

Curriculum for MD/ MS Ayurveda
(PRESCRIBED BY NCISM)

अभ्यासात्प्राप्यते दृष्टिः कर्मसिद्धिप्रकाशिनी ।

Semester III-VI
Panchakarma
(Procedural Management)
(SUBJECT CODE : AYPG-PK)

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



आयुषे सर्वलोकानाम्



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

Preface

Panchakarma, the cornerstone of Ayurvedic therapeutic interventions, embodies the classical science of detoxification, purification, and rejuvenation. With its holistic approach to health management, it addresses both prevention and cure, making it highly relevant in managing lifestyle disorders, chronic diseases, and promoting long-term wellness. The postgraduate curriculum in Panchakarma is structured to build a strong theoretical and clinical foundation, enabling scholars to deeply understand the philosophy and practical aspects of the five principal karmas—Vamana, Virechana, Basti, Nasya, and Raktamokshana—along with preparatory and post-procedural care.

Through a blend of textual study and clinical immersion, students learn to assess patients, determine therapeutic eligibility, interpret doshic imbalances, and plan individualized treatment protocols. Procedural competence, understanding of drug interactions during therapy, complication management, and critical analysis of classical references are integral to training. Exposure to applied anatomy, physiology, and therapeutic mechanisms further enhances clinical precision and decision-making. Practical sessions focus on mastering traditional procedures with modern instruments, ensuring safe, evidence-based, and effective treatment outcomes.

Recognizing the expanding global interest in Ayurveda, the curriculum also integrates modules on Panchakarma center management, Ayurvedic wellness spa governance, and quality assurance aligned with NABH standards. Scholars are introduced to the essentials of medical tourism, AYUSH visa facilitation, and global patient engagement, preparing them for leadership roles in both clinical and wellness sectors. This comprehensive training not only develops competent Panchakarma clinicians and educators but also encourages innovation, entrepreneurship, and global outreach in the field of Ayurvedic healthcare.

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We want the 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
Panchakarma (AYPG-PK)

Summary & Credit Framework

Semester III-VI

| Module Number & Name | Credits | Notional Learning Hours | Maximum Marks of assessment of modules (Formative Assessment) |
|---|---------|-------------------------|---|
| Semester No : 3 | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | |
| M 1 Snehana karma, Dravya, Categorization along with related applied anatomy & physiology | 2 | 60 | 50 |
| M 2 Application of Abhyantara Sneha | 2 | 60 | 50 |
| Paper No : 2 (Shodhana Siddhi) | | | |
| M 9 Shodhanartha Sneha before Vamana and Virechana Karma, Principles of Vamana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Vamana Dravya and Indications, Contra indications of Vamana Karma | 2 | 60 | 50 |
| M 10 Vamana Karma-Standard Operative Procedure and Assessment, Mode of action and Recent advances | 2 | 60 | 50 |
| Paper No : 3 (Basti Siddhi) | | | |
| M 17 APPLIED ANATOMY, PHYSIOLOGY AND IMPORTANCE OF BASTI | 1 | 30 | 25 |
| M 18 CLASSIFICATION OF BASTI AND SCREENING OF PATIENT AND DOSE SCHEDULE FOR BASTI | 3 | 90 | 75 |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | |
| M 25 Applied Panchakarma in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa | 2 | 60 | 50 |

| | | | |
|---|---|----|----|
| M 26 Panchakarma treatment in Arsha,Amlapitta,Udawarta,Grahani and Udara | 2 | 60 | 50 |
| Semester No : 4 | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | |
| M 3 Application of Sneha based on Mode of administration and action | 2 | 60 | 50 |
| M 4 Bahya Snehana and their modes of Application | 2 | 60 | 50 |
| Paper No : 2 (Shodhana Siddhi) | | | |
| M 11 Principles of Virechana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Virechana Dravya, Indications and Contra indications of Virechana Karma | 2 | 60 | 50 |
| M 12 Standard Operative Procedure of Virechana | 2 | 60 | 50 |
| Paper No : 3 (Basti Siddhi) | | | |
| M 19 PHARMAKOKINETICS AND PHARMACODYNAMICS OF BASTI DRAVYAS | 1 | 30 | 25 |
| M 20 METHODOLOGY FOR NIRUHA BASTI, ANUVASANA BASTI AND UTTAR BASTI | 3 | 90 | 75 |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | |
| M 27 Applied Panchakarma in selected diseases of Raktadushti | 2 | 60 | 50 |
| M 28 Applied Panchakarma in Sthaulya, Karshya, Prameha & Hridroga | 2 | 60 | 50 |
| Semester No : 5 | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | |
| M 5 Principles of Sagni and Niragni Sweda Practice | 2 | 60 | 50 |
| M 6 Various Modalities, assessment and mode of action of swedana Karma | 2 | 60 | 50 |
| Paper No : 2 (Shodhana Siddhi) | | | |
| M 13 Principles of Nasya Karma, Critical Analysis of Nasya Dravya and Indications, Contra indications of Nasya Karma | 2 | 60 | 50 |
| M 14 Standard Operative Procedure of Nasya karma, NasyaVyapat, Mode of action of Nasya Karma and Recent advances in Nasya Karma | 2 | 60 | 50 |
| Paper No : 3 (Basti Siddhi) | | | |

| | | | |
|--|----|------|------|
| M 21 Contents of Niruha Basti, method of mixing and analysis of prepared Basti | 1 | 30 | 25 |
| M 22 BASTI FORMULATIONS | 3 | 90 | 75 |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | |
| M 29 Applied Panchakarma in selected Vatavyadhi | 3 | 90 | 75 |
| M 30 Applied Panchakarma in Mutrakrichra & Mutraghata | 1 | 30 | 25 |
| Semester No : 6 | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | |
| M 7 Principles and Practice of MarmaChikitsa | 2 | 60 | 50 |
| M 8 Principles and application of Physiotherapy in association with Panchakarma | 2 | 60 | 50 |
| Paper No : 2 (Shodhana Siddhi) | | | |
| M 15 Principles of Raktamokshana,Critical Analysis of Instruments and Dravya used in Raktamokshana | 2 | 60 | 50 |
| M 16 Standard Operative Procedure and Assessment of Raktamokshana Procedure and Recent advances | 2 | 60 | 50 |
| Paper No : 3 (Basti Siddhi) | | | |
| M 23 Handling Emergencies in Panchakarama | 2 | 60 | 50 |
| M 24 Recent Advances in Basti | 2 | 60 | 50 |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | |
| M 31 Applied Panchakarma in Sotha & Amavata | 2 | 60 | 50 |
| M 32 Applied Panchakarma in supportive management of diseases | 2 | 60 | 50 |
| | 64 | 1920 | 1600 |

Credit frame work

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

Important Note: The User Manual MD/MS Ayurveda is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please

note that the contents related to the MSE should be considered authentic. Each paper has 16 credits and each semester covers 16 credits across 4 papers. In case of difficulty and questions regarding the curriculum, write to syllabus24ayu@ncismindia.org

| Credit Analysis Overview | | | | | |
|--|----------------------------|------------------------------|--|------------------------------|----------------|
| Sem/Paper | Paper No 1 | Paper No 2 | Paper No 3 | Paper No 4 | Credits |
| Semester 3 | M-1 2 Crs M-2 2 Crs | M-9 2 Crs M-10 2 Crs | M-17 1 Crs M-18 3 Crs | M-25 2 Crs M-26 2 Crs | 16 |
| Semester 4 | M-4 2 Crs M-3 2 Crs | M-12 2 Crs M-11 2 Crs | M-19 1 Crs M-20 3 Crs | M-27 2 Crs M-28 2 Crs | 16 |
| Semester 5 | M-5 2 Crs M-6 2 Crs | M-13 2 Crs M-14 2 Crs | M-21 1 Crs M-22 3 Crs | M-29 3 Crs M-30 1 Crs | 16 |
| Semester 6 | M-7 2 Crs M-8 2 Crs | M-15 2 Crs M-16 2 Crs | M-23 2 Crs M-24 2 Crs | M-31 2 Crs M-32 2 Crs | 16 |
| Credits | 16 | 16 | 16 | 16 | 64 |
| Semester VI University examination | | | | | |
| Theory | | | Practical* | | |
| Paper | Marks | Total | Practical Heads | Marks | Total |
| Paper -1 | 100 | 400 | Long case or procedure/Major practical as applicable | 100 | 400 |
| | | | Short case or procedure/Minor practical | 50 | |
| Paper -2 | 100 | | Spotters | 50 | |
| | | | Assessing teaching ability | 20 | |
| Paper -3 | 100 | | Assessing presentation skills | 20 | |
| | | | Viva (4 examiners: 20 marks/each examiner) | 80 | |
| Paper -4 | 100 | | Dissertation Viva | 40 | |
| | | | Logbook (Activity record) | 20 | |
| | | Practical/Clinical Record | 20 | | |
| Semester VI University examination – 800 Marks | | | | | |

* Details in 6H table

Course Code and Name of Course

| Course code | Name of Course |
|-------------|--|
| AYPG-PK | Panchakarma (Procedural Management) |

Table 1 : Course learning outcomes and mapped Program learning outcomes

| CO No | A1 Course learning Outcomes (CO) AYPG-PK At the end of the course AYPG-PK, the students should be able to | B1 Course learning Outcomes mapped with program learning outcomes. |
|-------|---|---|
| CO1 | Analyze and apply the core principles of Panchakarma and Upakarma in clinical and wellness practices. | PO1,PO2 |
| CO2 | Illustrate and customize standard operating procedures for Panchakarma, Upakarma, Marma Chikitsa, and physiotherapy based on individual patient needs. | PO1,PO2,PO3 |
| CO3 | Perform Panchakarma and Upakarma procedures, and prepare related formulations with clinical proficiency for both preventive and curative purposes. | PO2,PO3,PO4 |
| CO4 | Design protocol-based interventions for Panchakarma and Upakarma and demonstrate procedural expertise in the management of various diseases and emerging clinical conditions. | PO1,PO2,PO7 |
| CO5 | Identify, diagnose, and manage emergencies associated with Panchakarma and Upakarma procedures. | PO2,PO6,PO8 |
| CO6 | Communicate effectively with all stakeholders, exhibiting leadership qualities, ethical conduct, and compassion in professional practice. | PO3,PO5,PO6,PO8 |
| CO7 | Integrate recent advances and evidence-based approaches into Panchakarma practice through continuous research and scholarly engagement. | PO4,PO5,PO8 |
| CO8 | Practice and advocate Panchakarma therapy by blending traditional knowledge with modern technology and innovation for global outreach and recognition. | PO3,PO5,PO8 |

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

| Paper No : 1 Upakalpaniya Siddhi | | | | | | |
|----------------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| Semester No : 3 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-1 Snehana karma, Dravya, Categorization along with related applied anatomy & physiology Comprehension of SnehanaUpakrama, Snehadravya and Snehopaga, Interpretation of categorization of Sneha; Applied Anatomy and physiology of skin and Integumentary system, veins, arteries, lymphatic vessels along with tvachasharira, sirasharira, dhamanisharira, Srotasasharira in snehana and swedana; Applied Anatomy and physiology of musculoskeletal system, spine, along with Peshisharira, Snayusharira, Kandarasharira, Sandhi sharira, Kalaasharira in snehana and Swedana; Applied Anatomy and physiology of cerebrum, cerebellum, spinal cord and Nervous system;</p> <p>• M 1U 1 Comprehension of Snehana Upakrama, Snehadravya and Snehopaga Dravya</p> <ol style="list-style-type: none"> 1. Discuss the importance of Snehana karma 2. Effects of Snehana Upakrama 3. Dfference between snehana as Poorva Karma vs Pradhana Karma | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|--|--|--|--|--|
| | <p>4. Combined administration of Snehana and Swedana</p> <p>• M 1U 2 Interpretation of categorization of Sneha</p> <ol style="list-style-type: none"> 1. Sthavara - Jangama Sneha 2. Yamaka-Trivrut-Maha Sneha 3. Bahya-Abhyantara Sneha <p>• M 1U 3 Applied Anatomy and Physiology of Skin and Integumentary System, Veins, Arteries, Lymphatic Vessels along with Tvacha Sharira, Sira Shareeram, Dhamani Shareeram, Srotasa Shareeram in Snehana and Swedana</p> <ol style="list-style-type: none"> 1. Applied Anatomy and Physiology of Skin and Integumentary System in Snehana and Swedana <p>• M 1U 4 Applied Anatomy and physiology of musculoskeletal system, spine, along with Sandhi sharira, Peshisharira, Snayusharira, Kandarasharira, Kalaasharira in snehana and Swedana</p> <ol style="list-style-type: none"> 1. Applied Anatomy and Physiology of Musculoskeletal System in Snehana and Swedana. <p>• M 1U 5 Applied Anatomy and Physiology of Cerebrum, Cerebellum, Spinal Cord and Nervous System.</p> <ol style="list-style-type: none"> 1. Applied Anatomy and Physiology of Cerebrum, Cerebellum, Spinal Cord and Nervous System. | | | | | |
|--|---|--|--|--|--|--|

