Srotoshodhaka chikitsa), supportive therapy, and isolation/preventive strategies. Referral and red flag

indicators (e.g., encephalitis, immunocompromised state, respiratory distress) will be covered.
Students will:

- Work in pairs on 2 assigned infectious case vignettes.
- Identify clinical features, required investigations, and differential diagnoses.
- Formulate Samprapti and Vighatana.
- Devise integrative treatment and preventive strategies (Ayurveda + supportive).
- Role-play counseling for patients/caregivers on disease transmission, home care, and immunization.
- Present case findings and management plans to peers and faculty.

Teacher will summarise the session.(Duration-4hrs)

Practical Training 32.5 : Diagnosis and Management of Aupsargika-Roga (Infectious Disorders)-III

Demonstration
The teacher will demonstrate the clinical assessment of vector-borne Aupsargika Rogas such as Vishama Jwar (Malaria, Kala-azar), Dengue, Chikungunya, Zika, Rickettsial fever, and Typhus fever. The session will include eliciting relevant history (e.g., travel, vector exposure), identifying classical signs (e.g., cyclical fever, rashes, hepatosplenomegaly, hemorrhagic signs, arthralgia), and interpreting key investigations (e.g., peripheral smear, NS1 antigen, ELISA, PCR, serology, Weil-Felix test). Samprapti and Samprapti Vighatana will be discussed for each disease. The teacher will present individualized integrative management including Ayurvedic treatment (e.g., Jwarahara, Raktaprasadana, Rasayana, Vishaghna chikitsa), supportive measures (e.g., hydration, paracetamol), and preventive strategies (e.g., vector control, lifestyle guidance). Referral indicators such as thrombocytopenia, altered sensorium, or multi-organ involvement will also be addressed.
Students will:

- Work in pairs on given disease vignettes.
- Identify clinical features, diagnostic tests, and differential diagnoses.
- Formulate disease-specific Samprapti and Vighatana.
- Plan integrated management strategies (Ayurveda + supportive care).
- Role-play communication on prevention, prognosis, and lifestyle advice.
- Present their findings for peer and faculty feedback.

The teacher will summarise the session.(Duration-4 hrs).

Experiential learning Activity
Experiential-Learning 32.1 : Management of Graha Roga-I
Each student will assess a minimum of three clinical cases or vignettes of Graha Rogas (e.g., Skanda, Skanda Apasmara, Naigamesha, Shwa Graha).They will conduct a detailed case examination, identify Nidana Panchaka, analyze Graha-specific Lakshanas, recommend necessary investigations, formulate the Samprapti, and develop an individualized Chikitsa plan including Daiva Vyapashraya, Satvavajaya, and Yuktivyapashraya Chikitsa with clear justification. They will also educate and counsel caregivers sensitively. All findings will be recorded in the logbook.(Duration-5hrs)
Experiential-Learning 32.2 : Management of Graha Roga-II
Each student will assess a minimum of three clinical cases or vignettes of Graha Rogas (e.g., Putana, Pithru, Mukha Mandika, Shushkha Revati, Shakuni, Revati). They will perform a detailed case examination, identify Nidana Panchaka, analyze Lakshana and Graha Lakshanas, advise appropriate investigations, formulate Samprapti, and develop a personalized Chikitsa plan (including Daiva Vyapashraya, Satvavajaya, and Yuktivyapashraya Chikitsa) with rationale. They will also counsel the caregiverswith appropriate reassurance and guidance. All findings will be documented in the logbook. (Duration-5hrs)
Experiential-Learning 32.3 : Management of Aupsargika Roga (Infectious Disorders)-III
Each student will assess a minimum of three clinical cases or vignettes of Aupsargika Roga (e.g., Antrika Jwara – Typhoid/Paratyphoid, Rohini – Diphtheria, Kukkura Kasa – Whooping Cough, Danurvata – Tetanus/Neonatal Tetanus, Karna Shola/Srava – Otitis Media). They will perform detailed case examination, identify Nidana Panchaka, advise relevant investigations, formulate Samprapti, and develop an individualized Chikitsa plan (Shodhana / Shamana / Complementary / Alternative / Pathya–Apathya) with proper rationale. They will also counsel the patient and caregivers. All findings will be documented in the logbook. (Duration-6hrs)
Experiential-Learning 32.4 : Management of Aupsargik Roga (Infectious Disorders)
Each student will assess a minimum of three clinical cases or vignettes of Aupsargika Roga (e.g., Measles, Mumps, Chickenpox, Viral Hepatitis, Weil's Disease, COVID-19, HIV/AIDS, Poliomyelitis). They will perform detailed case examination, identify Nidana Panchaka, advise relevant investigations, formulate Samprapti and develop Chikitsa plan (Shodhana / Shamana / Complementary/Alternative/Pathya-Apathya) with rationale, counsel patients and caregivers All findings will be recorded in the logbook. (Duration-5hrs)
Experiential-Learning 32.5 : Management of Aupsargika-Roga (Infectious Disorders)

Evaluate a minimum of three different clinical cases or case vignettes of Aupsargika Roga (e.g., Malaria, Dengue, Kala-azar, Chikungunya, Rickettsial Fever) across varied presentations (e.g., febrile, hemorrhagic, relapsing, or with organ dysfunction) and doshic predominance. Perform a detailed clinical examination, assess involvement of Raktavaha, Rasavaha, and other relevant Srotas, identify Nidana Panchaka, and recommend appropriate investigations (e.g., peripheral smear, ELISA, NS1 antigen, Weil-Felix test). Formulate Samprapti and Samprapti Vighatana. Develop and communicate an individualized Chikitsa plan incorporating Shamana, Shodhana, Rasayana, Pathya-Apathya, and preventive strategies as per clinical context. All findings and reflections will be recorded in logbook. (Duration-5hrs)

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. OSCE Stations: (Each Station x 10 marks=50 marks) Station 1: Case/Simulated case/Case Vignette – Typhoid as Antrika Jwara: Diagnosis + Dosha mapping Station 2: Identify Graha Roga types with presentation . Station 3: Prescribe formulations for Vishama Jwara or Dhanurvata Station 4: Role Play – Public education on Jwara prevention (Janapadodhwamsa) Station 5: Interpret infection lab reports using Ayurvedic principles OR Any practical in converted form can be taken for assessment. (25 marks) AND Any of the experiential as portfolio/ refelections / presentations can be taken as assessment.. (25 marks)	4

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)

Practical No*	Practical name	Hours
1.1	Applied Genomics in Prakriti Assessment	2
1.2	Yajna Purusha and Human Origin, Disease and Holistic Health	3
1.3	Cosmic Evolution: Sankhya Meets Science	2
1.4	Purusha-Loka Sambandha Prayoga	2
1.5	Loka Purusha Samya Siddhant-Based Assessment	2
1.6	Beeja Dushti Prevention and Genetic Health Promotion	2
1.7	Atulya Gotra Pariksha	2
1.8	Integrative Counselling for Genetic Disorder Prevention	2
1.9	Genetic Mapping in Consanguineous Marriages	3
2.1	Dosage Calculation	2
2.2	Aushadhi Sevana Kala & Vidhi: Application and Analysis	2
2.3	Prakriti-Vikriti Guided Drug Selection- Part I	4
2.4	Prakriti-Vikriti Guided Drug Selection- Part II	4
2.5	Safe Drug Administration Practice	2
2.6	Age-Appropriate Pediatric Drug Administration	4
2.7	Dose Calculation Techniques	2
3.1	Beeja Dosha and Pediatric Genetics	3
3.2	Karyotype Analysis and Dosha Correlation	3
3.3	Molecular Basis of Prakriti and Beeja-dosha	2

