Curriculum for MD/ MS Ayurveda
(PRESCRIBED BY NCISM)

अभ्यासात्प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी।

Semester II
Applied Basics of Kayachikitsa
(Internal Medicine)
(SUBJECT CODE : AYPG-AB-KC)

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

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

PREFACE

Kayachikitsa stands as the heart of Ayurvedic clinical practice, representing the science of internal medicine. Rooted in the classical principles of Nidana, Samprapti, Rupa, Upashaya, and Chikitsa, this discipline emphasizes the understanding of disease not just as a set of symptoms, but as a dynamic imbalance in the Dosha-Dhatu-Mala system. The postgraduate program in Kayachikitsa is designed to nurture physicians who are well-versed in classical diagnostics and therapeutic reasoning, while also being responsive to the evolving burden of chronic, metabolic, and psychosomatic illnesses in today's society.

In this curriculum, scholars engage deeply with the Trividha Chikitsa (Daivavyapashraya, Yuktivyapashraya, and Sattvavajaya), Oushadha Yoga Nirman, and the clinical utility of Srotovijnana. The integration of theory with Rogi-Pariksha, Vyadhi Vinischaya, and Chikitsa Siddhanta fosters the development of diagnostic accuracy and patient-centered treatment planning. Practical training in Avasthik Chikitsa, Atyayika Chikitsa, and Rasayana-Vajikarana expands the clinician's ability to manage acute conditions, degenerative diseases, and rejuvenative care. Exposure to Yuktisamatva, Anukta Vyadhi management, and evidence-oriented practice prepares scholars for the complex realities of clinical medicine.

The program promotes a dynamic and hands-on learning environment. Interactive pedagogies such as clinical case-based learning, simulation, therapeutic skill sessions, and interdisciplinary modules allow for active engagement. Assessment tools are aligned with real-world competencies, and emphasis is placed on research in Samprapti Vighatana and personalized treatment protocols. Scholars are encouraged to contribute to the growing field of integrative Ayurveda through clinical audits, collaborative research, and documentation of classical Chikitsa success stories. This curriculum aims to produce compassionate, competent, and visionary Ayurvedic physicians who can serve as healers, researchers, and advocates for the science in both national and global health landscape

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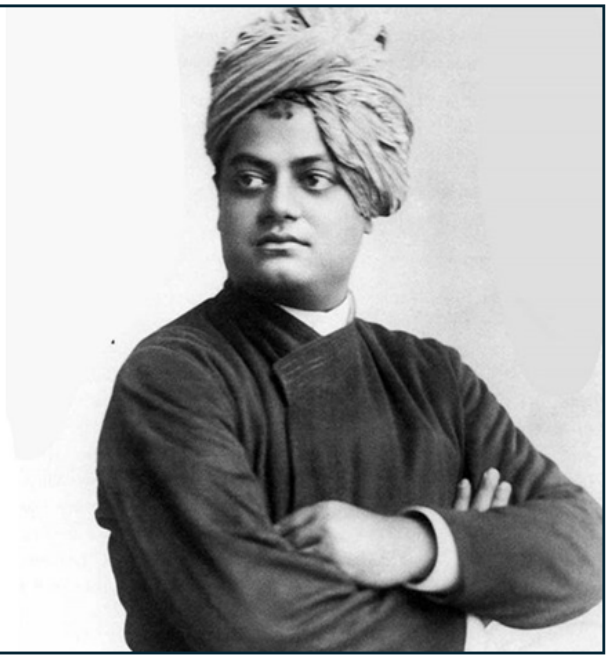
We want that education by which **character** is formed, **strength of mind** is increased, the **intellect** is expanded, and by which one can **stand on one's own feet.**

-Swami Vivekananda



NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Curriculum for MD/ MS Ayurveda

Applied Basics of Kayachikitsa (AYPG-AB-KC)

Summary & Credit Framework

Semester II

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative assessment)
M1. Hospital etiquette	1	30	25
M2. Rogi Pareeksha	2	60	50
M3. Aushadhi sevana kala	2	60	50
M4. Applications of Chikitsa sutra	3	90	75
M5. Chikitsa Bheda	3	90	75
M6. Basic knowledge of diagnostic procedures, its principles and applicability in practice	2	60	50
M7. Basic knowledge about medical procedures, handling skills and applicability in practice	3	90	75
	16	**480**	**400**

Credit frame work

AYPG-AB-KC consists of 7 modules totaling 16 credits, which correspond to 480 Notional Learning Hours. Each credit comprises 30 hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

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

Course Code and Name of Course

Course code	Name of Course
AYPG-AB-KC	Applied Basics of Kayachikitsa

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) AYPG-AB-KC At the end of the course AYPG-AB-KC, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO 1	Demonstrate proficiency in clinical examination, diagnostic investigations, and formulating appropriate Chikitsa (treatment) plans in accordance with Ayurvedic principles	PO1,PO2,PO3,PO7
CO 2	Perform diagnostic and therapeutic procedures adhering to legal, safety and regulatory standards as part of Kayachikitsa	PO1,PO2,PO3
CO 3	Develop proficiency to diagnose and manage atyayika Avastha	PO1,PO2,PO7
CO 4	Demonstrate leadership, empathy , compassion and communicate effectively with patients, care takers and other stakeholders	PO4,PO6
CO 5	Develop efficiency in administering aoushadha yogas according to the stage of the disease and the patient's condition	PO1,PO5,PO7
CO 6	Demonstrate skills in academic and research activities and imbibe advancements in the field of Kayachikitsa	PO1,PO5,PO7
CO 7	Develop competency in case of documentation, data management and ethics in health care	PO7,PO8
CO 8	Develop innovative, integrative and evidence based solutions for the emerging and challenging health conditions	PO1,PO3,PO7

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

2A Module Number	2B Module & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including modular assessment	2G Total
1	**M-1 Hospital etiquette** This module develops core competencies for working in hospital settings. It covers effective teamwork in multidisciplinary units, leadership and conflict resolution, and understanding emergency colour codes. Learners will also gain skills in caring for vulnerable patients—including the elderly, ICU, and mentally challenged—and in performing life-saving interventions through BLS and ACLS, with an introduction to pharmacotherapy and rehabilitation. • **M1U1 Teamwork Dynamics in Hospital, leadership and conflict management, Emergency colour codes used in hospital** 1. Integrating skills with Multidisciplinary teams 2. Teamwork dynamics and role of each member 3. Managing Conflict in Hospital 4. Leadership qualities and Importance of Leader 5. Emergency colour codes used in the hospital • **M1U2 Handling vulnerable patients** 1. Care for vulnerable patients in the hospital 2. Old age patients 3. ICU patients 4. Mentally challenged patients	1	5	10	15	30

	• **M1U3 BLS (Basic Life Support), ACLS (Advanced Cardiac Life Support)** 1. BLS 2. ACLS alongwith Pharmacotherapy and Rehabilitation					
2	**M-2 Rogi Pareeksha** Covers the fundamental understanding of the patient, including surface anatomy, history taking, examination skills, and the assessment of Rogibala through specific Pareeksha methods described in classical texts. • **M2U1 Essential clinical surface anatomy** 1. Skull and cranial nerves 2. Thorax 3. Abdomen 4. Spines, other bones and joints 5. The extremities • **M2U2 History taking** 1. Particulars of the patient 2. Chief complaints 3. Associated complaints 4. History of present illness 5. History of past illness 6. Treatment History 7. Family History 8. Personal History 9. History taking in psycho-somatic diseases	2	10	20	30	60

	• **M2U3 Determine the Nidana (etiological factors) based on history taking for nidana parivarjana as a chikitsa** 1. Nidana and Nidana parivarjana 2. Preventive medicine and its importance 3. Modifiable and non-modifiable risk factors • **M2U4 Comprehend the Rogi Bala Pariksha (Assessment of patient's strength) on the basis of** 1. Prakriti 2. Vyadhikshamatva 3. Satmya and Asatmya 4. Concept of Gara Visha 5. Basic immunology					
3	**M-3 Aushadhi sevana kala** Deals with time of administration of Aushadha and its clinical importance considering an individual, disease and dfifferent forms of aushadha. Prescription writing skills and norms along with medical record. • **M3U1 Aushadhi sevana kala, applications in present practice** 1. Aushadhi sevana kala 2. Anupana • **M3U2 Prescription writing skills** ◦ Qualities of ideal prescription	2	10	20	30	60

	◦ Prescription on Rasaushadhis ◦ Dosage / Posology • **M3U3 Medical Records and Hospital management software** ◦ Maintenance of case records - OPD & IPD ◦ Referral forms and Discharge summary ◦ Certificates and forms (Medical certicate, Treatment certificate, etc.)					
4	**M-4 Applications of Chikitsa sutra** Focuses on understanding the significance of Samprapti Vinashana (breaking the pathogenesis) in effective disease management. It also covers the fundamental principles of treatment and the mechanisms of action of various categories of medicines commonly used in clinical practice. Additionally, it provides a basic overview of Rasayana Chikitsa(rejuvenation therapy) and its practical applications • **M4U1 Samprapti vinashana as a chikitsa & Doshopakarama** 1. Samprapti and its components 2. Chikitsa Sutra of dvividha and trividha vyadhi 3. Chikitsa sutra in Ashayapakarsha, Margavarana, Paraspara anubandha vyadhi, Anyonya sambhava vyadhi- Nidanarthakara Vyadhi 4. Chikitsa of vriddhi and kshaya of doshas 5. Shodhana and Rasayana in Kinchit Avashishta dosharoopa vyadhi • **M4U2 Leena Dosha, Dhatu Upadhatu pradosha/dushti, Indriya Pradoshaja Vikara, Swabhavika Roga Chikitsa** 1. Leena doshavastha and chikitsa 2. Chikitsa of vriddhi-kshaya of Dhatu and Upadhatu	3	15	30	45	90

	3. Sama Nirama dhatu avastha and chikitsa 4. Chikitsa Sutra for Ojo-vikara, Indriya Pradoshaja Vikara, and Swabhavika Roga • **M4U3 Mala Vriddhi Kshaya Chikitsa** 1. Chikitsa of Mala vriddhi and kshaya • **M4U4 Srotodushti Chikitsa** 1. Srotodushti and management					
5	**M-5 Chikitsa Bheda** Deals with different types of chikitsa mentiond in classics and its proper understanding and applicability including Bramhana/Santarpana, Langhana/Apatarpana Shodhana, and Shamana chikitsa. • **M5U1 Santarpana & Apatarpana** 1. Santarpana /Bramhana and Aptarpana/ Langhana Chikitsa. 2. Snehana, Rookshana, Swedana, Stambhana Chikitsa 3. Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshaya chikitsa 4. Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa • **M5U2 Shodhana and Shamana** 1. Bahudoshavastha and Shodhana 2. Advancements in Shodhana therapy 3. Shamana chikitsa	3	15	30	45	90

6	**M-6 Basic knowledge of diagnostic procedures, its principles and applicability in practice** Deals with the basic knowledge about diagnostic procedures, its principles and applicability in practice. To make scholars acquainted with diagnostic procedures. • **M6U1 Imaging tests** 1. X-rays, Barium meal X-ray 2. Pyelogram, Angiogram 3. CT scans, MRI scans, Ultrasound 4. Vascular Doppler • **M6U2 Endoscopy** 1. Gastroscopy, Colonoscopy, Cystoscopy 2. Bronchoscopy, Arthroscopy, Ureteroscopy 3. ERCP, MRCP • **M6U3 Electrogram** 1. ECG, TMT 2. EEG 3. EMG • **M6U4 Other diagnostic procedures** 1. NCV, Neuropathy Analyser 2. BMD 3. CASA 4. PFT	2	10	20	30	60

	5. Nadi Yantra					
7	**M-7 Basic knowledge about medical procedures, handling skills and applicability in practice** Deals with the understanding and handling of different procedures in a hospital set up including handling of instruments used in ICU • **M7U1 Basic medical procedures** 1. Infusions 2. Ryle's Tube Insertion 3. Catheterization 4. Intubation 5. Gastric lavage 6. Tractions • **M7U2 Critical/Advanced medical procedures** 1. Paracentesis, USG Guided Tapping, Thoracocentesis, Water Seal Drainage 2. Lumbar Puncture 3. Dialysis • **M7U3 Handling ICU instruments** 1. ICU instruments and equipment	3	15	30	45	90
		16	**80**	**160**	**240**	**480**

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

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning Hours	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Knows how/Know)	3G Teaching Learning Methods
Module 1 : Hospital etiquette						
Module Learning Objectives **(At the end of the module, the students should be able to)** 1. Integrate skills with multidisciplinary teams and teamwork dynamics with the role of each member 2. Describe the dynamics of hospital conflict resolution 3. Identify oneself with leadership qualities and the importance of being a leader 4. Enact with emergency colour codes used in the hospital 5. Demonstrate knowledge of the care required for vulnerable patient populations in the hospital setting 6. Plan appropriate care and support to geriatric patients, critically ill individuals in the ICU, and patients with mental challenges within the hospital setting 7. Demonstrate competency in BLS and ACLS techniques, including relevant pharmacological interventions and rehabilitation strategies						
Unit 1 Teamwork Dynamics in Hospital, leadership and conflict management, Emergency colour codes used in hospital 1. Integrating skills with Multidisciplinary teams 2. Teamwork dynamics and role of each member 3. Managing Conflict in Hospital 4. Leadership qualities and Importance of Leader 5. Emergency colour codes used in the hospital **References:** 23,31,34,38,45,46,61,62,63,65,74						

3A	3B	3C	3D	3E	3F	3G
CO 4	Discuss the role of a multidisciplinary team in a hospital setting and interpret the skills of integrative work. (Refer- Draft, Board of Ethics and Registration, Regulation, 2022)	1	Lecture	CE	Knows-how	DIS,L&GD,L&PPT
CO 4	Demonstrate the skill of collaboration and co-ordination as a part of multidisciplinary team and exhibit leadership skills.	2	Practical Training 1.1	PSY-MEC	Shows-how	CBL,DIS,TBL
CO 4	Demonstrate skills for handling patients by multidisciplinary teams and concomitant management by each team member in OPD, IPD and emergency settings.	2	Experiential-Learning 1.1	PSY-MEC	Does	RP,TBL
CO 4	Describe leadership qualities for managing team cohesion and skills for conflict resolution along with hospital etiquettes	1	Lecture	CAP	Knows-how	L&GD,L&PPT
CO 4	Analyse causes of conflict and plan strategies for conflict resolution in different scenarios.	2	Experiential-Learning 1.2	PSY-MEC	Does	DIS,PBL,RP
CO 4	Differentiate emergency colour codes indicated by NABH for Hospital - Red, Blue, Yellow, Black, Orange, White, Brown, Green, Pink, Purple	1	Lecture	CAP	Knows-how	L&PPT,RLE
CO 4	Demonstrate different emergency colour codes indicated by NABH for hospital - Red, Blue, Yellow, Black, Orange, White, Brown, Green, Pink, Purple	1	Experiential-Learning 1.3	PSY-MEC	Does	RP,TBL

Unit 2 Handling vulnerable patients

1. Care for vulnerable patients in the hospital
2. Old age patients
3. ICU patients
4. Mentally challenged patients

References: 21,23,29,30,31,32,34,44,53,54,65,69

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 7	Appraise the care needed for vulnerable patients in the hospital	1	Lecture	CAP	Knows-how	FC,L_VC
CO 1,CO 2,CO 3,CO 4,CO 7	Demonstrate methods of handling vulnerable patients and elderly patients in the hospital.	2	Practical Training 1.2	PSY-MEC	Shows-how	CBL,D,D-BED,DIS,SIM
CO 1,CO 2,CO 3,CO 4,CO 7	Manage old age patients and vulnerable patients by assessing the stage and medical condition of the patient.	2	Experiential-Learning 1.4	PSY-MEC	Does	D-BED,RP,TBL
CO 1,CO 2,CO 3,CO 4,CO 7	Demonstrate the method of handling ICU patients in the hospital.	2	Practical Training 1.3	PSY-MEC	Shows-how	CBL,D-BED,DIS
CO 1,CO 2,CO 3,CO 4,CO 7	Manage the ICU patients through teamwork with a concomitant role for each team member.	2	Experiential-Learning 1.5	PSY-MEC	Does	CBL,D-BED,TPW,TBL
CO 1,CO 2,CO 3,CO 4,CO 7	Demonstrate handling of mentally challenged patients in the hospital.	2	Practical Training 1.4	PSY-GUD	Shows-how	CBL,D-BED,SIM
CO 1,CO 2,CO 3,CO 4,CO 7	Manage mentally challenged patients in a clinical setting.	2	Experiential-Learning 1.6	PSY-MEC	Does	CBL,SIM,TBL

Unit 3 BLS (Basic Life Support), ACLS (Advanced Cardiac Life Support)

1. BLS
2. ACLS alongwith Pharmacotherapy and Rehabilitation

References: 21,22,29,51

3A	3B	3C	3D	3E	3F	3G
CO 3,CO 4	Describe the components of BLS (Basic Life Support), ACLS (Advanced Cardiac Life	1	Lecture	CAP	Knows-	L_VC

	Support) and its importance.				how	
CO 3,CO 4	Demonstrate BLS, ACLS.	2	Practical Training 1.5	PSY-GUD	Shows-how	D,SIM
CO 3,CO 4	Perform BLS and ACLS.	2	Experiential-Learning 1.7	PSY-MEC	Does	CBL,SIM

Practical Training Activity

Practical No	Name	Activity details
Practical Training 1.1	Constituting a multidisciplinary team and demonstration of integration and leadership skills.	P1A -Group Activity/Presentation of case scenario 1. Teacher will give a scenario to a group of students. 2. The teacher will discuss the team members' roles and actions. 3. Teacher will discuss key skills for collaboration (communication, adaptability, problem-solving) and its impact and challenges in collaboration. P1B - Practical to Identify team leaders through leadership assessments 1. Teacher will briefly explain the importance of understanding leadership styles and will introduce MBTI and DISC assessments. 2. Students will complete the Myers-Briggs Type Indicator (MBTI) and Dominance, Influence, Steadiness and Compliance (DISC) assessments to identify their personality types and dominant traits. 3. Teacher will discuss on how certain traits like decisiveness (Dominance) or empathy (Steadiness) align with effective leadership in teams.
Practical Training 1.2	Handling vulnerable and old age patients in the	Group Activity- 1. Teacher will demonstrate how to handle vulnerable and old age patients in Hospital with the real / simulated cases.

	hospital	2. Students will conduct examinations in 1-2 cases and discuss the management protocol with the teacher. 3. Students will record the cases in practical record book.
Practical Training 1.3	Handling ICU patients in the hospital.	1. Teacher will provide real/ simulated case scenarios in ICU setting and demonstrate key aspects of handling such patients like continuous monitoring (Vital signs, Physiological functions), advanced organ support, and addressing underlying pathological conditions. 2. Teacher explains interventions like mechanical ventilation, sedation, and nutrition support, along with importance of early mobilization and rehabilitation. 3. Teacher specifies importance of effective communication, teamwork, and adherence to strict protocols for ensuring patient safety and well-being. 4. Students will be assigned specific roles and will be guided by the teacher in performing various tasks. 5. Students will record the activity in their log book.
Practical Training 1.4	Handling mentally challenged patients in the hospital.	1. Students will be shown video clips/case scenario/real cases of various disorders in mentally challenged patients. 2. Teacher will explain and demonstrate how to manage conditions. 3. Students will be given case scenario to understand and discuss management. 4. Students will record the cases in practical record book.
Practical Training 1.5	Demonstration of BLS, ACLS.	Demonstration of BLS- 1. Teacher will briefly introduce BLS, highlighting its importance in emergency care. 2. Teacher will give a demonstration of BLS on mannequin/ simulated cases. 3. Students will repeat the procedures, guided by the teacher/ instructor. Demonstration of ACLS- 1. Teacher will briefly introduce ACLS, highlighting its importance in emergency care. 2. Teacher will give demonstration of ACLS on mannequin/ simulation.

		3. Students will repeat the procedures, guided by the teacher/ instructor.
Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 1.1	Team activity on handling patients	Role-Playing Exercise : Handling patients by Multidisciplinary teams and concomitant handling by each team member 1. Case scenarios will be given to students. 2. Students will identify and understand their specific roles within the team for effective collaboration 3. Teams will conduct activity in collaboration. 4. At the end, role play will be summarized.
Experiential-Learning 1.2	Conflict resolution in hospital setting.	1. Teacher will assign real case / simulated case scenario of conflicts pertaining to Patient-Doctor, Team Members, Senior-Junior, Doctor-Staff etc. 2. Students will apply conflict resolution techniques such as mediation, compromise, negotiation and problem-solving in each scenario, fostering effective communication and collaboration. 3. Students will record activity in log book.
Experiential-Learning 1.3	Response to emergency colour codes indicated by NABH for hospital	1. Teacher will assign individual role for each student with respect to emergency situations. 2. Teacher will randomly display colour code on screen. 3. Students will respond immediately with respect to their assigned roles. 4. Students will record activity in their log book.
Experiential-Learning 1.4	Handling old age patients and vulnerable patients.	1. Teacher will assign 3 different case scenarios of old age, vulnerable patients to team of students. e.g. Old age patient with chronic ailments / acute stroke / trauma / post- surgery 2. Students will be instructed to assess status of the patient and handle them accordingly. 3. Teacher will observe and rectify whatever necessary. 4. Students will compile the cases and report to teacher.

Experiential-Learning 1.5	Skill enhancement in handling ICU patients.	1. Two different case scenarios will be given to team of students and asked to demonstrate the management. e.g. Stroke, MI, ARDS, Acute Hepatic failure, Acute Renal Failure, Diabetic ketoacidosis, Haemorrhages etc. 2. Activity will include assessment, adapting treatment protocol, execution, anticipation of further risks and complications, timely intervention and referral, if needed. 3. Students will compile cases and report to the teacher. 4. Reflective Report - Summarize insights on integrating Ayurvedic principles with modern methods of handling ICU patients highlighting benefits and areas for improvement.
Experiential-Learning 1.6	Handling the mentally challenged patients.	1. Students will be shown video clips/ case scenario/real cases of various conditions. 2. Students will ascertain and explain their role in group for handling such conditions. 3. Students will demonstrate handling of mentally challenged patients in real/ simulated case scenarios. 4. Teacher will summarize the activity and guide. 5. Students will record the activity in the log book.
Experiential-Learning 1.7	Skill enhancement in BLS and ACLS.	1. Teacher will provide different case scenarios. (real cases / video-clips/Simulators) 2. Student will select the appropriate method for life support and will demonstrate in real / simulated cases. 3. Teacher will give concluding remarks. 4. Students will record the activity in log book.