| | | | | | | |
|--|---|---|----|----|----|----|
| | | | | | | |
| | <p>M-2 Application of Abhyantara Sneha Evaluation of types of Sneha based on dosages, Division of Snehana based on Karmukata, Assessment and Application of Shamanartha and Brimhanatha Snehapana, Usage of commonly used Ghritas - Ingredients, Dosages, Indications, Way of Use (Abhyanga, Pana, Basti, Nasya). Applied aspect of RukshanaUpakrama Prior to Snehana. Udvartana, Udgharshana, Abhyantara Rukshana.</p> <p>• M 2U 1 Evaluation of types of Sneha based on dosages</p> <ol style="list-style-type: none"> 1. Categorisation of Sneha 2. Analysis of categorization 3. Discrete indications of type of every Snehamatra 4. Methodology to measure Agnibala and Jaranabala 5. Hriseeyasimatra <p>• M 2U 2 Division of Snehana based on Karmukata</p> <ol style="list-style-type: none"> 1. Principles behind categorisation 2. Difference between application of the types 3. Rationale behind limits of 3 to 7 days, 4. Pachana Karma 5. Application of Shamanartha and Brimhanartha Snehapana <p>• M 2U 3 Usage of commonly used Ghritas</p> <ol style="list-style-type: none"> 1. Ingredients 2. Dosages 3. Indications | | | | | |
| | | 2 | 10 | 20 | 30 | 60 |

| | <p>4. Route of Administration (Abhyanga, Pana, Basti, Nasya)</p> <p>• M 2U 4 Applied aspect of Rukshana Upakrama Prior to Snehana.</p> <p>Rukshana Upakrama Prior to Snehana.</p> <ol style="list-style-type: none"> 1. Udvardana 2. Udgharshana 3. Abhyantara Rukshana | | | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | 4 | 20 | 40 | 60 | 120 |
| Semester No : 4 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-3 Application of Sneha based on Mode of administration and action</p> <p>Snehana Modalities –Accha Sneha and Pravicharana, administration of Sadya Sneha, Avapeedaka Sneha, Uttara Bhaktika Sneha, Applied physiology and biochemistry of lipids and fatty acids related to Abhyantara Sneha, Mode of action of Abhyantara Sneha based on absorption, digestion and metabolism of fats, Analysis of effect of fat on gut microbiota. Analysis of variety of Milk and milk products, refined oil and each snehadravya chemical compositions Analysis of saindhav and its chemical compositions</p> | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | <p>• M 3U 1 Administration of Accha Sneha and Pravicharana</p> <ol style="list-style-type: none"> 1. Importance, utility, superiority of acchasneha 2. Difference between Accha Sneha and siddha Sneha 3. Concept, necessity and types of Pravicharana Sneha <p>• M 3U 2 Administration of Sadya Sneha, Avapeedaka Sneha, Uttara Bhaktika Sneha</p> <ol style="list-style-type: none"> 1. Concept, necessity, formulations and methodology of application, Dose, timings, duration of Sadyasneha 2. Concept, necessity, formulations and methodology of application, Dose, timings, duration of Avapeedaka Sneha 3. Concept, necessity, formulations and methodology of application, Dose, timings, duration of Uttara Bhaktika Sneha <p>• M 3U 3 Applied physiology and biochemistry of lipids and fatty acids related to Abhyantara Sneha</p> <ol style="list-style-type: none"> 1. Applied physiology and biochemistry of lipids and fatty acids related to Abhyantara Sneha <p>• M 3U 4 Mode of action of Abhyantara Sneha</p> <ol style="list-style-type: none"> 1. Interpretation of Absorption, digestion and metabolism of fats related to Abhyantara Sneha. | | | | | |
|--|--|--|--|--|--|--|

| | | | | | | |
|--|---|---|----|----|----|----|
| | 2. Analysis of effect of fat on gut microbiota. | | | | | |
| | <p>M-4 Bahya Snehana and their modes of Application Application of Bahyasnehana and Massage techniques, Moordhni Tailam and other bahya Snehana modalities; Application of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara; Their Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya. Applications of commonly used Tailas – Ingredients, Indications, Way of Use (Pana, Abhyanga, Nasya, Basti), Applied part of Chemical penetration enhancers (CPEs) in connection with mode of action of Bahya Snehana.</p> <p>• M 4U 1 Application of Bahyasnehana and Massage techniques</p> <ol style="list-style-type: none"> 1. Utility and Importance of Bahyasnehana 2. Methodology of Abhyanga, Mardana, Unmardana, Padaghata, Samvahana, Utsadana. 3. Different Massage Techniques: Swedish Massage, Thai Massage, Sports Massage, Deep Tissue Massage, Shiatsu Massage. <p>• M 4U 2 Moordhni Tailam and other Bahya Snehana modalities</p> <ol style="list-style-type: none"> 1. Application Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya and mode of action, of Shiro-Abhyanga, Shirodhara, ShiroPichu and ShiroBasti. 2. Application Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya and mode of action, of | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|--|---|----|----|----|-----|
| | <p>Urovasthi, Shiro Upanaha, Shiro Lepa (Talapotchil), Talam, Tarpana, Taila Parishek, Sneha Avagahana, Karna Poorana.</p> <p>• M 4U 3 Application of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara</p> <p>1. Application Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya and mode of action, of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara.</p> <p>• M 4U 4 Applications of commonly used Tailas</p> <p>1. Applications of commonly used Tailas – ingredients, indications, dose route of administration (Pana, Abhyanga, Nasya, Basti).</p> <p>• M 4U 5 Applied part of Chemical penetration enhancers (CPEs), commonly used fatty esters, fatty acids from dermatological formulations in connection with mode of action of Bahya Snehana.</p> <p>1. Applied aspects of Chemical penetration enhancers (CPEs), commonly used fatty esters, fatty acids from dermatological formulations in connection with mode of action of Bahya Snehana.</p> | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |

| Semester No : 5 | | | | | | |
|------------------------|--|-------------------------------|-------------------------|-----------------------------|--|-------------|
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-5 Principles of Sagni and Niragni Sweda Practice Swedana Upakrama, Categorization of Swedana, Analysis of Swedopaga Dravya and Swedana drugs, Advancement in Instruments used in current era</p> <ul style="list-style-type: none"> • M 5U 1 Essentialsof Swedana Upakrama <ol style="list-style-type: none"> 1. Importance and Utility of Swedana 2. Based on Swedana Drvya properties effect of swedana 3. Application of Swedana as Poorva Karma and pradhana karma, 4. Role of Swedana in shakha to koshta gati of Dosha. • M 5U 2 Categorisation of Swedana <ol style="list-style-type: none"> 1. Interpretation of difference between Sagni-Niragni, Snigdha-Ruksha, Ekanga-Sarvanga, Mridu-Madhyama-Teekshna 2. Integration of four types of sweda into thirteen types of sweda. 3. Indications, Contra indications of 10 types of Niragni Sweda | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|--|---|----|----|----|----|
| | <ul style="list-style-type: none"> • M 5U 3 Exploration of types of Classical Swedana Indications, Contra indications, Reason behind variations in Vishrama Kala before Vamana and Virechana • M 5U 4 Analysis of Swedopaga dravya and Swedana drugs <ol style="list-style-type: none"> 1. Properties, pharmaco kinetics, pharmacodynamics of Swedopaga dravya 2. Properties of Swedana Dravyas used in Sagni Sweda. • M 5U 5 Advancement in Instruments used for heating in current era <ol style="list-style-type: none"> 1. Utility and technology behind heating pads, souna bath, Nadi Swedana yantra. | | | | | |
| | <p>M-6 Various Modalitites, assessment and mode of action of swedana Karma Methodology of different modalities of SwedanaUpakrama, Assessment of Swedana karma, Understanding of Swedana from modern perspective</p> <ul style="list-style-type: none"> • M 6U 1 Methodology of different modalities of Swedana Karma <ol style="list-style-type: none"> 1. Indications, Contra indications, Ingredients, Methodology, Instructions to patient and therapists, Application of procedure, Observations during procedure, Precautions by physician, | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|---|----|----|----|-----|
| | <p>Benefits and Probable Mode of Action of different modalities of Swedana Upakrama</p> <p>• M 6U 2 Assessment of Swedana Karma</p> <p>1. Assessment of samyak Swedana, Atiyoga, Ayoga and complications of Swedana Karma.</p> <p>• M 6U 3 Understanding of Swedana from modern perspective</p> <p>1. Mode of action of Swedana Karma</p> | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |

Semester No : 6

| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-7 Principles and Practice of MarmaChikitsa Application of Marma Chikitsa in various disorders</p> <p>• M 7U 1 Marmasharira and fundamentals of Marma Chikitsa.</p> <p>1. Knowledge of Marmasharira and fundamentals of Marma Chikitsa.</p> | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|---|----|----|----|----|
| | <p>2. Varmam points and various techniques in practice for Varmam/ Marma stimulation.</p> <p>• M 7U 2 Abhyangam/ Mardhana vidhi, Massage techniques used in Marma Chikitsa</p> <p>1. Information of Abhyangam / Mardhanavidhi, Massage techniques used in Marma Chikitsa</p> <p>• M 7U 3 Management of various disease by Varmam/ Marma Chikitsa, utility of Marma Chikitsa and Sports medicine</p> <p>1. Knowledge of Management of various disease by Varmam/ Marma Chikitsa 2. Utility of Marma Chikitsa and Sports medicine</p> <p>• M 7U 4 Pharmacodynamics and pharmacokinetics of drugs and formulations used in Marma Chikitsa</p> <p>1. Information on Pharmacodynamics and pharmacokinetics of drugs and formulations used in Marma Chikitsa</p> | | | | | |
| | <p>M-8 Principles and application of Physiotherapy in association with Panchakarma Fundamental principles Physiotherapy, Biomechanics of human movements and Kinesiology. Physiotherapy in the Context of Panchakarma. Evidence-Based Practice in Panchakarma and Physiotherapy, Principles of Therapeutic Exercises. Range of Motion, Mobilization/Manipulation, Strengthening, Stretching</p> | 2 | 10 | 20 | 30 | 60 |

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| | <p>exercises,clinical Application ofElectrotherapy,Heat and cold therapies, Electromagnetic Wave Therapy, Radiation Therapies., Activities of Daily Life for Rehabilitation, Self-help Devices, Splints.</p> <ul style="list-style-type: none"> • M 8U 1 Principles of Physiotherapy practice <ol style="list-style-type: none"> 1. Definition and scope of practice of Physiotherapy 2. Biomechanics of human movements and Kinesiology. • M 8U 2 Applied Science of Exercise and Technique <ol style="list-style-type: none"> 1. Principles of Therapeutic Exercises 2. Range of Motion 3. Principles of Mobilization/ Manipulation. 4. Stretching and Strengthening exercises. • M 8U 3 Clinical Application of various modalities of physiotherapy <ol style="list-style-type: none"> 1. Electrotherapy 2. Heat and cold therapies 3. Electromagnetic wave therapy 4. Radiation therapies. • M 8U 4 Rehabilitation and its principles <ol style="list-style-type: none"> 1. Concept of rehabilitation and Rehabilitation team 2. Activities of Daily Life for Rehabilitation and need of Self-help devices 3. Splints. | | | | | |
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| | | 4 | 20 | 40 | 60 | 120 |
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| | | 16 | 80 | 160 | 240 | 480 |
| Paper No : 2 Shodhana Siddhi | | | | | | |
| Semester No : 3 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-9 Shodhanartha Sneha before Vamana and Virechana Karma, Principles of Vamana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Vamana Dravya and Indications, Contra indications of Vamana Karma</p> <p>Principles of Vamana Karma. Applied anatomy and physiology of Gastro Intestinal system in relation to Vamana Karma, indications and contraindications of Vamana Karma.</p> <p>• M 9U 1 Snehapana Procedure before Vamana Karma</p> <ol style="list-style-type: none"> 1. Importance of Shodhanartha Sneha and swedana 2. Dose fixation and Importance of Anupana, Importance of Vishrama Kala and diet during Vishrama Kala 3. Assessment of Sneha Jeeryamana, Jeerna Lakshana 4. Assessment of Samyak, Ayoga, Atiyoga Lakshana | 2 | 10 | 20 | 30 | 60 |