3.4	Applied Genetics in Child Health	6
3.5	Decoding Pediatric Disorders through Genetics	6
4.1	Karyotype Skills and Samprapti Mapping	4
4.2	Adibala Vyadhi and Chromosomal Mutations	3
4.3	Applied Mendelian Genetics	4
4.4	Managing Non-Mendelian Hereditary Disorders	5
4.5	Genetic Technologies and Ayurveda Integration	4
5.1	Shareera Vridhikara Bhava and Ashta Prakriti	5
5.2	Methods for Procuring Healthy Progeny	5
5.3	Care Practices for Fetal Well-being	4
5.4	Pumsavana Karma: Procedure, Benefits & Ethical Practice	2
5.5	Garbha Prakruti Assessment and Genetic Correlation	2
5.6	Assessment of Psycho-behavioural Development in Newborns.	2
6.1	Garbha Formation and Dosha Dynamics	4
6.2	Regenerative Insights in Garbha Vriddhi	2
6.3	Organogenesis through Beeja-bhaga	6
6.4	Nabhi Nadi & Fetal Circulation	4
6.5	Beeja-Shonita Oja & Maternal Immunity	2
6.6	Yamal Garbha: Diagnosis and Management	2
7.1	Integrated Assessment of Garbha Vikruti and Maternal Wellbeing	2

7.2	Assessment and Management of Fetal and Neonatal Endocrine Dysfunctions	2
7.3	Recurrent Miscarriage: Nidanapanchaka and Chikitsa	4
7.4	Impact of Satmyaja Bhava (Environmental Factors) on Garbha Vriddhi	2
7.5	Safe Procedures during Pregnancy	4
7.6	Congenital Anomalies of Garbha, Apara & Nabhinadi: Identification and Management	3
7.7	Congenital Anomalies of Srotas: Identification & Management	3
8.1	Clinical/biophysical/ biochemical tests for fetal well being.	4
8.2	Assessment of Masanumasik Garbha Vriddhi and Vikas.	2
8.3	Perinatal Genetic Screening Methods	4
8.4	Management, cases and prevention of disorders of sexual differentiation.	4
8.5	Disorders of Sexual Differentiation (DSD): Diagnosis and Clinical Management	2
8.6	Stree Kara and Purusha Kara Bhava Vikara	4
9.1	Perinatal complications and neonatal outcomes	1
9.2	Evaluation of ANC Reports	1
9.3	Feeding Support in Cleft Lip and Palate	2
9.4	Head to toe Examination of Newborn	3
9.5	Navajata Lakshana Pariksha (Neonatal screening)	3
9.6	Newborn Care Ancillary Procedures	3
9.7	Neonatal Unit Setup and Staffing	2
9.8	Infection Control and Biomedical Waste Management	2

9.9	Neonatal Feeding Techniques	2
9.10	Neonatal Total Parenteral Nutrition (TPN) Administration	1
10.1	Comparative resuscitation	2
10.2	Care of High-Risk Newborns	8
10.3	Newborn Resuscitation Skills	7
10.4	Surfactant Therapy	3
11.1	Prasava Kalina Abhighataja Vyadhi	4
11.2	Birth injuries - Concealed haemorrhages	3
11.3	Soft tissue injury	3
12.1	Assessment of Nabhi and Cord Care Complications	6
12.2	Congenital Disorders of Annavaha and Pureeshvaha Srotas	4
12.3	Diagnosis and Management of Medovaha & Mootravaha Disorders	10
12.4	Assessment of Asthi–Mamsa–Majja Vikara	10
13.1	Diagnosis and Management of Neonatal Respiratory Distress Syndrome (RDS)	4
13.2	Diagnosis and Management of GERD in Newborns	1
13.3	Assessment and Grading of Respiratory Distress Severity in Newborns	3
13.4	Artificial Respiration Tools in Neonatal Resuscitation	3
13.5	Diagnosis and Management of Complications from Assisted Respiration in Neonates	2
13.6	Diagnosis and Management of Neonatal CNS Infections	5
13.7	Neonatal tetanus	2

14.1	Navajata Shishu Kamala (Neonatal Hyperbilirubinemia)	2
14.2	Diagnosis and Investigation of Neonatal Infections	2
14.3	Screening and Investigation of Neonatal Infections	2
14.4	Suspect, identify and diagnose complications of septicaemia or other infection	2
14.5	Diagnosis and Management of Neonatal Hematologic Disorders	3
14.6	Congenital / Genetic Haemorrhagic and Haemolytic Diseases in New born	1
14.7	Identification and Management of Neonatal Metabolic Deviations	3
14.8	Management of Complications of Metabolic, Fluid, and Electrolyte Imbalances in Neonates	3
14.9	Counseling and Referral of Neonates with Cardiac Disorders	2
15.1	Assessment and Management of Neonatal Skin Disease	7
15.2	Management of Neonatal Eye and Nose Disease	3
16.1	Neonatal Life Support Application	8
16.2	Assessment and Management of Burn Injuries	6
16.3	Selection and Justification of Diagnostic/Therapeutic Procedures in Neonates	5
16.4	Counseling, Consent, and Documentation in Neonatal Procedures	3
16.5	Application of Ancillary Procedures	8
17.1	Management of Pranavaha Sroto Vikara- I	6
17.2	Management of Pranavaha Sroto Vikara-II	4
17.3	Management of Pranavaha Srotas Vikara-III	5
17.4	Management of Pranavaha Srotas Vikara- IV	5

18.1	Management of Urdhva Jatrugata Vikara	2
18.2	Management of Annavaha_Pureeshavaha Sroto Vikara-I	3
18.3	Annavaha-Pureeshavaha Sroto Vikara-II	6
18.4	Management of Annavaha–Pureeshavaha Srotovikara-III	5
18.5	Management of Krimi Roga	4
19.1	Management of Rasavaha and Raktavaha Srotas Vikaras-I	6
19.2	Management of Hrudroga	4
19.3	Rasa-Raktavaha Srotas Vikara	3
19.4	Management of Rasa-Raktavaha Vikara-III	7
20.1	Management of Vata Roga and Mastishka Vyadhi-I	7
20.2	Management of Vata Roga – Mastishka Vyadhi-II	6
20.3	Management of Vata Roga – Mastishka Vyadhi-III	7
21.1	Management of Mutravaha Srotas Vikara- I	5
21.2	Management of Mutravaha Srotas Vikara-II	5
21.3	Management of Twaka Vikara	10
22.1	Management of Antahsravi and Chayapachayajanya Roga	5
22.2	Management of Kuposhanajanya Roga	5
22.3	Management of Kuposhanajanya Roga-II	5
22.4	Manangement of Nutritional Disorders	5
23.1	Management of Atyayik Balaroga-I	6

23.2	Management of Atyayika Balroga-II	7
23.3	Management of Atyayika Balaroga- III	7
24.1	Management of Pediatric Leukemia and Lymphomas.	5
24.2	Management of Autoimmune and Rheumatological disorders	5
24.3	Management of and Common Lifestyle Disorders	5
24.4	Management of Granthi-Shotha-Vriddhi Vikara	5
25.1	Integrative Management of Beeja Dushti Janya Mamsavaha Sroto Vikara (Myopathies)	4
25.2	Skeletal Deformities & Musculoskeletal Disorders	4
25.3	Management of Mastiska Agahata Janya vikaras (Neurological and CNS injuries)	4
25.4	Management of Vata Vyadhi	4
25.5	Diagnosis and Management of Pakshavadha (Various Forms of Paralysis) and Ardita (Facial Palsy)	4
26.1	Assessment and Management of Unmada, Childhood Psychosis.	4
26.2	Assessment and Management of Atatwabhinivesha, Schizophrenia Spectrum Disorders, and Suicidal Behaviors.	3
26.3	Management of Psychosomatic disorders and Manas Taapa.	4
26.4	Assessment and Mangement of Vishada (Depression), sleep disorders, and eating disorders	4
26.5	Assessment and Management of Anaaryata (conduct disorder) disruptive impulse-control disorders,	3
26.6	Temper tantrum and Breath holding spells.	2
27.1	Behavioral disorders such as Aggression, Lying, Stealing, and Truancy .	4
27.2	Self-injurious behavior and stress disorders	4
27.3	Mrudbhakshana (Pica and rumination disorders), Shayyamutra (Enuresis), and Ayukta Mala Visarjana (Encopresis)	4