Modular Assessment

Assessment method	**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 25 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 01 credit x 02 hours x 25 marks Practical Learning Outcome Assessment: • Managing vulnerable/ elderly/ mentally challenged patient [10 marks x 1 Hour] Instructions: The instructor shall provide one clinical case or a simulated clinical scenario of vulnerable/ elderly/ mentally challenged patient to each student.	2

The student will be instructed to determine the clinical condition of the patient through history taking and examinations. (5 marks). The student will propose a management protocol considering the status of the patient. (5 marks)
Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, communicating effectively with patients and families, evaluating the effectiveness of interventions)

- Perform CPR [10 marks x 45 minutes]

Instructions: The students are instructed to perform CPR in a mannequin/ simulated case.
Assessment: Rubric-based assessment (Not Proficient, Working towards Proficiency, Proficient, Approaching Mastery, Mastery)

- Experiential Learning Outcome Assessment: [5 marks x 15 minutes] Learning process

- What are the challenges encountered while learning how to handle vulnerable patients? How did you solve it? [5 marks]

Or
Any practical in converted form can be taken for assessment. (20 marks)
And
Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (05 marks)

Module 2 : Rogi Pareeksha

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

1. Identify organs in different parts of the body on the basis of surface anatomy
2. Create skills regarding detailed history taking of the patients
3. Identify the Nidana through comprehensive history taking, to effectively implement Nidana Parivarjana as a therapeutic strategy
4. Create skills in Roga and Rogi Bala pareeksha

Unit 1 Essential clinical surface anatomy

1. Skull and cranial nerves
2. Thorax
3. Abdomen
4. Spines, other bones and joints
5. The extremities

References: 91,92

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3	Differentiate anatomical landmarks of the skull and its parts .	1	Lecture	CAN	Knows-how	BL,C_L,L,L&GD,L&PPT,L_VC
CO 1,CO 2,CO 3	Illustrate the surface anatomy of Mastishka (Brain) and its different areas on the basis of external features of the skull like pterion, asterion, bregma, lambda, glabella, sinuses, external and internal surfaces, etc.	2	Practical Training 2.1	PSY-MEC	Shows-how	D,D-BED,D-M

CO 1,CO 2,CO 3	Identify how skull anatomy relates to conditions like Skull fractures, Epidural haematoma, Facial palsy, Stroke,Craniotomy, etc .	2	Experiential-Learning 2.1	PSY-MEC	Does	DIS,PSM, TBL
CO 1,CO 2,CO 3	Identify the anatomical landmarks of the cranial nerves through direct observation and interactive simulations to recognise the functional deficits in various clinical scenarios.	2	Experiential-Learning 2.2	PSY-MEC	Shows-how	CBL,SIM
CO 1,CO 2,CO 3	Identify major surface anatomical landmarks of Thorax and its associated structures	1	Lecture	CC	Knows-how	L,L&GD
CO 1,CO 2,CO 3	Identify and mark the Surface anatomy of Phuphusa (lungs), Swasanalika (trachea), Phuphusantarala (mediastinum), Hridkapatika (heart valves), Hrit dhara and Tala (heart borders and surfaces) and interpret pathological signs of common lung and heart diseases.	2	Experiential-Learning 2.3	PSY-MEC	Shows-how	BS,D-M,SIM,TPW
CO 1,CO 2,CO 3	Descibe the anatomical boundaries and regions of Udaraguha (abdominal cavity) with special emphasis on clinical diagnosis of udara rogas.	1	Lecture	CAN	Knows-how	L,L&GD
CO 1,CO 2,CO 3,CO 4,CO 5,CO 6	Identify the Surface anatomy of abdominal viscera (liver,spleen,kidneys, stomach, intestines ,bladder etc) using anatomical landmarks and describe their pathological enlargement based on directional orientation.	2	Practical Training 2.2	PSY-MEC	Shows-how	D,D-BED,D-M
CO 1,CO 2,CO 3	Identify and explain the clinical relevance of palpable landmarks and prominences of various asthi (bones), sandhis (joints) and pristhavamsha (spines) .	2	Experiential-Learning 2.4	PSY-GUD	Shows-how	CBL,IBL, PL,PBL
CO 1,CO 2,CO 3,CO 5,CO 6,CO 7	Examine the anatomical landmarks of Nadis (nerves) in relation to dermatomal and myotomal distribution through direct observation and interactive simulations, and identify functional deficits in various clinical scenarios.	2	Experiential-Learning 2.5	PSY-GUD	Does	BS,D-BED,ECE,SIM,TPW

Unit 2 History taking

1. Particulars of the patient
2. Chief complaints
3. Associated complaints
4. History of present illness
5. History of past illness

6. Treatment History
7. Family History
8. Personal History
9. History taking in psycho-somatic diseases

References: 93,94,95,96

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the significance of thorough and structured history taking in accurately diagnosing a disease.	1	Lecture	CC	Knows-how	DIS,FC,L,L&GD,L&PPT
CO 1,CO 2,CO 4,CO 5,CO 6	Demonstrate comprehensive history taking using structured questionnaire focusing on components like disease chronicity (Ashukari/Acute or Chirakari/Chronic), duration and progression of symptoms (Kala Apakarsa), history of present illness(Atanka Samutpatti krama), history of past illness(Purva vyadhi vrtta).	2	Practical Training 2.3	PSY-GUD	Shows-how	CBL,IBL,TPW
CO 2,CO 3,CO 4,CO 5	Demonstrate methods of case taking in complex situations like inarticulate, unintelligent, unconsious, mentally retarded conditions.	2	Experiential-Learning 2.6	PSY-ORG	Shows-how	PSM,PrBL
CO 1,CO 2,CO 3	Apply the methods of history taking in patients with various srotovikaras(systemic diseases), focusing on identifying features related to a specific systemic condition.	2	Practical Training 2.4	PSY-ADT	Shows-how	D-BED,DIS
CO 1,CO 2,CO 3,CO 4	Apply the Standard protocol of clinical history taking in patients with Sharirika Vyadhis (somatic manifestations) caused by Manasa roga janya nidana (psychological causes) and Sahaja Vyadhi(Genetic Diseases) .	2	Experiential-Learning 2.7	AFT-SET	Does	CBL,C_L,PBL,PSM

Unit 3 Determine the Nidana (etiological factors) based on history taking for nidana parivarjana as a chikitsa

1. Nidana and Nidana parivarjana
2. Preventive medicine and its importance
3. Modifiable and non-modifiable risk factors

References: 1,5,9,12,50,87,88,89,90

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the principles and components of Dosha hetu - Sannikrishta, Viprakrishta and Vyabhichari hetu and analyze their importance in the diagnosis of the diseases.	1	Lecture	CC	Knows-how	DIS,L,L&PPT
CO 1,CO 2,CO 3	Apply different approaches to identify the factors that trigger or exacerbate the disease through patient interaction, case analysis, and observation.	2	Practical Training 2.5	PSY-MEC	Shows-how	CBL
CO 1,CO 2,CO 3,CO 4,CO 6	Design and implement questionnaire for identifying Dosha hetu through patient interaction and analysis of individual case profiles.	2	Experiential-Learning 2.8	PSY-GUD	Does	BS,CBL,DIS
CO 1,CO 2,CO 3	Discuss the relevance of Vyadhi hetu in analysing patient symptoms and medical history	1	Lecture	CC	Knows-how	C_L,L&GD
CO 1,CO 2,CO 3	Categorize the Vyadhi hetu into Pradhanika, Utpadaka and Vyanjaka hetu in different clinical conditions.	2	Practical Training 2.6	PSY-GUD	Shows-how	BL,CD,DIS,ECE
CO 1,CO 2,CO 3	Apply the methods of identifying Vyadhi hetu pertaining to diet(Ahara), lifestyle(vihara) and pshyco social factors(manovyadhi hetu).	2	Experiential-Learning 2.9	AFT-RES	Does	CBL,IBL,PAL,PT
CO 1,CO 2,CO 3	Analyse the concept of Nidanarthakara roga and differentiate from Upadrava and Vyadhi Sankar.	1	Lecture	CC	Knows-how	L,L&GD
CO 1,CO 2,CO 3	Demonstrate the methods of diagnosing Paraspara Anubandhi roga (Interdependent disease).	2	Experiential-Learning 2.10	PSY-MEC	Shows-how	C_L,D-BED
CO 1,CO 2,CO 3	Discuss preventive as well as curative strategies for disorders caused by 'Prayoga Aparishuddhatwat' (incorrect administration of therapies) – Ref (Ch.Ni. 8/22)	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 1,CO 2,CO 3	Identify the importance of exogenous factors (Agantu hetu) and Iatrogenic factors in disease mamnifestation.	2	Practical Training 2.7	PSY-MEC	Shows-how	CBL,PAL,TPW

CO 1,CO 2,CO 3	Evaluate the role of Modifiable and Non-modifiable risk factors in disease manifestation, and the scope of preventive medicine in present health delivery system.	2	Experiential-Learning 2.11	PSY-MEC	Does	BL,C_L, DIS,PER

Unit 4 Comprehend the Rogi Bala Pariksha (Assessment of patient's strength) on the basis of

1. Prakriti
2. Vyadhikshamatva
3. Satmya and Asatmya
4. Concept of Gara Visha
5. Basic immunology

References: 1,2,87,88,97,98

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2	Assess the Prakriti using validated tools and evaluate its importance in disease manifestation and prognosis	2	Experiential-Learning 2.12	PSY-MEC	Does	CBL,D-BED,IBL
CO 1,CO 2,CO 3	Evaluate the role of Vyadhikshamatwa (Vyadhibala virodhitwam and Vyadhi utpadaka pratibandhkatwam) - and its importance in disease prevention and prognosis.	2	Practical Training 2.8	PSY-MEC	Shows-how	BS,CBL, DIS,PER
CO 1,CO 2,CO 3	Assess Trividha bala (Sahaja, Kalaja and Yuktikrta) and their importance in disease manifestation and prognosis.	2	Practical Training 2.9	PSY-GUD	Shows-how	BL,CD,PT,PBL
CO 1,CO 2,CO 3	Describe the importance of Satmya and Asatmya in disease manifestation and prognosis.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 1,CO 2,CO 3	Identify the role of Viruddha ahara with Gara visha (dietary, lifestyle and environmental factors) in the manifestation of the diseases.	2	Practical Training 2.10	PSY-GUD	Shows-how	CBL
CO 1,CO 2,CO 3	Interpret the basics of Immunology and its clinical application in diagnosing immunological disorders.	1	Lecture	CAP	Knows-how	BS,FC,L&GD
CO 1,CO 2,CO 3,CO 8	Assess the patient's immune system function using rogi pareeksha vidhi and immunological assay.	2	Experiential-Learning 2.13	CAN	Does	BS,C_L,DIS,IBL

Practical Training Activity		
Practical No	**Name**	**Activity details**
Practical Training 2.1	Surface anatomy of Mastishka (Brain) .	1. Teacher will demonstrate different anatomical landmarks, surface anatomy and applied anatomy of Mastishka in Human skull / 3D image/Diagrams/Specimens/Models/Simulators. 2. Students will identify the anatomical landmarks, surface anatomy in the specimen. 3. The students will discuss the applied anatomical aspects regarding specific areas of brain. 4. The teacher will conclude the session with remarks.
Practical Training 2.2	Surface anatomy of major abdominal viscera along with the direction of their enlargement in diseased states.	Teachers activity 1. Teacher will demonstrate surface marking of abdominal viscera by using a human model or mannequin. 2. Teacher will show the direction of pathological enlargement with reference to clinical scenarios 3. Students will be divided into pairs or small groups 4. Students will mark the surface anatomy of abdomen and demonstrate enlargement directions with arrows or notes, use inspection and palpation techniques to simulate findings 5. Students will record the findings in their logbooks/record book. 6. The teacher will conclude the session with remark
Practical Training 2.3	Vyadhi vrutta focusing on kala apakarsa, chronicity, samprapti and history components relevant to disease conditions	Teacher Activity 1. Demonstrate how to take patient history using a structured Ayurvedic questionnaire 2. Show how to identify chronicity based on duration and symptom progression. 3. Guide students during real/simulated patient interactions

		4. Clarify doubts and help students interpret collected data in Ayurvedic terms Student Activity 1. Students review principles of vyadhi vritta and chronicity ,classification before the session 2. Students perform peer to peer or patient simulated history taking using a structured format 3. Students identify the Ashukari/Chirakari disease based on information collected. 4. Document the Atanka Samutpatti karma and Purva Vyadhi Vritta clearly. 5. Present their findings in small groups or class discussion. 6. Record their findings in the log books/case records.
Practical Training 2.4	Systemic approach to history taking in patients presenting with various sroto vikaras.	Teacher Activity 1. Explain the objective and relevance of history taking in systemic disease. 2. Demonstrate how to take a detailed history from a patient (real/simulated) with a specific systemic disorder. 3. Explain the link between the patients symptoms and sroto vikara 4. Observe students as they take patient history, offering guidance and correction where needed 5. Facilitate a group discussion on the history taken by students and provide feed back. Student Activity 1. Conduct a mock clinical interview with a peer or simulated patient focusing on a specific sroto vikara. 2. Record and present the patients history with emphasis on identifying symptoms relevant to the condition. 3. Participate in group discussion to analyze and compare clinical features observed in different cases. 4. Fill out a structured case taking format to document the history and findings.

Practical Training 2.5	Approach towards identifying exacerbating factors	Group activity/presentation 1. Teacher will provide case scenarios or facilitate real patient interactions. 2. Demonstrate history taking techniques focused on identifying predisposing(viprakrshta nidan),precipitating(sannikrshta nidan),perpectuating(anupasaya),preventive / protective factors(upasaya). 3. Supervise and offer feedback during case analysis presentation. Students Activity 1. Students will work in group and perform history taking to identify all the causative factors. 2. Discuss findings in groups and present clinical interpretations 3. Reflect on differences in disease progression due to varying hetus 4. The students will compile the case records and submit to the teacher. .
Practical Training 2.6	Clinical Application of Vyadhi hetu classification in Ayurvedic Diagnosis and treatment.	Teacher Activity 1. Teacher will provide an overview of vyadhi Hetus(-(Pradhanika hetu,Utpadaka and Vyanjanaka hetu) 2. Teacher will divide the students into small groups. 3. Each group will be assigned OPD/IPD case reports.. Student Activity 1. Each group will analyze the assigned case reports from OPD/IPD to categorize the hetus under Pradhanika, Utpadaka and Vyanjaka bheda. 2. Each group will discuss the rationale behind categorisation of Hetus and create a report and submit to teacher .

		3. One student from each group will present the findings. 4. Instructor will summarize the findings, provide insights and conclude the session.
Practical Training 2.7	Identification of exogenous factors(Agantu Hetu) and iatrogenic factors in disease manifestation.	Teacher Activity 1. Instructor explains about the role of Exogenous factors and Iatrogenic factors in disease development. 2. Instructor explains the mechanism of action of Agantuja Hetu affecting the body homeostasis,oxidative stress,and immune system. 3. Instructor divide students into small groups, and assigned each group three or four cases / previous case reports Student Activity 1. Each group take the history in real /simulator cases or analyze the previous case reports to identify the exogenous and iatrogenic factors. 2. Students will discuss the importance of Agantuja Hetu in the disease Manifestation. 3. Instructor facilitates discussion on common challenges and provides feedback , highlighting key points for each factor. 4. Student will record the information in their log book.
Practical Training 2.8	Vyadhikshamatwa (Vyadhibala virodhitwam and Vyadhi utpadaka pratibandhakatwam) and its role in disease prevention and prognosis.	Group Activity/ Presentation 1. Instructor introduces the concept of Vyadhikshamatwa (Vyadhibala virodhitwam) and (Vyadhi utpadaka pratibandhakatwam) including its importance in understanding disease resistance and maintaining health and preventing disease.. 2. Instructors identify and evaluate the individuals physical and mental constitution to assess their disease resistance. 3. Divide the students into groups, each evaluating the individual's past medical history, including previous illness and treatments ,diet, exercise and stress management habits to assess their disease resistance.

		4. Instructor leads a discussion to analyze data and information to identify patterns and trends related to disease resistance and prevention and prognosis. 5. Instructor provides feedback on the students analysis, highlights key points and summarizes the importance of factors influencing Vyadhikshamatwa.
Practical Training 2.9	Assessment of trividha bala and their importance in disease manifestation and prognosis.	Group Activity/ Presentation 1. Instructor introduces the concept of Trividha Bala(Sahaja, kalaja and yuktikrta) 2. Students will narrate the contextual references from classical text. 3. Instructor demonstrate the method of assessing the individual's Sahaja bala(genetic predisposition,constitutional strength, Natural immunity) kalaja Bala (seasonal adaptation, Diet and Lifestyle,immune system function) yuktikrta Bala (lifestyle habits, self care practices, mental and emotional resilience) with its importance in disease manifestation and prognosis. 4. Divide the students into groups ,each evaluating the individual's lifestyle habits, self care practices and mental and emotional resilience through questionnaires, physical examination and diagnosing test, and record in the case proforma. 5. Instructor leads a discussion to analyze data and information to identify areas of strength,areas of improvement, provides feedback on the students analysis, highlights keypoints and summarizes the importance of Trividha Bala.
Practical Training 2.10	Role of Viruddha ahara and Gara Visha(dietary, lifestyle and environmental factors) in disease manifestation.	Group Activity/ Presentation 1. Instructor introduces the concept of Viruddha ahara and Gara visha and the methods used to identify these potential factors through history taking and symptom analysis. 2. Instructor divide the students into small groups and each team will be assigned with a case scenario or case study related to viruddha ahara and gara visha. 3. The students will discuss and identify the potential toxic combinations and their effects. 4. Instructors encourage other teams to ask questions and provide feedback and evaluate their understanding of the concepts of Viruddha ahara and Gara Visha through presentations and discussions. 5. Instructor summarises the key points and the students will keep the information in their log book.

Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 2.1	Relating skull anatomy with respect to pathological conditions.	A] Teacher's Activity: 1. Teacher will divide the students into two or more groups. 2. Teacher will provide the case scenarios/radiographs/visual clips related to skull and brain pathology like fractues, hemiplegia, haematoma etc.,to each group. B] Student's Activity: 1. Students will identify the anatomical landmarks related to pathology. and discuss the possible clinical presentation or complications 2. One student from each group will present the findings before the teacher. 3. Teacher will conclude the session and students will compile the cases.
Experiential-Learning 2.2	Relating Cranial nerves anatomical landmarks with respect to its pathological conditions.	A] Teacher's Activity: 1. Teacher will divide the students into two or more groups. 2. Teacher will provide the case scenarios/anatomical models/visual clips/ digital simulation, related to cranial nerves dysfunctions. B] Student's Activity:

		1. Students will trace the anatomical landmarks related to pathology. and discuss the possible clinical presentation or complications 2. one student from each group will present the findings before the teacher. 3. Teacher will conclude the session and students will compile the cases.
Experiential-Learning 2.3	Relating lungs and Heart anatomy with respect to pathological conditions.	A] Teacher's Activity: 1. Teacher will divide the students into two or more groups. 2. Teacher will provide the case scenarios/radiographs/visual clips related to lungs and heart pathologies like pneumonia, pleural effusion, CHF,valvular disease etc. B] Student's Activity: 1. Students will identify the surface marking and practice palpation related to pathology and discuss the possible clinical presentation or complications. 2. One student from each group will present the findings before the teacher. 3. Teacher will conclude the session by clarifying doubts and ensure correct tecnique during hands on practice. and students will compile the cases.
Experiential-Learning 2.4	Anatomical landmarks of various asthi (bones), sandhis (joints) and pristhavamsha (spines) with their clinical significance	A] Teacher's Activity: 1. Teacher will divide the students into two or more groups. 2. Teacher will provide the case scenarios/radiographs/visual clips related to Asthi(bones), Sandhis(joints) and Pristavamsha(spines). B] Student's Activity:

		1. Students will identify the surface marking and practice palpation related to pathology and discuss the possible clinical presentation or complications 2. One student from each group will present the findings before the teacher. 3. Teacher will conclude the session by clarifying doubts and ensure correct tecnique during hands on practice and students will compile the cases.
Experiential-Learning 2.5	Identification of Dermatomal and Myotomal distribution and its applied aspect.	A] Teacher's Activity: 1. Teacher will divide the students into two or more groups. 2. Teacher will provide the case scenarios/anatomical models related to nerve dysfunctions B] Student's Activity: 1. Students will identify the dermatomal and myotomal distribution and discuss the possible clinical presentation or complications 2. One student from each group will present the findings before the teacher. 3. Teacher will conclude the session and students will compile the cases.
Experiential-Learning 2.6	Proficiency in case history taking for complex situations	A] Activity of Teacher: 1. Explain the basic of history taking in challenging conditions like inarticulate, unintelligent, unconsious,mentally retarded conditions . Student Activity

		1. The students will shadow the Teachers/Doctors in their activity of case taking on challenging conditions like inarticulate, unintelligent, unconsious,mentally retarded conditions . 2. Students will discuss with the Teacher on different approaches in case taking and will record in their log book 3. Students will present the case taking methodology in challenging patients before peers.
Experiential-Learning 2.7	Clinical history taking for patients with somatic symptoms caused by psychological or genetic factors.	A] Activity of Teacher: 1. Provide simulated or real patient case scenarios 2. Guide group Discussions on Psychosomatic and genetic case findings 3. Give feedback on student performance and documentation. B] Activity of Student: 1. Practice history taking on simulated or real patients with Sharirika Vyadhis 2. Identify Psychological or Genetic factors through structured interviews. 3. Document and present case findings 4. Participate in peer discussions and reflect on learning.
Experiential-Learning 2.8	Clinical Assessment of Dosha Hetu through patient based case studies	Teacher Activity: 1. Teacher briefs students on the importance of dosha hetu and its clinical significance. 2. Teacher supervise field application or patients interview simulation Student Activity

		1. Students assess OPD/IPD cases and collaboratively design questionnaires to identify the dosha involvement . 2. Students collaborate with the faculty and peers to discuss the impact of ahara, vihara,agni in provoking the dosha in a particular individual. 3. Students present their findings, challenges and outcomes in a group discussion with faculty and peers. 4. Teacher summarizes the findings and students gather valuable information about an individual's Dosha hetu .
Experiential-Learning 2.9	Role of Diet, lifestyle, pshyco social factors in disease manifestation.	Teacher Activity 1. Instructor brief on the importance of Ahara, vihara, and mano vyadhi hetu in the manifestation of a disease. 2. Instructor will divide the students into small groups Student Activity 1. Each group will assess atleast ten OPD/IPD cases to identify the factors (Ahara, vihara, and mano vyadhi hetu) provoking the disease. 2. Students collaborate with the faculty and peers to discuss the impact of ahara, vihara and manasika factors in a particular individual leading to disease manifestation. 3. Students present their findings, challenges and outcomes in the group discussion. 4. Instructor summarizes the findings and students will record theinformation in their log book.
Experiential-Learning 2.10	Identification of paraspara anubandhi rogas.	Teacher Activity: 1. Teacher introduces skills to diagnose paraspara anubandhi roga (interdependent Disease) including its importance in understanding disease relationships.

		2. Teacher briefs and summarizes types of paraspara anubandhi roga including Srotos, Dhatus and Mala based disease. Student Activity: 1. Students will analyze the OPD/IPD cases for identifying paraspara anubandhi roga 2. Students collaborate with the faculty and peers to discuss the factors essential for diagnosing paraspara anubandhi roga. 3. Students present their findings, challenges and outcomes in a group discussion with faculty and peers. 4. Instructor briefs about the integrative approaches in diagnosing Paraspara anubandhi rogas. 5. Instructor summarizes the findings and students record the information in log book.
Experiential-Learning 2.11	Modifiable and Non-modifiable risk factors in disease manifestation	Group Activity/ Presentation 1. Instuructor introduces the importance of Modifiable and nonmodifiable risk factors in disease manifestation and prognosis. 2. Instructor introduces the concept of preventive medicine and its importance in preventing disease and promoting health.. 3. Instructor identify and make distinction between primary ,secondary and tertiary prevention 4. Divide the students into groups and assign cases/case reports/case scenarios, focusing on modifiable and non-modifiable risk factor identification and preventive aspects. Student Activity 1. Students will distinguish the modifiable and nonmodifiable risk factors from the cases /case reports provided 2. Students will discuss the role of preventive medicine in each case scenarios. 3. Instructor provides feedback on the students analysis,highlights key points and summarizes the importance of Preventive medicine in current clinical practice. 4. Students will keep information in their log book.

Experiential-Learning 2.12	Assessment of Prakriti and its importance in disease manifestation.	1. Instructor brief students on the concept of Prakriti and its importance in disease manifestation and prognosis. 2. Students will conduct Prakriti assessment using standardized tool or questionnaire in assigned cases.. 3. Students discuss the role of prakriti in disease manifestation and prognosis. 4. Students analyze a patient's case study and develop a treatment plan based on prakriti assessment. 5. Instructor summarizes the findings and students record information in their log book.
Experiential-Learning 2.13	Assessment of patient's immune system function.	Steps of Activity: 1. Instructor brief students on the importance of the basics of immunology in Ayurveda including the role of Oja,Agni,Bala etc for the assessment of disease condition.. 2. The instructor will identify and describe the different components of the immune system including innate immunity, Adaptive immunity etc 3. Instructor will explain the process of immune response and diagnostic procedures of immunological disorders. 4. Students will develop basic understanding of immunological tests, role of vaccines and immune response to different types of pathogen 5. Students will participate in a simulated lab/refer lab reports in real cases or previous case reports to analyze the immunological test reports. 6. Instructor summarizes the findings and students compile the records .

Modular Assessment	
Assessment method	**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome- Based Assessment: 02 credits x 04 hours x 50 marks	4

Practical Learning Outcome Assessment:

- Identification of Surface Anatomy of Thorax [15 marks x 1 Hour]

Instructions: The instructor shall provide one clinical case (Bronchial Asthma or COPD) or a simulated clinical scenario for each student. The student will be instructed to identify the Surface Anatomy of underlying structures with special emphasis on clinical diagnosis (15 marks)
Assessment: Rubrics–based assessment along with OSPE (Name the structure correctly, identify its location, explain its relative position with respect to other structures, mention common pathologies related to the structure).