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| | <p>5. Sneha Vyapat and management,</p> <p>• M 9U 2 Introduction to Vamana Karma</p> <ol style="list-style-type: none"> 1. Concept and Treatment principles of Vamana Karma with relation to prevention, promotion and curative aspects. 2. Clinical importance of Classification of Vamana Karma: Mrudu, Madhyama, Teekshna Vamana <p>• M 9U 3 Applied Anatomy and Physiology of Gastro Intestinal System in relation to Vamana Karma</p> <ol style="list-style-type: none"> 1. Anatomy and Physiology of Gastro-Intestinal Tract and its clinical application 2. Functions of Accessory organs in relation to Vamana Karma and its clinical application <p>• M 9U 4 Analysis of Vamaka, Vamanopaga Dravya Guna Karma and its clinical application</p> <ol style="list-style-type: none"> 1. Vamana and Vamanopaga Dravya. 2. Chemical composition and their clinical utility 3. Vamana Yoga available in Charaka Kalpa Sthana 4. Preparations of Vamana Yoga, their ingredients, indications and dosage of Madanaphala Yoga, Jeemutaka Yoga, Ikshvaku Yoga, Dhamargava Yoga, Kutaja Yoga, Krutavedhana Yoga and their clinical application. <p>• M 9U 5 Indications and Contraindications of Vamana karma with rationale</p> | | | | | |
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| | <p>1. Indications of Vamana Karma based on different Avastha of Dosha and Roga.</p> <ul style="list-style-type: none"> ▪ Gastro Intestinal System: <p>Nava Jwara, Ajeerna, Mandagni, Visha peeta, Visuchika, Alasaka, Hrullasa, Mukha Praseka, Avipaka, Aruchi, Arsha, Atisara, Mukha paka, Pandu, Adhoga Raktapitta, Urdhwaga Amlapitta</p> <ul style="list-style-type: none"> ○ Respiratory system: <p>Shwasa, Kasa, Rajayakshma, Peenasa, Kaphaja Shiroroga</p> <ul style="list-style-type: none"> ○ Central nervous system: <p>Apasmara, Unmada, Chitta Vibhramsha, Ardita</p> <ul style="list-style-type: none"> ○ Integumentary system: <p>Kitibha, Ekakusta, Vicharchika, Shwitra Sheetapitta Khalitya, Palitya, Mukhadushika, Granthi, Visarpa</p> <ul style="list-style-type: none"> ○ Endocrinal system: <p>Hypothyroidism, Hyperthyroidism, Sthoulya, Prameha</p> <ul style="list-style-type: none"> ○ Reproductive system: <p>Polycystic Ovarian Disease, Infertility, Stanya Dusti, Yoni Vyapat</p> <ul style="list-style-type: none"> ○ Miscellaneous: <p>Shleepada, Apachi, Hrudroga</p> | | | | |
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| | <p>○ Indication of Vamana in different Clinical Conditions-</p> <p>Avastha and Sthana of dosha, Age Wise and who are on concomitant medications for any systemic diseases, 2. Contra-Indications of Vamana Karma based on avastha of dosha and roga i. Gastro Intestinal system: Krimi Kosta, Urdwaga Raktapitta, Pleeha, Urdhwa Vata, Udara, Gulma, Arsha, Parshwaruk ii. Respiratory system: Rajayakshma, Nava Pratishyaya iii. Musculo-skeletal system: Vatavyadhi iv. Miscellaneous: Hrudroga, Mutraghata, Baala, Vriddha, Kshudhita, Pipasita v. Contra Indication of Vamana in different Clinical Conditions</p> <p>• M 9U 6 Assessment of Kaphotklesha Lakshana and Clinical Interpretation of Concept of Sadhyo Vamana, Ghreya Vamana and Practice of Vasantika Vamana</p> <ol style="list-style-type: none"> 1. Lakshana before Vamana Karma 2. Clinical application of Sadhyo Vamana and Ghreya Vamana 3. Importance of Vasantika Vamana | | | | | |
| | <p>M-10 Vamana Karma-Standard Operative Procedure and Assessment, Mode of action and Recent advances</p> <p>The module explains about the procedure and assessment criteria of Vamana, complications occurring due to Vamana Karma and their management, Probable mode of action and recent advances, scope of Vamana Karma</p> | 2 | 10 | 20 | 30 | 60 |

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| | <p>• M 10U 1 Protocol of Vamana Procedure, Assessment of Vamana Vega and Upavega in Dosha Nirharana</p> <ol style="list-style-type: none"> 1. Purva karma, Pradhana Karma and Paschat Karma of Vamana Karma 2. Utility of Akantapaana during Vamana procedure 3. Assessment of Vega and Upavega 4. Assessment of Dosha nirharana <p>• M 10U 2 Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma</p> <ol style="list-style-type: none"> 1. Assessment of Samyak, Ayoga and Atiyoga 2. Assessment of Laingiki, Vegiki, Maniki and Antiki Lakshana 3. Identification of Pravara, Madhyama and Avara Shudhi 4. Development of a protocol to handle the vomitus hygienically <p>• M 10U 3 Scientific explanation of Samsarjana Krama, Tarpana Vidhi, Rasa Samsarjana Krama</p> <ol style="list-style-type: none"> 1. Importance and scientific understanding of Samsarjana Krama 2. Scientific explanation of Samsarjana Krama, Tarpana Vidhi, Rasa Samsarjana Krama 3. Importance of different dietic methods used in different clinical conditions. 4. Serving dose fixation of Peyadi kalpa based on Rogi Bala and Dosha Nirharana | | | | |
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| | <ul style="list-style-type: none"> • M 10U 4 Analysis of Complications of Vamana Karma and their management <ol style="list-style-type: none"> 1. Complications during Vamana Karma with reasons 2. Management of Complications • M 10U 5 Mode of Action of Vamana Karma with its Pharmacodynamics, Physiology of Vomiting <ol style="list-style-type: none"> 1. Vamana Karmukata 2. Physiology of Vomiting 3. Probable mode of action and its pharmacodynamics in each Vamaka Dravya used • M 10U 6 Recent advancement and research work <ol style="list-style-type: none"> 1. Researches on Vamana Karma and instruments for Vamana Karma 2. Research activities by using biochemical analysis 3. Sandardisation and innovative approach in Vamana Karma and instruments | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |

Semester No : 4

| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
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| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
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| <p>M-11 Principles of Virechana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Virechana Dravya, Indications and Contra indications of Virechana Karma</p> <p>This module explains about the principles of Virechana Karma and its clinical utility, Applied anatomy and Physiology of Gastro Intestinal System in relation to virechana karma, Analysis of Virechana Dravya, Indications & contraindications of Virechana Karma</p> <p>• M 11U 1 Concept and treatment principles of Virechana Karma with relation to preventive, promotive and curative aspect Clinical importance of Different Classifications of Virechana and Laxatives</p> <p>1.Principles of Virechana Karma2.Classification of Virechana Karma</p> <p>• M 11U 2 Applied Anatomy and Physiology of Gastro Intestinal System in relation to Virechana Karma</p> <p>1. Introduction to the Gastro Intestinal System, Anatomy of Upper, Lower GI tract and accessory organs of digestion. 2. Overview of digestive process, Physiology of Upper, Lower GI tract and functions of accessory organs of digestion.</p> <p>• M 11U 3 Analysis of Virechana, Virechanopaga Dravya Guna Karma Virechana yogas and its clinical application</p> <p>1. Virechana and Virechanopaga Dravya.2. Chemical composition and their clinical utility3. Virechana yoga available in Charaka Kalpa Sthana,4. Preparations of different virechana yoga, their ingredients, indications, dosage of Trivrit Lehya, Vyoshadi Gulika, Abhayadi</p> | 2 | 10 | 20 | 30 | 60 |
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| | <p>Modaka, Manibhadra Guda, Kalyanaka Guda, Ichabhedhi Rasa, Danti Lehya, Hareetaki Churna, Avipattikara Churna, Triphala Churna, Aragwadha Churna, Katuki Churna, Hingutriguna Taila, Gandharvahastadi Taila, Nimbamrutadi Eranda Taila, Sukumara Eranda Taila.</p> <p>• M 11U 4 Indications and Contraindications of Virechana karma with rationale</p> <p>1. Indications of Virechana Karma based on Avastha of Dosha and Roga</p> <p>i. Gastro Intestinal system: Jwara, Pandu, Kamala, Haleemaka, Parshwashula, Gulma, Pleeha, Bhgandara, Arshas, Krimikosta, Garavisha, Visuchika, Udara, Arochaka, Vibandha, Anaha, Udavarta, Chardi, Urdhwaga Raktapitta, Adhoga Amlapitta</p> <p>ii. Respiratory system: Shwasa, Kasa, Urdhwaga Rakta Pitta</p> <p>iii. Central nervous system: Unamada, Apasmara, Pakshaghata, Ardhavabhedaka</p> <p>iv. Integumentary system: Kitibha, Ekakusta, Dadru, Vicharchika, Vipadika, Shwitra, Sheetapitta, Vidradhi, Granthi, Dusta Vrina, Visrapa, Vyanga, Neelika</p> <p>v. Musculo-skeletal system: Vatarakta, Amavata, Gridrasi</p> <p>vi. Endocrinal system: Hypothyroidism, Sthoulya, Prameha</p> <p>vii. Reproductive system: Infertility, Yoni Vyapat, Reto dosha</p> <p>viii. Miscellaneous: Hrudroga, Siraja granthi, Vruddhi, Shotha, Madatyaya</p> <p>ix. Indication of Virechana in different Clinical Conditions and age factor.</p> <p>2. Contra Indications of Virechana Karma based on avastha of dosha and roga</p> <p>i. Gastro Intestinal system: Nava Jwara, Alpagni, Adhoga Raktapitta, Atisara, Nava Pratishtyaya. Ksata guda, Mukta Nala, Madatyaya</p> <p>ii. Reproductive system: Garbhini, Nava prasuta</p> <p>iii. Contra Indication of Virechana in different Clinical Conditions</p> | | | | | |
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| | <ul style="list-style-type: none"> • M 11U 5 clinical application of Koshta Shodhana, Nitya Virechana and Importance of Sharad Virechana 1.Lakshana before Virechana Karma 2.Clinical application of Koshta Shodhana, Nitya Virechana 3.Importance of Sharad Virechana | | | | | |
| | <p>M-12 Standard Operative Procedure of Virechana This module explains about the procedure and assessment criteria of virechana karma, complications occurring due to Virechana and their management, Probable mode of action and recent advances, the scope of Virechana Karma</p> <ul style="list-style-type: none"> • M 12U 1 Protocol of Virechana Procedure, Assessment of Virechana Vega and Upavega in dosha nirharana 1.Purva karma, Pradhana Karma and Paschat Karma of Virechana Karma2. Assessment of Vega and Upavega3. Assessment of dosha nirharana • M 12U 2 Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga of Virechana Karma 1. Assessment of Samyak Yoga2. Assessment of Ayoga and Atiyoga3. Utility of assessment criteria's in clinical practice • M 12U 3 Assessment of Laingiki, Vaigiki, Manaki and Antiki Shuddhi of Virechana Karma 1. Assessment of Laingiki, Vegiki, Maniki and Antiki shuddhi2. Identify Pravara, Madhyama and Avara Shuddhi3. Utility of assessment of shuddhi in clinical practice • M 12U 4 Analysis of Complications of Virechana Karma and their management | 2 | 10 | 20 | 30 | 60 |

| | <p>1. Complications during Virechana Karma with suitable reasons 2. Management of complications</p> <p>• M 12U 5 Mode of Action of Virechana Karma with its Pharmacodynamics, Physiology of Defecation 1. Virechana Karmukata 2. Physiology of Defecation 3. Probable mode of action and its pharmacodynamics in each Virechaka Dravya used</p> <p>• M 12U 6 Recent advancement and research work 1. Research on virechana karma and instruments for Virechana Karma 2. Research activities by using biochemical analysis 3. Standardization and innovative approach in Virechana Karma and instruments</p> | | | | | |
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| | | 4 | 20 | 40 | 60 | 120 |
| Semester No : 5 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-13 Principles of Nasya Karma, Critical Analysis of Nasya Dravya and Indications, Contra indications of Nasya Karma Module explains about principle and clinical utility of Nasya Karma, Analysis of Nasya Dravya, Indication and Contra indication of Nasya Karma</p> <p>• M 13U 1 Concept and treatment principles of Nasya Karma and Classifications of Nasya</p> | 2 | 10 | 20 | 30 | 60 |

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| | <ol style="list-style-type: none"> 1. Concept and treatment principles of Nasya Karma, 2. Various Classifications and sub-classifications of Nasya 3. Utility of different types of Nasya <p>• M 13U 2 Applied Anatomy and Physiology Head and Neck relevant to Nasya Karma</p> <ol style="list-style-type: none"> 1. Applied Anatomy and Physiology of Head and Neck relevant to Nasya Karma <p>• M 13U 3 Nasya Dravya and Clinical Interpretation</p> <ol style="list-style-type: none"> 1. Analysis of Nasya Dravya Guna Karma (drugs of Shirovirechanopaga, Shirovirechana and Sangyasthapaka Mahakashaya) and their Clinical interpretation 2. Pharmacodynamics and Pharmacokinetics of Shirovirechanopaga, Shirovirechana and Sangyasthapaka drugs <p>• M 13U 4 Nasya Yoga and their clinical utility</p> <ol style="list-style-type: none"> 1. Nasya Yoga with ingredients, indications and clinical utility of Shadbindu Taila, Anu taila, Ksheerabala Taila, Karpasastyadi Taila, Masha Taila, Prasarini Taila, Nimba Taila, Bramhi Ghrita, Ghritamanda, Jeemutaka Swarasa, Saindhavadi Yoga, Guda-Nagar Nasya, Kumkumadi Nasya, Mashabaladi Kwath Nasya, Madhukasaradi Nasya, Trikatu, Katphala Churna, Haridradi Dhuma Varti, Dashamula Varti | | | | | |
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| | <p>• M 13U 5 Indications of Nasya Karma based on Avastha of Dosha and Roga</p> <p>1. Indications of Nasya Karma based on Avastha of Dosha and Roga i. Gastro Intestinal system: Kamala, Arochaka ii. Respiratory system: Peenasa, Hikka, Nasagata Raktapitta, Shwasa iii. Musculoskeletal system: Manya Stambha, Shiro Stambha, Skanda Roga, Amsa Shoola, Vishwachi, Apabahuka iv. Central nervous system: Vak Graha, Shirashoola, Swara Bheda, Swara Kshaya, Ardita, Apatanaka, Apatantraka, Hanugraha, Unmada, Apasmara, Ardhavabhedaka, Gadgada, Suryavarta, Pakshaghata, v. Integumentary system: Kusta, Nilika, Vyanga, Dadru, Kotha, vi. Endocrinal system: Galaganda, Sthoulya vii. Reproductive system: PCOD viii. Miscellaneous: Shukra Roga, Akshi shola, Gala Shundika, Vartma Roga, Timira, Adhimanta, Nidranasha, Atinidra, Kruchravabhoda, Danta-Kesha-Smashru Pata, Karna Kshweda, Karna Shoola, Akala Vali Palitya, Asya Shosha, Nasa Shosha, Badhirya, Mano Roga, Visha Vikara, Krimi, Sanyasa.2. Contra Indications of Nasya Karma based on Avastha of Dosha and Roga i. Gastro Intestinal system: Ajeerna, Nava jwara, ii. Respiratory system: Nava Pratishyaya, Shwasa, Kasa, Dusta peenasa iii. Reproductive system: Garbhini, Sutika, iv. Miscellaneous: Trishna, Mada, Shrama, Mada, Murcha, Shastra Hata, Shokabhitapta, Gara</p> | | | | | |
| | <p>M-14 Standard Operative Procedure of Nasya karma, NasyaVyapat, Mode of action of Nasya Karma and Recent advances in Nasya Karma</p> <p>Demonstration of Nasya Procedure, assessment of Ayoga, Atiyoga, Samyak Lakshana, Management of Nasya Vyapat and innovations of instruments and standardisation of Nasya</p> | 2 | 10 | 20 | 30 | 60 |