27.4	Pragnyaparadha Janya Vyadhis (Screen and Gaming Disorder)	4
27.5	Atanasheelata (roaming\habitual indifference), Motor and habit disorders , Nakha khadi bruxism.	4
28.1	Chitta Chaanchalya, Chittodvega, Anavasthita Chittata, and ADHD	4
28.2	Neuro-developmental Disorders, Executive function and dysfunction Disorder,	5
28.3	Adhyayana Akshamata, Dyslexia, Dysgraphia,Dyscalculia .	2
28.4	Language Development and Communication Disorders.	2
28.5	Hearing Disabilities and Vakagraha	2
28.6	Developmental delay and Buddhi Nirodha (intellectual disability)	2
28.7	Chittavibhrama - Baalonmada Autism Spectrum Disorders	3
29.1	Panchakarma, Rasayana, and Daiva Vyapashrya Chikitsa	7
29.2	Applicability of Satvavajaya Chikitsa and Therapeutic yoga	6
29.3	Physiotherapy, Speech Therapy, Behavioral Therapy, and Occupational Therapy	7
30.1	Identification of Physiological, Psychological, and Behavioural Problems	4
30.2	Adolescent Sexuality, Adolescent Nutrition	4
30.3	Adolescent mental health and behavioural issues.	4
30.4	Development of Adoescent Friendly Health Services	4
30.5	National Programme for Adolescent Health	4
31.1	Child Protection and Family Welfare	4
31.2	Adoption and Child Safety	4
31.3	Global child care practices, vital statistics, and cultural issues through	4

31.4	National Health Mission	4
31.5	Application of Aseptic and Community Disinfection Principles.	4
32.1	Diagnosis and Management of Graha Roga-I	4
32.2	Diagnosis and Management of Graha Roga-II	4
32.3	Diagnosis and Management of Aupsargika-Roga (Infectious Disorders)	4
32.4	Diagnosis and Management of Aupsargika-Roga (Infectious Disorders)-II	4
32.5	Diagnosis and Management of Aupsargika-Roga (Infectious Disorders)-III	4

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)		
Experiential learning No*	**Experiential name**	**Hours**
1.1	Applied Genetics: Communication and Counseling through Simulation	2
1.2	Clinical Relevance of Yajnapurusha and Atma transmigration	3
1.3	Tattva Vivechana: Sharira evam Vyadhi ka Sankhya Siddhanta	2
1.4	Ashta Prakriti Analysis	2
1.5	Loka-Purusha Mapping in Pediatric Health	3
1.6	Triguna–Prakriti Samya in Bala Swasthya	3
1.7	Atulya Gotra Siddhanta: Beejadosha Nivarana	3
1.8	Ayurgenetic Counselling for Healthy Progeny	4
1.9	Genetic Risk : Gotra, Pedigree & Karma	4
2.1	Aushadhi Matra Calculation and Documentation i.e. art of writing prescription.	3
2.2	Aushadhi Sevana Kala and Vidhi	3
2.3	Impact of Sahapana and Anupana	1
2.4	Application and Evaluation of Aushadhi- Part I	5
2.5	Application and Evaluation of Aushadhi- Part II	5
2.6	Pediatric Pharmacokinetics and Pharmacodynamics Case Analysis	5
2.7	Drug Route Evaluation	4
3.1	Applied Cytogenetics with Bioinformatics	4

3.2	Evaluation of Chromosomal Abnormalities	4
3.3	Karyotyping Skills and Genetic Diagnostics	7
3.4	Protecting Genetic Data: Ethical Practice	2
3.5	Integrative Genetic Counseling	4
3.6	Cancer Genes and Beeja Dushti: Bridging Systems	2
3.7	Genetic Profiling in Pediatric Disorders	3
4.1	Integrative Counseling in Chromosomal Disorders	6
4.2	Integrative Counseling for Hereditary Disorders	6
4.3	Integrative Genetic Counseling-II	6
4.4	Evaluate the application of Genomic technologies in pharmacogenomics.	8
5.1	Clinical Evaluation of Vriddhikara Bhavas and Ashta Prakriti in Genetic Traits	6
5.2	Preventing Unplanned Pregnancy and Promoting Healthy Progeny	6
5.3	Garbha Poshana through Garbhini Paricharya and Samskaras	6
5.4	Pumsavana Karma and its ethical consideration.	2
5.5	Clinical Application of Shareerika and Manasika Prakruti	4
5.6	Mahat–Ahankara and Modern Psychology in Garbha Development	2
6.1	Counseling on Embryonic Health	8
6.2	Patient Education in Organogenesis Issues	8
6.3	Placental Feature Assessment: Term vs. Preterm	6

6.4	Garbha Sharira: Circulation Before and After Birth	2
6.5	Integrated IVF-Ayurveda Case Analysis	2
7.1	Intrauterine infections and endocrinal problems during fetal devlopment.	2
7.2	Recurrent abortions and social ethics regarding abortion.	4
7.3	Evaluation of Factors in Fetal Disorders	6
7.4	Safe Ayurvedic Practices and Awareness in Pregnancy	4
7.5	Factors Affecting Fetal Growth	4
7.6	Garbha–Apara–Nabhi Nadi Anomaly: Evaluation and Counselling	3
7.7	Congenital Anomalies of Srotas : Evaluation & Parent Counselling	3
8.1	Assessment of Fetal Well-being in Antenatal Cases	4
8.2	Masanumasik Garbha Vriddhi and Vikas.	4
8.3	Invasive and Non invasive, Prenatal and Perinatal Diagnostic Procedures.	6
8.4	Disorders of Sexual Differentiation (DSD) Evaluation, Counseling, and Awareness	6
8.5	Evaluation and Awareness of Stree and Purusha Kara Bhava Vikara	6
9.1	Perinatal Physiology and Neonatal Outcomes	2
9.2	Examination of Newborn Reflexes	3
9.3	Neonatal Risk Assessment from Birth History	2
9.4	Metabolic and Sensory Disorder Management	2
9.5	Management of Neonatal-Congenital, Genetic, and Hormonal Disorders	2
9.6	Newborn Care	2

9.7	Neonatal Feeding Assessment	4
9.8	Neonatal Ward Staffing and Work Allocation	1
9.9	Neonatal Referral and Transport with Communication	3
9.10	Neonatal Feeding in Special Maternal Conditions	5
10.1	Holistic Newborn Resuscitation and Care	7
10.2	Golden Hour Newborn Resuscitation	5
10.3	Co-morbidities of birth asphyxia	4
10.4	Care of Neonates from High-Risk Maternal Conditions	3
10.5	Management of Preterm, IUGR/SGA, Post-term, and Multiple Pregnancy Neonates: Protocol-Based Approach	7
11.1	Prasava Kalina Abhighataja/Sanghatabala Pravritta Vyadhi (Caput Succedaneum and Cephalohematoma)	3
11.2	Management of Pediatric Musculoskeletal Injuries	6
11.3	Holistic Management of Concealed Hemorrhages	4
12.1	Management of Annavaha and Purishavaha Srotas (GIT) Vikara	10
12.2	Management of Anomalies of Annavaha - Pureeshavaha Srotas Navajata Vyadhi (G.I.T.) and Nabhi roga	5
12.3	Management of Medovaha, Mootravaha, and Janananga Srotas Vikara	10
12.4	Management of Asthi, Mamsa, and Majjavaha Srotas Vikara.	7
12.5	Counseling on Congenital Anomalies: Treatment and Outcomes	7
13.1	Neonatal Respiratory Disease management	6
13.2	Assessment of respiratory distress	3