- Identify Sannikrishta, Viprakrishta and Vyabhichari hetu [15 marks x 1 Hour]

Instructions: The instructor shall provide one clinical case to each student. The student will be instructed to identify the Sannikrishta, Viprakrishta and Vyabhichari hetu through history taking. (10 marks). The student will propose a guideline for the patient based on Nidanaparivarjana. (5 marks)
Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, communicating effectively with patients and families, evaluating the effectiveness of interventions)

- Structured Viva-voce [5 marks x 1 hour]
- Experiential Learning Outcome Assessment: [15 marks x 1 hour] Learning process

What did you learn about the importance of studying Vyadhikshamatva and its role in manifestation of Immunological disorders? What was the most challenging part while analysing Vyadhikshamatva and how did you solve it?
Or
Any practical in converted form can be taken for assessment. (25 marks)
And
Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)

Module 3 : Aushadhi sevana kala

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

1. Interpret the Aushadhi Matra (Dose), Aushadhi sevana kala (Time of administration of Drug) and Anupana in different clinical scenarios
2. Formulate the Aushadhi Matra, Aushadhi sevana kala and anupana in different clinical scenarios
3. Illustrate the art of Prescription writing skills and Medical Records
4. Evaluate and write the appropriate Prescriptions in different clinical scenarios
5. Analyze the different Medical Records and their subcomponents

Unit 1 Aushadhi sevana kala, applications in present practice

1. Aushadhi sevana kala
2. Anupana

References: 81,82

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5,CO 6,CO 8	Discuss the relevance of unified consolidated Aushadhi sevana kala incorporating information from Ayurvedic texts.	1	Lecture	CE	Knows-how	DIS,L&GD,L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5,CO 6,CO 8	Create a unified consolidated Aushadha sevana kala based on its clinical application.	2	Practical Training 3.1	PSY-MEC	Shows-how	DIS,LS,PER
CO 1,CO 2,CO 3,CO 4,CO 5,CO 6,CO 8	Apply the unified consolidated Aushadhi sevana kala in different case scenarios.	3	Experiential-Learning 3.1	PSY-MEC	Shows-how	CBL,DIS

CO 3,CO 4,CO 5,CO 6,CO 8	Discuss the role of the unified consolidated Aushadhi sevana kala, matra and anupana in various diseases along with recent updates.	1	Lecture	CS	Knows-how	DIS,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Demonstrate the application of unified consolidated Aushadhi sevana kala, matra and anupana in various clinical conditions.	2	Practical Training 3.2	PSY-MEC	Shows-how	CBL,D-BED,PSM,TBL
CO 3,CO 4,CO 5,CO 6,CO 8	Apply the Unified consolidated Aushadhi sevana kala, matra and anupana in various disease conditions.	3	Experiential-Learning 3.2	PSY-MEC	Shows-how	DIS,FC,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Describe the unified consolidated Aushadhi Sevana Kala, matra and anupana for the effective therapeutic application of various formulations.	1	Lecture	CS	Knows-how	DA,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Demonstrate the application of the unified consolidated Aushadhi sevana kala, matra and anupana in effective therapeutic use of various formulations	2	Practical Training 3.3	PSY-MEC	Shows-how	CBL,D-BED,DA
CO 3,CO 4,CO 5,CO 6,CO 8	Apply the consolidated Aushadha sevana kala, matra and anupana in the therapeutic application of various formulations.	3	Experiential-Learning 3.3	PSY-MEC	Shows-how	DIS,PAL,PL,PBL

Unit 2 Prescription writing skills

- Qualities of ideal prescription
- Prescription on Rasaushadhis
- Dosage / Posology

References:

3A	3B	3C	3D	3E	3F	3G
CO 3,CO 4,CO 5,CO 6,CO 8	Discuss the methodology of prescription writing and its components like drug name/proprietary name, dose, dosage, anupana, oushadha kala, duration, legal issues associated with prescription writings, qualities of ideal prescription in the context of	1	Lecture	CAP	Knows-how	DIS,L&PPT

	herbal formulations.					
CO 3,CO 4,CO 5,CO 6,CO 8	Prepare a standardised medical prescription suitable for various herbal formulations	2	Practical Training 3.4	PSY-ORG	Shows-how	CBL,D,DIS,PT
CO 3,CO 4,CO 5,CO 6,CO 8	Formulate an ideal prescription of herbal formulations.	3	Experiential-Learning 3.4	PSY-ORG	Shows-how	D,DIS,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Describe the methodology of prescription writing and its components like drug name/proprietary name, dose, dosage, anupana, oushadha kala, duration, legal issues associated with prescription writings, qualities of ideal prescription in the context of Rasa oushadhis	1	Lecture	CS	Knows-how	L&GD,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Demonstrate the method of preparing a standardised medical prescription suitable for various Rasa oushadhis.	2	Practical Training 3.5	PSY-ORG	Shows-how	D,D-BED,DIS,PAL,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Formulate an ideal prescription of Rasa oushadhis in various clinical conditions.	3	Experiential-Learning 3.5	PSY-ORG	Does	CBL,DIS,PAL
CO 3,CO 4,CO 5,CO 6,CO 8	Describe the prescription with consideration of various avastha of roga and rogi including Atyayika avastha.	1	Lecture	CS	Knows-how	L&GD,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Prepare a standardised medical prescription considering different avastha of Roga and Rogi	2	Practical Training 3.6	PSY-ORG	Shows-how	D,D-BED,PAL,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Formulate a standardised medical prescription considering different avastha of Roga and Rogi	3	Experiential-Learning 3.6	CS	Does	CBL,PER

Unit 3 Medical Records and Hospital management software

- Maintenance of case records - OPD & IPD
- Referral forms and Discharge summary

- Certificates and forms (Medical certicate, Treatment certificate, etc.)

References: 83

3A	3B	3C	3D	3E	3F	3G
CO 3,CO 4,CO 5,CO 6,CO 8	Describe the protocol for maintaining case records at OPD levels, including different investigation reports, day care procedures conducted, consents and follow-up visit records.	1	Lecture	CS	Knows-how	L&GD,L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5,CO 6,CO 8	Demonstrate the maintenance of OPD case records	2	Practical Training 3.7	PSY-ORG	Shows-how	CBL,D,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Illustrate the maintenance of OPD case records	3	Experiential-Learning 3.7	PSY-ORG	Does	PAL,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Describe the protocol for maintaining case records at the IPD level, including different investigation reports, day care procedures conducted, consents and follow-up visit records.	1	Lecture	CS	Knows-how	L&GD,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Demonstrate the maintenance of IPD case records	2	Practical Training 3.8	PSY-ORG	Shows-how	D,PSM
CO 3,CO 4,CO 5,CO 6,CO 8	Illustrate the maintenance of IPD case records with medical emergency and ICU managements	3	Experiential-Learning 3.8	PSY-ORG	Shows-how	D,PBL
CO 3,CO 4,CO 5,CO 6,CO 8	Explain the protocol for maintaining case records at IPD levels (with procedures, panchakarma and surgical managements) with maximum information including different investigation reports, day care procedures conducted, consents, discharge summary etc	1	Lecture	CS	Knows-how	L,L&GD,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Demonstrate the maintenance of medical records at IPD levels (with procedures, panchakarma and surgical managements)	2	Practical Training 3.9	PSY-ORG	Shows-how	CBL,DIS,PAL

CO 3,CO 4,CO 5,CO 6,CO 8	Illustrate the maintanence of medical records at IPD levels (with procedures, panchakarma and Surgical managements)	2	Experiential-Learning 3.9	PSY-ORG	Shows-how	DIS,PAL
CO 3,CO 4,CO 5,CO 6,CO 8	Describe the different hospital forms and certicates like referral forms, requisition forms, certificates, fitness certificates for different panchakarma procedures.	1	Lecture	CS	Knows-how	DIS,L&GD,L&PPT
CO 3,CO 4,CO 5,CO 6,CO 8	Illustrate the hospital forms and certicates like referral forms and requisition forms.	2	Practical Training 3.10	PSY-ORG	Shows-how	CBL,D,DIS

Practical Training Activity

Practical No	Name	Activity details
Practical Training 3.1	Development of unified consolidated Aushadhi sevana kala	Small group learning 1. Teacher will divide the students into small groups. 2. They will be assigned to consolidate different Aushadhi sevana kala as per classical texts. 3. Students will discuss and critically analyze the different Aushadhi sevana kala components like timings, drugs, roga, roga avastha, rogi (age, bala) etc . 4. They will work on their Aushadhi sevana kala, critically analyse, plan for their application, challenges and solutions of the same. 5. One member from each group will present their worked up details. 6. Group discussion will be coordinated by the Mentor. 7. Mentor will summarize and conclude. 8. Students will record the development of unified consolidated Aushadhi sevana kala activity in their log book
Practical Training 3.2	Guided application of unified consolidated Aushadhi sevana kala,	Small group activity

	matra and anupana	1. The mentor will organize students into groups according to various srotas. Each group will identify significant and commonly observed diseases related to their assigned srotas. 2. Students will explore Aushadhi Sevana Kala, dosage (matra), and anupana in the management of various diseases and their recent updates. They will also examine the application of Aushadhi Sevana Kala in emerging diseases, syndromes, and conditions, along with recent updates and advancements in its clinical use. 3. One member from each group will present their worked up details. 4. Group discussion is coordinated by the instructor. 5. Mentor will summarise and conclude.
Practical Training 3.3	Application of the unified consolidated Aushadhi sevana kala,matra and anupana in the use of vrious formulations	Small Group Activity 1. Mentor will divide students into groups on the basis of different dosage forms. They will identify the important formulations under different dosage forms. 2. They will work on application of Aushadhi sevana kala, matra and anupana in various oushadhi like churna, avalehya, asava-arista, vati, ghruta etc. used in various therapuetic applications like shamana, shodhana, rasayana etc. 3. One member from each group will present their worked up details. 4. Group discussion is coordinated by the instructor. 5. Mentor will summarise and conclude.
Practical Training 3.4	Developing a standardized medical prescription suitable for various herbal formulations	Small group activity 1. Mentor will brief on prescription writing and its components 2. Divide students into groups on the basis of different dosage forms. They will identify the important formulations under different dosage forms 3. They will work on prescription writing, components like drug name/proprietary name, dose, dosage, anupana, bheshaja kala, duration etc Legal issues associated with prescription writings. Qualities of ideal prescription - general practical considerations while writing different kashaya kalpanas, asava, arishta, kshara, swarasa, kashaya, churna, vati, taila, ghrita

		etc. 4. One member from each group will present their worked-up details. 5. Group discussion is coordinated by the instructor. 6. Mentor will summarise and conclude.
Practical Training 3.5	Medical prescription of Rasa oushadhis	Small Group Activity 1. Mentor will brief on prescription writing in context of Rasa oushadhis. 2. Divide students into groups on the basis of different dosage forms. They will identify the important formulations under different dosage forms 3. They will work on prescription writing in context of Rasa oushadhis, components like drug name/proprietary name, dose, dosage, anupana, bheshaja kala, duration etc Legal issues associated with prescription writings.Considerations while prescribing rasoushadhis and contraindications if any, necessity of considering wash out period and maximum time that the rasoushadhis to be prescribed. Understanding the rationale behind mixing of various bhasmas in different doses and prescribing methods. Special considerations for the used rasa oushadhi like pathyapathya, anuapana, matra, bheshaja kala etc. 4. One member from each group will present their worked up details. 5. Group discussion is coordinated by the instructor. 6. Mentor will summarise and conclude.
Practical Training 3.6	Medical prescription with respect to different avastha of Roga and Rogi	Small Group Activity/Role play 1. Mentor will brief on prescription as per roga and rogi pareeksha. 2. Divide students into groups as per the different components of roga and rogi like vyadhi avastha, age, sukumar, bala etc. 3. They will work on prescription writing, considering dosage as per roga and rogi pareeksha. They will develop a medical prescription, looking into different permutations and combinations of roga avastha and rogi pareeksha, and consider the relevant legal issues.

		4. One member from each group will present their worked-up details. 5. Group discussion is coordinated by the instructor. 6. Mentor will summarise and conclude.
Practical Training 3.7	Maintenance of OPD case records	Small Group Activity 1. Mentor will brief on maintenance of case records 2. Divide students into groups. They will be distributed with masked hospital records/Hospital management softwares (OPD segment) taking permission from concerned authorities for use of hospital records or hospital management software/dummy case records or scenarios. 3. They will work on the maintenance of case records at OPD levels with maximum information including different investigation reports, day care procedures conducted, consents, follow up visit records etc., challenges and solutions towards the proper medical record keeping at OPD levels 4. One member from each group will present their worked-up details. 5. Group discussion is coordinated by the Mentor. 6. Mentor will summarise and conclude.
Practical Training 3.8	Maintenance of IPD case records in different case scenarios	Small Group Activity 1. Mentor will brief on maintenance of case records at IPD levels 2. Divide students into groups. Masked hospital records/Hospital management softwares (IPD) taking permission from concerned authorities for use of hospital records or hospital management software/dummy case records or scenarios will be distributed. 3. They will work on maintenance of case records at IPD levels (With medical, emergency and ICU managements) with maximum information including different investigation reports, day care procedures conducted, consents, discharge summary etc Challenges and solutions towards the proper medical record keeping at IPD levels. 4. One member from each group will present their worked up details.

		5. Group discussion is coordinated by the instructor. 6. Mentor will summarise and conclude.
Practical Training 3.9	Maintenance of medical records at IPD levels (with procedures, panchakarma and surgical managements) on different case scenarios.	Group Activity/ Presentation 1. Mentor will brief on maintenance of medical records at IPD levels 2. Divide students into groups. Masked hospital records/Hospital management softwares (IPD) (taking permission from concerned authorities for use of hospital records or hospital management software)/dummy Case records or scenarios will be distributed. 3. They will work on maintenance of medical records at IPD levels (with procedures, panchakarma and Surgical managements) with maximum information including different investigation reports, day care procedures conducted, consents, discharge summary etc. Challenges and solutions towards the proper medical record keeping at IPD levels. 4. One member from each group will present their worked up details. 5. Group discussion is coordinated by the instructor. 6. Mentor will summarise and conclude.
Practical Training 3.10	Illustrating the hospital forms and certicates like referral forms and requisition forms on different case scenarios	Group Activity/Pressentation 1. Mentor will brief on referral forms, requisition forms, certificates, writing different fitness certificates 2. Divide students into multiple groups. 3. They will work on different referral forms, requisition forms, certificates, writing different fitness certificates for different panchakarma procedures. Overall knowledge about different certificates issued by the hospital and their contents. Critical analysis on photocopies of these documents. 4. One member from each group will present their worked up details. 5. Group discussion is coordinated by the instructor. 6. Mentor will summarise and conclude.

Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 3.1	Application of the Unified consolidated Aushadhi sevana kala	Group based activity 1. Students with the help of mentor, will be divided into various groups as per the different masked case records/case scenarios 2. Students will do activity in masked case records/case scenarios. Critically analyse the Aushadhi sevana kala advised and possible Aushadhi sevana kala that can be used. 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed. 5. Students can write a report of the activity in the log book 6. Mentor will summarise and conclude
Experiential-Learning 3.2	Application of Unified consolidated Aushadhi sevana kala,matra and anupana	Group activity 1. Students with the help of mentor, will be divided into various groups as per the different masked case records/case scenarios. 2. Students will assess the case sheets. Analyse the diagnosis, diseases, Avastha, concomitant medicines used. Critically analyse the Aushadhi sevana kala, matra and anupana used and possible Aushadhi sevana kala that can be used. 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 5. Students can write a report of the activity in the log book 6. Mentor will summarise and conclude

Experiential-Learning 3.3	Implementation of consolidated Aushadha sevana kala,matra and anupana in the therapeutic application of various formulations in different case based scenarios	Group activity 1. Students with the help of mentor , will be divided into various groups as per the different masked case records/case scenarios. And they will identify the important formulation in them. 2. Students will do activity on implementation of Aushadhi sevana kala in various oushadhi like churna, avalehya, asava-arista, vati, ghruta, etc. in different therpauetic applications like shamana, shodhana, rasayana etc. 3. Application of Aushadhi Sevana Kala, matra, and anupana in patients with single or multiple coexisting diseases, those receiving medications from the same or different medical systems, or prescriptions from multiple physicians, as well as in cases with changing clinical conditions (avasthas). The discussion will also address practical challenges in implementing Aushadhi Sevana Kala in such patients and explore potential solutions 4. Invite each student from group to present their activity, challenges and their possible solutions 5. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 6. Students can write a report of the activity in log book 7. Mentor will summarise and conclude
Experiential-Learning 3.4	Prescription of herbal oushadhi	Activity : 1. Students with the help of mentor, will be divided into various groups as per the different masked case records/case scenarios. And they will identify the important formulation in them. 2. Students on masked case records or case scenarios will anlayze, discuss and compose medical prescription including the components like drug name/proprietary name, dose, dosage, anupana, bheshaja kala, duration etc, legal issues associated with prescription writings. Qualities of ideal prescription writing in context of Ayurveda practise . 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed. 5. Students can write a report of the activity 6. Mentor will summarise and conclude

Experiential-Learning 3.5	Ideal prescription of Rasa oushadhis	Group activity 1. Students with the help of mentor, will be divided into various groups as per the different masked case records/case scenarios. And they will identify the important formulation in them. 2. Students in masked case records/case scenarios will do activity on prescription writing in context of Rasa oushadhis, components like drug name/proprietary name, dose, dosage, anupana, bheshaja kala, duration etc Legal issues associated with prescription writings. Considerations while prescribing rasoushadhis and contraindications if any, necessity of considering wash out period and maximum time that the rasoushadhis to be prescribed. Understanding the rationale behind mixing of various bhasmas in different doses and prescribing methods. Special considerations for the used rasoushadhi like pathyapathya, anuapana, matra, bheshaja kala etc. 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 5. Students will write a report of the activity 6. Mentor will summarise and conclude
Experiential-Learning 3.6	Standardized medical prescription considering avastha of Roga and Rogi	Group Activity : 1. Students with the help of instructor, will be divided into various groups as per the different masked case records/case scenarios 2. Students will engage in activities using masked case records or clinical scenarios focused on prescription writing, taking into account dosage based on roga and rogi pareeksha, while also incorporating relevant legal considerations 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 5. Students can write a report of the activity

Experiential-Learning 3.7	Illustrating the maintenance of OPD case records in Medical record section.	Group Activity : 1. Students with the help of mentor will be divided into various groups. They will be divided on the basis OPD records of different diseases in Medical record section. 2. Students in Medical record section will work on maintenance of case records at OPD levels with maximum information including different investigation reports, day care procedures conducted, consents, follow up visit records etc Challenges and solutions towards the proper medical record keeping at OPD levels. 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 5. Students can write a report of the activity 6. Mentor will summarize and conclude
Experiential-Learning 3.8	Maintenance of IPD case records with medical, emergency and ICU managements in different case scenarios	Group Activity : 1. Students with the help of Mentor, will be divided into various groups 2. Students in Medical record section, activity on maintenance of case records at IPD levels (With medical, emergency and ICU managements) with maximum information including different investigation reports, day care procedures conducted, consents, discharge summary etc Challenges and solutions towards the proper medical record keeping at IPD levels. 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 5. Students can write a report of the activity 6. Mentor will summarize and conclude
Experiential-Learning 3.9	Illustrating the maintanence of medical records at IPD levels	Group Activity :

	(with procedures, panchakarma and Surgical managements) in Medical Record Section	1. Students with the help of mentor, will be divided into various groups 2. Students in Medical Record Section, activity on maintenance of medical records at IPD levels (with procedures, panchakarma and Surgical managements) with maximum information including different investigation reports, day care procedures conducted, consents, discharge summary etc. Challenges and solutions towards the proper medical record keeping at IPD levels. 3. Invite each student from group to present their activity, challenges and their possible solutions 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed 5. Students can write a report of the activity 6. Mentor will summarise and conclude

Modular Assessment

Assessment method	**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome- Based Assessment: 02 credits x 04 hours x 50 marks Practical Learning Outcome Assessment: • Develop a standardised medical prescription [15 marks x 1 Hour] Instructions: The instructor shall provide any one clinical case for each student. The student will be instructed to analyse the status of the patient by conducting Roga rogi pareeksha (5 marks) and formulate a standardised medical prescription (10 marks) Assessment: Rubrics–based assessment (based on Accuracy, clarity, completeness, safety, Evidence-Based practice, Patient communication). • Application of Aushadha sevana kala, Matra and Anupana [15 marks x 1 Hour] Instructions: The instructor shall provide any one clinical case for each student. The student will be instructed to analyse the status of the patient by conducting Roga rogi pareeksha (5 marks) and advise medicines giving special emphasis to Aushadha sevana kala, Matra and Anupana. (10 marks) Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, communicating effectively with patients and families, evaluating the effectiveness of interventions)	4

• Structured Viva-voce [5 marks x 1 hour] • Experiential Learning Outcome Assessment: [15 marks x 1 hour] What did you learn about the importance of developing a unified consolidated Aushadhi sevana kala in clinical application? Or Any practical in converted form can be taken for assessment. (25 marks) And Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)	

Module 4 : Applications of Chikitsa sutra

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

1. Apply Samprapti Vinashana Chikitsa in Different diseases involving Dosha, Dhatu and Mala
2. Analyze the importance of applying Chikitsa, based on the principles of Guna Siddhanta.
3. Recognise the relative dominance (tara-tama bhava vriddhi) of doshas in various diseases through clinical observation and symptom analysis, and implement suitable Chikitsa based on the doshic hierarchy and disease condition
4. Apply deepana, pachana and srotoshodhaka chiktsa in various samavastha and margavaranajanya diseases
5. Categorise the Chikitsa sutras of different diseases involving dosha, dhatu and mala under Shadupakrama
6. Analyze the implementation of Rasayana Chikitsa as preventive and Prophylactic

Unit 1 Samprapti vinashana as a chikitsa & Doshopakarama

1. Samprapti and its components
2. Chikitsa Sutra of dvividha and trividha vyadhi
3. Chikitsa sutra in Ashayapakarsha, Margavarana, Paraspara anubandha vyadhi, Anyonya sambhava vyadhi- Nidanarthakara Vyadhi
4. Chikitsa of vriddhi and kshaya of doshas
5. Shodhana and Rasayana in Kinchit Avashishta dosharoopa vyadhi

References: 1,2,5,104

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss Samprapti Vinashana Chikitsa(with appropriate examples to highlight its significance in effective treatment planning), Dvividha Vyadhi Chikitsa (Swatantra and Paratantra Vyadhi), Trividha Vyadhi Chikitsa(Drishtapacharaja, Purvapacharaja, and Drishtadrishta Karmaja), and Anukta Vyadhi Chikitsa(Vikaranama Abhava).	2	Lecture	CC	Know	DIS,L&GD,L&PPT
CO 1,CO 2,CO	Formulate the treatment principles for dvividha and trividha vyadhi, along with Upadrava	2	Practical	PSY-	Shows-	CBL

3,CO 5	Chikitsa.		Training 4.1	ORG	how	
CO 1,CO 2,CO 3,CO 4,CO 5	Apply the principles of treatment for Dvividha and Trividha Vyadhi using the Nidana Panchaka framework, after evaluating Sadhyasadhyata and identifying any associated Upadrava.	3	Experiential-Learning 4.1	CAP	Does	CBL,RLE ,RP
CO 1,CO 2,CO 3,CO 4,CO 5	Describe the Doshantara Dosha Kopa Chikitsa (Ashayapakarsha, Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi- Nidanarthakara Vyadhi) and comprehend the Chikitsa Sutra mentioned for Ekadoshaja, Samsarga, and Sannipataja Dosha Chikitsa	1	Lecture	CC	Knows-how	L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Construct the treatment principles for Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi and Nidanarthakara Vyadhi.	2	Practical Training 4.2	PSY-MEC	Shows-how	CBL,DIS, PER
CO 1,CO 2,CO 3,CO 4,CO 5	Formulate the treatment principles for Margavaranajanya Vyadhi, Paraspara Anubandha, Vyadhi Anyonya Sambhava Vyadhi, and Nidanarthakara Vyadhi in different clinical conditions.	3	Experiential-Learning 4.2	CAP	Does	CBL,DIS, PER
CO 1,CO 2,CO 3,CO 4,CO 5	Describe Doshagati, Anya Sthana Gata Dosha, Tiryak Gata Dosha, Paradesha Gamana Dosha, and Agantu Dosha Chikitsa, based on Doshabalabala, and assess Guru vyadhita and Laghu vyadhita in adapting the appropriate treatment principles.	1	Lecture	CE	Knows-how	L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Differentiate the various types of Doshagati — Anya Sthana Gata Dosha, Tiryak Gata Dosha, Paradesha Gamana Dosha, and Agantu Dosha — based on Doshabala in different disease conditions and assess a few cases of Guru and Laghu vyadhita.	2	Practical Training 4.3	PSY-MEC	Shows-how	CBL
CO 1,CO 2,CO	Construct the treatment protocol for Anya Sthana Gata Dosha, Tiryak Gata Dosha,	2	Experiential-	CS	Does	CBL,DIS