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| | <p>instruments</p> <ul style="list-style-type: none"> • M 14U 1 Protocol of Nasya Procedure Preoperative, Operative & Postoperative Procedure <ol style="list-style-type: none"> 1. Protocol of Nasya Procedure-Pre procedure, Procedure and Post Procedure, 2. Assessment and interpretation of different types of Nasya Kala, dose and duration • M 14U 2 Assessment of of Samyak Yoga, Ayoga and Atiyoga of Nasya <ol style="list-style-type: none"> 1. Clinical Assessment of Samyak Yoga in each type of Nasya. 2. Ayoga and Atiyoga of each type of Nasya. 3. Interpretation of Ayoga and Atiyoga • M 14U 3 Complications of Nasya and Management <ol style="list-style-type: none"> 1. Complications of Nasya Karma and its reasoning 2. Management of Complications • M 14U 4 Mode of Actions of Nasya <ol style="list-style-type: none"> 1. Mode of Action of different types of Nasya Karma with its Pharmacodynamics, 2. Scientific explanation of '<i>Naasa hi Shiraso Dwaram</i>' • M 14U 5 Recent advancement and research in Nasya | | | | | |
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| | <ol style="list-style-type: none"> Recent Advances and scope of instrumentation in Nasya Karma Recent researches in Nasya Karma | | | | | |
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| Semester No : 6 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-15 Principles of Raktamokshana, Critical Analysis of Instruments and Dravya used in Raktamokshana Explains about the principles and practice of Raktamokshana, Analysis of instruments and Dravya used in Raktamokshana, indications and contraindications of Raktamokshana</p> <ul style="list-style-type: none"> M 15U 1 Principles of Raktamokshana <ol style="list-style-type: none"> Raktadusti and diseases due to Raktadusti and . Importance of Raktamokshana in different clinical conditions and Different types of Classification and their clinical utility M 15U 2 Indications and Contraindications of Raktamokshana | 2 | 10 | 20 | 30 | 60 |

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| | <p>Indications of Raktamokshana based on Dosha and Roga Avastha i. Gastro Intestinal system: Arsha, Agnisada, Pleeha, Jwara ii. Respiratory system: Putinasa, iii. Musculoskeletal system: Gridrasi, Vishwachi, Khalli, Amavata iv. Circulatory System: Vatarakta (Varicose Vein, Varicocele) v. Central nervous system: Unmada, Apasmara, Anantavata, Suryavarta vi. Integumentary system: Visarpa, Upadamsha, Vaivarnya, Kotha, Pidika, Kusta, Charmadala, Vidarika, Sheetapitta, Mukhadushika, Khalitya vii. Endocrinal system: Raktameha, Medoroga viii. Reproductive system: Dusta Artava, Stana Roga, Pradara ix. Miscellaneous: Mukha Paka, Granthi, Sleepada, Swara kshaya, Mada, Gulma, Nidra Atiyoga, Gala and Danta roga, Ksudra roga, Osta roga, Karnapali roga, Mukharoga, Netra roga, Shiroroga, Arbuda, Apachi, Shotha, Murcha, Padadari². Contra Indications of Raktamokshana based on Dosha and Roga Avastha i. Gastro Intestinal system: Udara, Pandu, Arsha, Pravridha jwara, Ajeerna, Atisara, Chardi ii. Respiratory system: Kasa, Shwasa iii. Central nervous system: Akshepaka, Pakshaghata, Ekanga vikara iv. Reproductive system: Garbhini, nava prasuta, Klaibya, Sutika, v. Miscellaneous: Nidrabhibhoota, Sarvanga Shotha, Mada, Murcha, Shosha, Atinidra, Aandhya, Timira</p> <p>• M 15U 3 Instruments and Dravya for different types of Panchakarma</p> <ol style="list-style-type: none"> 1. Instruments for different types of Raktamokshana- <ol style="list-style-type: none"> a. Shastrakrita and Ashastrakrita b. Siravyadha, Prachanna, 2. Dravya used for different types Shringa, Jalauka, Alabu, Ghatyantra | | | | | |
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| | <p>• M 15U 4 Study of Jalauka (Leeches)</p> <ol style="list-style-type: none"> 1. Leeches - Morphology, Anatomy, Physiology 2. Various types of leeches, their collection and preservation 3. Bio-chemical effects of constituents of the saliva of leeches and its importance in Jalaukavacharan 4. Recent researches in the treatment of Jalaukavacharan | | | | | |
| | <p>M-16 Standard Operative Procedure and Assessment of Raktamokshana Procedure and Recent advances Explains the procedure of different types of Raktamokshana, Assessment of samyak, ayoga, atiyoga lakshana, vyapat, its management, Mode ofn action & recent advances in instruments & scope of research in Raktamokshana</p> <p>• M 16U 1 Protocol of Raktamokshana</p> <ol style="list-style-type: none"> 1. Protocol of Raktamokshana Procedure-Pre procedure, Procedure and Post Procedure 2. Administration of Siravyadha and Prachanna 3. Administartion of Shringa, Jalouka, Alabu, Ghatyantra <p>• M 16U 2 Assessment of Siravedha and Prachhan procedure</p> <ol style="list-style-type: none"> 1. Assessment of Samyak yoga 2. Assessment of Ayoga and Atiyoga of Sira Vyadha and Pracchana and analysis of thereof | 2 | 10 | 20 | 30 | 60 |

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| | <p>• M 16U 3 Assessment of Jaloukavacharana, Shringa, Alabu and Ghatyantra</p> <ol style="list-style-type: none"> 1. Assessment of Samyak yoga, Ayoga and Atiyoga of Jaloukavacharana, 2. Assessment of Samyak Yoga, Ayoga and Atiyoga Shringa, Alabu and Ghatyantra <p>• M 16U 4 Complications of Raktamokshana and management</p> <ol style="list-style-type: none"> 1. Complications of different types of Raktamokshana 2. Management of complications with suitable reasoning. 3. Complications due to poisonous Leech application and its management <p>• M 16U 5 Mode of Action of different types of Raktamokshana with their Pharmacodynamics</p> <ol style="list-style-type: none"> 1. Karmukata of different types of Raktamokshana 2. Pharmacodynamics of different types of Raktamokshana <p>• M 16U 6 Recent advancements and researches in Raktamokshan</p> <ol style="list-style-type: none"> 1. Recent advances in invention and scope of instrumentation in Raktamokshana 2. Modified methods of bloodletting – Cupping, Syringe method, Needle method 3. Scope of Researches related Raktamokshana | | | | | |
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| Paper No : 3 Basti Siddhi | | | | | | |
| Semester No : 3 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | M-17 APPLIED ANATOMY, PHYSIOLOGY AND IMPORTANCE OF BASTI This module explains about applied anatomy, physiology and its importance in Basti. <ul style="list-style-type: none"> • M 17U 1 Applied anatomy, applied physiology, significance of Basti and application of modern technique for Basti Karma <ol style="list-style-type: none"> 1. Applied anatomy of the urogenital system, large colon and anal region important to Basti Karma practices, including surface anatomy, neuroanatomy, key structures/organs, their anatomical locations, and common anomalies. 2. Applied physiology of urogenital system, Excretory system, large colon, regulation of vital functions, pathophysiological alterations in diseased state 3. Significance of Basti as “Ardha chikitsa” and its vital role in Astanga Ayurveda. | 1 | 5 | 10 | 15 | 30 |

| | | | | | | |
|--|---|---|----|----|----|----|
| | <ol style="list-style-type: none"> 4. Significance of Basti as Shodhana, Shamana, Brimhana (nourishment) and Rasayana (rejuvenation). 5. Importance of left lateral position and any feasible changes in cases of difficulty administering in patients of varied disease conditions. 6. Proto-sigmoidoscopy, barium enema, and its applications in Basti administration. 7. Consideration of ethical aspects for the administration of Basti. | | | | | |
| | <p>M-18 CLASSIFICATION OF BASTI AND SCREENING OF PATIENT AND DOSE SCHEDULE FOR BASTI This module explains classification of basti and screening of patient and dose schedule for basti</p> <ul style="list-style-type: none"> • M 18U 1 Classification and utility <ol style="list-style-type: none"> 1. Classifications of Basti 2. Sub-classifications of Niruha Basti and Sneha Basti 3. Combined Basti regimens, including Yoga, Kala, Karma, and Chaturbhadra Kalpa as per the condition of disease and patient 4. Basti in Samhita with commentaries. • M 18U 2 Screening of the patient, dosages and schedules of different type of Basti <ol style="list-style-type: none"> 1. Indications of Basti, its role and significance at the various stages of diseases (Vyadhi Avastha). | 3 | 15 | 30 | 45 | 90 |

| | <ol style="list-style-type: none"> 2. Contraindications for Basti with reasoning. Contraindications with rationale based on present-day medical practices. 3. Importance of Anuvasana Basti before Niruha Basti and Niruha Basti and Anuvasana Basti before Uttara Basti. 4. Dose schedules of Niruha Basti, Sneha Basti, Anuvasana Basti, Matra Basti, Siddha Basti, Yapana Basti, Uttara Basti. 5. Modifications in dose of Basti and its utility based on Rogi and Roga Bala. 6. Impact of Haemodynamic status of the body for the administration of Basti. | | | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | 4 | 20 | 40 | 60 | 120 |
| Semester No : 4 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | M-19 PHARMAKOKINETICS AND PHARMACODYNAMICS OF BASTI DRAVYAS This module explains about the Pharmacokinetics and Pharmacodynamics of Basti Dravya. <ul style="list-style-type: none"> • M 19U 1 Pharmacokinetics and Pharmacodynamics of Basti Dravya, Shada Skandha, Asthapanopaga and Anuvasanopaga Mahakashaya | 1 | 5 | 10 | 15 | 30 |

| | | | | | | |
|--|---|---|----|----|----|----|
| | <ol style="list-style-type: none"> 1. Analysis and utility of drugs used in Basti. 2. Pharmacodynamics and pharmacokinetics of the drugs for Basti procedures (drugs of Asthapanopaga and Anuvasanopaga Mahakashaya) 3. Dravya indicated in Shad Skandha for Basti preparation 4. Various types of Ghrita and Taila useful in Anuvasana Basti; Anuvasana Basti with Vasa and Majja along with their merits and demerits. | | | | | |
| | <p>M-20 METHODOLOGY FOR NIRUHA BASTI, ANUVASANA BASTI AND UTTAR BASTI This modules explains about methodology for Niruha basti, Anuvasana basti and Uttar Basti</p> <p>• M 20U 1 Purvakarma, administration and observation of Niruha Basti, Anuvasana Basti, and Uttar Basti.</p> <ol style="list-style-type: none"> 1. Purvakarma for Niruha Basti; Pathya before, during and after Niruha Basti, Anuvasana Basti and Uttara Basti. 2. Precautions and aseptic measures. 3. The vital role of each step, along with all the steps of administration of various Niruha Basti, Anuvasana Basti and Uttara Basti 4. Observations during and after Niruha Basti, Anuvasana Basti and Uttara Basti, Basti Pratyagamana <p>• M 20U 2 Samyakyoga, Ayoga and Atiyoga Lakshana and management of Vyapata</p> | 3 | 15 | 30 | 45 | 90 |

| | | | | | | |
|--|--|---|----|----|----|-----|
| | <ol style="list-style-type: none"> 1. Symptoms of Samyakyoga, Ayoga and Atiyoga Lakshana. 2. Various Vyapat of Niruha Basti and Anuvasana Basti and their key treatment modalities. 3. Management during and after Niruha Basti, Anuvasana Basti and Uttara Basti. 4. Role of Pariharya Vishaya and Parihara Kala <p>• M 20U 3 Reporting of adverse drug reactions and medicolegal cases</p> <ol style="list-style-type: none"> 1. Adverse drug reactions. 2. Medicolegal Cases | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |

Semester No : 5

| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-21 Contents of Niruha Basti, method of mixing and analysis of prepared Basti This module describe contents of Niruha Basti, method of mixing and analysis of prepared Basti</p> <p>• M 21U 1 Contents of Niruha Basti, method of mixing and analysis of prepared Basti</p> | 1 | 5 | 10 | 15 | 30 |

| | | | | | | |
|--|---|---|----|----|----|----|
| | <ol style="list-style-type: none"> 1. Significance of contents of various types of Niruha Basti, their ratio, methods of mixing of Basti Dravya. 2. The physiochemical changes during Basti preparation, when mixed in different sequences. 3. Properly formed Niruha Basti and its physical properties (emulsions, viscosity, specific gravity, pH). 4. Dravya of Niruha Basti to modify it into Mridu or Tikshna Basti. | | | | | |
| | <p>M-22 BASTI FORMULATIONS This module dealt with various Niruha Basti, Anuvasana and Uttar Basti formulations</p> <p>• M 22U 1 Various Basti formulations</p> <ol style="list-style-type: none"> 1. Various Basti formulations and their clinical utility like Piccha Basti, Kshira Basti, Mustadi Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti, Madhutailika Basti, Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Krimighna Basti, Lekhana Basti, Vrishya Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshokleshana Basti, Chakshusya Basti, Kuthaghna Basti, Shodhana Basti, Takra Basti, Churna Basti, Siddha Basti, Yuktaratha Basti, Ashwagandhadi Anuvasana, Pippalyadi Anuvasana Basti, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila, Shatavaryadi | 3 | 15 | 30 | 45 | 90 |

| | <p>Taila or Shatavaryadi Ghrita, Brihat Savidhavadi Taila.</p> <p>2. Formulations for Uttara Basti- Panchavalkala Kashaya, Triphala Kashaya, Dashmool Kashaya, Yastimadhu Taila, Dashmool Taila, Jatyadi Ghrita, Shatavaryadi Ghrita, Phala Ghrita, Dadimadi Ghrita.</p> <p>• M 22U 2 Basti in emerging lifestyle diseases Role and utility of Basti in emerging lifestyle diseases (for e.g. Diabetes,Hyperthyroidism,PCOD,SLE)</p> | | | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | 4 | 20 | 40 | 60 | 120 |
| Semester No : 6 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-23 Handling Emergencies in Panchakrama This module deals with emergency conditions in Panchkarma with their management</p> <p>• M 23U 1 Emergency conditions in Panchkarma with their management</p> <p>1. Lifesaving drugs used in complications of Snehan, Swedan,Vamana, Virechana, Basti, Nasya and Raktamokshana.</p> | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|---|----|----|----|----|
| | <p>2. Management of certain complications using contemporary medical sciences approach for Haematemesis, Epistaxis, Hypotension, Vasovagal shock, Fainting, GI bleeding, Dehydration, Hypoglycemia, Dyslipidemia, convulsions/ seizures, Hyperpyrexia, Hypertension, Burns, Septicemia, Bed sores, Cardiorespiratory arrest, sudden stoppage of breathing/ apnoea, Ketoacidosis, Acute Fissure, Rectal Prolapse,</p> | | | | | |
| | <p>M-24 Recent Advances in Basti This module deals with the immunological, metabolic, gut microbiome response of Basti and recent advances in Basti</p> <p>• M 24U 1 Immunological, metabolic response and standardization</p> <ol style="list-style-type: none"> 1. Immunological and metabolic responses of Basti. 2. Standardization of Basti Karma. 3. Research thoughts on different Biomarkers in Basti: 4. Gut & Digestive Function Biomarker- Gut Microbiome Composition, Stool pH, Bowel Transit Time. 5. Inflammatory Markers- CRP, Tumor Necrosis Factor (TNF), Interleukin-6 (IL-6), ESR. 6. Metabolic Markers- FBS, HbA1c, Insulin Sensitivity. 7. Hormonal Markers- Cortisol, Thyroid Hormones, Testosterone/Estrogen/Progesterone. 8. Immune Function Markers- Immunoglobulin E, Lymphocyte Subsets (CD4+, CD8+ T cells). | 2 | 10 | 20 | 30 | 60 |

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|--|---|----|----|-----|-----|-----|
| | <ul style="list-style-type: none"> • M 24U 2 Gut microbiome, molecular biology, drug administration through anal route <ol style="list-style-type: none"> 1. Gut Brain mechanism related to Basti Therapy. 2. Recent advances in per rectal drug administration. 3. Molecular biology and gut microbiome regarding per rectal drug administration. • M 24U 3 Advancement in Basti <ol style="list-style-type: none"> 1. Advantages and disadvantages of modified Basti Yantra. 2. Advancements in Basti Yantra, Basti Netra. 3. Management of various Basti Doshas. | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |
| | | 16 | 80 | 160 | 240 | 480 |

Paper No : 4 Naimittika Panchakarma Siddhi

Semester No : 3

| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
|------------------------|--|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | M-25 Applied Panchakarma in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa This module includes the identification of disease conditions, | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | <p>their pathological characteristics, preparation of Panchakarma protocols and development of procedural management in Dhatusravan sansthan, Chittavikara, Kasa and Shwasa.</p> <ul style="list-style-type: none"> • M 25U 1 Dhatusravan sansthan <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Dhatusravan sansthan 2. Procedural management of Dhatusravan sansthan vikara 3. Administration of panchakarma in Dhatusravan sansthan vikara 4. Specialised panchakarma procedure in Dhatusravan sansthan vikara • M 25U 2 Chittavikara <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya of Chittavikara 2. Principles of management of Chittavikara 3. Procedural management of of Chittavikara 4. Administration of panchakarma in of Chittavikara 5. Specialized panchakarma procedure in of Chittavikara • M 25U 3 Kasa <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Kasa 2. Principles of management 3. Procedural management of Kasa 4. Administration of panchakarma in Kasa 5. Specialised panchakarma procedure in Kasa | | | | | |
|--|--|--|--|--|--|--|

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|--|--|---|----|----|----|----|
| | <p>• M 25U 4 Shwasa</p> <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Shwasa 2. Principles of management 3. Procedural management of Shwasa 4. Administration of panchakarma in Shwasa 5. Specialized panchakarma procedure in Shwasa | | | | | |
| | <p>M-26 Panchakarma treatment in Arsha,Amlapitta,Udawarta,Grahani and Udara This module include identification of disease condition, their pathological characteristics, applications of Panchakarma protocols and development of procedural management in Arsha,Amlapitta,Udawarta,Grahani and Udara</p> <p>• M 26U 1 Arsha</p> <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Arsha 2. Principles of management 3. Procedural management of Arsha 4. Administration of panchakarma in Arsha 5. Specialized panchakarma procedure in Arsha <p>• M 26U 2 Amlapitta</p> <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Amlapitta 2. Principles of management 3. Procedural management of Amlapitta | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|---|----|----|----|-----|
| | <p>4. Administration of panchakarma in Amlapitta 5. Specialized panchakarma procedure in Amlapitta</p> <p>• M 26U 3 Udawarta</p> <p>1. Samprapti vighatana of Udawarta 2. Principles of management 3. Procedural management of Udawarta 4. Administration of panchakarma in Udawarta with comorbidity 5. Specialized panchakarma procedure in Udawarta</p> <p>• M 26U 4 Grahani</p> <p>1. Samprapti vighatana of Grahani 2. Principles of management 3. Procedural management of Grahani 4. Administration of panchakarma in Grahani with comorbidity 5. Specialized panchakarma procedure in Grahani</p> <p>• M 26U 5 Udara</p> <p>1. Samprapti vighatana of Udara 2. Principles of management 3. Procedural management of Udara 4. Administration of panchakarma in Udara with comorbidity 5. Specialized panchakarma procedure in Udara</p> | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |

| Semester No : 4 | | | | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-27 Applied Panchakarma in selected diseases of Raktadushti By this module, student will learn identification of disease condition, their pathological characteristics, preparation of Panchakarma protocols and development of procedural management in selected diseases of Raktadushti</p> <p>• M 27U 1 Kustha (Mandala, Ekakustha, Vicharchika, Vipadika, Kitibha, Sidhma), Shwitra, Sheetapitta Samprapti Vigyan and Vyadhi Vinishchaya, Principles of management, Procedural management, Administration of panchakarma, Specialized panchakarma procedure in,</p> <ol style="list-style-type: none"> 1. Mandala Kushtha 2. Ekakustha 3. Vicharchika 4. Vipadika 5. Kitibha Kushtha 6. Sidhma Kushtha 7. Shwitra 8. Sheetapitta <p>• M 27U 2 Vatashonita</p> | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|---|----|----|----|----|
| | <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Vatashonita 2. Principles of management 3. Procedural management of Vatashonita 4. Administration of panchakarma in Vatashonita 5. Specialized panchakarma procedure in Vatashonita <p>• M 27U 3 Visarpa</p> <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Visarpa 2. Principles of management 3. Procedural management of Visarpa 4. Administration of panchakarma in Visarpa 5. Specialized panchakarma procedure in Visarpa <p>• M 27U 4 Pandu-kamala</p> <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Pandu-Kamala 2. Principles of management of Blood disorders, Liver diseases in detail 3. Procedural management of Pandu-Kamala 4. Administration of panchakarma in Pandu-Kamala 5. Specialized panchakarma procedure in Pandu-Kamala | | | | | |
| | <p>M-28 Applied Panchakarma in Sthaulya, Karshya, Prameha & Hridroga This module includes identification of disease condition,</p> | 2 | 10 | 20 | 30 | 60 |

their pathological characteristics, applications of Panchakarma protocols and development of procedural management in Sthaulya, Karshya, Prameha & Hridroga

• M 28U 1 Sthaulya-Karshya

1. Samprapti Vigyan and Vyadhi Vinishchaya in Sthaulya-Karshya
2. Principles of management
3. Procedural management of Sthaulya-Karshya
4. Administration of panchakarma in Sthaulya-Karshya
5. Specialized panchakarma procedure in Sthaulya-Karshya

• M 28U 2 Prameha

1. Samprapti Vigyan and Vyadhi Vinishchaya in Prameha
2. Principles of management
3. Procedural management of Prameha
4. Administration of panchakarma in Prameha
5. Specialized panchakarma procedure in Prameha

• M 28U 3 Hridroga

1. Samprapti Vigyan and Vyadhi Vinishchaya in Hridroga
2. Principles of management
3. Procedural management of Hridroga
4. Administration of panchakarma in Hridroga
5. Specialized panchakarma procedure in Hridroga

| | | 4 | 20 | 40 | 60 | 120 |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| Semester No : 5 | | | | | | |
| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-29 Applied Panchakarma in selected Vatavyadhi By this module, student will learn identification of disease condition, their pathological characteristics, preparation of Panchakarma protocols and development of procedural management in selected Vatavyadhi</p> <ul style="list-style-type: none"> • M 29U 1 Maha VataVyadhi <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in mahavatavyadhi 2. Principles of management 3. Procedural management of mahavatavyadhi 4. Administration of panchakarma in mahavatavyadhi 5. Specialized panchakarma procedure in mahavatavyadhi • M 29U 2 Samanya Vatavyadhi <ol style="list-style-type: none"> 1. Samprapti Vigyan and Vyadhi Vinishchaya in Samanya Vatavyadhi 2. Principles of management | 3 | 15 | 30 | 45 | 90 |

| | | | | | | |
|--|--|---|---|----|----|----|
| | <p>3. Procedural management of Samanya Vatavyadhi 4. Administration of panchakarma in Samanya Vatavyadhi 5. Specialized panchakarma procedure in Samanya Vatavyadhi</p> <p>• M 29U 3 Apasmara Panchakarmeeya siddhi in Apasmara</p> <p>• M 29U 4 Pain management</p> <p>1. Pathophysiology 2. WHO analgesics ladder 3. Common procedures for pain relief 4. Role of Panchakarma in acute and chronic pain management. 5. Role of Panchakarma in Pain Gateways 6. Specialised procedural techniques for pain management</p> | | | | | |
| | <p>M-30 Applied Panchakarma in Mutrakrichra & Mutraghata This module includes identification of disease condition, their pathological characteristics, applications of Panchakarma protocols and development of procedural management in Mutrakrichra & Mutraghata</p> <p>• M 30U 1 Mootrakrichra</p> <p>1. Samprapti Vigyan and Vyadhi Vinishchaya in Moothrakrichra 2. Principles of management 3. Procedural management of</p> | 1 | 5 | 10 | 15 | 30 |

| | | | | | | |
|--|---|---|----|----|----|-----|
| | <ol style="list-style-type: none"> 4. Moothrakrichra 5. Administration of panchakarma in Moothrakrichra 6. Specialized panchakarma procedure in Moothrakrichra <p>• M 30U 2 Mootraghata</p> <ol style="list-style-type: none"> 1. Samprapthivinjana of Moothraghata 2. Principles of management of Moothraghata 3. Administration of Panchakarma in Moothraghata 4. Specialised procedural techniques in Moothraghata | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |

Semester No : 6

| 2A Module Number | 2B Modules & units | 2C Number of Credits | Notional Learning hours | | | |
|------------------------|---|-------------------------------|-------------------------|-----------------------------|--|-------------|
| | | | 2D Lectures | 2E Practical Training | 2F Experiential Learning including Modular Assessment | 2G Total |
| | <p>M-31 Applied Panchakarma in Sotha & Amavata This module include identification of disease condition, their pathological characteristics, preparation of Panchakarma protocols and development of procedural management in Sotha & Amavata</p> <p>• M 31U 1 Shotha</p> <ol style="list-style-type: none"> 1. Samprapthivinjana of Shotha | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|--|---|----|----|----|----|
| | <ol style="list-style-type: none"> 2. Principles of management of Shotha 3. Administration of Panchakarma in Shotha 4. Administration of Panchakarma in Shotha with Yakrudroga, Hridroga and Vrikkaroga 5. Specialised procedural techniques in Shotha <p>• M 31U 2 Amavata</p> <ol style="list-style-type: none"> 1. Samprapthi vinjana and Vyadhivinishchaya of Amavata 2. Principles of management 3. Procedural management of Amavata 4. Administration of Panchakarma in Amavata with comorbidities 5. Specialised procedural techniques in Amavata | | | | | |
| | <p>M-32 Applied Panchakarma in supportive management of diseases By this module, student will learn role of Panchakarma as a supportive management in malignancy, palliative care and sports medicine. This module elaborate the application of customized procedural management for the selected conditions.</p> <p>• M 32U 1 Planning of Panchakarma in Malignancy</p> <ol style="list-style-type: none"> 1. Samprapthighataka leading to Carcinogenesis 2. Principles of supportive management of Cancer through Panchakarma <p>• M 32U 2 Panchakarma in palliative medicine</p> <ol style="list-style-type: none"> 1. Philosophy, principles and scope of palliative care | 2 | 10 | 20 | 30 | 60 |

| | | | | | | |
|--|---|----|-----|-----|-----|------|
| | <ul style="list-style-type: none"> 2. Principles of Symptom management 3. End of life care 4. Panchakarma in palliative care <p>• M 32U 3 Panchakarma in Sports Medicine</p> <ul style="list-style-type: none"> 1. Introduction 2. Medical Aspects of Sports Medicine 3. Administration of Panchakarma in Athletes care and rehabilitation | | | | | |
| | | 4 | 20 | 40 | 60 | 120 |
| | | 16 | 80 | 160 | 240 | 480 |
| | | 64 | 320 | 640 | 960 | 1920 |

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

| | | | | | | |
|--|--|---|--|--|-------------------------------------|---|
| Paper No : 1(Upakalpaniya Siddhi) | | | | | | |
| Semester No : 3 | | | | | | |
| Module 1 : Snehana karma, Dravya, Categorization along with related applied anatomy & physiology | | | | | | |
| <p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <p>1 Describe the importance, utility of snehanaUpakrama and snehadravya along with related applied anatomy and physiology of skin, integumentary system, musculoskeletal system, cerebrum, cerebellum, spinal cord in relation with Ayurveda structures and their functions.</p> <p>2 Conduct agnibala, jaranabala assessment, application of lavana in sneha, rukshana karma</p> <p>3 Identify the difference between application of sneha based on prakriti, agni and koshta.</p> <p>4. Assess the difference between usage of yamaka, trivrut and mahasneha.</p> <p>5. Justify the effects of snehana and swedana over various systems in the body.</p> | | | | | | |
| Unit 1 Comprehension of Snehana Upakrama, Snehadravya and Snehopaga Dravya | | | | | | |
| <p>1. Discuss the importance of Snehana karma</p> <p>2. Effects of Snehana Upakrama</p> <p>3. Dfference between snehana as Poorva Karma vs Pradhana Karma</p> <p>4. Combined administration of Snehana and Swedana</p> | | | | | | |
| References: 1,7,8,9,13,21,29,30,34,38,41,42,45,54,56 | | | | | | |
| 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/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows | 3G Teachin g Learnin |

| | | | | | | |
|-----------------|---|---|------------------------------|---------|----------------------------|----------------------|
| | | | Experiential Learning | | how/Knows how/Know) | g Methods |
| CO1 | Discuss importance and effects of Snehana UpaKarma, combined effect of Snehana and Swedana as Poorvakarma, properties of Sneha Dravya; Discrete indications, Guna, Karma, Pharmaceutical perspective, application based on Ritu, Ushna - Sheeta Kala and Anupana of four Sneha. | 1 | Lecture | CC | Knows-how | L&GD,L &PPT ,L |
| CO1,CO3,CO4 | Explain properties, pharmacodynamaic and pharmacokinetic study, probable way of application of Snehopaga Dravya; physiological perspective of use of Lavana during Snehana. | 1 | Lecture | CAP | Knows-how | L,L&PPT ,L&GD |
| CO1,CO2,CO3,CO4 | Demonstrate the role and application of Lavana in Snehapana. | 4 | Practical1.1 | PSY-SET | Shows-how | CBL,PSM,DIS |
| CO1,CO2,CO3,CO4 | Evaluate patients for use of Ghrita as Shodhanapoorva and Shamana Snehapana. | 4 | Experiential-Learning1.1 | AFT-RES | Does | SDL,RL E,CBL,PBL,DIS |

Unit 2 Interpretation of categorization of Sneha

1. Sthavara - Jangama Sneha
2. Yamaka-Trivrut-Maha Sneha
3. Bahya-Abhyantara Sneha

References: 1,13,21,29,30,34,38,41,42,45,46,53,54,56

| 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 |
|--------------------------|--|-----------------------------------|--|------------------------------|---|-------------------------------------|
|--------------------------|--|-----------------------------------|--|------------------------------|---|-------------------------------------|

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|------------------|--|---|--------------------------|---------|-----------|----------------------|
| CO1,CO3 | Evaluate the concept and differences between Sthavara and Jangama Sneha, Sthavara Sneha explained by Sushruta; Notion of Samskaravahitva, pharmaceutical Superiority of Ghrita over other Sneha. | 1 | Lecture | CE | Knows-how | L,L&GD, L&PPT |
| CO1,CO3 | Describe the notion and application of Yamaka, Trvivrutta, Mahasneha; evaluation from pharmaceutical perspective; Bahya and Abhyantara Sneha, Sneha based on Paka. | 1 | Lecture | CAN | Knows-how | L&PPT ,L,L&GD |
| CO1,CO2,CO3, CO4 | Demonstrate the clinical application of Single Sneha and Yamak Sneha. | 4 | Practical1.2 | PSY-SET | Shows-how | CBL,PT, CD,PBL |
| CO1,CO2,CO3, CO4 | Perform Abhyanga using single Sneha and Yamaka Sneha. | 4 | Experiential-Learning1.2 | PSY-MEC | Does | PBL,CB L,DA,PS M,DIS |

Unit 3 Applied Anatomy and Physiology of Skin and Integumentary System, Veins, Arteries, Lymphatic Vessels along with Tvacha Sharira, Sira Shareeram, Dhamani Shareeram, Srotasa Shareeram in Snehana and Swedana

1. Applied Anatomy and Physiology of Skin and Integumentary System in Snehana and Swedana

References: 1,3,7,8,9,13,20,21,29,30,34,38,41,42,45,54,56

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO1 | Evaluate applied anatomy and physiology of skin, integumentary system,Viens,Arteries,Lymhatic Vessels along with Tvacha Shareeram,Dhamani Shareeram,Srotas Shareeram in snehana and Swedana. | 1 | Lecture | CS | Knows-how | L&PPT ,L&GD,L |

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|-------------|---|---|--------------------------|---------|-----------|-------------------|
| CO1 | Integrate the applied anatomy and physiology of veins, arteries, lymphatic vessels, along with Sira Shareera, Srotasa Shareera and Dhamani Shareera into Snehana and Swedana. | 1 | Lecture | CS | Knows-how | L,L&GD, L&PPT |
| CO2,CO3 | Demonstrate the application of Tailas for Abhyanga in skin disorders, considering Dosha predominance in Tvacha. | 4 | Practical1.3 | PSY-SET | Shows-how | D,CBL |
| CO2,CO3,CO4 | Perform and compare Abhyanga with and without Nadi Sweda. | 4 | Experiential-Learning1.3 | PSY-MEC | Does | RLE,D,SDL,DIS,CBL |

Unit 4 Applied Anatomy and physiology of musculoskeletal system, spine, along with Sandhi sharira, Peshisharira, Snayusharira, Kandarasharira, Kalaasharira in snehana and Swedana

1. Applied Anatomy and Physiology of Musculoskeletal System in Snehana and Swedana.

References: 1,7,8,13,20,21,29,30,31,42,45,53,54,56

| 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 Teachin g Learnin g Method s |
|----------------------------------|---|---|--|--|---|--|
| CO1 | Evaluate applied anatomy and physiology of musculoskeletal system and spine related to snehana and Swedana. | 1 | Lecture | CK | Knows-how | L,L&GD, L&PPT |
| CO1 | Explain applied aspect of Sandhi Shareera, Asthi Shareera, Peshi Shareera, Snayu Shareera, Kandarasharira, Kalaa Shareera in view of snehana and swedana. | 1 | Lecture | CAN | Knows-how | L,L&PPT, L_VC, L&GD |

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| CO1,CO4 | Perform team-based project on applied anatomy and physiology of musculoskeletal structures with focus on Janu Sandhigata Vata and infer effects of Snehana and Swedana. | 4 | Practical1.4 | PSY-GUD | Shows-how | W,PrBL, TPW,TB L |
| CO1,CO2,CO3, CO4 | Perform Janu Basti followed by Lepa application. | 5 | Experiential-Learning1.4 | PSY-SET | Does | DA,CBL, D-M,PSM, DIS |

Unit 5 Applied Anatomy and Physiology of Cerebrum, Cerebellum, Spinal Cord and Nervous System.

1. Applied Anatomy and Physiology of Cerebrum, Cerebellum, Spinal Cord and Nervous System.

References: 20,21

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO1 | Identify applied anatomy and physiology of cerebrum and cerebellum in relation to Panchakarma. | 1 | Lecture | CAP | Knows-how | L&PPT ,L&GD,L _VC,L |
| CO1 | Evaluate applied anatomy and physiology of spinal cord and whole nervous system in terms of panchakarma. | 1 | Lecture | CE | Knows-how | L&PPT ,L&GD,L _VC,L |
| CO1 | Design a team-based project on cerebrum and cerebellum anatomy with relevance to Snehana and Swedana in Vata Vyadhi. | 4 | Experiential-Learning1.5 | CAP | Does | CBL,TP W,PrBL |
| CO1,CO2,CO3, CO4 | Perform Abhyanga using condition-specific oils for flaccid and spastic muscle tones. | 5 | Experiential-Learning1.6 | PSY-MEC | Does | IBL,PSM ,TPW,Pr BL,TBL |

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|--|--|---|--------------|-------------|-----------|----------------------------|
| CO1,CO2,CO3, CO4 | Illustrate an autonomic nervous system responses to Abhyanga and Swedana in Vata Vyadhi. | 4 | Practical1.5 | PSY- SET | Shows-how | DIS,SDL ,PBL,CB L,DA |
| Practical Training Activity | | | | | | |
| Practical Training 1.1 Demonstration of the use of Lavana in enhancing the effectiveness of Snehapana. | | | | | | |
| <p>Demonstration by Faculty:</p> <ul style="list-style-type: none"> • Faculty will explain the physiological role, dosage, and textual references regarding Lavana in Snehapana using charts, diagrams, and case examples. • Faculty will demonstrate the method of mixing 2–5 gm Lavana with Ghrita and explain its clinical relevance during assessment of Samyak Snigdha Lakshana. • Each PG scholar will be assigned 5 patients and instructed to prescribe Snehapana with Lavana. • Scholars will design and implement an assessment and follow-up protocol to monitor outcomes in their cases. • Scholars will also prepare an individualized assessment plan, including daily follow-up, symptom tracking, and outcome documentation. • Faculty will facilitate ongoing review and discussion to deepen the students' understanding of the therapeutic role of Lavana in internal oleation. | | | | | | |
| Practical Training 1.2 Demonstration of comparative application of Single Sneha and Yamak Sneha. | | | | | | |
| <p>Demonstration by Faculty:</p> <ul style="list-style-type: none"> • Faculty will demonstrate the concept and clinical application of single Sneha and Yamak Sneha, explaining Yamaka, Trivrut, and Maha Sneha with relevant biochemical and therapeutic distinctions. • PG scholars will be divided into two groups, each allotted 2 hemiplegia patients for Abhyanga. • One group will use single Sneha (e.g., Dhanvantara Taila) and the other Yamak Sneha (e.g., Dhanvantara Kuzhambu). • Scholars will assess outcomes using the Rivermead Hemiplegia Scale, record observations, and analyse the comparative effects. | | | | | | |
| Practical Training 1.3 Demonstration of clinical implementation of Abhyanga in skin disorders, considering Dosha predominance in Tvacha. | | | | | | |

Demonstration by Faculty:

- Faculty will demonstrate assessment of tvacha in kushtha patients to identify dosha dominance using clinical signs, photos, or videos.
- Scholars will be introduced to commonly used Tailas for Abhyanga in skin disorders and their selection based on dosha dominance.
- Two groups will be assigned 3 patients each (e.g., Psoriasis) for Abhyanga using two different Tailas (e.g., Dinesha Keram and Pinda Tailam).
- PG scholars will assess dosha dominance, perform Abhyanga, record outcomes, and analyse the effects of each Taila.

Practical Training 1.4 Develop team-based project on applied anatomy and physiology of musculoskeletal structures with focus on Janu Sandhigata Vata and infer effects of Snehana and Swedana.

Demonstration by Faculty :

- Faculty divides PG scholars into two groups: one explores applied anatomy (Asthi, Peshee, Snayu, Sira, Kandara etc.) in Janu Sandhigata Vata; the other compiles oils and Swedana types used in its management.
- Both groups analyse diagnosis and treatment strategies.
- Groups present findings; faculty guides discussion, interpretation, and clinical application of Snehana and Swedana.