13.3	Interpretation of Investigations in Assisted Neonatal Respiration	4
13.4	Ventilatory Support in Neonates	4
13.5	Management of Neonatal Convulsions	6
13.6	Management of HIE and Complications	3
14.1	Navajata Shishu Kamala (Neonatal Hyperbilirubinemia)	9
14.2	Manage Neonatal Infections	7
14.3	Management of Neonatal Fluid & Electrolyte Imbalances	6
14.4	Manage Navajata Hridroga	3
14.5	Neonatal Referral Documentation and Counseling	1
15.1	Management of Physiological Conditions of Parental Concerns in Neonates	5
15.2	Management of skin diseases of neonates.	4
15.3	Management of diseases of Ear and Throat of neonates	4
16.1	Management of Neonatal Emergencies	10
16.2	Neonatal IV Fluid & Blood Therapy Management	10
16.3	Diagnostic Procedure Performance	10
16.4	Therapeutic Procedure Performance	9
17.1	Management of Pranavaha Sroto Vikara- I	6
17.2	Management of Pranavaha Sroto Vikara- II	6
17.3	Management of Pranavaha Srotas -III	6
17.4	Management of Pranavaha Srotas- IV	4

17.5	Pediatric Respiratory Interventions	2
17.6	Ethical Communication and Referral in Pediatric Respiratory Care	2
18.1	Management of Urdhva Jatrugata Vikara	3
18.2	Management of Annavaha Pureeshavaha Sroto Vikara-I	5
18.3	Annavaha Pureeshavaha Sroto Vikara-II	8
18.4	Mnagement of Annavaha–Pureeshavaha Srotovikara-III	5
18.5	Management of Krimi Roga	5
19.1	Management of Rasavaha and Raktavaha Srotas Vikara-I	4
19.2	Management of Hrudroga	7
19.3	Management of Rasa-Raktavaha Sroto Vikara-II	7
19.4	Management of Rasa-Raktavaha Sroto Vikara-III	8
20.1	Management of Vata Roga-Mastishka Vyadhi-I	7
20.2	Management of Vata Roga – Mastishka Vyadhi-II	10
20.3	Management of Vata Roga – Mastishka Vyadhi-III	9
21.1	Management of Mutravaha Srotas Vikara-I	8
21.2	Management of Mutravaha Sroto Vikara-II	8
21.3	Management of Twaka Vikara	10
22.1	Management of Antahsravi and Chayapachayajanya Roga	7
22.2	Management of Kuposhanajanya Roga	6

22.3	Management of Nutritional Disorders	7
22.4	Management of Nutritional Disorders-II	6
23.1	Management of Atyayik Balaroga-II	8
23.2	Management of Atyayika Balroga-II	9
23.3	Management of Atyayika Balaroga-III	9
24.1	Management of Hematologic Malignancies	6
24.2	Management of Autoimmune and Rheumatological Disorders	7
24.3	Management of Lifestyle Disorders.	6
24.4	Management of Granthi-Shotha-Vriddhi Vikara	7
25.1	Management of Beeja Dushti Janya Mamsavaha sroto vikaras (myopathies and dystrophies)	4
25.2	Management of Skeletal Deformities and Musculoskeletal Disorders	6
25.3	Management of Mastiska Agahata Janya Vikara (neurological and CNS injuries).	6
25.4	Management of Vatavaha Srotas Vikara	3
25.5	Management of Pakshavadha and Ardita.	3
25.6	Management of Pakshavadha and Ardita Vata .	4
26.1	Management of Unmada, and Childhood Psychosis .	5
26.2	Management of Atatwabhinivesha, Schizophrenia Spectrum Disorders and Suicide Prevention	4
26.3	Management of Psychosomatic Disorders and Manastaapa(anxiety or mood disorders).	5
26.4	Vishaada(depression),jaagarukata (Insomnia) nidra luptata (sleep disorders) and eating disorders in clinical settings.	5
26.5	Anaaryata (Disruptive Impulse-Control and Conduct Disorders),	4

26.6	Temper tantrum and Breath-Holding spells	3
27.1	Strategies for managing Aggression, Lying, Stealing, and Truancy in practical, real-world settings.	6
27.2	Self-injurious behavior and stress disorders	6
27.3	Mrudbhakshana (Pica), Shayyamutra (enuresis), and Ayuktamala visarjana (encopresis)	3
27.4	Pragnyaparadhajanya Vyadhi (screen and gaming disorders)	6
27.5	Management of Motor and Habit disorders, such as Atanashealata and Bruxism	5
28.1	Chitta Chaanchalya, Chittodvega, Anvasthita Chittata, and ADHD in real-world clinical settings.	6
28.2	Neuro-developmental disorders and Executive Function Dysfunction	3
28.3	Approach to Adhyayana akshamata,dyslexia, and math and writing disabilities	3
28.4	Language Development and Communication Disorders	3
28.5	Hearing disabilities and Vakagraha in clinical settings.	3
28.6	Developmental delay and intellectual disability in clinical settings.	3
28.7	Chittavibhrama -Baalonmada Autism Spectrum Disorders in clinical practice.	5
29.1	Integrated Management of Chronic and Developmental Disorders	9
29.2	Applicability of Satvavajaya Chikitsa and Therapeutic Yoga	7
29.3	Physiotherapy, Speech Therapy, Behavioral Therapy, and Occupational Therapy.	10
30.1	Physiological , Psychological and Behavioral issues in adolescents	6
30.2	Adolescent sexuality and Adolescent nutrition	6
30.3	Management strategies for adolescent mental health and behavioural problems in clinical settings.	6

30.4	Adolescent Friendly Health Services (AFHS) in clinical settings.	4
30.5	National programs aimed at improving adolescent health	4
31.1	Child Protection & Intervention Strategies	5
31.2	Ethics & Child Healthcare in International Adoption	5
31.3	Vital Stats & Culture in Global Child Care	5
31.4	Implimentation of National Health Mission,	6
31.5	Analysis of Community Disinfection Practices.	5
32.1	Management of Graha Roga-I	5
32.2	Management of Graha Roga-II	5
32.3	Management of Aupsargika Roga (Infectious Disorders)-III	6
32.4	Management of Aupsargik Roga (Infectious Disorders)	5
32.5	Management of Aupsargika-Roga (Infectious Disorders)	5

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-KB	4	100 x 4 Papers = 400	400	800

6 B : Scheme of Assessment (Formative and Summative Assessment)

Credit frame work

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

Formative Assessment : Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.
Summative Assessment: Summative Assessment (University examination) will be carried out at the end of Semester VI.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP =d*f/c*e*100
Semester No : 3						
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))						
M1 Purushotpatti, Sahaja and Sanchari Roga Pariharopaya (Genetic Counselling)	2	60		50		
M2 Prakriti Anusaarena Aushadhi (Pharmacogenetics)	2	60		50		
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))						
M9 Navajata Parikshana, Paricharya and Poshana [Examination, Care, Management and Feeding of neonate (Normal/Sick)]	2	60		50		
M10 Samaya Purva-Paschat (Newborn -Preterm/Full Term/Post Term), Alpabhara Jatamatra-(SGA/AGA/LGA)Navajata Paricharya. Assessment of Normal and Sick Neonate)	2	60		50		

Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))						
M17 Pranavaha Srotovikara (Respiratory disorders)	2	60		50		
M18 Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders)	2	60		50		
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))						
M25 Pediatric developmental disabilities.	2	60		50		
M26 Manovaha Sroto Vikaras, Psychiatric and Behavioral Disorders-I	2	60		50		
	16	480		400		
Semester No : 4						
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))						
M3 Anuvamshkiya Vigyana	2	60		50		
M4 Clinical application of Beeja Vigyana.	2	60		50		
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))						
M11 Prasava Kalina Abhighata/Vyadhi (Birth Injuries)	1	30		25		
M12 Sahaja Vyadhi and Anna Purisha Meda Asthi Majja Vaha Srotas Vikruti (Birth Injuries, Congenital anomalies and Diseases of The G.I. Tract, Musculo-Skeletal and Central Nervous System)	3	90		75		
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))						
M19 Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system)	2	60		50		
M20 Vata Rogas, Mastishka Vyadhis (Neurological disorders)	2	60		50		
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))						
M27 Manovaha Sroto Vikaras, Psychiatric and behavioral Disorders-II	2	60		50		
M28 Vriddhi Vipratipatti - Learning and Developmental Disorders	2	60		50		
	16	480		400		
Semester No : 5						
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))						

M5 Garbhanirmana, Ashta Prakritis and Suprajasthapana (Healthy progeny)	2	60		50		
M6 Garbhavakranti - Garbha Vriddhi & Vikasa (Embryology)	2	60		50		
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))						
M13 Prana, Majja Vaha Srotas Vikaras (Diseases of the Respiratory System and Central Nervous System)	2	60		50		
M14 Rasa Rakta Vaha Srotas Vikara (Disorders of the Cardiao Vascular and Circulatory System, and Haematology)	2	60		50		
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))						
M21 Mutravaha Srotovikaras & Twaka Vikara (Nephrological, Genito-Urinary disorders & Skin disorders)	2	60		50		
M22 Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders)	2	60		50		
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))						
M29 Pediatric Rehabilitation	2	60		50		
M30 Kishora Swasthya Vijnana, Adolescent Medicine	2	60		50		
	16	480		400		
Semester No : 6						
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))						
M7 Garbhopaghatakara Bhavas	2	60		50		
M8 Fetal monitoring and Disorders of Sexual Differentiation	2	60		50		
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))						
M15 Kshudra evam Anya Vikara (Minor Neonatal Ailments and Physiological Problems)	1	30		25		
M16 Navajata Atyayika Chikitsa evam Naidanik evam Chikitsiya Karmaabhyasa (Neonatal Emergencies, Therapeutic Procedures and Trainings)	3	90		75		
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))						

M23 Atyayika Balaroga prabandhana (Pediatric emergency management)	2	60		50		
M24 Anya Vyadhyi (Miscellaneous disorders)	2	60		50		
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))						
M31 Social And Community Pediatrics	2	60		50		
M32 Aupsargika Roga (Infections)	2	60		50		
	16	480		400		
MGP = ((Number of Notional learning hours attended in a module) X (Marks obtained in the modular assessment) / (Total number of Notional learning hours in the module) X (Maximum marks of the module)) X 100						

6 D : Semester Evaluation Methods for Semester Grade point Average (SGPA)

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPS of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA

SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester

Evaluation Methods for Modular Assessment

Semester No : 3		
Paper No : 1 Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology)		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
1	M1.Purushotpatti, Sahaja and Sanchari Roga Pariharopaya (Genetic Counselling)	C1
2	M2.Prakriti Anusaarena Aushadhi (Pharmacogenetics)	C2
Paper No : 2 Navajata Shishu Vigyana (Neonatology)		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
3	M9.Navajata Parikshana, Paricharya and Poshana [Examination, Care, Management and Feeding of neonate (Normal/Sick)]	C3
4	M10.Samaya Purva-Paschat (Newborn -Preterm/Full Term/Post Term), Alpabhara Jatamatra-(SGA/AGA/LGA)Navajata Paricharya. Assessment of Normal and Sick Neonate)	C4
Paper No : 3 Balachikitsa Vigyana (Pediatric Medicine)		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
5	M17.Pranavaha Srotovikara (Respiratory disorders)	C5
6	M18.Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders)	C6
Paper No : 4 Bala Samvardhana and Samrakshan (Developmental and community paediatrics)		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
7	M25.Pediatric developmental disabilities.	C7
8	M26.Manovaha Sroto Vikaras, Psychiatric and Behavioral Disorders-I	C8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+ C6+C7+C8) / Number of modules(8)
Semester No : 4		
Paper No : 1 Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology)		

A S.No	B Module number and Name	C MGP
1	M3.Anuvamshkiya Vigyana	C1
2	M4.Clinical application of Beeja Vigyana.	C2
Paper No : 2 Navajata Shishu Vigyana (Neonatology)		
A S.No	**B Module number and Name**	**C MGP**
3	M11.Prasava Kalina Abhighata/Vyadhi (Birth Injuries)	C3
4	M12.Sahaja Vyadhi and Anna Purisha Meda Asthi Majja Vaha Srotas Vikruti (Birth Injuries, Congenital anomalies and Diseases of The G.I. Tract, Musculo-Skeletal and Central Nervous System)	C4
Paper No : 3 Balachikitsa Vigyana (Pediatric Medicine)		
A S.No	**B Module number and Name**	**C MGP**
5	M19.Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system)	C5
6	M20.Vata Rogas, Mastishka Vyadhis (Neurological disorders)	C6
Paper No : 4 Bala Samvardhana and Samrakshan (Developmental and community paediatrics)		
A S.No	**B Module number and Name**	**C MGP**
7	M27.Manovaha Sroto Vikaras, Psychiatric and behavioral Disorders-II	C7
8	M28.Vriddhi Vipratipatti - Learning and Developmental Disorders	C8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 5		
Paper No : 1 Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology)		
A S.No	**B Module number and Name**	**C MGP**
1	M5.Garbhanirmana, Ashta Prakritis and Suprajasthapana (Healthy progeny)	C1
2	M6.Garbhavakranti - Garbha Vriddhi & Vikasa (Embryology)	C2
Paper No : 2 Navajata Shishu Vigyana (Neonatology)		

A S.No	B Module number and Name	C MGP
3	M13.Prana, Majja Vaha Srotas Vikaras (Diseases of the Respiratory System and Central Nervous System)	C3
4	M14.Rasa Rakta Vaha Srotas Vikara (Disorders of the Cardiao Vascular and Circulatory System, and Haematology)	C4
Paper No : 3 Balachikitsa Vigyana (Pediatric Medicine)		
A S.No	**B Module number and Name**	**C MGP**
5	M21.Mutravaha Srotovikaras & Twaka Vikara (Nephrological, Genito-Urinary disorders & Skin disorders)	C5
6	M22.Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders)	C6
Paper No : 4 Bala Samvardhana and Samrakshan (Developmental and community paediatrics)		
A S.No	**B Module number and Name**	**C MGP**
7	M29.Pediatric Rehabilitation	C7
8	M30.Kishora Swasthya Vijnana, Adolescent Medicine	C8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 6		
Paper No : 1 Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology)		
A S.No	**B Module number and Name**	**C MGP**
1	M7.Garbhopaghatakara Bhavas	C1
2	M8.Fetal monitoring and Disorders of Sexual Differentiation	C2
Paper No : 2 Navajata Shishu Vigyana (Neonatology)		
A S.No	**B Module number and Name**	**C MGP**
3	M15.Kshudra evam Anya Vikara (Minor Neonatal Ailments and Physiological Problems)	C3
4	M16.Navajata Atyayika Chikitsa evam Naidanik evam Chikitsiya Karmaabhyasa (Neonatal Emergencies, Therapeutic Procedures and Trainings)	C4