3,CO 4,CO 5	Paradesha Gamana Dosha, and Agantu Dosha based on Doshabalabala in different disease conditions and assess cases of Guru and Laghu Vyadhita.		Learning 4.3			
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the Chikitsa Sutra of Vriddhi and Kshaya of Doshas, considering the particular influencing factors like different gunas responsible for it.	1	Lecture	CC	Knows-how	DIS,L&GD,L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Demonstrate the methods of formulating treatment principles for Vriddhi (increase) and Kshaya (decrease) of Doshas, taking into account the specific influencing factors such as the different Gunas responsible for these conditions.	2	Practical Training 4.4	PSY-MEC	Shows-how	CBL,D,D-BED
CO 1,CO 2,CO 3,CO 4,CO 5	Formulate the treatment principles in different disease conditions of Vriddhi and Kshaya of Doshas.	3	Experiential-Learning 4.4	CS	Does	CBL,DIS
CO 1,CO 2,CO 3,CO 4,CO 5	Describe the Kinchit Avashishta Dosharoopa Vyadhi and Kinchit Anavashishta Dosharoopa Vyadhi, and understand their scope and limitations in the context of Shodhana and Rasayana therapies	1	Lecture	CC	Knows-how	L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Identify the methods of formulating treatment principles like repeated Shodhana followed by Rasayana in different identified disease conditions of Kinchit Avashishta Dosharoopa Vyadhi.	2	Practical Training 4.5	PSY-MEC	Shows-how	CBL,D-BED,DIS
CO 1,CO 2,CO 3,CO 4,CO 5	Construct treatment principles (Shodhana and Rasayana Chikitsa) for different disease conditions of Kinchit Avashishta Dosharoopa Vyadhi.	3	Experiential-Learning 4.5	CS	Does	CBL,D-BED,DIS,PER
Unit 2 Leena Dosha, Dhatu Upadhatu pradosha/dushti, Indriya Pradoshaja Vikara, Swabhavika Roga Chikitsa						

1. Leena doshavastha and chikitsa
2. Chikitsa of vriddhi-kshaya of Dhatu and Upadhatu
3. Sama Nirama dhatu avastha and chikitsa
4. Chikitsa Sutra for Ojo-vikara, Indriya Pradoshaja Vikara, and Swabhavika Roga

References: 1,2,5

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the Leena Dosha Avastha, Sama Nirama Dosha, Dhatu Avastha and its Chikitsa Sutra	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Demonstrate the methods of identifying the Chikitsa Sutra for different conditions like Leena Dosha Avastha and Sama Nirama Dosha/Dhatu Avastha.	2	Practical Training 4.6	PSY-MEC	Shows-how	CBL,D-BED,DIS
CO 1,CO 2,CO 3,CO 4,CO 5	Formulate the treatment protocol based on the specific conditions of Leena Dosha Avastha and Sama Nirama Dosha/Dhatu Avastha.	2	Experiential-Learning 4.6	CS	Does	CBL,D-BED,DIS,PER
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the Chikitsa Sutra for the Vriddhi and Kshaya of Dhatus and Upadhatus, considering the specific influencing factors such as the various Gunas responsible for these changes.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Identify the appropriate Ahara, Vihara, and Aushadha for various conditions involving the Vriddhi and Kshaya of Dhatus and Upadhatus, considering the Nidana and Prakruti of the patient.	2	Practical Training 4.7	PSY-ORG	Shows-how	CBL,D-BED,DIS
CO 1,CO 2,CO 3,CO 4,CO 5	Advise appropriate Ahara, Vihara and Aushadha in Vriddhi or Kshaya of Dhatus/ Upadhatus, based on the patient's Nidana and Prakruti.	3	Experiential-Learning 4.7	CS	Does	CBL

CO 1,CO 2,CO 3,CO 4,CO 5	Describe the clinical methods for identifying various types of Ojovikara and application of the Chikitsa Sutra in the management of Ojovikara, *e*laborate on the concept of Indriya Pradoshaja Vikara and the Sutras related to Swabhavika Roga Chikitsa, and explain the importance of identifying the Dhatupaka in treatment.	1	Lecture	CC	Knows-how	L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Identify the methods of formulating appropriate treatment principles (eg. Rasayana Chikitsa) in different conditions of Ojovisramsa, Ojovyapath & Ojokshaya.	2	Practical Training 4.8	PSY-MEC	Shows-how	CBL,D-BED,DIS
CO 1,CO 2,CO 3,CO 4,CO 5	Formulate appropriate treatment principles in different conditions of Ojovikaras	2	Experiential-Learning 4.8	CS	Does	CBL,D-BED,DIS

Unit 3 Mala Vriddhi Kshaya Chikitsa

1. Chikitsa of Mala vriddhi and kshaya

References: 1,2,5

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5	Interpret the role of Vriddhi and Kshaya of Mala (Purisha, Mutra, and Sweda) and Dhatu Mala, along with their causative factors, associated conditions, and their correlation with metabolic wastes.	2	Lecture	CC	Knows-how	L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse & interpret the role of Mala Vriddhi and Kshaya in disease pathogenesis and diagnosis	2	Practical Training 4.9	PSY-ADT	Shows-how	CBL,LRI, L&PPT
CO 1,CO 2,CO	Demonstrate the diagnostic and therapeutic approaches of conditions arising due to the	2	Practical	PSY-	Shows-	CBL,LRI,

3,CO 4,CO 5	Mala Vriddhi and Kshaya.		Training 4.10	ORG	how	L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse imbalance of Mala in various metabolic Disorders like diabetes mellitus, Urea Cycle Disorders, Phenylketonuria (PKU), Maple Syrup Urine Disease, Fabry Disease, Lesch–Nyhan Syndrome and and its therapeutic approach	2	Practical Training 4.11	PSY-ADT	Shows-how	CBL,LRI, L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Demonstrate Sama and Nirama condition of Dosha & Mala in diagnosis and therapeutic implications.	2	Practical Training 4.12	PSY-ADT	Shows-how	CBL,LRI, L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the role of Agni, diet and lifestyle in the context of Mala Vriddhi or Kshaya	1	Lecture	CC	Knows-how	L&GD,L &PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse critically the complications due to prolonged derangement of Mala in various conditions like Chronic Kidney disease, Hepatic Diseases	2	Experiential-Learning 4.9	CAP	Does	LRI,L,L& PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse the therapeutic indications and mode of action of Mutravirechana and Mutrasangrahana drugs.	2	Experiential-Learning 4.10	CAP	Does	JC,L&GD
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse critically the therapeutic indications and mode of action of drugs used for Pureesha Sthambhana and Virechana (Bhedana, Rechana, and Anulomana)	3	Experiential-Learning 4.11	CAP	Does	L&GD
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse the therapeutic indications and mode of action of Swedajanana and Stambhana drugs	2	Experiential-Learning 4.12	CAN	Does	L&GD,M nt

Unit 4 Srotodushti Chikitsa

1. Srotodushti and management

References: 1,2,5

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss Srotodushti with contemporary pathophysiology and application of Khavaigunya	2	Lecture	CC	Knows-how	L,L&GD, L&PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Identify the role of Sroto Vaigunya and Sroto Dushti in the diagnosis of the disease	2	Experiential-Learning 4.13	PSY-ADT	Does	CBL,DIS
CO 1,CO 2,CO 3,CO 4,CO 5	Identify and interpret the clinical presentations of Srotodushti in systemic disorders.	3	Experiential-Learning 4.14	PSY-ADT	Shows-how	CBL,PAL ,SDL
CO 1,CO 2,CO 3,CO 4,CO 5	Demonstrate systematic examination as per the type of Srotas vitiation	3	Practical Training 4.13	PSY-ADT	Shows-how	CD,CBL, D-BED
CO 1,CO 2,CO 3,CO 4,CO 5	Discuss the application of Chikitsa Sutra considering Sroto dushti prakara.	1	Lecture	CC	Knows-how	L&GD,L &PPT
CO 1,CO 2,CO 3,CO 4,CO 5	Formulate the treatment protocols as per the type of Srotodushti.	2	Experiential-Learning 4.15	CAN	Does	CBL,PBL
CO 1,CO 2,CO 3,CO 4,CO 5	Analyse Laboratory findings and their application in Srotodushti identification	2	Experiential-Learning 4.16	CAP	Does	CD,CBL, D-BED
CO 1,CO 2,CO 3,CO 4,CO 5	Demonstrate Laboratory findings and their application in Srotodushti identification	3	Practical Training 4.14	PSY-ADT	Shows-how	DL,L&G D

Practical Training Activity

Practical No	Name	Activity details
Practical Training 4.1	Treatment principles in dvividha and trividha vyadhi.	Group Activity/ Presentation of cases from IPD/case scenario 1. Instructor will identify trividha vyadhi, different cases of drishtapacharaja (diseases developed due to present deeds ex.

		Vatakantaka, Gridhrasi), Purvapacharaja (diseases developed due to past deeds ex. Kushtha, Prameha) and drishtadrishta karmaja (diseases developed due to present and past deeds eg. Kushtha, Prameha) vyadhis and dvividha vyadhi, svatantra Paratantra vyadhi/dosha/mala on the basis of Nidana, lakshana, Samprapti from OPD-IPD/Case scenario and distribute it to each student for case taking and discussion. 2. The instructor will identify and explain the specific nidanas and lakshanas pertaining to the different vyadhis and will discuss the upadravas. 3. The instructor will carry out the discussion on treatment principles after the case presentation. 4. The instructor will summarize and conclude.
Practical Training 4.2	Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi, and Nidanarthakara Vyadhi chikitsa tatva.	Group Activity/ Presentation of cases from IPD/case scenario 1. Instructor will distribute different cases like Pakshaghata, Swasa, Arshas, Raktapitta etc. to each student and ask them to prepare treatment principles of diseases with Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi, Nidanarthakara Vyadhi. 2. The Instructor will demonstrate the specific clinical examinations and explain the important investigations. 3. Instructor will carry out the discussion on treatment principles after the case presentation by each student. 4. Group discussion is coordinated by the instructor. 5. Instructor will summarize and conclude.
Practical Training 4.3	Assessment of Doshagati, Agantu Dosha, Guru and Laghu vyadhita.	Group Activity/ Presentation of cases from OPD-IPD/case scenario 1. The instructor will distribute different cases related to different Doshagati, Anya Sthana Gata dosha, Tiryak gata dosha, Paradesha Gamana, or Agantu Dosha based on Nidana, Lakshana, Samprapti, and relevant investigations and ask the students to prepare the treatment protocol. Also ask students to assess the case whether a Guruvyadhita or Laghuvyadhita. 2. The instructor will demonstrate the specific clinical examinations and explain the important investigations to be carried out. 3. The instructor will discuss treatment principles after the case presentation by each student.

		4. Group discussion is coordinated by the instructor. 5. The instructor will summarize and conclude.
Practical Training 4.4	Formulating treatment principles for the Vriddhi and Kshaya of Doshas	Group Activity/ Presentation of cases from IPD/Given case scenario 1. The instructor will allot different cases to assess the Vata, Pitta, and Kapha Vriddhi Lakshanas and also to establish the relation between the nidanas in that particular patient. 2. Students will be asked to prepare a list of dislikes towards the Ahara & Vhara to establish the type of Dosha Vriddhi 3. Also try to assess the specific Dosha Kshaya Lakshanas, if any, to advise the Ahara, Vihara and Aushadha. 4. The instructor will carry out the discussion on treatment principles after the case presentation by each student. 5. Group discussion is coordinated by the instructor. 6. Instructor will summarize and conclude.
Practical Training 4.5	Construction of treatment principles for various identified disease conditions characterized by Kinchit Avashishta Dosharoopa Vyadhi.	Presentation of cases from OPD-IPD/Given case scenario 1. The instructor will demonstrate different disease conditions like chronic (Kushtha, Jwara) or acute (Punaravrtaka Jwara, Agantuja Jwara) with specific signs and symptoms showing the Avashishta Doshas (Remaining dosha) to determine the type of treatment. 2. Students will be asked to prepare a list of indications of Shodhana Chikitsa in different contexts. 3. The instructor will demonstrate the specific clinical examinations and explain the important investigations. 4. Group discussion is coordinated by the instructor. 5. The instructor will summarize and conclude.
Practical Training 4.6	Identifying chikitsa tatva of Leena	Presentation of cases from OPD-IPD/Given case scenario

	Doshavastha, Sama Nirama Dosha/Dhatu Avastha.	1. The instructor will select different disease conditions involving Leena Doshavastha, Sama Nirama Dosha/Dhatu Avastha to identify the Nidana Panchaka and to formulate the Chikitsa sutra accordingly. 2. Students are asked to identify different conditions by assessing the Lakshanas of Sama and Niramata of Dosha and Dhatu. 3. The instructor will demonstrate the specific clinical examinations and explain the important investigations. 4. Group discussion is coordinated by the instructor. 5. The instructor will summarize and conclude.
Practical Training 4.7	Identification of appropriate Ahara, Vihara, and Aushadha	Presentation of cases from OPD-IPD/Given case scenario 1. The instructor will ask the students to assess & establish the particular Dhatu or Upadhatu Vriddhi/Kshaya Lakshanas & relation between the Nidanas. 2. Students will be asked to prepare the list of likes and dislikes towards the food articles to identify and establish the type of Dhatu/Upadhatu Vriddhi and Kshaya. 3. Also assess the specific Dhatu/Upadhatu Kshaya Lakshanas to advise the Ahara, Vihara, and Aushadha accordingly. 4. The instructor will discuss treatment principles after the case presentation by each student. 5. Group discussion is coordinated by the instructor. 6. The instructor will summarize and conclude.
Practical Training 4.8	Identify treatment principles in Ojovisramsa, Ojovyapath & Ojokshaya.	Presentation of cases from IPD/Given case scenario 1. The instructor will demonstrate different disease conditions involving Ojovisramsa, Ojovyapath & Ojokshaya, with Sadhyasadhyata, to identify the Nidana, Lakshana Samprapti, and to formulate the Chikitsa Sutra. 2. Students are asked to identify different conditions by assessing the Lakshanas of Ojo Visramsa, OjoVyapath & Ojokshaya, with Sadhyasadhyataas. 3. The instructor will demonstrate the specific clinical examinations and explain the important investigations to be carried out. 4. Group discussion will be coordinated by the instructor.

		5. The instructor will summarize and conclude.
Practical Training 4.9	Plan of diagnosis & management in Mala Vriddhi and Kshaya	1. The teacher will guide the students with the line of treatment for the management of disorders arising due to Mala Vriddhi and Kshaya. 2. Divide the students in two/three groups and assign cases with the presentation of Mala Vriddhi and Kshaya 3. Invite each group for discussion to plan the line of treatement 4. The teacher shall summarise the key points covered in the practical.
Practical Training 4.10	Identification of Mala Vriddhi and Kshaya	1. The teacher will guide the students with the utility of clinical assessment of Mala Vriddhi and Kshaya Lakshana. 2. Divide the students into two groups / three groups. 3. The teacher will explain conditions arising due to excessive accumulation of metabolic wastes and analysis of lab reports. 4. The students should be guided to assess the status of Vriddhi and Kshaya of Mala and enlist of investigations like urine, sputum, stool, its analysis, and interpretation. 5. Instruct each group about the clinical examination of various disorders occurring due to Mala Vriddhi and Kshaya and its correlation to the lab reports. 6. Facilitate a discussion on clinical assessment and examination with the possible line of treatment. 7. The teacher shall summarise the key points covered in the practical.
Practical Training 4.11	Management plan for the imbalance of Mala in Metabolic Disorders	1. The teacher will guide the students with importance of Mala assessment based on laboratory reports in Metabolic Disorders. 2. The teacher will explain the pathogenesis of various metabolic disorders and laboratory findings.

		3. Divide the students in two/three groups. 4. The students should be provided with lab reports like biochemical markers (e.g., blood glucose, ketones, uric acid, lipid profiles etc.) and abnormal metabolites like phenylalanine, branched chain amino acids (BCAA), ammonia etc. 5. Instruct each group to discuss to do clinical assessment of cases of metabolic disorders, including the locomotor, integumentary, nervous, gastrointestinal, renal, and endocrine systems and interpret it with the laboratory findings. 6. Invite each group for group discussion for planning the treatment. 7. The teacher shall summarise the key points covered in the practical
Practical Training 4.12	Demonstration of Sama and Nirama avastha.	1. The teacher will guide the students with importance of Sama and Nirama condition of Dosha & Mala. 2. The teacher will explain the role of clinical assessment of Samata and Niramata for diagnosis & Treatment. 3. Divide the students in two/three groups. 4. The students should be provided with Sama and Nirama stages of the diseases like Amavata, Grahani, Atisara, Jvara etc. 5. Instruct each group to conduct a clinical examination & discuss the Sama and Nirama stage and its treatment. 6. The teacher shall summarize the key points covered in the practical
Practical Training 4.13	Systematic examination of each system	1. The teacher will guide the students with importance of Srotas assessment in healthy and diseased. 2. The teacher will explain various types of Srotodushti in respect to different organs and organ systems. 3. Divide the students in two/three groups. 4. Demonstrate each group about clinical examination of organ systems in respect to Srotodushti like examination of respiratory system, cardiovascular system, locomotor system, integumentary system, nervous system etc. and interpret its role in the disease and pathogenesis 5. Invite each group to examine the patients after the hands-on training. 6. Facilitate a discussion on clinical assessment and examination of various organ systems. 7. The teacher shall summarise the key points covered in the practical

Practical Training 4.14	Demonstration of Laboratory findings and their application in Srotodushti identification in the given lab reports.	1. The teacher will guide the students with importance of laboratory investigations and its clinical interpretation with respect to Srotodushti like haematological, biochemical parameters, endoscopy, Spirometery, USG, X ray , CT scan, MRI etc. 2. Divide the students in two/three groups. 3. The students will be provided with lab reports and findings like haematological, biochemical parameters, endoscopy, Spirometery, USG, X ray , CT scan, MRI etc, etc. and their association with various types of Srotodushti. 4. Invite each group to examine the patients after the hands-on training. 5. Facilitate a discussion on analysis and interpretation of various lab investigations pertaining to Srotodushti. 6. The teacher shall summarise the key points covered in the practical.
Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 4.1	Application of the treatment principles in Dvividha and Trividha Vyadhi	OPD-IPD cases/ Case scenario 1. Students will be assigned to identify different cases of Drishtapacharaja(diseases developed due to present deeds ex. Vatakantaka, Gridhrasi), Purvapacharaja (diseases developed due to past deeds Ex. Kushtha, Prameha) and Drishtadrishta Karmaja(diseases developed due to present and past deeds ex. Kushtha, Prameha) Vyadhis and Swatantra-Paratantra Vyadhi/Dosha/Mala based on Nidana Panchaka and distribute it to each student. 2. Student will identify and explain the specific nidanas and lakshanas pertaining to the different vyadhis and will discuss regarding the upadravas. 3. Invite each student to present their cases, challenges and their possible line of treatment 4. Students will write a report of the discussion. 5. Students will formulate the chikitsa for the above said vuadhis including upadrava

Experiential-Learning 4.2	Planning the treatment principles in Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi, and Nidanarthakara Vyadhi.	IPD case/ Case scenario 1. Student will identify different cases like Pakshaghata, Swasa, Arshas, Raktapitta, etc., and prepare treatment principles of diseases with Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi, Nidanarthakara Vyadhi. 2. The student will demonstrate the specific clinical examinations and explain the important investigations. 3. Invite each student to present their cases, to observe the application of Chikitsa Sutras like Snehana, Swedana, Sthambhana, Mridusamshodhana (anulomana), Anabhishyandhi, Snigdha, Srotoshodhaka, Kapha Pitta Aviruddha Chikitsa, Shamana Chikitsa. 4. The instructor will discuss treatment principles after the case presentation by each student. 5. Group discussion will be done based on their respective cases, challenges, and solutions will be discussed 6. Students can write a report of the case discussion
Experiential-Learning 4.3	Application of Chikitsa Sutras like Dosha Anulomana Chikitsa, Dosha Koshtha Gamana Chikitsa	IPD case/ Case scenario 1. Student will identify different cases related to different Doshagati, Anya Sthana Gata dosha, Tiryak gata Dosha, Paradesha Gamana dosha and Agantu Dosha based on Nidana panchaka and relevant investigations to prepare the treatment protocol. Also they will assess the cases for Guruvyadhita or Laghuvyadhita to frame the treatment protocol. 2. The student will demonstrate the specific clinical examinations and explain the important investigations to be carried out. 3. Invite each student to present their cases to observe the application of Chikitsa sutras like - Dosha anulomana Chikitsa, Dosha Koshtha Gamana Chikitsa (Vriddhi, Vishyanadana, Paka, Srotomukha vishodhana) 4. The instructor will carry out the discussion on treatment principles after the case presentation by each student. 5. Group discussion will be done based on their respective cases, challenges, and solutions will be discussed 6. Students can write a report of the case discussion
Experiential-	Dosha Vriddhi Kshaya	OPD-IPD case/ Case scenario

Learning 4.4	chikitsa	1. Student will assess the Vata, Pitta and Kapha Vriddhi Lakshanas to establish the relation between the nidanas in that particular patient. 2. Students will prepare the list of dislikes towards the Ahara & Vihara to identify and establish the type of Dosha Vriddhi. 3. Student will assess the specific Dosha Kshaya Lakshanas to advise the Swayoni vardhana Ahara, Vihara and Aushadha. 4. Instructor will carry out the discussion on treatment principles after the case presentation by each student. 5. Group discussion will be done based on their respective cases, challenges and solutions will be discussed 6. Students can write a report of the case discussions held.
Experiential-Learning 4.5	Application of the Chikitsa Sutra in Kinchit Avashishta Dosharoopa Vyadhi.	OPD-IPD case/ Case scenario 1. Student will select different disease conditions like chronic (Kushtha, Jwara) or acute (Punaravartaka Jwara, Agantuja Jwara) with specific signs and symptoms showing the Avashishta Doshas (Remaining Dosha) to determine the type of treatment. 2. Students will prepare a list of indications of Shodhana chikitsa in different contexts. 3. The student will demonstrate the specific clinical examinations and explain the important investigations. 4. Students will be presenting the cases after applying the appropriate chikitsa sutras like Dosha Nirharana Chikitsa based on the Bala of the Rogi and Vyadhi, and for improvement of Bala–Rasayana therapy - Urjaskara (Preventive) and Vyadhihara (Prophylactic). 5. The instructor will discuss treatment principles after the case presentation by each student. 6. Students can write a report of the case discussions held.
Experiential-Learning 4.6	Leena Dosha and Sama-Nirama Dosha/Dhatu Avastha Chikitsa	OPD-IPD case/ Case scenario 1. Students will select different disease conditions involving Leena Dosha Avastha, Sama Nirama Dosha/Dhatu Avastha to identify the Nidana Panchaka and to plan the Chikitsa.

		2. Students will identify different conditions by assessing the Lakshanas of Sama and Niramata of Dosha and Dhatu to propose the treatment principles 3. Students will be presenting the cases after applying the appropriate Chikitsa Siddhantas like in Leena Dosha Avastha – Deepana Pachana, Snehana, Swedana and Doshavasechana and in Sama Dosha/Dhatu Chikitsa - Deepana, Pachana, Langhana, Langhana Pachana, Doshavasechana etc., 4. The instructor will carry out the discussion on treatment principles after the case presentation by each student. 5. Students can write a report of the case discussions held.
Experiential-Learning 4.7	Dhatu/ Upadhatu - Vriddhi Kshaya Chikitsa	OPD-IPD case/ Case scenario 1. Students will assess the particular Dhatu or Upadhatu Vriddhi/Kshaya lakshanas and establish the relation between the nidanas. 2. Students will prepare a list of likes and dislikes towards the food articles, different other activities related to body and mind, to identify and establish the type of Dhatu/Upadhatu Vriddhi and Kshaya. 3. Also assess the specific Dhatu/Upadhatu Kshaya Lakshanas if any to advise the Ahara, Vihara, and Aushadha accordingly -- like Samshodhana & Kshapana without causing depletion of the tissues or in Kshaya – Svayonivardhana Ahara, Vihara and Aushadha. 4. The instructor will carry out the discussion on treatment principles after the case presentation by each student. 5. Group discussion will be based on their respective cases, challenges and solutions will be discussed 6. Students can write a report of the case discussions held
Experiential-Learning 4.8	Chikitsa Sutras in Ojovikara	OPD-IPD case/ Case scenario 1. Students will demonstrate different disease conditions involving Ojovisramsa, Ojovyapath, and Ojokshaya with Sadhyasadhyata to identify the Nidana Panchaka and formulate the Chikitsa sutra. 2. Students, by assessing the lakshanas of Ojovisramsa, Ojovyapath & Ojokshaya – with Sadhyasadhyata, will present the appropriate chikitsa sutras based on specific conditions like - In Ojovisramsa & Ojovyapath – improving the quantities by

		adopting principles to regain Bala (Rasayana), in Ojokshaya – Jeevaniya Aushadha, Ksheera, Mamsa Rasa. Or Ojovardhaka – Madhura, Snigdha, Sheeta, Laghu, Hita Ahara, Manasika Dukha Hetu Parihara, Hridya & Sroto Prasadana Ahara Vihara Abhyasa. 3. The instructor will discuss treatment principles after the case presentation by each student. 4. Group discussion will be done based on their respective cases, challenges, and solutions will be discussed. 5. Students can write a report of the case discussions held
Experiential-Learning 4.9	Evaluation of the complications due to prolonged derangement of Mala in chronic conditions (Chronic Kidney Disease, Hepatic Diseases)	1. The teacher will identify cases or case-based scenarios of Acute, Chronic Kidney disease and Hepatic Diseases with complications. 2. The teacher will instruct the students to examine the cases, create a list of the required investigations, and plan line of treatment 3. The students will check complications of Chronic Kidney Disease and Hepatic Diseases. 4. Students will be instructed to identify the need for referral note and prepare referral note if needed. 5. The students will be encouraged to attend the emergency care units of Allopathy Hospital
Experiential-Learning 4.10	Application of Mutravirechana and Mutrasangrahana drugs	1. The teacher will identify the cases of chronic renal failure with or without urinary tract infections. Students wil learn about various therapeutic indications of drugs used for Mutravirechana and Mutrasangrahana. 2. Assign groups to assess various clinical cases in OPD/IPD with diseases or complications of Mutravaha Sansthana and make suitable prescription plans for the same. 3. The students will discuss the indications & mode of action of various drugs which can act as Mutravirechana or Mutrasangrahana. 4. The students will also enlist the various possible formulations or single herbs with their appropriate Anupana and Aushadha sevana Kala to address the diseases related to the Mutravaha Sansthana.