Practical Training 1.5 Illustration of an autonomic nervous system responses to Abhyanga and Swedana in Vata Vyadhi.

Demonstration by faculty:

- Faculty explains ANS functions and relevance in Vata Vyadhi.
- Demonstrates Abhyanga and Swedana on patients with Sarvanga Gata Vata or similar conditions.
- PG scholars record physiological parameters (pulse, BP, RR, temperature) pre- and post-therapy.
- Small group analysis of changes to interpret sympathetic-parasympathetic responses.
- Group presentations followed by discussion with faculty to link therapy outcomes with ANS modulation.
- Observations are documented in Log Books.

Experiential Learning Activity

Experiential-Learning Learning 1.1: Application and counselling of patients for use of Ghrita as Shodhanapoorva and Shamana Snehapana.

Instructions:

- Faculty guides PG scholars on the dual role of Ghrita in Shodhanapoorva and Shamana Snehapana.
- Scholars counsel 3 patients to consume pre-decided Ghrita before Vamana and continue the same post-Vamana for 1 month.
- Observe and document signs of Samyak Snehana and therapeutic outcomes.
- Analyze and compare pre- and post-treatment findings.
- Discuss observations with peers and faculty; record in Log Book.

Experiential-Learning Learning 1.2: Performance and comparative analysis between effects of Abhyanga using single Sneha and Yamaka Sneha.

Instructions:

- PG scholar selects two Snehas: a single Sneha (e.g., Sahacharadi Taila) and a Yamaka Sneha (e.g., Sahacharadi Kuzhambu).
- Conduct Abhyanga on two patient groups (5 each) with a similar condition (e.g., Gridhrasi) for 7 days.
- Observe, document, and analyze outcomes to compare therapeutic effects.

Experiential-Learning Learning 1.3: Performance and comparison between effects of Abhyanga with and without Nadi Sweda.

Instructions:

- PG scholar selects 6 patients with similar conditions (e.g., calf muscle sprain) and divides them into two groups.
- One group receives Abhyanga + Nadi Sweda; the other receives Abhyanga only.
- Assess, record, and analyze the outcomes to evaluate the added benefits of Nadi Sweda.
- Discuss findings with peers and faculty.

Experiential-Learning Learning 1.4: Performance of Janu Basti followed by Lepa application.

Instructions:

- PG scholar studies the applied anatomy of the knee and examines the joint from both modern and Ayurvedic perspectives.
- Select 3 patients with a similar knee deformity (e.g., ligament tear).

- Perform Janu Basti using appropriate oil (e.g., Murivenna), ensuring proper sealing and temperature maintenance.
- Follow with Lepa application (e.g., Jatamayadi Lepa) in the correct thickness and consistency.
- Repeat the procedures for the prescribed duration.
- Record, analyze, and discuss observations with peers and faculty.

Experiential-Learning Learning 1.5: Preparation of a team-Based Project on on cerebrum and cerebellum anatomy with relevance to Snehana and Swedana in Vata Vyadhi.

Instructions:

- PG scholars divide brain areas among team members and study their applied functions in neurological disorders.
- Collect and compile treatment protocols of Snehana and Swedana used in Vata Vyadhi.
- Correlate functional impairments with doshic involvement and treatment rationale.
- Infer the probable mode of action of Snehana and Swedana based on findings.
- Present conclusions through a group discussion or seminar.

Experiential-Learning Learning 1.6: Performance of Abhyanga using condition-specific oils for flaccid and spastic muscle tones.

Instructions:

- PG scholar assesses muscle tone (flaccid or spastic) in selected patients.
- Select suitable oil based on muscle tone (e.g. Snigdha oils for spasticity, Ushna oils for flaccidity).
- Perform Abhyanga accordingly and observe changes in tone and function.
- Record observations, analyze effects, and discuss findings with peers and faculty.

Modular Assessment

Assessment

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.

- Direct observation (DOPS) of Shodhanartha Sneha being done and observe for the application of knowledge of surface anatomy and applied physiology (20 marks)
- OSCE of long case presentation with special reference to applied Gastro Intestinal systemic examination (20 marks)

Hour

4

- Viva-voce (10 marks)
- Or
- Any practical in converted form can be taken for assessment (25 marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment (25 Marks)

Module 2 : Application of Abhyantara Sneha

Module Learning Objectives

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

1. Elaborate the types of sneha based on matra and karmukata
2. Identify and select the appropriate dose and type of application of sneha in given clinical condition.
3. Demonstrate, apply and justify the usage of different Ghritas as per the clinical condition.

Unit 1 Evaluation of types of Sneha based on dosages

1. Categorisation of Sneha
2. Analysis of categorization
3. Discrete indications of type of every Snehamatra
4. Methodology to measure Agnibala and Jaranabala
5. Hriseeyasimatra

References: 1,3,8,9,21,29,30,34,36,38,41,42,45,46,56,57

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO1 | Interpret and analyse the reasons and difference of opinions regarding categorization of snehana based on dosages. | 1 | Lecture | CE | Knows-how | L,L&GD, L&PPT |

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|-------------|--|---|------------------------------|-------------|-----------|-----------------------------------|
| CO1 | Summarise the discrete indications of Uttama, Madhayama and Hrasvasneha. | 1 | Lecture | CAN | Knows-how | L,L&PP T ,L&GD |
| CO1 | Discuss the notion of Hriseeyasi Matra and methodology to decide the dosages for Uttama, Madhyama and Hrasvamatra. | 1 | Lecture | CC | Knows-how | L,L&PP T ,L&GD |
| CO1,CO2,CO4 | Develop a questionnaire to assess Prakruti, Koshtha, Agni strength, and Jarana ability. | 3 | Practical2.1 | PSY- ORG | Shows-how | PT,PBL, DIS,IBL, PAL |
| CO1,CO3,CO4 | Design and calculate a dosage schedule for Shamanartha Snehapana using Hriseyasi Matra. | 3 | Practical2.2 | PSY- ORG | Shows-how | D- BED,TU T,IBL,P BL,DSN |
| CO1,CO3,CO4 | Propose, advise, and counsel the dosage schedules of Hrasva and Madhyama Matra. | 7 | Experiential- Learning2.1 | AFT- VAL | Does | DIS,CBL ,RLE,PL ,PSM |

Unit 2 Division of Snehana based on Karmukata

1. Principles behind categorisation
2. Difference between application of the types
3. Rationale behind limits of 3 to 7 days,
4. Pachana Karma
5. Application of Shamanartha and Brimhanartha Snehapana

References: 1,3,7,8,9,13,21,29,30,34,36,38,41,42,45,46,54,56,57

| 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 Teachin g Learnin g Method s |
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|--------------------|---|---|---------------------------|---------|-----------|---------------------------|
| CO1 | Explain the types of Snehana based on Karmukata and elaborate rationale behind Prakarsha Kala (limit of three to seven days) for Shodhanartha Sneha. | 1 | Lecture | CE | Knows-how | L&PPT, PER, L&GD, L |
| CO1 | Discuss the medicines and mode of action of Pachana Karma. | 1 | Lecture | CC | Knows-how | L&PPT, L_VC, L&GD, L, IBL |
| CO1, CO3, CO4 | Design a proforma to assess Pachana Karma. | 2 | Practical 2.3 | PSY-ORG | Shows-how | IBL, LS, DA, CBL, PSM |
| CO1 | Explain discrete methodologies of application of Shamanartha Snehana and Brumhanartha Snehana. | 1 | Lecture | CE | Knows-how | L&GD, L, L&PPT |
| CO1, CO2, CO3, CO4 | Effectively help, counsel, and convince patients who are reluctant or refusing to undergo <i>Snehapana</i> therapy, through communication strategies and empathetic engagement. | 7 | Experiential-Learning 2.2 | AFT-RES | Does | RLE, TUT, SDL, Mnt, IBL |
| CO1, CO2, CO4 | Construct, develop a clinical assessment format for Samyak Snigdha Lakshanas in any type of Snehapana. | 4 | Practical 2.4 | PSY-ORG | Shows-how | LS, PSM, TUT, PT, IBL |

Unit 3 Usage of commonly used Ghritas

1. Ingredients
2. Dosages
3. Indications
4. Route of Administration (Abhyanga, Pana, Basti, Nasya)

References: 1,8,9,13,21,29,30,31,34,36,38,41,42,45,46,53,54,55,56,57

| 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/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows how/Knows how/Know) | 3G Teachin g Learnin g |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|------------------------------------|
|-------------------------|--|-------------------------------------|--|--------------------------------|--|------------------------------------|

| | | | Experiential Learning | | | Methods |
|-------------|---|---|------------------------------|---------|-----------|-------------------|
| CO1 | Analyse Usage of following Ghritas based on ingredients, indications, dosages, way of administration, anupana. Amritha Prasha Ghritam, Brahmi Ghritam, Dadimadya Ghritam, Dhatryadi Ghritam, Dhanwantara Ghritam, Durva Ghritam, Guggulu Tiktaka Ghritam, Indukanta Ghritam. | 1 | Lecture | CAN | Knows-how | L&GD,L &PPT ,L |
| CO1 | Analyse Usage of following Ghritas based on ingredients, indications, dosages, way of administration, anupana. Jeevantyadi Ghritam, Jatyadi Ghritam, Kalyanaka Ghritam, Kantakari Ghritam, Maha Tiktaka Ghritam, Maha Pancha Gavya Ghritam, MadhuYashtyadi Ghritam, Maha Kalyanaka Ghritam. | 1 | Lecture | CAN | Knows-how | L&GD,L, L&PPT |
| CO1 | Analyse Usage of following Ghritas based on ingredients, indications, dosages, way of administration, anupana Maha Sneham, Mishraka Sneham, Mahabhutarava Ghritam, Panchatikta Ghritam, Pancha Gavya Ghritam, Phala Sarpis, Sukumara Ghritam, Shat Pala Ghritam, Tiktaka Ghritam, Triphala Ghritam, Varunadi Ghritam, Vasthyamayantaka Ghritam, Vidaryadi Gritham. | 1 | Lecture | CAN | Knows-how | L,L&GD, L&PPT |
| CO1,CO2,CO4 | Prescribe and evaluate the effect of a selected Ghrita as Shamanartha Snehapana in cognitive dysfunction. | 3 | Practical2.5 | PSY-GUD | Shows-how | D,PT,DA ,PBL,CB L |

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|-------------|--|---|--------------------------|---------|-----------|---------------------|
| CO1,CO3 | Compile Ghrita formulations from classical texts as a departmental team-based project. | 3 | Practical2.6 | PSY-GUD | Shows-how | LS,TPW,PrBL,PAL,PER |
| CO1,CO2,CO4 | Propose, design, and analyze the clinical effectiveness of a selected Ghrita administered via Snehapana and Nasya in a neurological condition. | 5 | Experiential-Learning2.3 | PSY-MEC | Does | RLE,SDL,PBL,CBL,DIS |
| CO1,CO2,CO4 | Propose and analyze the therapeutic use of two different <i>Ghritas</i> in the management of similar clinical presentations, evaluating their comparative efficacy and patient outcomes. | 5 | Experiential-Learning2.4 | PSY-MEC | Does | PBL,PL,RLE,PSM,CBL |

Unit 4 Applied aspect of Rukshana Upakrama Prior to Snehana.

Rukshana Upakrama Prior to Snehana.

1. Udvardana
2. Udgharshana
3. Abhyantara Rukshana

References: 1

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO1 | Discuss Snehavyapada and their management, Importance, methodology of Rukshana Upakrama prior to Snehana along with application of Udvardana, Udgharshana. | 1 | Lecture | CC | Knows-how | L&GD,L &PPT ,L |

| | | | | | | |
|-----------------|------------------------------------|---|--------------------------|---------|-----------|------------------|
| CO1,CO2,CO3,CO4 | Demonstrate udvartana. | 2 | Practical2.7 | PSY-SET | Shows-how | CBL,D,DIS,DA,PT |
| CO1,CO2,CO3,CO4 | Perform Udvardana and Udgharshana. | 2 | Experiential-Learning2.5 | PSY-MEC | Does | DIS,DA,CBL,PL,PT |

Practical Training Activity

Practical Training 2.1 Development of a questionnaire to assess Prakruti, Koshtha, Agni strength, and Jarana ability.

Demonstration by faculty:

- Faculty introduces key assessment parameters for Prakruti, Koshtha, Agni, and Jarana Shakt comprising of constitutional traits (Deha and Manasa Prakruti), nature of bowel movements and response to purgatives (Koshtha), characteristics and strength of Agni (Vishmagni, Tikshnagni, Mandagni, Samagni), patterns of digestion and metabolism.
- PG scholar collects references from classics, texts, and articles.
- Drafts a preliminary questionnaire with guidance from faculty and peer discussion.
- Conducts a pilot test on 10 patients, analyzes responses, refines the tool.
- Final version is documented and submitted to faculty.

Practical Training 2.2 Formulation and implementation of a dosage schedule for Shamanartha Snehapana using Hriseyasi Matra.

Demonstration by Faculty :

- Faculty will explain the concept of Hriseyasi Matra and factors influencing dose like Agni Bala (digestive strength), Jaraṇa Shakti (digestive capacity), Prakruti (constitution), Age, Satmya (adaptability), and Sharira Bala (physical strength).
- PG scholar will assess all the above factors in 3 patients.
- Initiate Hriseyasi Matra on Day 1 and observe digestion time and signs of proper digestion in them.
- Based on observations, scholar will determine the appropriate dose schedule for Shamanartha Snehapana.
- All observations, dosage decisions, and clinical reasoning will be systematically recorded in the scholar's logbook for future reference and academic evaluation.