Paper No : 3 Balachikitsa Vigyana (Pediatric Medicine)		
A S.No	**B Module number and Name**	**C MGP**
5	M23.Atyayika Balaroga prabandhana (Pediatric emergency management)	C5
6	M24.Anya Vyadhyi (Miscellaneous disorders)	C6
Paper No : 4 Bala Samvardhana and Samrakshan (Developmental and community paediatrics)		
A S.No	**B Module number and Name**	**C MGP**
7	M31.Social And Community Pediatrics	C7
8	M32.Aupsargika Roga (Infections)	C8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+ C6+C7+C8) / Number of modules(8)

S. No	Evaluation Methods
1.	Method explained in the Assessment of the module or similar to the objectives of the module.

6 E : Question Paper Pattern

MD/MS Ayurveda Examination
AYPG-KB
Sem VI

Time: 3 Hours ,**Maximum Marks:** 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per Question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 1 (Beeja, Anuvamshkiya Evam Garbha Vigyana (Genetics and Embryology))				
(M-1)Purushotpatti, Sahaja and Sanchari Roga Pariharopaya (Genetic Counselling) (Marks: Range 5-20)				
1	(U-1) Fundamentals of Genetics and its Clinical Application	Yes	Yes	Yes
2	(U-2) Lokasamya - Purusha Siddhanta and its Clinical Application	Yes	Yes	Yes
3	(U-3) Rajaswala & Ritumati Paricharya and Naisthiki Bhrahmacharya for restoring Genetic Health	Yes	Yes	Yes
(M-2)Prakriti Anusaarena Aushadhi (Pharmacogenetics) (Marks: Range 5-20)				
1	(U-1) Aushadhi Matra Evam Sevana Vidhi (Posology and Drug delivery)	No	Yes	Yes
2	(U-2) Aushadhi - I	No	Yes	Yes
3	(U-3) Aushadhi-II	No	Yes	Yes
4	(U-4) Pharmacodynamics and Pharmacokinetics of Drugs	No	Yes	Yes
5	(U-5) Pediatric Dosage forms,Formulae & Dose calculations	Yes	Yes	Yes
(M-3)Anuvamshkiya Vigyana (Marks: Range 5-20)				
1	(U-1) Beeja-Vigyana (Cytogenetics)	No	Yes	Yes
2	(U-2) Branches of Genetics Part 1	Yes	Yes	Yes
3	(U-3) Branches of Genetics Part 2	Yes	Yes	Yes
(M-4)Clinical application of Beeja Vigyana. (Marks: Range 5-20)				
1	(U-1) Beeja Bhaga Avyava janya Vikara (Chromosomal Disorder)	Yes	Yes	Yes
2	(U-2) Anuvamshkiya Vikara (Hereditary disorders)	Yes	Yes	Yes
3	(U-3) Non-Mendelian Disorders	No	Yes	Yes
4	(U-4) Recent advances in genetics	No	Yes	Yes
(M-5)Garbhanirmana, Ashta Prakritis and Suprajasthapana (Healthy progeny) (Marks: Range 5-20)				
1	(U-1) Formation of quality Genetic Traits	No	Yes	No
2	(U-2) Supraja – Principles for Optimal Progeny	Yes	Yes	Yes
3	(U-3) Garbha Dhana	Yes	Yes	Yes
4	(U-4) Daivavyapashraya Chikitsa during Pregnancy	No	Yes	Yes
5	(U-5) Ayur Genomics	Yes	No	Yes
6	(U-6) Garbha Prakriti and its development	Yes	No	Yes
(M-6)Garbhavakranti - Garbha Vriddhi & Vikasa (Embryology) (Marks: Range 5-20)				

1	(U-1) Garbhavkranti (Embryogenesis)	No	Yes	Yes
2	(U-2) Garbha Avayava Utpatti (Organogenesis)	Yes	No	Yes
3	(U-3) Apara	No	Yes	Yes
4	(U-4) Garbha Poshana	Yes	Yes	Yes
5	(U-5) Yamala Garbha	No	Yes	Yes
(M-7)Garbhopaghatakara Bhavas (Marks: Range 5-20)				
1	(U-1) Garbhavyapad	Yes	Yes	Yes
2	(U-2) Effects of Garbhakara Bhava Dushti	No	Yes	Yes
3	(U-3) Effects of Aahara, Vihara and Aushadha on Garbha	Yes	No	Yes
4	(U-4) Janmabala Pravritta Vyadhi	No	Yes	Yes
(M-8)Fetal monitoring and Disorders of Sexual Differentiation (Marks: Range 5-20)				
1	(U-1) Foetal Monitoring	Yes	Yes	Yes
2	(U-2) Prenatal and Perinatal Diagnosis	Yes	Yes	Yes
3	(U-3) Disorders of sexual differentiation	No	Yes	Yes
4	(U-4) Streekara and Purushakara Bhava Vikaras	No	Yes	Yes

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 2 (Navajata Shishu Vigyana (Neonatology))				
(M-9)Navajata Parikshana, Paricharya and Poshana [Examination, Care, Management and Feeding of neonate (Normal/Sick)] (Marks: Range 5-20)				
1	(U-1) Transition from Garbhavastha to Navajata Shishu Avastha (Feto - Neonatal transition)	Yes	No	Yes
2	(U-2) Assessment of Navajta Shishu (Normal Neonate)	No	Yes	Yes
3	(U-3) Navajata Lakshana Pariksha (Neonatal screening)	No	Yes	Yes
4	(U-4) Navajata Shishu Paricharya (Immediate and routine care measures)	Yes	Yes	Yes
5	(U-5) Sutikagara, Kumaragara	No	Yes	Yes
6	(U-6) Shishu Poshana	Yes	Yes	Yes
(M-10)Samaya Purva-Paschat (Newborn -Preterm/Full Term/Post Term), Alpabhara Jatamatra-(SGA/AGA/LGA)Navajata Paricharya. Assessment of Normal and Sick Neonate) (Marks: Range 5-20)				
1	(U-1) Pranapratyagamana (Resuscitation) as per gestation and weight	Yes	No	Yes
2	(U-2) Pranapratyagamana of Achesta Navajata and Paricharya	Yes	Yes	Yes
3	(U-3) Anticipation, Evaluation and management and outcome and follow-up care	Yes	Yes	Yes
(M-11)Prasava Kalina Abhighata/Vyadhi (Birth Injuries) (Marks: Range 5-15)				
1	(U-1) Prasava Kalina Abhighataja/Sanghatabala Pravritta Vyadhis (Birth injuries)	No	Yes	Yes
(M-12)Sahaja Vyadhi and Anna Purisha Meda Asthi Majja Vaha Srotas Vikruti (Birth Injuries, Congenital anomalies and Diseases of The G.I. Tract, Musculo-Skeletal and Central Nervous System) (Marks: Range 5-20)				
1	(U-1) Annavaha - Pureeshavaha Srotas Navajata Vyadhis	Yes	No	No
2	(U-2) Medovaha, Mootravaha srotas and Janananga Vikaras	No	No	Yes
3	(U-3) Asthi Mamsa Majjavaha Srotas Vikriti	No	No	Yes
4	(U-4) Anya Sahaja Vikriti (Other Congenital anomalies)	No	No	Yes
(M-13)Prana, Majja Vaha Srotas Vikaras (Diseases of the Respiratory System and Central Nervous System) (Marks: Range 5-20)				
1	(U-1) Shvasavarodha (Asphyxia)	Yes	Yes	Yes
2	(U-2) Assessment scales for Respiratory Distress	Yes	Yes	Yes
3	(U-3) RDOS [Respiratory Distress Observation Scale],	Yes	Yes	Yes