Experiential-Learning 4.11	Application of Pureesha Sthambhana and Virechana drugs	1. The teacher will identify the cases of Udavarta, Vibandha, and instruct the students to enlist the various drugs, formulations and their therapeutic indications as Pureesha Sthambhana and Pureesha Virechana (Bhedana, Rechana and Anulomana). 2. Assign groups to assess various clinical cases in OPD/IPD with diseases or complications of Pureeshvaha Sansthana and make suitable prescriptions. 3. The students will discuss about the mode of action of Pureesha Sthambhana and Pureesha Virajaneeya (Bhedana, Rechana or Anulomana karma) drugs 4. The students will discuss the various possible formulations for Pureesha Bhedana, Rechana, and Anulomana and its indications and contraindications.
Experiential-Learning 4.12	Application of Swedajanana and Stambhana drugs	1. The teacher will identify the cases or present a case-based scenario of patients having Aswedana or Atiswedana and instruct the students to identify the conditions and the complications. 2. Assign groups to assess various clinical cases in OPD/IPD with diseases of Swedavaha Sansthana and make suitable prescription for the same. 3. The students will discuss the indications for Swedajanana and Stambhana drugs with its mode of action. 4. The students will enlist the conditions for the indications of Swedajanana and Stambhana and different medicines and single herbs indicated with their proper Anupana and Aushadha Kala.
Experiential-Learning 4.13	Sroto Vaigunya and Srotodushti in disease manifestation	1. The teacher will identify the cases having Sroto Dushti and assign the case to the students for examination and interpretation. 2. Students will record the findings of different types of Srotodushti and clinical examination of Sroto-specific organs and organ systems.

		3. Students will develop critical thinking by assessing Srotas able to do appropriate clinical examination. 4. The student will perform the Sroto-specific examination on a patient/ volunteer for hands-on practice. 5. Assign groups to find out the recent updates on different clinical tests for diagnosis of systemic or local ailments. 6. Groups will also explore the contemporary and scientific relevance of Sroto-specific clinical examination & its role in planning Treatment
Experiential-Learning 4.14	Interpreting Srotodushti in systemic disorders	1. The teacher will identify the cases having symptoms of various Sroto Dushti and assign the groups for the diagnosis of the cases and investigations required 2. Students will learn to interpret various types of clinical presentations with respect to Srotodushti & systemic disorders. 3. The student will perform the Sroto-specific examination on a patient/ volunteer for hands-on practice. 4. Assign groups to identify patients of different types of Srotodushti and write the appropriate investigations and treatment principles.
Experiential-Learning 4.15	Treatment protocols considering Srotodushti	1. The teacher will identify the cases of various presentations of Sroto vikara and instruct the students to identify the conditions, complications, and its line of treatment 2. Divide all students in two/three groups. 3. Students will formulate treatment protocols for different clinical presentations as per the Sroto-specific clinical examination and the diseases. 4. Students will discuss the treatment protocol for specific Srotodushti, along with possible complications. 5. Each group will make suitable Ayurvedic management protocol for at least one type of Srotodushti along with its possible complications
Experiential-	Role of Laboratory	

Learning 4.16	findings in identification of Srotodushti	1. The teacher will identify the cases of various reports related to Sroto Dushti and assign the students to interpret their diagnosis and assessment. 2. Divide all students in two/three groups. 3. Each group will be given five lab reports to assess and correlate with the clinical presentation of those patients. 4. Students will identify and correlate lab findings with the clinical presentation of different types of Srotodushti. 5. Students will identify Srotodushti based on lab investigations.

Modular Assessment

Assessment method	**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome- Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: • Construct a treatment protocol [15 marks x 1 Hour] Instructions: The instructor shall provide any one clinical case for each student (Margavarana janya/ Paraspara Anubandha vyadhi/ Nidanarthakara vyadhi). The student will be instructed to identify the type of vyadhi as Margavarana janya, Paraspara Anubandha vyadhi or Nidanarthakara vyadhi (5 marks) and formulate a standardised treatment protocol. (10 marks) Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, communicating effectively with patients and families, evaluating the effectiveness of interventions) • Presentation of Case [25 marks x 3 Hours] Instructions: The instructor shall provide any one case/ simulated case scenario for each student (Tiryak gata dosha/ Anyasthana gata dosha/ Agantu dosha). . The student will be instructed to analyse the samprapti by conducting Roga rogi pareeksha (5 marks) and propose a standard treatment protocol (5 marks). The student will present the case before the teachers and peers (15 marks). Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, presentation aids, elocution, communicating and answering effectively with peers and teachers)	6

• Structured Viva-voce [5 marks x 1 hour] • Experiential Learning Outcome Assessment: [30 marks x 1 hour] Justify Pathya and Apathya in Dhatu Vriddhi or Kshaya condition considering patient's Prakruti and Nidana, Instructions: The students will be provided 5 individual cases/ simulated case scenarios. After assessing Prakruti, Nidana and Vridhikshaya Lakshana of Dhatu/Upadhatu, they will propose Pathya apathya reflected from their experience. The students will justify the rationale of selecting Pathya apathya with the teacher. Assessment – Mini-cex (History taking, Examination, clinical judgement, Appropriate management) Or Any practical in converted form can be taken for assessment. (45 marks) And Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (30 marks)	

Module 5 : Chikitsa Bheda

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

1. Assess and Interpret outcomes of various types of chikitsa in guiding further therapeutic decisions.
2. Apply the principles of Santarpana and Aptarpana Chikitsa
3. Analyse the implementation of Snehana, Rookshana, Swedana, and Stambhana Therapies
4. Plan Shodhana Therapy Based on Bahudoshavastha Lakshanas
5. Apply Shamana Chikitsa based on rogavastha and rogibala

Unit 1 Santarpana & Apatarpana

1. Santarpana /Bramhana and Aptarpana/ Langhana Chikitsa.
2. Snehana, Rookshana, Swedana, Stambhana Chikitsa
3. Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshaya chikitsa
4. Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa

References: 1,2,3,4,5,10,12,89,97,98

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 5	Describe the concepts and applications of Ayoga, Samyak Yoga, and Ati Yoga Lakshanas as indicators of Chikitsa Parinama in terms of stopping/switching the line of treatment.	1	Lecture	CC	Knows-how	L&GD,RP
CO 1,CO 5	Identify the clinical signs of Ayoga, Samyak Yoga, and Ati Yoga in different case scenarios.	3	Practical Training 5.1	PSY-MEC	Shows-how	CBL,DIS,TBL
CO 1,CO 5	Analyse the vyadhi avastha and switch over to the appropriate treatment plan.	4	Experiential-Learning 5.1	PSY-MEC	Does	CBL,D-BED
CO 1,CO 5	Discuss the principles of Santarpana and Aptarpana Chikitsa and their clinical	2	Lecture	CC	Knows-	L&GD,L

	applications.				how	&PPT
CO 1,CO 2,CO 5	Identify the appropriate interventions (Santarpana or Aptarpana) based on clinical presentations.	3	Practical Training 5.2	PSY-MEC	Knows-how	CBL,DIS, PBL
CO 1,CO 5	Describe the indications and contraindications of Snehana, Rookshana, Swedana, and Stambhana therapies in different conditions	2	Lecture	CC	Knows-how	L&PPT
CO 1,CO 5	Identify the clinical signs of Ayoga, Samyak Yoga, and Ati Yoga of snehana, rookshana, swedana, stambhana through case scenarios	3	Practical Training 5.3	PSY-MEC	Shows-how	CBL,DIS
CO 1,CO 5	Apply the principles of identifying Ayoga, Samyak Yoga, and Ati Yoga lakshanas of snehana, rookshana, swedana and stambhana, and proposing appropriate treatment methods in different case scenarios.	4	Experiential-Learning 5.2	PSY-MEC	Shows-how	PBL,TBL
CO 1,CO 5	Discuss the concept and utility of Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshaya chikitsa in modern-day clinical practice.	1	Lecture	CC	Knows-how	DIS,L&GD,L&PPT
CO 1,CO 5	Identify the application of Daivavyapashray, Yuktivyapashray, Satvavjay and Upshayanupshaya chikitsa in various clinical conditions.	3	Practical Training 5.4	PSY-MEC	Know	CBL,PBL
CO 1,CO 5	Apply the principles of Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshay chikitsa in various clinical conditions with proficiency.	4	Experiential-Learning 5.3	PSY-MEC	Shows-how	CBL,DIS
CO 1,CO 5	Discuss the application of Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa in various clinical conditions.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 1,CO 5	Identify the indications of Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa in various clinical conditions.	3	Practical Training 5.5	PSY-MEC	Shows-how	CBL
CO 1,CO 5	Apply the principles of Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa in appropriate clinical conditions.	4	Experiential-Learning 5.4	PSY-MEC	Does	CBL
Unit 2 Shodhana and Shamana						

1. Bahudoshavastha and Shodhana
2. Advancements in Shodhana therapy
3. Shamana chikitsa

References: 1,2,3,4,5,10,12,89,97,98

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 5	Describe the role of Dosha, Prakriti, Vikriti and Kala in determining the type of Shodhana therapy.	1	Lecture	CC	Knows-how	L,L&PPT
CO 1,CO 5	Perform assessment of Dosha, Prakriti, Vikruti and Kala to indicate the appropriate type of Shodhana therapy.	3	Practical Training 5.6	PSY-MEC	Shows-how	CBL
CO 1,CO 5	Advise appropriate Shodhana therapy considering the Bahudoshavastha, Prakriti, Vikruti and Kala in various clinical conditions.	5	Experiential-Learning 5.5	PSY-MEC	Does	CBL,DIS, PER
CO 1,CO 5	Discuss the Srotas-specific indications for Shodhana Karma.	2	Lecture	CC	Knows-how	L,L&GD, L&PPT
CO 1,CO 5	Analyse cases with specific Srotas involvement and propose suitable Shodhana Karma.	3	Practical Training 5.7	PSY-MEC	Shows-how	CBL
CO 1,CO 5	Apply the method of selecting appropriate Shodhana therapy by following patient experiences and therapy outcomes.	5	Experiential-Learning 5.6	CAP	Does	CBL,DIS
CO 1,CO 5	Discuss the possible mechanism and mode of action of Shodhana therapy through Ayurvedic and modern perspective.	1	Lecture	CC	Knows-how	DIS,L&GD,L&PPT
CO 1,CO 5	Formulate research protocols involving Shodhana and its interpretations in the perview of conventional medicine.	3	Practical Training 5.8	PSY-MEC	Shows-how	CBL,DIS, JC
CO 1,CO 5	Compile and present recent research activities/ outcomes related to the mechanism of action of Shodhana procedure and related drugs.	4	Experiential-Learning 5.7	CE	Does	DIS,JC,LS

CO 1,CO 5	Describe the principles of Shamana Chikitsa and classify Shamana Chikitsa with relevant examples.	2	Lecture	CC	Knows-how	L&PPT
CO 1,CO 5	Perform Shamana Chikitsa in patient care based on disease condition.	3	Practical Training 5.9	PSY-MEC	Shows-how	CBL
CO 1,CO 5	Apply the principles of selecting appropriate Shamana therapies in acute and chronic conditions and evaluate their effectiveness.	4	Experiential-Learning 5.8	PSY-MEC	Does	CBL
CO 1,CO 5	Discuss the rationale behind selecting appropriate formulations for managing conditions related to different Srotas.	2	Lecture	CC	Knows-how	DIS,L&GD,L&PPT
CO 1,CO 5	Identify the application of appropriate formulations for different Srotas-related disorders based on samprapti ghatakas	3	Practical Training 5.10	PSY-MEC	Shows-how	CBL
CO 1,CO 5	Analyse the effect of appropriate formulations in different srotogata vyadhis based on evaluation of samprapti ghataka and treatment outcome.	5	Experiential-Learning 5.9	PSY-MEC	Does	CBL

Practical Training Activity

Practical No	Name	Activity details
Practical Training 5.1	Identification of clinical signs of Ayoga, Samyak Yoga, and Ati Yoga.	Group Activity/ Presentation 1. Instructor will provide a briefing on the definitions and clinical signs of Ayoga, Samyak Yoga, and Ati Yoga. 2. Divide students into required groups. Each group will focus on one of the three aspects (Ayoga, Samyak Yoga, or Ati Yoga). 3. Groups will analyse case scenarios relevant to their assigned topic, explore textual references, identify clinical signs, and discuss possible treatments or preventive measures. 4. One representative from each group will present their findings with supportive evidence from classical texts. 5. The instructor coordinates the group discussion to highlight overlaps, differences, and real-world applications. 6. The instructor will summarise the findings, provide feedback, and conclude the activity.

		7. The students will record the findings in case report forms.
Practical Training 5.2	Identification of appropriate interventions (Santarpana or Aptarpana)	Group Activity/ Presentation 1. Instructor will provide an overview of Santarpana (Bramhana) and Aptarpana (Langhana) interventions, including indications and contraindications. 2. Divide students into required groups: one focusing on Santarpana interventions and the other on Aptarpana interventions. 3. Groups will analyse case scenarios with diverse clinical presentations to identify the most suitable intervention. 4. Each group will discuss the rationale behind their selected intervention, referring to classical texts and modern applications. 5. One representative from each group will present their findings and propose treatment plans. 6. Group discussion will be coordinated by the instructor to compare and contrast the interventions, their applications, and potential challenges. 7. Instructor will summarize key points, provide insights, and conclude the session.
Practical Training 5.3	Identification of clinical signs of Ayoga, Samyak Yoga, and Ati Yoga by analysing case scenarios.	Group Activity/ Presentation 1. Instructor will provide a briefing on the definitions and clinical signs of Ayoga, Samyak Yoga, and Ati Yoga. 2. Divide students into required groups. Each group will focus on one of the three aspects (Ayoga, Samyak Yoga, or Ati Yoga). 3. Groups will analyse case scenarios relevant to their assigned topic, explore textual references, identify clinical signs, and discuss possible treatments or preventive measures. 4. One representative from each group will present their findings with supportive evidence from classical texts. 5. Group discussion will be coordinated by the instructor to highlight overlaps, differences, and real-world applications. 6. Instructor will summarize the findings, provide feedback, and conclude the activity.

Practical Training 5.4	Application of Daivavyapashray, Yuktivyapashray, Satvavjay and Upshayanupshaya chikitsa based on clinical presentations.	Group Activity/ Presentation 1. Instructor will provide an overview of Daivavyapashray, Yuktivyapashray, Satvavjay and Upshayanupshaya chikitsa. 2. The instructor guide them in identifying the clinical conditions in which Daivavyapashray, Yuktivyapashray, Satvavjay and Upshayanupshaya chikitsa have to be selected. 3. The students will discuss the rationale behind the selected intervention, referring to classical texts and modern applications. 4. Group discussion will be coordinated by the instructor to compare and contrast the interventions, their applications, and potential challenges. 5. Instructor will summarize key points, provide insights, and conclude the session.
Practical Training 5.5	Identification of Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa in various case scenarios.	Steps for activity: 1. The Instructor will provide an overview of Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa. 2. The instructor guides them in identifying the clinical conditions in which Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa were indicated. 3. The students will discuss the rationale behind the selected intervention, referring to classical texts and modern applications. 4. Group discussion will be coordinated by the instructor to compare and contrast the interventions, their applications, and potential challenges. 5. The Instructor will summarise key points, provide insights, and conclude the session.
Practical Training 5.6	Assessment of Dosha, Prakriti, Vikruti and Kala to indicate appropriate Shodhana therapy.	Steps for Activity/ Presentation 1. The teacher/ Instructor guides the students to select appropriate shodhana therapy considering the Dosha avastha (Bahudoshavastha) ,Prakriti, Vikruti and Kala. 2. The students will perform pariksha to identify Bahudoshavastha, Prakriti, Vikruti and Kala. They will discuss the rationale

		of selecting appropriate Shodhana therapy. 3. Instructor leads a discussion to compare findings, clarify doubts, and explore overlapping or mixed Dosha conditions. 4. Instructor summarises clinical examination techniques, provides feedback, and emphasises practical application in diagnosis and selection of appropriate Shodhana procedure.
Practical Training 5.7	Selection of Appropriate Sodhana in Srotas specific disorders.	Group Activity/ Presentation 1. Instructor introduces the concept of Srotas, their clinical significance, and the role of Shodhana Karma in treating Srotas-related disorders. 2. The instructor presents various patient case scenarios with symptoms indicating dysfunction in different Srotas. 3. The instructor guides the students in analysing the cases individually, identifying the involved Srotas and determining the appropriate Shodhana Karma therapies for each case. 4. Each student proposes a treatment plan, including the choice of Shodhana Karma, indications, and classical references supporting the therapy. 5. Students share their proposed treatment plans, discuss the reasoning behind their choices, and address any challenges or contradictions in their decisions. 6. Instructor provides feedback on the students' analysis, highlights key points for Srotas-related therapies, and summarizes the importance of Shodhana Karma in clinical practice.
Practical Training 5.8	Analyse cases and develop research protocols with a scientific temperament.	Group Activity/ Presentation 1. Instructor introduces the concept of Shodhana therapy and its role in Ayurvedic treatments, explaining the need for research protocols to evaluate its efficacy and safety. 2. Instructor presents a clinical case where Shodhana therapy can be applied. 3. Students individually design a research protocol, including:

		• Study objectives, hypothesis, and research questions. • Selection criteria (inclusion/exclusion), and sample size. • Intervention details (type of Shodhana therapy, duration, and dosage). 4. Students propose both primary and secondary outcome measures, including clinical assessments and laboratory markers. 5. Students share their protocol designs, discuss methodological approaches, and receive feedback from peers and the instructor. 6. Instructor provides feedback, summarises key points in designing clinical research protocols, and emphasises the importance of rigorous study designs in Ayurveda research.
Practical Training 5.9	Demonstration of Shamana Chikitsa in patient care based on disease condition	Group Activity/ Presentation 1. Instructor explains the concept of Shamana Chikitsa (Palliative treatment) in Ayurveda, its role in managing symptoms, and its application based on Doshik imbalances in various disease conditions. 2. Instructor presents multiple patient case scenarios with different disease conditions. 3. Students individually analyse each case, identify the predominant Dosha imbalance, and propose appropriate Shamana therapies (e.g., Herbal formulations, dietary modifications, lifestyle changes). 4. Students create a treatment plan, including recommended Shamana therapies, dosage, duration, and any supporting Ayurvedic practices (e.g., Panchakarma for symptom management). 5. Students share their treatment plans, discuss the rationale for selecting specific therapies, and explore how Shamana Chikitsa can be tailored to individual patient needs. 6. Instructor provides feedback on treatment plans, highlights key points of Shamana Chikitsa in clinical practice, and summarises its significance in patient care.
Practical Training 5.10	Identify the appropriate formulations for different Srotas-related disorders based on samprapti ghatakas.	Group Activity/ Presentation 1. Instructor introduces the concept of Srotas and Srotas-related disorders as one example each. 2. The instructor presents various patient case scenarios (one for each srotas) of various srotas related disorders. 3. Students analyse the cases individually, identifying the involved Srotas and determining the appropriate samprapti ghatka for each case. 4. Each student proposes a treatment plan, including the choice of Shodhana, Shamana, indications, and classical references

		supporting the therapy. 5. Students share their appropiate formulations based on samprapti ghataka and srotas involved and rational behind the treatment. 6. Instructor provides feedback on the students' analysis, highlights key points for Srotas-related ttreatment, and summarizes the importance of appropiate formulations in clinical practice.
Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 5.1	Analysis of vyadhi avastha and chikitsa.	Steps for the Activity: 1. Students will be divided into small groups. 2. Each group will assess masked IPD case sheets under the guidance of the instructor. They will critically analyse the Chikitsa (treatment) advised for each patient based on vyadhi avastha. 3. Invite each student from group to present their activity, challenges and their possible solutions. 4. Group discussion will be done on the basis of their activity, challenges and solutions will be discussed. 5. Students will write a report on the activity and submit to the teacher for final verification.
Experiential-Learning 5.2	Treatment based on Ayoga, Samyak Yoga, and Ati Yoga of snehana, rookshana, swedana and stambhana.	Steps for the Activity: 1. Students will be devided in to various groups 2. Students will assess the masked IPD case sheets and patients under the guidance of the instructor. They will identify the Ayoga, Samyak Yoga, and Ati Yoga lakshanas of snehana, rookshana, swedana and stambhana and critically analyse the Chikitsa (treatment) advised for each patient. 3. The students will discuss prescribed treatments and understand when to start and stop the different modalities of treatment

		based on patients condition. 4. Invite each student from group to present their activity, challenges and their possible solutions. 5. Group discussion will be done on the basis of their activity, challenges and solutions. 6. Students will keep a report of the activity in log book.
Experiential-Learning 5.3	Clinical application of the principles of Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshay chikitsa.	Steps for the Activity: 1. Instructor divides the students into small groups. Each group will be assigned at least 5 OPD/IPD cases or case reports . 2. Students will analyse the roga avastha and discuss the appropriateness of advising Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshay chikitsa. 3. Students collaborate with peers and faculty to evaluate the outcomes of therapies in terms of patient recovery and satisfaction. 4. Students present their findings, challenges, and outcomes in a group discussion with faculty and peers. 5. The teacher summarises the findings, and the students compile the cases, reflecting on the integrated therapy approach and outcomes.
Experiential-Learning 5.4	Proficiency in indicating Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa	Steps for the Activity: 1. Instructor divides the students into small groups. Each group will be assigned at least 5 OPD/IPD cases or case reports . 2. Students will analyse the roga avastha and discuss the appropriateness of advising Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa. 3. Students collaborate with peers and faculty to evaluate the outcomes of therapies in terms of patient recovery and satisfaction. 4. Students present their findings, challenges, and outcomes in a group discussion with faculty and peers. 5. The teacher summarises the findings, and the students compile the cases, reflecting on the integrated therapy approach and outcomes.

Experiential-Learning 5.5	Advise of appropriate Shodhana therapy considering Bahudoshavastha.	Steps for the Activity: 1. Instructor divides the students into small groups. 2. Each group will be assigned at least 5 IPD cases or case scenarios. 3. The Students conduct Rogi pariksha to assess the Doshavastha, Prakriti, Vikruti and Kala. After discussion they propose suitable Shodhana therapy. 4. One student from each group will present the findings before the teacher and the peers. 5. The teacher will conclude the session with remarks/ suggestions. The students summarise the findings in the logbook.
Experiential-Learning 5.6	Selection of appropriate Shodhana therapy by following patient experiences.	Steps for the Activity: 1. Students observe and document their experiences during each Shodhana Karma procedure, focusing on the step-by-step process and patient responses. 2. Students identify and record any challenges faced during the Shodhana Karma procedure, including complications or patient discomfort. 3. Students reflect on the learning points from each observed Shodhana Karma, noting key takeaways for improving technique and patient care. 4. Students share their experiences with peers, discussing the successes and challenges encountered during the procedures. 5. Students collaborate to analyze how Shodhana therapies were implemented for specific Srotas, identifying which approaches were most effective. 6. Students compile their reflections and peer feedback into a report, evaluating the successes and challenges in implementing Srotas-specific Shodhana therapies.
Experiential-Learning 5.7	Selection of appropriate Shamana therapies in	Steps for the Activity:

	chronic and acute conditions.	1. Instructor introduces the role of Shamana therapies in managing chronic and acute conditions. 2. Students review OPD case sheets of patients who have received Shamana therapies, focusing on diagnosis and treatment. 3. Students observe patients in the OPD and document their responses to Shamana therapies. 4. Students reflect on the outcomes of Shamana therapies in both chronic and acute conditions. 5. Students discuss their findings with peers and faculty to evaluate therapy effectiveness. 6. Students write a report summarizing their reflections on Shamana therapies and patient outcomes.
Experiential-Learning 5.8	Effect of Samana Aushadhis in disease management.	Steps for the Activity: 1. The instructor introduces the different srotogata vyadhi and their samprapti ghataka. 2. Students review case sheets of patients of various srotogata vyadhi and analyse the samprapti ghataka. 3. Students observe patients and document their responses to appropriate formulations. 4. Students reflect on the outcomes of treatment based on samprapti ghataka in various cases. 5. Students discuss their findings with peers and faculty to evaluate therapy effectiveness. 6. Students write a report summarizing their observations on appropriate formulations based on samprapti ghataka and patient outcomes.
Experiential-Learning 5.9	Advanced research outcomes regarding Mechanism of action of Shodhana therapy and related drugs.	Steps for the Activity: 1. The instructor explains the importance of compiling recent research activities in the area of the Mechanism of action of the Shodhana procedures - Vamana, Virechana (Anulomana, Sramsana, Bhedana and Rechana), Nirooha, Nasya and Raktamoksha. 2. The instructor divides the students into small groups and assigns each group at least ten relevant articles (published within the last 7 years) 3. Students collect data regarding the Mechanism of action of Shodhana therapy and drug delivery, including Pharmacokinetics, from the articles. 4. The students discuss their findings with teachers, and after the conclusion, will submit the compilation for verification.