	Silvermann-Anderson Score, Borg Scale, Downe's Score, Visual Function Scale for Low Respiratory Compliance)			
4	(U-4) Disorders of CNS	Yes	Yes	Yes
5	(U-5) HIE and its complications	Yes	Yes	Yes
6	(U-6) Navajata Dhanustambha (Neonatal tetanus)	Yes	Yes	Yes
(M-14)Rasa Rakta Vaha Srotas Vikara (Disorders of the Cardiao Vascular and Circulatory System, and Haematology) (Marks: Range 5-20)				
1	(U-1) Navajata Shishu Kamala (Neonatal Hyperbilirubinaemia)	Yes	Yes	Yes
2	(U-2) Raktavishamayta / Septicaemia	Yes	Yes	Yes
3	(U-3) Haemorrhagic disorders of new born	Yes	Yes	Yes
4	(U-4) Metabolic and Electrolyte disturbances	Yes	Yes	Yes
5	(U-5) Navajata Hridroga (Cardiac disorders)	Yes	Yes	Yes
6	(U-6) IEM	Yes	Yes	Yes
(M-15)Kshudra evam Anya Vikara (Minor Neonatal Ailments and Physiological Problems) (Marks: Range 5-20)				
1	(U-1) Physiological neonatal problems	Yes	Yes	Yes
2	(U-2) Navajata Twaka Vikaras	No	Yes	Yes
3	(U-3) Karna evam Kantha Rogas	No	Yes	Yes
4	(U-4) Netra, Nasa Rogas	No	Yes	No
(M-16)Navajata Atyayika Chikitsa evam Naidanik evam Chikitsiya Karmaabhyasa (Neonatal Emergencies, Therapeutic Procedures and Trainings) (Marks: Range 5-20)				
1	(U-1) Neonatal Emergencies	No	Yes	No
2	(U-2) Handling Emergencies	Yes	No	No
3	(U-3) Neonatal Investigative/Therapeutic procedure	No	Yes	No
4	(U-4) Ancillary Procedures	No	Yes	No

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 3 (Balachikitsa Vigyana (Pediatric Medicine))				
(M-17)Pranavaha Srotovikara (Respiratory disorders) (Marks: Range 5-20)				
1	(U-1) Pranavaha Srotovikara I	Yes	Yes	Yes
2	(U-2) Pranavaha Srotovikara II	No	Yes	Yes
3	(U-3) Pranavaha Srotovikara III	Yes	Yes	Yes
4	(U-4) Pranavaha Srotovikara IV	Yes	Yes	Yes
(M-18)Annavaha and Pureeshavaha Srotovikara (Gastrointestinal Disorders) (Marks: Range 5-20)				
1	(U-1) Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) - I	No	Yes	Yes
2	(U-2) Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) II	Yes	No	Yes
3	(U-3) Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) III	Yes	Yes	Yes
4	(U-4) Annavaha and Pureeshavaha Srotovikara (Gastrointestinal disorders) IV	Yes	Yes	Yes
(M-19)Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) (Marks: Range 5-20)				
1	(U-1) Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) I	Yes	Yes	Yes
2	(U-2) Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) II	No	Yes	Yes
3	(U-3) Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) III	No	Yes	Yes
4	(U-4) Rasavaha, Raktavaha Srotas Evum Hridaya Vikaras (Disorders of Circulatory & Hemopoietic system) IV	Yes	Yes	Yes
(M-20)Vata Rogas, Mastishka Vyadhis (Neurological disorders) (Marks: Range 5-20)				
1	(U-1) Vata Rogas, Mastishka Vyadhis (Neurological disorders) I	Yes	Yes	Yes
2	(U-2) Vata Rogas, Mastishka Vyadhis (Neurological disorders) II	Yes	Yes	Yes
3	(U-3) Vata Rogas, Mastishka Vyadhis (Neurological disorders) III	Yes	Yes	Yes
(M-21)Mutravaha Srotovikaras & Twaka Vikara (Nephrological, Genito-Urinary disorders & Skin disorders) (Marks: Range 5-20)				

1	(U-1) Mutravaha Srotovikaras (Nephrological, Genito-Urinary disorders) I	Yes	Yes	Yes
2	(U-2) Mutravaha Srotovikaras (Nephrological, Genito-Urinary disorders) II	Yes	Yes	Yes
3	(U-3) Twaka Vikara (Skin disorders)	No	Yes	Yes
(M-22)Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders) (Marks: Range 5-20)				
1	(U-1) Antahsravi, Chayapachayajanya, Kuposhanajanya Rogas (Endocrinal, Metabolic and Nutritional Disorders) I	Yes	Yes	Yes
2	(U-2) Kuposhanajanya Rogas (Nutritional Disorders) I	No	Yes	Yes
3	(U-3) Kuposhanajanya Rogas (Nutritional Disorders) II	Yes	Yes	Yes
4	(U-4) Kuposhanajanya Rogas (Nutritional Disorders) III	No	Yes	Yes
(M-23)Atyayika Balaroga prabandhana (Pediatric emergency management) (Marks: Range 5-20)				
1	(U-1) Atyayika Balaroga prabandhana (Pediatric emergency management) I	Yes	Yes	Yes
2	(U-2) Atyayika Balaroga prabandhana (Pediatric emergency management) II	Yes	Yes	Yes
3	(U-3) Atyayika Balaroga prabandhana (Pediatric emergency management) III	Yes	Yes	Yes
(M-24)Anya Vyadhyi (Miscellaneous disorders) (Marks: Range 5-20)				
1	(U-1) Pediatric Malignancies	No	Yes	Yes
2	(U-2) Autoimmune disorders	No	Yes	Yes
3	(U-3) Life style Disorders	Yes	Yes	Yes
4	(U-4) Granthi, Vriddhi and Apachi, Gandamala	No	Yes	Yes

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 4 (Bala Samvardhana and Samrakshan (Developmental and community paediatrics))				
(M-25)Pediatric developmental disabilities. (Marks: Range 5-20)				
1	(U-1) Beeja Dusti Janya Vikara (Congenital, Chromosomal, Hereditary) Mamsavaha Srotodusti Janya Vikara, Myopathies and Dystrophies.	No	Yes	Yes
2	(U-2) Asthi-Majjavaha Sroto Vikara (Skeletal deformities, Musculo Skeletal Problems).	No	Yes	Yes
3	(U-3) Mastishka Agahata janya Vyadhis (Neurological and CNS injuries), Cerebral palsy.	Yes	Yes	Yes
4	(U-4) Sarvanga, Ekanga and Adhranga Vata.	No	Yes	Yes
5	(U-5) Pakshavadha, (Quadriplegia , diplegia, Hemiplegia, paraplegia, mono plegia), Ardita (facial palsy).	Yes	Yes	Yes
6	(U-6) Neurodevelopmental disabilities	Yes	Yes	Yes
(M-26)Manovaha Sroto Vikaras, Psychiatric and Behavioral Disorders-I (Marks: Range 5-20)				
1	(U-1) Unmada, Childhood psychosis (Catatonia, Phobic and Hallucination disorders).	Yes	Yes	Yes
2	(U-2) Atatwabhinivesha (Schizophrenia spectrum disorders) Suicide and attempted suicide.	No	Yes	Yes
3	(U-3) Psychosomatic Disorders, Manas Taapa (Anxiety Disorders, Mood Disorders),	No	Yes	Yes
4	(U-4) Vishada (Depression), Jagarukata, Nidra-luptata (Sleep Disorders), Eating Disorders.	No	Yes	Yes
5	(U-5) Anaaryata (Disruptive impulse - control and Conduct disorders).	No	Yes	Yes
6	(U-6) Tantrum and breath holding spells	No	Yes	Yes
(M-27)Manovaha Sroto Vikaras, Psychiatric and behavioral Disorders-II (Marks: Range 5-20)				
1	(U-1) Durupacharata and Krodhajanya Vyadhis, Aggression, Stena, Lying, Stealing and Truancy.	No	Yes	Yes
2	(U-2) Self-Injurious behavior, Stress Disorders.	No	Yes	Yes
3	(U-3) (3). Acharya Agnivesha, Charaka Samhita, e, (35). Keligman Robert M, Nelson Textbook of, (38). Meharban Singh, Care of the Newborn, , (39). Meharban Singh, Medical Emergencies i, (45). Piyush Gupta, PG Textbook of Pediatri, (76). Ambikadatta Shashtri, Susruta Samhita, (77). Prof. K.R. Srikantha Murthy, Illustra, (93). Dr Lal Krishnan, Arogya	Yes	Yes	Yes

	Raksha Kalpad			
4	(U-4) Pragnyaparadha Janya Vyadhis(Screen and Gaming Disorder).	No	Yes	Yes
5	(U-5) Atanashealata, Motor and habit disorders, , Nakha Khadi (Bruxism).	Yes	Yes	Yes
(M-28)Vriddhi Vipratipatti - Learning and Developmental Disorders (Marks: Range 5-20)				
1	(U-1) Chitta Chaanchalya, Chittodvega, Anvasthita Chittata, ADHD.	Yes	Yes	Yes
2	(U-2) Neuro-developmental disorders, Executive function and dysfunction disorder	Yes	Yes	Yes
3	(U-3) Adhyanana akshamata - Dyslexia, Maths and writing disabilities.	No	Yes	No
4	(U-4) (9). Cloherty & Stark's Manual o, (38). Meharban Singh, Care of the Newborn, , (39). Meharban Singh, Medical Emergencies i, (43). Pandit Hemraj Sharma, Kashyapa Samhit, (46). Prof. Devendra Nath Mishra, Kaumarbhr, (57). Shilpi Gupta, Kaumarbhritya, Te, (59). Vinod K Paul and Arvind Bagga, Ghai, , (76). Ambikadatta Shashtri, Susruta Samhita, (77). Prof. K.R. Srikantha Murthy, Illustra, (78). Prof. K.R. Srikantha Murthy, Astanga , (79). Dr. S.Suresh Babu, Astanga Samgraham , (80). Dr. R.K. Sharma, Vaidya Bhagawan Dash	No	Yes	No
5	(U-5) Vakagraha -Hearing Disabilities	No	Yes	No
6	(U-6) Buddhi Nirodha (Intellectual Disability), Vriddhi Vyakshepa -Developmental Delay	Yes	Yes	Yes
7	(U-7) Chhitavibhrama / Unmada - Autism Spectrum Disorders	Yes	Yes	Yes
(M-29)Pediatric Rehabilitation (Marks: Range 5-20)				
1	(U-1) Panchakarma (Rehabilitation medicine), Rasayana , Daiva Vyapashrya chikitsa	Yes	Yes	Yes
2	(U-2) Satvavajaya (Cognitive behavioural therapy) chikitsa, Therapeutic Yoga.	Yes	Yes	Yes
3	(U-3) Physiotherapy, Speech Therapy, Behavioural Therapy, Occupational Therapy	No	Yes	Yes
(M-30)Kishora Swasthya Vijnana, Adolescent Medicine (Marks: Range 5-20)				
1	(U-1) Behavioral Adolescent Problems	Yes	No	Yes
2	(U-2) Adolescent Nutrition.	No	Yes	Yes
3	(U-3) : Adolescent Mental Health	No	Yes	Yes

4	(U-4) Adolescent Friendly Health Services	No	Yes	Yes
5	(U-5) National Programs for Adolescent Health	Yes	Yes	Yes
(M-31)Social And Community Pediatrics (Marks: Range 5-20)				
1	(U-1) Child Protection and Parenting: Understanding Care, Abuse, and Rights	Yes	Yes	Yes
2	(U-2) Child Adoption	Yes	Yes	Yes
3	(U-3) Vital Statistics	No	Yes	Yes
4	(U-4) National Health Mission	Yes	Yes	Yes
5	(U-5) Disinfection	Yes	Yes	Yes
(M-32)Aupsargika Roga (Infections) (Marks: Range 5-20)				
1	(U-1) Diagnosis and management of Graha Rogas	Yes	Yes	Yes
2	(U-2) Diagnosis and management of Graha Rogas	No	Yes	Yes
3	(U-3) Diagnosis and management of Aupsargika-Roga (Infectious Disorders):	No	Yes	Yes
4	(U-4) Diagnosis and management of Aupsargika-Roga (Infectious Disorders):	No	Yes	Yes
5	(U-5) Diagnosis and management of Aupsargika-Roga (Infectious Disorders):	Yes	Yes	Yes

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

Instructions for the paper setting.

1. University examination shall have 4 papers of 100 marks.

Each 100 marks question paper shall contain:-

- Application Based Question: 1 No (carries 20 marks)
- Short Answer Questions: 8 Nos (each question carries 05 marks)
- Long Answer Questions: 4 Nos (each question carries 10 marks)

2. Questions should be drawn based on the table 6F.
3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.
4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated “NO”.
5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.
6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.
7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.
8. Create Blueprint based on instructions 1 to 7

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	**Long Case Evaluation (100 Marks)** 1. History Taking – 15 marks Elicits relevant history: Developmental, Nutritional, Immunization, Nidana Panchaka, Prakriti, etc. 2. Physical Examination & Provisional Diagnosis – 15 marks Ashtasthana Pariksha, Dashvidha Pariksha, General and Systemic Examination. 3. Differential Diagnosis & Diagnosis – 40 marks 4. Treatment Plan – 30 marks 5. Communication & Professionalism – 5 marks Communicates with empathy to parents/caregivers while maintaining respect, ethics, and professionalism. 6. Organisation & Clinical Judgement – 5 marks Demonstrates confidence, time management, and logical approach.	100
2	**A) Short Case – 50 Marks** 1. History and Examination – 10 marks 2. Differential Diagnosis and Diagnosis – 10 marks 3. Treatment Plan – 10 marks OR **B) Procedure – 50 Marks** 1. Perform on a patient or simulated patient- 30 marks 2. Document the procedure- 20 marks (Real-time observation by faculty assessor)	50

3	**C) Spotters – 50 Marks** 1. Instruments (Neonatal and Pediatric) 2. Lab Report / Pedigree / Growth Chart Analysis/ Clinical Photographs of pediatric conditions 3. Radiological Report Analysis 4. Drugs and Formulations used in Pediatrics 5. Vaccination	50
4	Microteaching Assessment 1. Preparation & Planning – 4 marks 2. Introduction & Motivation – 2 marks 3. Content Delivery (Clarity, Relevance, Accuracy) – 6 marks 4. Teaching Aids/Use of Media – 2 marks 5. Interaction & Engagement with Learners – 2 marks	20

	6. Communication Skills (Voice, Language, Non-verbal cues) – 2 marks 7. Conclusion & Reinforcement of Key Points – 2 marks	
5	Dissertation Presentation - 20 marks Content - 8 marks 1. Organization & Flow- 4 marks 2. Presentation Skills- 4 marks 3. Visual Aids- 2 marks 4. Professionalism- 2 marks	20
6	**Viva (4 examiners: 20 marks/each examiner)**	80
7	**Dissertation Viva**	40
8	Logbook (Activity Record)	20
9	Practical/Clinical Record	20
Total Marks		**400**

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Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		
		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		

		LRI	Lab Report Interpretation		
		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		
		DSN	Dissection		
		PSN	Prosection		

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