Modular Assessment		
Assessment method		**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome- Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: • Indicate proper Shodhana therapy [20 marks x 1 Hour] Instructions: The instructor shall provide any one clinical case (indicated for shodhana therapy) for each student. The student will be instructed to identify the clinical condition through Roga–rogi pareeksha (10 marks) and indicate the proper treatment protocol. (10 marks) Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, communicating effectively with patients and families, evaluating the effectiveness of interventions) • Indicate Shamana therapy [20 marks x 1 Hour] Instructions: The instructor shall provide any one clinical case (indicated for shamana therapy) for each student. The student will be instructed to identify the clinical condition through Roga–rogi pareeksha (10 marks) and indicate the proper treatment protocol. (10 marks) Assessment: Rubrics–based assessment (Data collection and assessment, Clinical reasoning and problem-solving, developing individualised care plans, communicating effectively with patients and families, evaluating the effectiveness of interventions) • Structured Viva-voce [5 marks x 1 hour] • Experiential Learning Outcome Assessment: [30 marks x 3 hours] Analyse Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa. Instructions: The students will be provided 3 individual cases/ simulated case scenarios. After conducting Roga-rogi pareeksha the students analyse the role of Hetuviparita, Vyadhi viparita and Ubhayarthakari chikitsa in all the 3 cases. The students will justify the importance of selecting each treatment method in individual cases. Assessment – Mini-cex (History taking, Examination, clinical judgement, Appropriate management) Or		6

Any practical in converted form can be taken for assessment. (45 marks) And Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (30 marks)	

Module 6 : Basic knowledge of diagnostic procedures, its principles and applicability in practice

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

1. Analyse the need, procedural understanding and applicability of various diagnostic Procedures used in clinical medicine.
2. Demonstrate methods of evaluation and interpretation of various diagnostic procedures.
3. Interpret the results and establish the most appropriate clinical diagnosis.

Unit 1 Imaging tests

1. X-rays, Barium meal X-ray
2. Pyelogram, Angiogram
3. CT scans, MRI scans, Ultrasound
4. Vascular Doppler

References: 70

3A	3B	3C	3D	3E	3F	3G
CO 2	Describe the advantages, disadvantages and risks involved with Single-frame X-ray and Tomosynthesis (SFXT), general indications, contraindications, evaluation and interpretation of Chest, bone and joint X-rays.	1	Lecture	CC	Knows-how	L&PPT
CO 2	Demonstrate the methods of evaluating and interpreting Chest, bone and joint X-rays.	2	Practical Training 6.1	PSY-GUD	Shows-how	X-Ray
CO 2,CO 6	Analyze X- ray reports to establish an appropriate clinical diagnosis.	3	Experiential-Learning 6.1	CAN	Does	D,X-Ray
CO 2	Describe the indications and contraindications, evaluation and interpretation of Barium meal X-ray, Pyelogram, and Angiogram.	1	Lecture	CC	Knows-how	L&PPT ,L_VC

CO 2,CO 6	Demonstrate the methods of evaluating and interpreting Barium meal X-ray, Pyelogram, and Angiogram.	2	Practical Training 6.2	PSY-MEC	Shows-how	D,X-Ray
CO 2	Analyze Barium meal X-ray, Pyelogram and Angiogram reports, to conclude with an appropriate clinical diagnosis.	2	Experiential-Learning 6.2	CAN	Does	D,X-Ray
CO 2	Describe the indications, contraindications, evaluation and interpretation of CT and MRI scans.	1	Lecture	CC	Knows-how	L_VC
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting CT and MRI scans.	2	Practical Training 6.3	PSY-MEC	Shows-how	D
CO 2	Analyze CT and MRI scan reports and identify the clinical condition.	3	Experiential-Learning 6.3	CAN	Does	D
CO 2	Decribe the indications and contraindications, evaluation and interpretation of Ultrasound and Vascular Doppler.	1	Lecture	CC	Knows-how	L_VC
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting Ultrasound and Vascular Doppler.	2	Practical Training 6.4	PSY-MEC	Shows-how	D
CO 2	Analyze USG and Vascular Doppler studies and establish the clinical diagnosis.	2	Experiential-Learning 6.4	CAP	Does	D

Unit 2 Endoscopy

1. Gastroscopy, Colonoscopy, Cystoscopy
2. Bronchoscopy, Arthroscopy, Ureteroscopy
3. ERCP, MRCP

References: 70

3A	3B	3C	3D	3E	3F	3G
CO 2	Describe the indications and contraindications, evaluation and interpretation of	1	Lecture	CC	Knows-	L_VC

	Endoscopic procedures like Gastroscopy, Colonoscopy, Cystoscopy, Bronchoscopy, Arthroscopy, Ureteroscopy, ERCP and MRCP.				how	
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting different endoscopic procedures like Gastroscopy, colonoscopy, Cystoscopy, Bronchoscopy, Arthroscopy, Ureteroscopy, ERCP and MRCP.	3	Practical Training 6.5	PSY-MEC	Shows-how	D
CO 2	Analyze various endoscopic procedures like Gastroscopy, colonoscopy, Cystoscopy,Bronchoscopy, Arthroscopy, Ureteroscopy, ERCP and MRCP to establish the clinical condition.	3	Experiential-Learning 6.5	CAN	Does	D

Unit 3 Electrogram

1. ECG, TMT
2. EEG
3. EMG

References: 71,72,99,100

3A	3B	3C	3D	3E	3F	3G
CO 2	Illustrate the indications and contraindications, evaluation and interpretation of ECG and TMT.	1	Lecture	CC	Knows-how	L&PPT
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting ECG and TMT.	2	Practical Training 6.6	PSY-MEC	Shows-how	D
CO 2	Analyze ECG and TMT reports to bring out an appropriate clinical outcome.	3	Experiential-Learning 6.6	CAN	Does	D
CO 2	Describe the indications and contraindications, evaluation and interpretation of EEG and EMG.	1	Lecture	CC	Knows-how	L&PPT
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting EEG and EMG.	2	Practical Training 6.7	PSY-MEC	Shows-how	D

CO 2	Analyze EEG and EMG reports to bring out an appropriate clinical decision.	2	Experiential-Learning 6.7	CAN	Does	D

Unit 4 Other diagnostic procedures

1. NCV, Neuropathy Analyser
2. BMD
3. CASA
4. PFT
5. Nadi Yantra

References: 73,101,102,103

3A	3B	3C	3D	3E	3F	3G
CO 2	Describe the indications and contraindications, evaluation and interpretation of NCV, Neuropathy Analyser and BMD.	1	Lecture	CC	Knows-how	L&PPT
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting NCV, Neuropathy Analyser and BMD.	2	Practical Training 6.8	PSY-GUD	Shows-how	D,L_VC
CO 2	Analyze NCV, Neuropathy Analyser and BMD studies to bring out appropriate clinical diagnosis.	3	Experiential-Learning 6.8	CAN	Does	D,DIS
CO 2	Illustrate the indications and contraindications, evaluation and interpretation of PFT and CASA.	1	Lecture	CC	Know	L&PPT
CO 2,CO 6	Demonstrate the methods of evaluating and interpreting PFT and CASA.	2	Practical Training 6.9	PSY-MEC	Shows-how	D,L_VC
CO 2	Analyze PFT and CASA and substantiate the clinical diagnosis.	3	Experiential-Learning 6.9	CAN	Does	D
CO 2	Describe the basic principles, procedure and interpretation of Nadi Pariksha by Nadi Parikshan Yantra.	1	Lecture	CC	Knows-how	L&PPT

CO 2	Demonstrate the methods of conducting, evaluating and interpreting Nadi pariksha aided by Nadi Parikshan Yantra.	1	Practical Training 6.10	PSY-MEC	Shows-how	D,L_VC
CO 2	Analyze and report the Nadi Pariksha findings for clinical correlation.	2	Experiential-Learning 6.10	CAN	Does	D,DIS

Practical Training Activity

Practical No	Name	Activity details
Practical Training 6.1	Interpretation of X-ray (Chest, Bones & Joints)	The instructor demonstrates how to identify different views of Chest, Bone and Joint X-rays (Antero-Posterior, Postero Anterior, Lateral, Oblique, etc.), their evaluation regarding the quality of image (Rotation, Inflation, Penetration, etc.), and the methods of interpretation (ABCDE of chest and Musculoskeletal X-ray). The instructor interprets Chest X-rays to identify 1. Lung pathologies like Consolidation (Pneumonia, Tuberculosis, Pulmonary edema, Pulmonary embolism, Lung Cancer, etc.), Interstitial Infiltrates (Pulmonary Fibrosis, ILD, Sarcoidosis, etc.), Pleural Effusion, Pneumothorax, Emphysema, Bronchiectasis, Atelectasis, etc., 2. Cardiac pathologies (Cardiomegaly, Aortic aneurysm, etc.), 3. Mediastinal abnormalities (Aortic dissection, Lymph node enlargement, etc.), 4. Bone abnormalities (Rib fracture, Cervical Rib, etc.) The instructor interprets Musculoskeletal X-rays to identify 1. Spinal curvature disorders (Scoliosis, Kyphosis and Lordosis), Congenital spinal disorders (Spina bifida, Lumbarization, Sacralization), Spondylosis, Spondylolisthesis, Osteoporosis, Schmorl nodes, etc. 2. Bone fractures, Bone tumors, Degenerative bone conditions (Osteophytes/ Bone Spurs, Osteoporosis, joint narrowing, joint structure changes, etc.) The students undergo hands-on training to identify the anatomical structures and the pathological changes in X-ray films. They will be instructed to report the findings properly.

Practical Training 6.2	Evaluation and Interpretation of Barium meal X-ray, Pyelogram, and Angiogram	The instructor demonstrates how to detect • Upper and Lower Gastrointestinal abnormalities in Barium meal X-ray (Ulcers, Tumors, Blockages, Hernias, Constrictions, inflammatory conditions, Scarring, etc.), • Urinary tract pathologies using Intravenous Pyelogram (Renal calculi, Urinary tract tumors, Enlarged Prostate, Renal Cysts, etc.) • Vascular pathologies using live/ video/ images of Angiogram (Coronary Artery disease, Peripheral artery disorders, Aneurysms, etc.)/internet sources. The students undergo hands-on training to identify the anatomical structures and the pathological changes using respective images. They will be instructed to report the findings properly.
Practical Training 6.3	Evaluation and Interpretation of CT and MRI scans.	The instructor will demonstrate the key differences in interpreting CT and different MRI sequences (T1-weighted, T2-weighted and FLAIR images). The instructor demonstrate CT and MRI interpretation on various disorders • Brain pathologies like Traumatic Brain Injuries, Stroke, Small vessel disease, Multiple Sclerosis, hydrocephalus, etc. • Cancers – Lung CA, Hepatocellular Carcinoma, Pancreatic CA, Uterine Carcinoma, Bladder CA ,etc. • Abdominal disorders –Ascites, Appendicitis, Cholecystitis, Pancreatitis, etc. • Lung disorders – Pneumonia, pulmonary embolism, etc. • Bone fractures, Soft tissue injuries, joint disorders, etc. The students undergo hands-on training in identifying the anatomical structures and pathological changes by using images (Films/ C.D) The students will be instructed to report the findings properly.
Practical Training 6.4	Evaluation and Interpretation of USG and Vascular Doppler.	The instructor demonstrates how to identify different anatomical structures in abdominal, pelvic, and scrotal USG in live patients or using recorded videos or reliable internet sources. Hands-on training will be provided so that the students will be able to identify

		• Abdominal Pathologies like Cholelithiasis, Cholecystitis, Renal and vesical Calculi, Liver disorders (Fatty Liver, Hepatitis, fibrosis, Carcinoma, etc.), Splenomegaly, Pancreatitis • Joint Pathologies like Synovitis, Bursitis and other Joint inflammations. • Thyroid disorders (Cysts, nodules, goiter, thyroiditis) • Scrotal disorders (Testicular Torsion, Varicocele, Epididymitis and Epididymo-orchitis, tumors, cysts and abscess) The instructor provides training to evaluate Peripheral arterial and venous Doppler waveforms, and to identify arterial and venous occlusive disorders in live patients/ recorded videos/ internet sources. The students report the findings accurately.
Practical Training 6.5	Evaluation and Interpretation of Endoscopic procedures.	The instructor demonstrates the method of identifying pathologies using different endoscopic procedures in live patients or using recorded videos/ internet sources like • Gastroscopy/ Esophagogastroduodenoscopy – to identify Upper GI problems like ulcers, gastritis, GERD, Hiatus Hernia, Esophagitis, etc. • Colonoscopy – to identify Ulcers, Perforations, Chronic Colitis, Diverticulosis, Colorectal polyps/ Cancer. • Cystoscopy – to identify pathologies of the urinary bladder including Calculi, Cancer, Urethral strictures, Cystitis, etc. • Bronchoscopy – to detect Pulmonary infiltrates, Pneumonia, atelectasis, etc. • Arthroscopy – to diagnose knee, shoulder and hip pathologies. • Ureteroscopy - to detect Ureteral Calculi, Nephrolithiasis, Ureterovaginal fistula, etc. • ERCP and MRCP - to detect Cholelithiasis, Pancreatitis, Pancreatic Cancer etc. The students will be trained to identify the pathological changes by visualizing different endoscopic procedures in live patients/ recorded videos/ internet sources. They are instructed to report the findings accurately.
Practical Training 6.6	Interpretation of ECG and TMT	The instructor demonstrates how to interpret ECG using different ECG strips. Hands-on training will be given to students to identify different ECG patterns with respect to Rhythm disorders (Tachycardia, bradycardia, Regularly irregular and irregularly irregular patterns), Axis deviation, P, QRS, and T wave abnormalities, P-R and Q-T interval abnormalities, STEMI, ST depression, Heart blocks(1st degree, Second degree, Third degree and Bundle Branch Blocks) and other valid changes. Changes in TMT report to rule out Stress induced Ischemia will be demonstrated. Students will be instructed to report the findings properly.

Practical Training 6.7	Evaluation and Interpretation of EEG and EMG	• The instructor demonstrates the method of interpreting EEG (Background activity, Symmetry, Stage of Alertness and Abnormality- slowing, sharp waves, triphasics, seizure, PLEDs, etc.) with the help of reports/ recorded videos. The students will be provided training for interpreting pathological changes in EEG. • The instructor demonstrates how to identify variations in motor unit action potentials in EMG using various reports. The students will receive training for interpreting pathological changes in EMG. The students will be instructed to report the findings properly.
Practical Training 6.8	Evaluation and Interpretation of PFT and CASA.	1. The instructor performs the Pulmonary Function test on a patient and provides hands-on training for the students to analyze the report. The students will perform the test on one or two patients in the presence of the instructor and will analyze the reports to confirm Obstructive or Restrictive pathology. 2. The instructor performs CASA on one or two semen samples using software/ demonstrates the procedure using recorded videos. Then interprets the report. The students will perform interpretation and analysis of one or two cases in the presence of the instructor/ able to explain the procedure using recorded videos, and report the findings.
Practical Training 6.9	Evaluation and Interpretation of NCV, Neuropathy Analyser and BMD.	• The instructor demonstrates how to analyze action potentials and nerve conduction velocity using reports. The students will be provided with hands-on training on interpreting the result. They will be trained to report the findings systematically. • The instructor performs the Neuropathy Analyser procedure on a patient/ explains the procedure using recorded videos or internet sources and provides hands-on training for the students to analyze the report. The students will perform the test in one or two patients/ able to explain the procedure using recorded videos, in the presence of the instructor. • The instructor performs BMD test in one or two patients/ explain the procedure using recorded videos and gives training to the students to analyze the report. The students will perform the test on one or two patients/ able to explain the procedure using recorded videos and analyze the report in the presence of the instructor.

Practical Training 6.10	The procedure of Nadi Pariksha with Nadi Parikshan Yantra and its interpretation.	The instructor demonstrates how to perform Nadi Pariksha with the help of Nadi Parikshan Yantra/ explains the procedure using pre-recorded videos. He provides hands-on training for the students to interpret the findings. The students perform Nadi Pariksha in one or two cases and record the findings/ explain the procedure using pre-recorded videos.
Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 6.1	Radiological diagnosis -X-ray (Chest, Bones & Joints)	Each student read at least 15 X-rays of different pathologies (Each case of Pneumonia, Pulmonary tuberculosis, Lung Cancer, Pulmonary Fibrosis, Pleural effusion, Emphysema, Cardiomegaly, Cervical Rib, Scoliosis, Kyphosis, Spina bifida, Sacralization, Calcaneal Spur, Joint narrowing in OA of Knee/Hip, Joint destruction in Rheumatoid Arthritis) from OPD/IPD/Previous records/internet sources provided by the teacher. They will identify the pathology, interpret diagnostic findings, and communicate the findings with the teacher/instructor. The teacher/ Instructor will give suggestions/additions, if any and a final compilation of all X-ray reports will be submitted by the student.
Experiential-Learning 6.2	Radiological diagnosis - Barium meal X-ray, Pyelogram, and Angiogram.	Each student interprets at least two reports of Barium meal X-ray, Pyelogram and Angiogram from OPD/IPD/ previous records provided by the teacher. They will identify the pathology, interpret diagnostic findings, and communicate the findings with the teacher/instructor. The teacher/ Instructor will give suggestions/additions if any and a final compilation of all case reports will be submitted by the student.
Experiential-Learning 6.3	Imageology - CT and MRI scan Analysis.	Each student read at least five CT(Hepatocellular Carcinoma, Lung Cancer, Carcinoma Bladder, Cerebrovascular Accident, Space occupying lesions in Brain, etc. relevant to the present practice set up) and MRI scans(Multiple Sclerosis, CerebroVascular Accidents, Hydrocephalus, Spine, Shoulder, etc. relevant to the present practice set up) of different pathologies using films/CDs from OPD/IPD patients/ internet sources or those provided by the teacher. They will identify the condition, interpret diagnostic findings, and communicate with the teacher/instructor. The teacher/ Instructor will give suggestions/additions if any and a final compilation of all case reports to be submitted by the student.

Experiential-Learning 6.4	Imageology - USG and Vascular Doppler Analysis.	Each student interprets at least 5 USG images (pathologies of Liver, Thyroid, Gallbladder, Kidney and Scrotum) 3 vascular Doppler images (Deep Vein Thrombosis, Venous insufficiency, Arterial Stenosis) provided as recordings (CD) or in live cases by visiting a Sonography centre. They will identify the pathology, interpret diagnostic findings, and communicate the findings with the teacher/instructor. The teacher/ Instructor will give suggestions/additions if any and a final compilation of all case reports to be submitted by the student.
Experiential-Learning 6.5	Endoscopy - Analysis.	Each student interprets at least 6 Endoscopy images (each one from Gastroscopy, colonoscopy, Cystoscopy, Bronchoscopy, Arthroscopy, Ureteroscopy, ERCP and MRCP) provided as recordings (CD)/ internet sources or in live cases by visiting a diagnostic centre. They will identify the pathology, interpret diagnostic findings, and communicate the findings with the teacher/instructor. The teacher/ Instructor will give suggestions/additions if any and a final compilation of all case reports to be submitted by the student.
Experiential-Learning 6.6	ECG and TMT Analysis	Each student interprets at least 15 ECG(Tachycardia, Bradycardia, Atrial flutter, Atrial Fibrillation, Junctional Rhythm, Axis deviation, P Pulmonale, P Mitrale, Bundle branch block, Second degree heart block, STEMI, Ischemia, Hyperkalemia, Ventricular Hypertrophy, Premature Ventricular Contraction) and 4 TMT recordings (ST depression, ST elevation, T wave changes, Arrhythmia) from OPD/IPD/previous records. They should report the findings and communicate with the teacher/ instructor. After suggestions/ corrections, the students will compile the reports and submit them to the teacher.
Experiential-Learning 6.7	EEG and EMG Analysis	Each student interprets at least 5 EEG (Epileptiform discharges, Focal Slowing, Diffuse slowing, Periodic discharges, Burst suppression) and 5 EMG recordings (in Carpal Tunnel Syndrome, Foot drop, Amyotrophic Lateral Sclerosis, Myasthenia gravis, Muscular dystrophy) with abnormal findings, from OPD/IPD/previous records/internet source. They should report the findings and communicate with the teacher/ instructor. After suggestions/ corrections, the students will compile the reports and submit them to the teacher.
Experiential-Learning 6.8	NCV, Neuropathy Analyser and BMD Analysis	Each student performs at least two Neuropathy and BMD analyses individually in the hospital setting/ nearest diagnostic centre/ a screening camp. They will interpret the results and after proper suggestions compile it and submit them to the teacher. OR The students can conduct simulated classes on Neuropathy and BMD procedures and explain the methods of analysis among peers. The students in two or three groups will assist with at least 3 NCV procedures in a diagnostic centre/ individually collect NCV reports of at least 5 patients from OP/IP/previous records. They will interpret the results and after suggestions/ corrections made by the teacher, compile it and submit them to the teacher.

Experiential-Learning 6.9	PFT and CASA Analysis.	Each student performs at least 5 PFT individually in the hospital setting/ nearest diagnostic centre/ a screening camp. They will interpret the results and after proper suggestions compile them and submit them to the teacher. The students in two or three groups will assist with at least 3 CASA procedures in the hospital setting/ nearest diagnostic centre/ a screening camp/ individually collect CASA reports of at least 3 patients from OP/IP/previous records. They will interpret the results and after suggestions/ corrections made by the teacher, compile it and submit them to the teacher.
Experiential-Learning 6.10	Nadi Pariksha - Analysis.	The students perform Nadi Pariksha using Nadi Parikshan Yantra in at least 10 cases in the hospital setting/ nearest diagnostic centre/ a screening camp. After interpreting the results they will communicate it with the teacher and submit the compilation. OR The students can conduct simulated classes on Nadi Pariksha procedures and explain the methods of analysis among peers.

Modular Assessment

Assessment method	**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 02 credits x 04 hours x 50 marks Practical Learning Outcome Assessment: • Evaluation and Interpretation of X-ray [15 marks x 1 hour] Instructions: The instructor shall provide three X-ray films/ digital X-ray images for each student. The student will evaluate and interpret the clinical condition (5 marks x 3 = 15 marks). Assessment: Rubrics–based assessment (Image quality assessment, Anatomical structure identification, Abnormality detection, Diagnostic interpretation, Clinical correlation) • Evaluation and Interpretation of ECG [15 marks x 1 hour] Instructions: The instructor shall provide three ECG strips for each student. The student will evaluate and interpret the clinical condition (5 marks x 3 = 15 marks). Assessment: Rubrics–based assessment (Measurement and calculation, Rhythm interpretation, Waveform analysis, Arrhythmia identification, Clinical correlation)	4

• Structured viva (5 marks x 1 hour) • Experiential Learning Outcome Assessment: [10 marks x 1 hour] • What are the challenges encountered while learning endoscopic procedures? How did you solve it? [10 marks] Or Any practical in converted form can be taken for assessment. (40 marks) And Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (10 marks)	

Module 7 : Basic knowledge about medical procedures, handling skills and applicability in practice

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

1. Describe the principle, technique, indication, contra-indication, benefits and complications of Infusions, Ryle's Tube Insertion, Catheterization, Intubation, Gastric lavage, Tractions. .
2. Describe the principle, technique, indication, contra-indication, benefits and complications of critical procedures such as Paracentesis, USG Guided Tapping, Thoracocentesis, Water Seal Drainage, Lumbar Puncture, and Dialysis.
3. Analyze and understand the utility of different Medical instruments used in ICU setup

Unit 1 Basic medical procedures

1. Infusions
2. Ryle's Tube Insertion
3. Catheterization
4. Intubation
5. Gastric lavage
6. Tractions

References: 74,75,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO 3,CO 4,CO 5	Describe infusion therapy, its types, with indications, contraindications and complications.	1	Lecture	CC	Knows-how	FC,L&PPT
CO 4,CO 5,CO 6	Differentiate types of infusing fluids (Crystalloid, Colloid, Isotonic, Hypotonic and Hypertonic), replacement fluids, maintenance fluids and special fluids, their benefits and rationale for selection.	1	Lecture	CC	Knows-how	CBL,L&PPT

CO 3,CO 4,CO 5	Demonstrate the types of infusion needed in different clinical scenarios, review principles of infusion therapy.	2	Practical Training 7.1	PSY-GUD	Shows-how	CBL,L&P PT
CO 5,CO 6	Perform infusion therapy and interpret the changes in signs and symptoms before and after infusion therapy.	3	Experiential-Learning 7.1	PSY-MEC	Does	CBL,D-BED
CO 3,CO 4	Describe the types, indications, contraindications and complications in the use of Ryles tube (Nasogastric tube).	1	Lecture	CC	Knows-how	FC,L_VC
CO 7,CO 8	Identify the methods of insertion of Ryles tube.	2	Practical Training 7.2	PSY-GUD	Does	D-BED
CO 3,CO 5	Demonstrate the methods of Ryle's tube insertion.	3	Experiential-Learning 7.2	PSY-ORG	Shows-how	D-M
CO 3,CO 4	Describe the indications, contraindications and complications of catheterization along with knowledge on appropriate selection of catheters.	1	Lecture	CC	Knows-how	FC
CO 3,CO 4	Identify different types of catheters and demonstrate the procedure of Catheterization.	2	Practical Training 7.3	PSY-GUD	Knows-how	D-BED,D-M,SIM
CO 4,CO 5	Perform catheterization in both male and female patients.	3	Experiential-Learning 7.3	PSY-MEC	Does	D-BED,SIM
CO 3,CO 6	Discuss about the intubation and elaborate guidelines for tracheal intubation.	1	Lecture	CC	Knows-how	DIS,L&P PT
CO 5,CO 6	Identify the methods of performing endotracheal intubation (E.T.T procedure).	2	Practical Training 7.4	PSY-GUD	Shows-how	D-BED,D-M
CO 3,CO 4	Perform endotracheal intubation.	3	Experiential-Learning 7.4	PSY-MEC	Shows-how	D,D-M
CO 4,CO 5	Describe Gastric lavage - its uses, indications, contraindications and complications.	1	Lecture	CC	Knows-how	L_VC

CO 5	Demonstrate the procedure of Gastric lavage.	2	Practical Training 7.5	PSY-GUD	Shows-how	D-BED,D-M,SIM
CO 5,CO 6	Analyse the need for gastric lavage and perform the procedure.	3	Experiential-Learning 7.5	PSY-MEC	Does	CBL,D-BED,SIM
CO 5,CO 6	Differentiate between the types of traction: Mechanical and Manual, as well as IPT (Intermittent Pneumatic Traction) and ICT (Intermittent Cervical Traction), along with their applications, indications, contraindications, and potential complications.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 5,CO 6	Identify the methods of applying traction in appropriate clinical conditions.	2	Practical Training 7.6	PSY-GUD	Shows-how	D-BED,PAL
CO 3	Demonstrate the application of different traction methods and observe the changes in signs and symptoms in various conditions.	2	Experiential-Learning 7.6	PSY-MEC	Does	CBL,D-BED,SDL,SIM

Unit 2 Critical/Advanced medical procedures

1. Paracentesis, USG Guided Tapping, Thoracocentesis, Water Seal Drainage
2. Lumbar Puncture
3. Dialysis

References: 74,75,76,77,78,79,80

3A	3B	3C	3D	3E	3F	3G
CO 3,CO 4	Describe Paracentesis, its indications, contraindications, complications and equipment used.	1	Lecture	CC	Knows-how	L&GD,L&PPT
CO 3,CO 5	Conduct the procedure of Paracentesis in an ascites case.	2	Practical Training 7.7	PSY-GUD	Shows-how	D,D-BED,SIM
CO 4,CO 5	Analyse the indications and contraindications and perform paracentesis in ascites patients.	3	Experiential-Learning 7.7	PSY-MEC	Does	D-BED,D-M,DIS

CO 5,CO 6	Illustrate ultrasound-guided tapping, its indications, contraindications and complications.	1	Lecture	CC	Knows-how	L&PPT ,L_VC
CO 4,CO 5	Conduct ultrasound-guided tapping while recognizing the practical challenges involved in its execution.	2	Practical Training 7.8	PSY-GUD	Shows-how	D-BED,SIM
CO 3,CO 5,CO 8	Perform and interpret USG guided tapping in various clinical conditions.	2	Experiential-Learning 7.8	PSY-MEC	Does	D-BED,SIM
CO 3,CO 5	Discuss the procedure of Thoracentesis with it’s risks/benefits.	1	Lecture	CC	Knows-how	FC
CO 5,CO 6	Identify the methods of performing Thoracentesis in Pleural effusion.	2	Practical Training 7.9	PSY-GUD	Shows-how	D-BED,DIS,L_VC, SIM
CO 5,CO 6	Perform Thoracentesis in Pleural effusion.	3	Experiential-Learning 7.9	PSY-GUD	Shows-how	CBL,D-BED,D-M,SIM
CO 3,CO 6	Describe the purpose ,indications, sites and types of Water seal drainage.	1	Lecture	CC	Knows-how	L&PPT ,L_VC
CO 5,CO 6	Identify the methods of performing water seal drainage.	2	Practical Training 7.10	PSY-MEC	Shows-how	D-BED,D-M,DIS
CO 3,CO 4	Perform water seal drainage in various clinical conditions.	2	Experiential-Learning 7.10	PSY-MEC	Does	D-BED,RLE,SIM
CO 1,CO 2	Describe the uses, indications, contraindications, complications and sites of Lumbar puncture.	1	Lecture	CC	Knows-how	L_VC
CO 1,CO 2,CO 4,CO 5	Demonstrate the methods of performing Lumbar puncture.	2	Practical Training 7.11	PSY-GUD	Shows-how	D-BED,D-M,L_VC, PT,SIM

CO 1,CO 2,CO 5,CO 8	Analyse the indications and contraindications, and Perform Lumbar puncture.	2	Experiential-Learning 7.11	PSY-ORG	Does	D-M,SIM
CO 2,CO 4	Describe Dialysis, its principles, application, types, and complications involved in the procedure.	1	Lecture	CC	Knows-how	L&PPT ,L_VC,SIM
CO 1,CO 2,CO 7	Identify the equipments related with the procedure of dialysis.	2	Practical Training 7.12	PSY-ADT	Shows-how	D,PT
CO 2,CO 4	Identify the mechanism of dialyser, dialysis solution and dialyser membrane in consistent with the principles of haemodialysis.	2	Practical Training 7.13	PSY-SET	Shows-how	DIS,PT,RLE
CO 1,CO 2,CO 6	Analyse the need for haemodialysis/ peritoneal dialysis and observe the changes in clinical and laboratory parameters before and after the procedure.	2	Experiential-Learning 7.12	CAN	Does	CBL,PL
CO 1,CO 3	Analyse and compile recent advances in dialysis technology and formulate dietary guidelines for dialysis patients.	2	Experiential-Learning 7.13	CAN	Does	JC,LS,SDL

Unit 3 Handling ICU instruments

1. ICU instruments and equipment

References: 74,75,77,78

3A	3B	3C	3D	3E	3F	3G
CO 1,CO 2,CO 6	Describe different types of instruments used in ICU.	2	Lecture	CC	Knows-how	L&PPT ,L_VC
CO 1,CO 2,CO 3	Identify different types of instruments(including ventilator and defibrillator), drugs and its uses in ICU.	2	Practical Training 7.14	PSY-MEC	Shows-how	D-BED,DL,DIS,TPW
CO 1,CO 3,CO 8	Demonstrate the functional operation of instruments/ equipment provided in an ICU set-up.	2	Practical Training 7.15	PSY-MEC	Shows-how	D,PT

CO 1,CO 2,CO 6	Justify the need for admission to an ICU setting, considering the patient's vital status and other health parameters.	3	Experiential-Learning 7.14	CE	Does	CBL
CO 1,CO 3,CO 7	Demonstrate skills of critical care management (Airway management, breathing and circulatory support, nutritional support) in various clinical conditions.	3	Experiential-Learning 7.15	PSY-MEC	Shows-how	D-BED,D-M,DIS,SIM

Practical Training Activity

Practical No	Name	Activity details
Practical Training 7.1	Demonstration of the types of infusion needed in different clinical scenarios, review principles of infusion therapy.	Demonstration by the teacher: • The Teacher will guide the students with the utility of infusion therapy in different body conditions. • Teacher will demonstrate how to select and use different types of IV cannulas of different sizes in different clinical scenarios • The Teacher will also explain and demonstrate different types of infusions as per the need on a real patient/ mannequin/ through video demonstration. • Divide the students into 2 to 3 groups • The students should be provided IV sets for hands-on practice. • Instruct each group to administer intravenous infusions by physically practicing on a patient or mannequin, including selecting a proper vein, inserting an IV catheter, following all the aseptic protocols that are required. • Invite each group to present their experience after the hands on training of infusion therapy • Facilitate a discussion on insertion, uses of infusion therapy and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.
Practical Training 7.2	Practice on Ryles tube insertion.	Demonstration by the teacher:

		• The Teacher will guide the students with basics of Ryles tube, importance of French Gauge in size, uses of Ryles tube , types of Ryles tube, materials used in Ryles tube, technique for insertion, contraindications and risks involved in Ryles tube insertion. • Teacher will demonstrate the procedure of Ryles tube in different age group patients on a real patient/ mannequin/ through video demonstration. • Divide the students into 2 to 3 groups • The students should be provided Ryle's tube for hands on practice on a mannequin • Invite each group to present their experience during Ryle's tube insertion • Facilitate a discussion on insertion, uses of Ryle's tube and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.
Practical Training 7.3	Demonstration of Catheterization.	Demonstration by the teacher: • The Teacher will guide the students with anatomy of the Urogenital system,difference between urinary and cardiac catheterization, types of catheters used for catheterization, difference between indwelling, condom, intermittent self catheter, what is special about Foley catheter, urobag, size of catheter, cleaning process of catheter, how to do bladder wash, anatomical position for catheter insertion (through either video or in a case). • Teacher will perform Foley Catheter insertion in different age group patients on a real patient/ mannequin/ through video demonstration. • Divide the students into 2 to 3 groups • The students should be provided hands on practice on mannequin initially with proper materials used during catheterization. • Instruct each group to follow proper aseptic protocol in simulator mannequins with different scenarios and potential complications. • Invite each group to present their experience insertion • Facilitate a discussion on insertion, uses of catheterization and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.

Practical Training 7.4	Practice endotracheal intubation	Demonstration by the teacher: • The Teacher will guide the students with basics of ETT and its practical utility in day-to-day practice along with the complication. The Teacher will discuss the importance of GCS, PFT, ABG along with risks and complications associated with it (through either video or in a case). • Teacher will perform ETT Procedure on a mannequin/ through video demonstration. • Divide the students into 2 to 3 groups • The students should be provided hands on practice on mannequin initially with proper materials used during ETT • Invite each group to present their experience during ETT • Facilitate a discussion on insertion, uses of ETT and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.
Practical Training 7.5	Demonstrate Gastric lavage procedure.	Demonstration by the teacher: • The Teacher will perform a suction procedure on a real patient/ mannequin/ through video Demonstration. • Teacher will explain possible treatment protocols (through either video or in a case). • Divide the students into 2 to 3 groups • The students should be provided the materials like catheters of different sizes, suction machine, gloves, sterile drapes, and lubricant for hands on practice. • Instruct each group to perform the steps involved in properly suctioning the airway secretions under the supervision of the instructor on simulator mannequin. • Invite each group to present their experience after the procedure. • Facilitate a discussion on insertion, uses of suction and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.

Practical Training 7.6	Application of traction.	Demonstration by the teacher: • The Teacher will guide the students in performing the traction used in different conditions of cervical and lumbar spondylolisthesis/ Intervertebral Disc Prolapse and differentiate between IPT & ICT (through either video or in a case). • The Teacher will perform traction on a real patient/ mannequin/ through video Demonstration. • Divide the students into 2 to 3 groups • The students should be provided hands-on practice. • Instruct each group to perform different types of tractions on patients under the supervision of the instructor. • Invite each group to present their experience after the procedure. • Facilitate a discussion on traction along with its uses and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.
Practical Training 7.7	Identification of instruments and equipment in dialysis	Demonstration by the teacher: • The Teacher will brief on the basics of dialysis • Teacher will create an opportunity to visit a dialysis centre/ use videoclips to idenify the instruments and equipment needed for conducting dialysis. • The students prepare a list in their practical note.
Practical Training 7.8	Perform Paracentesis in ascites case.	Demonstration by the teacher: • The Teacher will guide the students with basics of ascites, definition of paracentesis, its indications and contraindication, complications, fluid analysis, USG guided Paracentesis. The teacher briefs on the need of paracentesis for therapeutic/

		diagnostic purpose , details of equipment needed for paracentesis, position of the patient, knowledge about z-track method, Peritoneal Fluid Analysis, clinical significance of Paracentesis. • The teacher will perform Paracentesis on a real patient/ mannequin/ through video demonstration. • Divide the students into 2 to 3 groups • The students should be provided the required materials for performing paracentesis like syringes, USG machine, needles etc for hands on practice. • Instruct each group physically practice performing a paracentesis procedure on a mannequin/ explain the procedure using video, under the guidance of an experienced instructor. • Invite each group to present the necessary skills that are to be required during the fluid drainage • Facilitate a discussion on insertion, uses of paracentesis and the insights gained from the practical.
Practical Training 7.9	Perform USG guided tapping	Demonstration by the teacher: • The Teacher will guide the students with basics of Respiratory system , anatomy and physiology of pleura, causes for pleural effusion, patient preparation, indications , scanning technique , characteristics of pleural fluid, benefits and contraindications of USG guided tapping (through either video or in a case). • The teacher/radiologist will perform USG guided tapping on a real patient/ mannequin/ through video demonstration. • Scholars are allowed to observe/perform the USG guided tapping on mannequin or will show the prerecorded video • Invite each group to present their experience during USG guided tapping • Facilitate a discussion on USG guided tapping and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical. Self-Assessment – • Develop critical thinking by reaching a diagnosis through detailed history taking and appropriate clinical examination in a case of pleural effusion. Demonstration of LENT SCORE AND RAPID SCORE IN PLEURAL EFFUSION and other

		relevant assessment scales useful in differential diagnosis. • Understanding the need of USG guided tapping and strict regimen in such conditions. • Assign groups to find out the recent research updates on pleural effusion, understanding of Light's criteria in pleural effusion and present them to the teacher. • Groups will also explore the contemporary relevance and scientific validation of these practices.
Practical Training 7.10	Practicing Thoracentesis.	Demonstration by the teacher: • Teacher will explain the recent advancements in Thoracentesis in Pleural Effusion patients. (Through either video or in a case). • The teacher will demonstrate Thoracentesis in a Pleural Effusion on a real patient/ mannequin/ through video demonstration. • Divide the students into 2 to 3 groups • The students will be provided the required equipment needed to perform thoracocentesis for hands on practice. • Instruct each group to perform needle puncture, USG evaluation and fluid aspiration on the mannequin or through video demonstration • Invite each group to present their experience during thoracentesis. • Facilitate a discussion on insertion, uses of thoracentesis and the insights gained from the practical. The teacher shall summarise the key points covered in the practical.
Practical Training 7.11	Practicing water seal drainage.	Demonstration by the teacher: • The Teacher will guide the students with basic Anatomy and Physiology of Respiratory system. And its recent advancements to perform water seal drainage in Pneumothorax/ Pleural Effusion, approaching the patient with relevant examinations and investigations and Risk Assessment Tool etc., and will explain possible treatment protocol and formulations (through either video or in a case). • The teacher will perform Water Seal Drainage in a Pneumothorax/ Pleural Effusion on a real patient/ mannequin/ through

		video demonstration. • The students will be provided with essential materials like Chest tube insertion kit (including trocar, catheter, sutures), sterile drapes, antiseptic solution, local anesthetic, syringes, needles, water seal drainage system, connecting tubing, and appropriate dressings for hands on practice. • The students will be divided into small groups and each group will be instructed to observe the procedure starting from Patient assessment, local anaesthesia administration, skin preparation, chest tube insertion, and monitoring the patient after connecting to the water seal system in a real patient/ mannequin/ video demonstration. • Invite each group to present their experience after the practicals. • Facilitate a discussion on insertion, uses of water seal drainage and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.
Practical Training 7.12	Practice of Lumbar Puncture.	Demonstration by the teacher: • The Teacher will guide the students with basics of lumbar puncture, how it is useful both in diagnostic and therapeutic purpose , sites of lumbar puncture in adult and children, the type of needle used for lumbar puncture along with its contraindications, absolute contraindication in adult and children and risks. • Teacher will demonstrate the procedure of lumbar puncture in both adults and children on a real patient/ mannequin/ through video demonstration. • The students should be provided essential materials for hands-on practice. • Instruct each group to practice using an Ultrasound and palpation to identify the landmark properly for the correct insertion of the needle to perform the procedure in mannequin or through video demonstration • Invite each group to present their experience after the procedure. • Facilitate a discussion on insertion of needle, uses of lumbar puncture and the insights gained from the practical. • The teacher shall summarise the key points covered in the practical.
Practical Training 7.13	Identification of mechanism of dialyser,	Demonstration by the teacher:

	dialysis solution and dialyser membrane.	• The Teacher will guide the students and explain the need of dialysis along with basics of dialysis, the mechanism of dialyser, procedure, its indication, contraindications, risks and when to go for dialysis. • Teacher will create an opportunity to visit a dialysis centre for demonstration of Dialysis on a real patient// through video demonstration. • Divide the students into 2 groups / three groups • The students will observe the procedure of arteriovenous fistula and common sites of it. • Instruct each group to practice the procedure on a mannequin or learn through video demonstration • Invite each group to present their experience after the procedure. • Facilitate a discussion on treatment, dietary regimen useful in dialysis patients and insights gained from the practical. • The teacher shall summarise the key points covered in the practicals.
Practical Training 7.14	Identification of types of instruments (ventilator and defibrillator) along with drugs used in ICU.	Demonstration by the teacher: • The Teacher will guide the students with basics of Emergency / ICU Setup along with instruments, drugs , clinical examinations and assessment scores required to form a diagnosis. • Teachers will create an opportunity to visit an ICU for detailed understanding of the treatment protocol used in critical conditions. • The students will observe the procedure of CPR, Defibrillator, ventilator etc., • The students will also gain knowledge about emergency medicines used in critical conditions like epinephrine etc., along with their doses, contraindications. • The students should be provided essential materials for hands-on practice. • Instructer guide each student to practice the procedure on a mannequin. • Invite to present their experience after the procedure. • Facilitate a discussion on ICU instruments, medicines used in different critical conditions and insights gained from the practical. • The teacher shall summarise the key points covered in the practical.

Practical Training 7.15	Instruments/ equipment in ICU and its use.	Demonstration by the teacher: • The teacher introduces the students to the basics of emergency/ICU set-up, instruments and emergency drugs used and required clinical examinations and assessment scores. • Teachers will create an opportunity to visit an ICU for a detailed understanding of treatment protocol used in critical conditions. • Divide the students into 2 groups / three groups • The students will observe the procedure of Ambu bag suction, Laryngoscope for ETT, CPR, Defibrillator, ventilator, ABG for monitoring O2 intake etc., • Instructer guides each group to practice the procedure on a mannequin or observe the pre-recorded video • Invite each group to present their experience after the procedure. • Facilitate a discussion on ICU instruments, medicines used in different critical conditions and insights gained from the practical. • The Instructor/teacher shall summarise the key points covered in the practical.
Experiential learning Activity		
Experiential learning No	**Name**	**Activity details**
Experiential-Learning 7.1	Perform infusion therapy and interpret the changes in signs and symptoms before and after infusion therapy.	Case Based Learning- • Enhance critical thinking skills by accurately establishing a diagnosis through comprehensive history taking and relevant clinical examinations where infusion therapy plays a vital role. Showcase the use of risk assessment tools and other pertinent evaluation scales that aid in differential diagnosis. Understand the dynamics of infusion in various critical conditions.

		• Developing rational thinking by interpreting the necessity of infusion therapy and improving soft skills to communicate the condition to patients in their comfortable language. • Understanding the need of infusion therapy. • Prepare and perform infusion therapy in real patients/ mannequin / explain with the help of pre-recorded video • Prepare a chart of changes that have been observed in the patients before and after the therapy. • The teacher will provide suggestions/ recommendations.
Experiential-Learning 7.2	Demonstrate Ryle's tube insertion.	Case Based Learning- • Enhance critical thinking skills by assisting in the diagnostic process through comprehensive history taking and thorough clinical examination, which are essential for the successful insertion of Ryle's tube in patients. • Prepare and perform Ryle's tube insertion therapy in real patients/ simulated patients/ explain by using pre-recorded video. • Prepare a chart of changes that has been observed in the patients before and after the therapy. • The teacher will provide feedback/ suggestions/ recommendations. • The student record the work in their log book.
Experiential-Learning 7.3	Perform catheterization in both male and female patients.	Group Project – • Assign groups to find out the recent updates on Catheterization procedure and present them to the teacher. • Groups will also explore the contemporary relevance and scientific validation of these practices. Case based learning – • Developing communication skills about the condition of the patient in patient – friendly language. • Developing soft skills on how to approach patients and how to proceed with catheterization.

		• Prepare and perform Catheterization in real patients/ mannequin/ explain with the help of pre-recorded video • Prepare a chart of changes that have been observed in the patients before and after the therapy. • Record the work in logbook.
Experiential-Learning 7.4	Proficiency in the endotracheal intubation procedure.	Case Based Learning- • Students will study in deail about the basic anatomy and physiology of respiratory system and relevant examinations and investigations and risk assessment tool like Glasgow coma scale, Difficult Airway Physiological Scale, IDS Score etc., and will explain possible treatment protocol and formulations. • Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination to do the tracheal intubation in IPD patients. • Understanding the need of tracheal intubation. • Prepare and perform Tracheal Intubation therapy in real patients/ mannequin/ explaining with the help of pre-recorded video. • Prepare a chart of changes that have been observed in the patients before and after the therapy. • Developing critical thinking skills about risks of endotracheal intubation like infection etc., and also their treatment protocol. • Developing soft skills to communicate the procedure, risks and regimen to the patient and bystander. • The teacher will provide fedback/ suggestions on the activity. • The students record the activity in log book.
Experiential-Learning 7.5	Analysis on gastric lavage.	Case based learning – • Students will take a brief history of the patient and demonstrate the examination relevant to the presenting complaints of the patient and justify the diagnosis for conducting the suction therapy. • Prepare and perform gastric lavage therapy in real patients/ mannequin/ explain the procedure using pre-recorded video. • Prepare a chart of changes that have been observed in the patients before and after the therapy (If real patients are

		available). • Developing critical skills of Medico-legal documents to be prepared in such conditions. • The teacher will provide feedback/ suggestions, which will be incorporated by students in their log book.
Experiential-Learning 7.6	Perform traction in different clinical conditions.	Case Based Learning- • Develop critical thinking by helping in coming to a diagnosis through detailed history taking and appropriate clinical examination like goniometry examination, scales like Neck Pain and Disability Index, Oswestry Disability Score etc., • Develop new skills to understand different kinds of physiotherapies that are needed in different conditions. • Prepare and perform traction therapy in real patients / mannequin / simulated cases. • The teacher provide suggestions/ recommendations to improve student's efficiency.
Experiential-Learning 7.7	Proficiency in performing paracentesis in ascites patients.	Assess the IPD case sheets of ascites patients. Analyse and interpret the ascitic fluid. Case based learning – • Students will take a brief history of the patient and demonstrate the examination relevant to the presenting complaints of the patient and justify the diagnosis. • Students will also examine the patient condition by using relevant scores like Child-Pugh Classification, Gradings of Ascites useful in diagnosing Ascitic Fluid disorders and justify the need of tapping. • Prepare and perform tapping therapy in real patients/ mannequin / explain the procedure using pre-recorded video. • Prepare a chart of changes that have been observed in the patients before and after the therapy. • The teacher will provide feedback/ Suggestions. • The students record the work in their log book.
Experiential-	Perform and interpret	Case Based Learning-

Learning 7.8	USG guided tapping.	• Enhance critical thinking skills by assisting in the diagnostic process through comprehensive history taking and thorough clinical examination and demonstrate USG-guided tapping in IPD patients with the help of a radiologist. • Understand and describe the complications and risk factors faced during the procedure and prepare a treatment protocol to encounter them. • Prepare and perform USG guided tapping therapy in real patients/ mannequin/watching pre-recorded video. • Prepare a chart of changes particularly BP,Pulse rate, SpO2 and Chest X-Ray that have been observed in the patients before and after the therapy. • After incorporating suggestions from the teacher, the students record the work in Log book.
Experiential-Learning 7.9	Performing Thoracentesis in pleural effusion.	Case based learning – • Student will explain the procedure, indications, contra indications, risk factors along with recent advancements in Thoracentesis in Pleural effusion patients. • Developing soft skills on how to approach patients and diagnose based on symptoms, examinations and assessment scores. • Developing communication skills on procedure of Thoracentesis of diagnosed patients by explaining the procedure, risks and regimen. • Prepare and perform Thoracentesis therapy in real patients/mannequin/ watching pre-recorded video. • Along with a chart of changes that have been observed in the patients before and after the therapy.
Experiential-Learning 7.10	Performing Water seal drainage	Case Based Learning- • Students will be performing water seal drainage with its Indications on how to approach the patient with relevant examinations, investigations, and scores like Water seal drainage assessment score etc., and will explain possible treatment protocol along with risks involved in Water seal drainage. • The students enhance their critical thinking skills by obtaining a comprehensive medical history and conducting a thorough

		clinical examination to illustrate the procedure for patients with pneumothorax or pleural effusion, incorporating assessment tools and other pertinent evaluation scales. • Students will justify the need for water seal drainage in patients. • They will plan treatment protocol for risk factors, if seen during the procedure and justify the effectiveness of the protocol with scientific validation. • Developing soft skills by communicating to patients about the procedure, risks, regimen. • Prepare and perform Water seal drainage therapy in real patients/ mannequin/ watching pre recorded video. • They will prepare a chart of changes that have been observed in the patients before and after the therapy. • The teacher will provide valuable suggestions/ feed back.
Experiential-Learning 7.11	Proficiency in the procedure of Lumbar Puncture	Case based learning – • Students will take a brief history of the patient and demonstrate the examination relevant to the presenting complaints of the patient and justify the diagnosis. And acquire the knowledge regarding the indications and contraindications of Lumbar puncture. • Students will visit ICU and get hands-on training to perform the lumbar puncture in patients after explaining the surface anatomy, clinical examination, Assessment scores etc., along with procedure and need of Lumbar puncture. • Understand and explain the risks associated with the procedure. • Prepare and perform Lumbar Puncture therapy in real patients/ mannequin/ explain the procedure using video clips. • The students prepare a chart of changes that have been observed in the patients before and after the therapy. • The teacher give feedback and suggestions. • The students record the work in their log book.
Experiential-Learning 7.12	Rationale of advising haemodialysis and peritoneal dialysis.	Case Based Learning- • Students will comprehend the indications and contraindications of dialysis and justify the need of dialysis based on the clinical examination and laboratory investigations of the patient.

		• The students properly communicate with the patient/ simulated case on the need of dialysis. • They observe and record the changes in clinical status and laboratory parameters before and after the procedure. • They advise pathyapathya accustomed to modern and Ayurvedic principles of management. • The teacher will provide feed back and suggestions. • The students compile the work and submit for evaluation.
Experiential-Learning 7.13	Recent advances in dialysis technology and dietary guidelines for dialysis patients.	1. Students with the help of instructor, will be divided into two groups. 2. One group of Students will analyze and collect all relevant information related to recent advances in dialysis technology like-implantable artificial kidney, high-flux dialyzers, wearable Dialysis devices, portable dialysis machine and role of AI in dialysis. 3. The other group of students will prepare dietary guidelines, formulate a sample meal plan for dialysis patients and acquire knowledge on renal diet. 4. Invite students from each group to present their activity. 5. Group discussion will be done on the basis of their activity. 6. Students can write a report on recent advances in dialysis technology and the dietary guidelines for dialysis patient, and submit the compilation for verification.
Experiential-Learning 7.14	Need for admission in ICU setting	In an ICU settings, justify the need of admission and Analyse the vital parameters. Case based learning – • Students will visit the emergency wards/ ICU and perform clinical examinations like cranial nerve examination, pupil dilatation assessment scores like Glasgowcoma scale etc., and justify the need of ICU admission in real cases/ simulated cases. • The Students will assess the vitals like SpO2, ABG, Pulse rate, respiratory rate etc., along with clinical scales. • The students will present their findings before the teacher. • The teacher will provide insight/ suggestions/ recommendations.

Experiential-Learning 7.15	Critical care management	Case Based Learning- • Students will learn different instruments like Defibrillator, Laryngoscope, Ambu bag, Ryle's Tube etc., along with procedure, benefits, indications, contraindications, risks associated. • Students will also learn about the emergency medicines used in critical conditions. • After appropriate clinical examination and diagnosis, they perform procedures like Ambu bag, Suction machine, ABG analyser, ETT and Foleys catheter with respect to the need of the situation in real patients/ simulated cases/ mannequins. • The Student will perform on a real case/ mannequin/ explain the procedure using video clips. • The Instructor will offer feedback, comments and suggestions.

Modular Assessment

Assessment method	**Hour**
Instructions: Conduct a structured modular assessment. The assessment will be for 75 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C. Outcome-Based Assessment: 03 credits x 06 hours x 75 marks Practical Learning Outcome Assessment: • Demonstration of Infusion therapy [25 marks x 2 Hours] Instructions: The instructor shall provide mannequins/ video clips for each student. The student will demonstrate Infusion therapy in the mannequin/ narrate the methods by watching the video clip. Assessment: Rubrics–based assessment (Indications and contraindications, medication and fluid administration, Infusion rate and dosage calculation, Monitoring and management, Patient education and safety) • Perform Catheterisation [25 marks x 2 Hours]	6

Instructions: The instructor shall provide mannequins/ video clips for each student. The student will demonstrate Catheterisation in the mannequin/ narrate the methods by watching the video clip.
Assessment: Rubrics–based assessment (Preparation and Asepsis, Catheter selection and Insertion, Catheter maintenance and care, Complication management, Patient comfort and safety)

- Structured Viva-voce (10 marks x 1 hour)
- Experiential Learning Outcome Assessment: [15 marks x 1 hour]

- What are the challenges encountered while learning critical care management? How did you solve it?

Or
Any practical in converted form can be taken for assessment. (50 marks)
And
Any experiential as portfolio/ reflection/ presentations/ projects/ symposium, can be taken for assessment (25 marks)

Table 4 : Practical Training Activity

Practical No	Practical name	Hours
1.1	Constituting a multidisciplinary team and demonstration of integration and leadership skills.	2
1.2	Handling vulnerable and old age patients in the hospital	2
1.3	Handling ICU patients in the hospital.	2
1.4	Handling mentally challenged patients in the hospital.	2
1.5	Demonstration of BLS, ACLS.	2
2.1	Surface anatomy of Mastishka (Brain) .	2
2.2	Surface anatomy of major abdominal viscera along with the direction of their enlargement in diseased states.	2
2.3	Vyadhi vrutta focusing on kala apakarsa, chronicity, samprapti and history components relevant to disease conditions	2
2.4	Systemic approach to history taking in patients presenting with various sroto vikaras.	2
2.5	Approach towards identifying exacerbating factors	2
2.6	Clinical Application of Vyadhi hetu classification in Ayurvedic Diagnosis and treatment.	2
2.7	Identification of exogenous factors(Agantu Hetu) and iatrogenic factors in disease manifestation.	2
2.8	Vyadhikshamatwa (Vyadhibala virodhitwam and Vyadhi utpadaka pratibandhakatwam) and its role in disease prevention and prognosis.	2
2.9	Assessment of trividha bala and their importance in disease manifestation and prognosis.	2
2.10	Role of Viruddha ahara and Gara Visha(dietary, lifestyle and environmental factors) in disease manifestation.	2

3.1	Development of unified consolidated Aushadhi sevana kala	2
3.2	Guided application of unified consolidated Aushadhi sevana kala, matra and anupana	2
3.3	Application of the unified consolidated Aushadhi sevana kala,matra and anupana in the use of vrious formulations	2
3.4	Developing a standardized medical prescription suitable for various herbal formulations	2
3.5	Medical prescription of Rasa oushadhis	2
3.6	Medical prescription with respect to different avastha of Roga and Rogi	2
3.7	Maintenance of OPD case records	2
3.8	Maintenance of IPD case records in different case scenarios	2
3.9	Maintenance of medical records at IPD levels (with procedures, panchakarma and surgical managements) on different case scenarios.	2
3.10	Illustrating the hospital forms and certicates like referral forms and requisition forms on different case scenarios	2
4.1	Treatment principles in dvividha and trividha vyadhi.	2
4.2	Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi, and Nidanarthakara Vyadhi chikitsa tatva.	2
4.3	Assessment of Doshagati, Agantu Dosha, Guru and Laghu vyadhita.	2
4.4	Formulating treatment principles for the Vriddhi and Kshaya of Doshas	2
4.5	Construction of treatment principles for various identified disease conditions characterized by Kinchit Avashishta Dosharoopa Vyadhi.	2
4.6	Identifying chikitsa tatva of Leena Doshavastha, Sama Nirama Dosha/Dhatu Avastha.	2
4.7	Identification of appropriate Ahara, Vihara, and Aushadha	2
4.8	Identify treatment principles in Ojovisramsa, Ojovyapath & Ojokshaya.	2
4.9	Plan of diagnosis & management in Mala Vriddhi and Kshaya	2
4.10	Identification of Mala Vriddhi and Kshaya	2

4.11	Management plan for the imbalance of Mala in Metabolic Disorders	2
4.12	Demonstration of Sama and Nirama avastha.	2
4.13	Systematic examination of each system	3
4.14	Demonstration of Laboratory findings and their application in Srotodushti identification in the given lab reports.	3
5.1	Identification of clinical signs of Ayoga, Samyak Yoga, and Ati Yoga.	3
5.2	Identification of appropriate interventions (Santarpana or Aptarpana)	3
5.3	Identification of clinical signs of Ayoga, Samyak Yoga, and Ati Yoga by analysing case scenarios.	3
5.4	Application of Daivavyapashray, Yuktivyapashray, Satvavjay and Upshayanupshaya chikitsa based on clinical presentations.	3
5.5	Identification of Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa in various case scenarios.	3
5.6	Assessment of Dosha, Prakriti, Vikruti and Kala to indicate appropriate Shodhana therapy.	3
5.7	Selection of Appropriate Sodhana in Srotas specific disorders.	3
5.8	Analyse cases and develop research protocols with a scientific temperament.	3
5.9	Demonstration of Shamana Chikitsa in patient care based on disease condition	3
5.10	Identify the appropriate formulations for different Srotas-related disorders based on samprapti ghatakas.	3
6.1	Interpretation of X-ray (Chest, Bones & Joints)	2
6.2	Evaluation and Interpretation of Barium meal X-ray, Pyelogram, and Angiogram	2
6.3	Evaluation and Interpretation of CT and MRI scans.	2
6.4	Evaluation and Interpretation of USG and Vascular Doppler.	2
6.5	Evaluation and Interpretation of Endoscopic procedures.	3
6.6	Interpretation of ECG and TMT	2

6.7	Evaluation and Interpretation of EEG and EMG	2
6.8	Evaluation and Interpretation of PFT and CASA.	2
6.9	Evaluation and Interpretation of NCV, Neuropathy Analyser and BMD.	2
6.10	The procedure of Nadi Pariksha with Nadi Parikshan Yantra and its interpretation.	1
7.1	Demonstration of the types of infusion needed in different clinical scenarios, review principles of infusion therapy.	2
7.2	Practice on Ryles tube insertion.	2
7.3	Demonstration of Catheterization.	2
7.4	Practice endotracheal intubation	2
7.5	Demonstrate Gastric lavage procedure.	2
7.6	Application of traction.	2
7.7	Identification of instruments and equipment in dialysis	2
7.8	Perform Paracentesis in ascites case.	2
7.9	Perform USG guided tapping	2
7.10	Practicing Thoracentesis.	2
7.11	Practicing water seal drainage.	2
7.12	Practice of Lumbar Puncture.	2
7.13	Identification of mechanism of dialyser, dialysis solution and dialyser membrane.	2
7.14	Identification of types of instruments (ventilator and defibrillator) along with drugs used in ICU.	2
7.15	Instruments/ equipment in ICU and its use.	2

Table 5 : Experiential learning Activity

Experiential learning No	Experiential name	Hours
1.1	Team activity on handling patients	2
1.2	Conflict resolution in hospital setting.	2
1.3	Response to emergency colour codes indicated by NABH for hospital	1
1.4	Handling old age patients and vulnerable patients.	2
1.5	Skill enhancement in handling ICU patients.	2
1.6	Handling the mentally challenged patients.	2
1.7	Skill enhancement in BLS and ACLS.	2
2.1	Relating skull anatomy with respect to pathological conditions.	2
2.2	Relating Cranial nerves anatomical landmarks with respect to its pathological conditions.	2
2.3	Relating lungs and Heart anatomy with respect to pathological conditions.	2
2.4	Anatomical landmarks of various asthi (bones), sandhis (joints) and pristhavamsha (spines) with their clinical significance	2
2.5	Identification of Dermatomal and Myotomal distribution and its applied aspect.	2
2.6	Proficiency in case history taking for complex situations	2
2.7	Clinical history taking for patients with somatic symptoms caused by psychological or genetic factors.	2
2.8	Clinical Assessment of Dosha Hetu through patient based case studies	2
2.9	Role of Diet, lifestyle, pshyco social factors in disease manifestation.	2
2.10	Identification of paraspara anubandhi rogas.	2
2.11	Modifiable and Non-modifiable risk factors in disease manifestation	2

2.12	Assessment of Prakriti and its importance in disease manifestation.	2
2.13	Assessment of patient's immune system function.	2
3.1	Application of the Unified consolidated Aushadhi sevana kala	3
3.2	Application of Unified consolidated Aushadhi sevana kala,matra and anupana	3
3.3	Implementation of consolidated Aushadha sevana kala,matra and anupana in the therapeutic application of various formulations in different case based scenarios	3
3.4	Prescription of herbal oushadhi	3
3.5	Ideal prescription of Rasa oushadhis	3
3.6	Standardized medical prescription considering avastha of Roga and Rogi	3
3.7	Illustrating the maintenance of OPD case records in Medical record section.	3
3.8	Maintenance of IPD case records with medical, emergency and ICU managements in different case scenarios	3
3.9	Illustrating the maintanence of medical records at IPD levels (with procedures, panchakarma and Surgical managements) in Medical Record Section	2
4.1	Application of the treatment principles in Dvividha and Trividha Vyadhi	3
4.2	Planning the treatment principles in Margavarana, Paraspara Anubandha Vyadhi, Anyonya Sambhava Vyadhi, and Nidanarthakara Vyadhi.	3
4.3	Application of Chikitsa Sutras like Dosha Anulomana Chikitsa, Dosha Koshtha Gamana Chikitsa	2
4.4	Dosha Vriddhi Kshaya chikitsa	3
4.5	Application of the Chikitsa Sutra in Kinchit Avashishta Dosharoopa Vyadhi.	3
4.6	Leena Dosha and Sama-Nirama Dosha/Dhatu Avastha Chikitsa	2
4.7	Dhatu/ Upadhatu - Vriddhi Kshaya Chikitsa	3

4.8	Chikitsa Sutras in Ojovikara	2
4.9	Evaluation of the complications due to prolonged derangement of Mala in chronic conditions (Chronic Kidney Disease, Hepatic Diseases)	2
4.10	Application of Mutravirechana and Mutrasangrahana drugs	2
4.11	Application of Pureesha Sthambhana and Virechana drugs	3
4.12	Application of Swedajanana and Stambhana drugs	2
4.13	Sroto Vaigunya and Srotodushti in disease manifestation	2
4.14	Interpreting Srotodushti in systemic disorders	3
4.15	Treatment protocols considering Srotodushti	2
4.16	Role of Laboratory findings in identification of Srotodushti	2
5.1	Analysis of vyadhi avastha and chikitsa.	4
5.2	Treatment based on Ayoga, Samyak Yoga, and Ati Yoga of snehana, rookshana, swedana and stambhana.	4
5.3	Clinical application of the principles of Daivavyapashray, Yuktivyapashray, Satvavjaya and Upshayanupshay chikitsa.	4
5.4	Proficiency in indicating Hetuviparita, Vyadhiviparita and Ubhayarthakari chikitsa	4
5.5	Advise of appropriate Shodhana therapy considering Bahudoshavastha.	5
5.6	Selection of appropriate Shodhana therapy by following patient experiences.	5
5.7	Selection of appropriate Shamana therapies in chronic and acute conditions.	4
5.8	Effect of Samana Aushadhis in disease management.	5
5.9	Advanced research outcomes regarding Mechanism of action of Shodhana therapy and related drugs.	4
6.1	Radiological diagnosis -X-ray (Chest, Bones & Joints)	3

6.2	Radiological diagnosis - Barium meal X-ray, Pyelogram, and Angiogram.	2
6.3	Imageology - CT and MRI scan Analysis.	3
6.4	Imageology - USG and Vascular Doppler Analysis.	2
6.5	Endoscopy - Analysis.	3
6.6	ECG and TMT Analysis	3
6.7	EEG and EMG Analysis	2
6.8	NCV, Neuropathy Analyser and BMD Analysis	3
6.9	PFT and CASA Analysis.	3
6.10	Nadi Pariksha - Analysis.	2
7.1	Perform infusion therapy and interpret the changes in signs and symptoms before and after infusion therapy.	3
7.2	Demonstrate Ryle's tube insertion.	3
7.3	Perform catheterization in both male and female patients.	3
7.4	Proficiency in the endotracheal intubation procedure.	3
7.5	Analysis on gastric lavage.	3
7.6	Perform traction in different clinical conditions.	2
7.7	Proficiency in performing paracentesis in ascites patients.	3
7.8	Perform and interpret USG guided tapping.	2
7.9	Performing Thoracentesis in pleural effusion.	3
7.10	Performing Water seal drainage	2
7.11	Proficiency in the procedure of Lumbar Puncture	2

7.12	Rationale of advising haemodialysis and peritoneal dialysis.	2
7.13	Recent advances in dialysis technology and dietary guidelines for dialysis patients.	2
7.14	Need for admission in ICU setting	3
7.15	Critical care management	3

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Paper	Theory	Practical	Total
AYPG-AB-KC	1	100	200	300

6 B : Scheme of Assessment (Formative and Summative Assessment)

Credit frame work

AYPG-AB-KC consists of 7 modules totaling 16 credits, which correspond to 480 Notional Learning Hours. Each credit comprises 30 Hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Formative Assessment : Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.
Summative Assessment: Summative Assessment (University examination) will be carried out at the end of Semester II.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP =d* f/c*e*100
M1. Hospital etiquette	1	30		25		
M2. Rogi Pareeksha	2	60		50		
M3. Aushadhi sevana kala	2	60		50		
M4. Applications of Chikitsa sutra	3	90		75		
M5. Chikitsa Bheda	3	90		75		
M6. Basic knowledge of diagnostic procedures, its principles and applicability in practice	2	60		50		
M7. Basic knowledge about medical procedures, handling skills and applicability in practice	3	90		75		
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

A S.No	B Module number and Name	C MGP
1	M1.Hospital etiquette	C1
2	M2.Rogi Pareeksha	C2
3	M3.Aushadhi sevana kala	C3
4	M4.Applications of Chikitsa sutra	C4
5	M5.Chikitsa Bheda	C5
6	M6.Basic knowledge of diagnostic procedures, its principles and applicability in practice	C6
7	M7.Basic knowledge about medical procedures, handling skills and applicability in practice	C7
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5 +C6+C7) / Number of modules(7)

S. No	Evaluation Methods
1.	Method explained in the Assessment of the module or similar to the objectives of the module.

6 E : Question Paper Pattern

MD/MS Ayurveda Examination
AYPG-AB-KC
Sem II

Time: 3 Hours ,**Maximum Marks:** 100
INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
(M-1)Hospital etiquette (Marks: Range 5-15)				
1	**(U-1)** Teamwork Dynamics in Hospital, leadership and conflict management, Emergency colour codes used in hospital	No	Yes	Yes
2	**(U-2)** Handling vulnerable patients	No	Yes	Yes
3	**(U-3)** BLS (Basic Life Support), ACLS (Advanced Cardiac Life Support)	No	Yes	Yes
(M-2)Rogi Pareeksha (Marks: Range 5-20)				
1	**(U-1)** Essential clinical surface anatomy	No	Yes	Yes
2	**(U-2)** History taking	Yes	No	Yes
3	**(U-3)** Determine the Nidana (etiological factors) based on history taking for nidana parivarjana as a chikitsa	No	Yes	Yes
4	**(U-4)** Comprehend the Rogi Bala Pariksha (Assessment of patient's strength) on the basis of	No	Yes	Yes
(M-3)Aushadhi sevana kala (Marks: Range 5-20)				
1	**(U-1)** Aushadhi sevana kala, applications in present practice	Yes	Yes	Yes
2	**(U-2)** Prescription writing skills	No	Yes	Yes
3	**(U-3)** Medical Records and Hospital management software	No	Yes	Yes
(M-4)Applications of Chikitsa sutra (Marks: Range 5-20)				
1	**(U-1)** Samprapti vinashana as a chikitsa & Doshopakarama	Yes	Yes	Yes
2	**(U-2)** Leena Dosha, Dhatu Upadhatu pradosha/dushti, Indriya Pradoshaja Vikara, Swabhavika Roga Chikitsa	Yes	Yes	Yes
3	**(U-3)** Mala Vriddhi Kshaya Chikitsa	No	Yes	Yes
4	**(U-4)** Srotodushti Chikitsa	Yes	Yes	Yes
(M-5)Chikitsa Bheda (Marks: Range 5-20)				
1	**(U-1)** Santarpana & Apatarpana	Yes	Yes	Yes
2	**(U-2)** Shodhana and Shamana	Yes	Yes	Yes
(M-6)Basic knowledge of diagnostic procedures, its principles and applicability in practice (Marks: Range 5-20)				
1	**(U-1)** Imaging tests	Yes	Yes	Yes
2	**(U-2)** Endoscopy	No	Yes	No
3	**(U-3)** Electrogram	No	Yes	Yes

4	**(U-4)** Other diagnostic procedures	No	Yes	Yes
(M-7)Basic knowledge about medical procedures, handling skills and applicability in practice (Marks: Range 5-20)				
1	**(U-1)** Basic medical procedures	No	Yes	Yes
2	**(U-2)** Critical/Advanced medical procedures	Yes	Yes	Yes
3	**(U-3)** Handling ICU instruments	No	Yes	Yes

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

Instructions for the paper setting.

1. 100 marks question paper shall contain:-
   - Application Based Question: 1 No (carries 20 marks)
   - Short Answer Questions: 8 Nos (each question carries 05 marks)
   - Long Answer Questions: 4 Nos (each question carries 10 marks)
2. Questions should be drawn based on the table 6F.
3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.
4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated “NO”.
5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.
6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.
7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.
8. Use the Blueprint provided in 6G or similar Blueprint created based on instructions 1 to 7

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	Long case or procedure/ major practical 1. Long case • Patient profile, Main complaints, Associated complaints, History of present illness, Past medical/surgical history, Family history, personal history etc. • Detailed general physical examination and systemic examination • Provisional diagnosis, Differential diagnosis • Diagnostic workup including laboratory investigations (Haematological, Radiological, etc.) • Roga -rogi pareeksha and Guna vikalpa samprapti • Final diagnosis and prognosis • Treatment plan including diet advice relevant to the given case • Record all the above in the given answer paper. 2. Procedure/ major practical • Preprocedure preparation - Indication, Contraindication, Patient identification and consent, Procedure planning • Aseptic technique and infection control • Step-by-step execution • Monitoring during procedure • Post-procedure care • Disposal and cleaning • Documentation • Note: Any major procedure from module 7 can be chosen as per the availability in IPD at the time of exams, and commonly used procedures may include - Central line insertion, Ascitic/Pleural fluid tap, Nasogastric tube insertion, etc.	80
2	Short case or procedure/minor practical or spotters 1. Short case • Patient profile, Main complaints, Associated complaints, Brief history of present illness, personal history, with family history • Concerned system examination in brief • Differential diagnosis - just mention the names of conditions • Relevant investigations required and • Final diagnosis 2. Minor procedure/practical	60

	• IV cannulation • Catheterisation (male/female) • Ryle's tube aspiration/feeding 3. Spotters • X-ray film interpretation • ECG interpretation • CT scan film interpretation • Instruments/Catheters/Needles identification, etc. • Spot diagnosis of cases/ case scenario, images of clinical conditions like twak roga. • ABG, CBC, LFT, culture & sensitivity	
3	Viva (20 x 2 Examiners=40 Marks) • Chikitsta sutra and different principles • Approach to certain clinical conditions • Differential diagnosis • Commonly prescribed formulations with their major ingredients and indications along with Aushadha sevana kala • Diagnostic workup in given case scenarios	40
4	Logbook (activity record)	10
5	Practical/ Clinical record • Case record - minimum of 20 cases • Cases chosen should be related all the modules i.e. atleast one to two cases should be from each module • Properly acknowledged and signed by the concerned treating physician of the case recorded.	10
Total Marks		**200**

Reference Books/ Resources

12_Kayachikitsa

Click here to access References and Resources

Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		
		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		
		LRI	Lab Report Interpretation		

		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		
		DSN	Dissection		
		PSN	Prosection		

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