Practical Training 2.3 Development of a proforma to assess Pachana Karma.

Demonstration by Faculty :

- Faculty will guide PG scholars to collect references from classics and standard literature.
- PG scholars will draft a preliminary questionnaire based on literature focusing on key indicators such as digestive strength, appetite, bowel habits, tongue coating, abdominal discomfort, belching, other subjective/objective markers of impaired digestion and clinical interactions with patients having Ama lakshana, Agnimandya or Ajeerna.
- A structured proforma will be designed covering all the above key aspects of Pachana Karma.
- PG scholars will apply the proforma in 5 patients planned for Snehapana.
- Observations will be recorded, revised if needed, and submitted for faculty approval.

Practical Training 2.4 Development of a clinical assessment format for Samyak Snigdha Lakshanas in any type of Snehapana.

Demonstration by Faculty:

- Faculty will introduce the concept and clinical importance of Samyak, Heena, and Ati Snigdha using classical references.
- PG scholars will compile signs and symptoms from classical texts (Charaka, Sushruta, Ashtanga Hridaya), draft a questionnaire including subjective and objective indicators (e.g., stool consistency, skin softness, digestive comfort), Incorporate variations in Sneha type, dose, patient Prakruti, and indication (Shodhanartha or Shamanartha).
- The draft will be piloted on 10 patients undergoing Snehapana.
- Based on observations, the format will be revised, peer-reviewed, and finalized for departmental documentation and future clinical use.

Practical Training 2.5 Evaluation of the effects of a specific medicated Ghrita administered as Shamanartha Snehapana in managing cognitive disorders.

Demonstration by Faculty:

- Faculty will guide PG scholars on the selection of a suitable Ghrita (e.g., Brahmi Ghrita or Kalyanaka Ghrita) for cognitive dysfunction.
- Explanation will be given on dosage (Matra), timing (Kaala), and duration (Avastha) for Shamanartha Snehapana.
- Clinical features of Samyak Snigdha Lakshanas will be demonstrated and discussed.
- Scholars will be assigned 3 patients with diagnosed cognitive dysfunction (e.g., Smritibhramsha, Buddhi Mandya).
- Ghrita will be administered as per protocol with regular monitoring of Snehana status.
- Cognitive function will be assessed before, during, and after intervention using suitable tools (e.g., MMSE).
- Scholars will record and analyze the observed changes and correlations between Snehapana and cognitive response.

- Results will be discussed with peers and faculty for deeper clinical understanding.

Practical Training 2.6 Compilation of Ghrita formulations from classical texts as a departmental team-based project.

Demonstration by Faculty:

- Allocate 1–3 classical texts per PG scholar based on department strength.
- Guide selection from major texts like Charaka Samhita, Sushruta Samhita, Ashtanga Hridaya, Bhavaprakasha, Chakradatta, etc.
- Instruct PG scholars to extract and compile Ghrita formulations from their allotted texts.
- Collate all data into a central repository.
- Categorize Ghritas based on ingredients, indications, and usage context.
- Analyze, discuss findings, and prepare a summary.
- Submit the completed departmental project for review.

Practical Training 2.7 Demonstration of Udvartana.

Demonstration by Faculty :

- Instruct PG scholar to study classical references on Udvartana.
- Demonstrate the standard method using Kol Kulatthadi Choorna.
- Allot 5 suitable patients for Udvartana to the PG scholar.
- Guide scholar to procure required materials in advance.
- Supervise the procedure performed as per SOP.
- Observe technique and correct strokes as needed.
- Instruct scholar to assess signs of Samyak Rukshana.
- Record and analyze the observations.

Experiential Learning Activity

Experiential-Learning Learning 2.1: Application and Counseling of Hrasva and Madhyama Matra in Snehapana.

Instructions:

- PG scholar will understand dosage planning based on Agni Bala and Jarana Bala.

- will select 2 patients each for Hrasva and Madhyama Matra in different clinical conditions.
- Finalize Sneha selection and calculate appropriate dosages and duration.
- Counsel patients regarding dosage, purpose, and expected outcomes.
- Will Supervise assessment of Samyak Snigdha Lakshanas in each case.
- Observe differences in Lakshana appearance between both dosages.
- Ensure proper recording and analysis of observations.

Experiential-Learning Learning 2.2: Development of strategies for counseling Reluctant Patients to Improve Acceptance of Snehapana.

Instructions:

- PG scholar shall observe faculty and senior interactions with patients prescribed Snehapana and identify challenges faced during such counseling.
- Will list common patient FAQs and prepare appropriate standard replies.
- will mock counseling drills with peers simulating hesitant patients.
- take 5 real patients for counseling practice.
- will scholar to document real-world issues encountered during counseling.
- Reinforce practice of FAQs and responses to improve patient compliance.

Experiential-Learning Learning 2.3: Comparison of the clinical effectiveness of a Selected Ghrita via Snehapana and Nasya in Neurological Disorders.

Instructions:

- Select 2 patients with a single neurological disease.
- Assess the patients for eligibility for Nasya and Snehapana.
- Choose an appropriate Ghrita for the selected clinical condition.
- Design a treatment plan with two different administration methods:
 - Example: Snehapana followed by Nasya or vice versa, for a fixed duration.
- Prescribe the treatment plan to the patients.
- Monitor and assess for signs of Samyak Snigdha and the clinical condition symptoms during both treatments.
- Record all observations.
- Analyze the outcomes.
- Discuss findings and conclusions with peers and faculty.

Experiential-Learning Learning 2.4: Comparative Clinical Evaluation of Two Ghritas in the Same Neurological Condition.

Instructions:

- PG scholar will select 10 patients with a specific neurological disease for Shamanartha Snehapana.
- Choose two suitable Ghritas for the condition and design a Snehapana pattern with fixed duration and follow-up schedule.
- Prescribe and implement the pattern in patients.
- Assess patients for Samyak Snigdha Lakshanas and clinical condition indicators.
- Record observations and analyze findings.
- Discuss conclusions with peers and faculty.

Experiential-Learning Learning 2.5: Performance of Udvartana and Udgharshana.

Instructions:

- Select 3 patients with Sthoulya for Udvartana and Udgharshana.
- Procure suitable choorna for the procedures ((e.g. Kola Kulatthadi, Triphala etc).
- Perform Udvartana and Udgharshana as per SOPs.
- Understand and apply the correct methodology, pressure, and direction of strokes for each procedure.
- Observe and interpret the Lakshanas.
- Document and analyze the observations.

Modular Assessment

Assessment

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.

- Identify and select the appropriate dose and type of application of sneha in given clinical condition (20 marks)
- Presentation of a scenario assessing diagnostic reasoning, treatment planning, and Demonstrate, apply and justify the usage of different Ghritas as per the clinical condition (20 marks)

4

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Semester No : 4

Module 3 : Application of Sneha based on Mode of administration and action

Module Learning Objectives

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

- 1 Describe specific snehana modalities meant for specific clinical conditions.
- 2 Prepare various snehapravicharana for different patients.
3. Analyze and assess the classification of snehadravayas and their similarity in context of various types of sneha.
4. Identify and evaluate the role of digestion and metabolism of fats with the mode of action of snehana.
5. Interpret the effects of sneha in certain clinical conditions based on the knowledge or related gut microbiota and changes in it.
6. Analysis of variety of Milk and milk products, Refined oil and each snehadravaya chemical compositions
7. Analysis of saindhav, its chemical compositions and its clinical importance

Unit 1 Administration of Accha Sneha and Pravicharana

1. Importance, utility, superiority of acchasneha
2. Difference between Accha Sneha and siddha Sneha
3. Concept, necessity and types of Pravicharana Sneha

References: 1,3,7,8,9,13,16,29,30,31,34,38,41,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO1 | Explain importance, superiority, utility of acchasneha; difference between acchasneha and siddha sneha, indications of siddha sneha. | 1 | Lecture | CC | Knows-how | L,L&PP T ,DIS,L& GD |
| CO1,CO4 | Discuss concept, necessity, 24 and 64 types, methodology of pravicharanasneha. | 1 | Lecture | CE | Knows-how | L&GD,L, L&PPT |
| CO1,CO2,CO4 | Explain structured format for the clinical administration of Pravicharana Sneha. | 4 | Practical3.1 | PSY- ORG | Shows-how | PAL,CB L,PL,RL E,PBL |
| CO2,CO3,CO4 | Discuss Accha Snehapana over Pravicharana Sneha. | 3 | Experiential- Learning3.1 | AFT- RES | Does | PL,PrBL ,SDL,RL E,PSM |
| CO1,CO2,CO3, CO4 | Describe manifestation of Samyak Snigdha Lakshanas in patients administered Accha Sneha versus Pravicharana Sneha. | 3 | Experiential- Learning3.2 | PSY- MEC | Does | SDL,RL E,CBL,P SM,PL |

Unit 2 Administration of Sadya Sneha, Avapedaka Sneha, Uttara Bhaktika Sneha

1. Concept, necessity, formulations and methodology of application, Dose, timings, duration of Sadyasneha
2. Concept, necessity, formulations and methodology of application, Dose, timings, duration of Avapedaka Sneha
3. Concept, necessity, formulations and methodology of application, Dose, timings, duration of Uttara Bhaktika Sneha

References: 1,3,7,8,9,13,29,30,31,34,35,38,41,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO1 | Describe the notion, necessity, indications, various formulations, methodology of Sadya Sneha. | 1 | Lecture | CC | Knows-how | L,L&GD, L&PPT |
| CO1,CO2,CO3 | Illustrate raw material and prepare Sadya Sneha formulations. | 4 | Practical3.2 | PSY- GUD | Shows-how | RLE,D,P L,PT,CB L |
| CO1,CO2 | Explain importance, utility, indications, application Avapeedaka Sneha and Uttara Bhaktika Sneha. | 1 | Lecture | CAP | Knows-how | L&GD,L, L&PPT |
| CO1,CO3,CO4 | Demonstrate Avapeedaka Sneha. | 2 | Practical3.3 | PSY- SET | Shows-how | PT,CBL, D,IBL |
| CO1,CO2,CO4 | Illustrate and prescribe Avapeedaka Sneha. | 3 | Experiential- Learning3.3 | PSY- MEC | Does | SDL,RL E,PBL,C BL,PT |
| CO1,CO2,CO4 | Illustrate and Prescribe Uttara Bhaktika Sneha | 3 | Experiential- Learning3.4 | PSY- SET | Does | SDL,IBL ,PT,PS M,CBL |

Unit 3 Applied physiology and biochemistry of lipids and fatty acids related to Abhyantara Sneha

1. Applied physiology and biochemistry of lipids and fatty acids related to Abhyantara Sneha

References: 1,7,8,13,21,29,30,31,34,36,38,56,57

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
|----------------------------------|--|---|--|--|---|--|

| | | | Experiential Learning | | how/Knows how/Know) | g Methods |
|-------------|--|---|--------------------------|---------|---------------------|----------------------|
| CO1 | Analyze the importance, utility, types and physiology of lipids, plant & Animal Origin fats. | 1 | Lecture | CC | Knows-how | L&GD,L &PPT ,L |
| CO1 | Explain the discrete functions of triglycerides, cholesterol and sterols. | 1 | Lecture | CE | Knows-how | L&PPT ,L&GD,L |
| CO1 | Explain the importance, utility and types of Fatty Acids; Omega three and Omega six, Saturated and Unsaturated, Long Chain, Medium Chain, Short Chain Fatty Acids. | 1 | Lecture | CC | Knows-how | L&GD,L, L&PPT |
| CO1 | Conduct Team Based Project over comparison between functions and properties of Fats & classification of Sneha. | 6 | Practical3.4 | PSY-ORG | Shows-how | TBL,PrB L,C_L,T PW |
| CO1,CO2,CO4 | Propose the investigations regarding the changes in Lipid Profile following Shamanartha Snehapana. | 3 | Experiential-Learning3.5 | PSY-ADT | Does | DIS,CBL ,CD,LRI, PBL |
| CO1,CO2,CO4 | Propose and conduct investigations to evaluate changes in lipid profile following Shodhanartha Snehapana. | 3 | Experiential-Learning3.6 | PSY-ADT | Does | LRI,CD, SDL,CB L,DIS |
| CO1 | Explain investigations to evaluate lipid profile changes following Brumhanartha Snehapana. | 3 | Experiential-Learning3.7 | PSY-ADT | Does | CD,LRI,I BL,SY,C BL |

Unit 4 Mode of action of Abhyantara Sneha

1. Interpretation of Absorption, digestion and metabolism of fats related to Abhyantara Sneha.
2. Analysis of effect of fat on gut microbiota.

References: 1,8,13,21,29,30,34,36,38,41,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO1 | Identify the process of absorption, digestion and metabolism of fats. | 1 | Lecture | CAN | Knows-how | L&GD,L, L&PPT |
| CO1 | Compare and integrate the physiology of digestion, absorption and metabolism of fats with the functioning of Jatharagni, Dhatvagni and Bhautikagni Paka. | 1 | Lecture | CE | Knows-how | L,L&GD, L&PPT |
| CO1 | Evaluate the influence of Fat over gut Microbiota. | 1 | Lecture | CE | Knows-how | L,L&GD, L&PPT |
| CO1 | Assess Group Discussion and brainstorming session over probable role of sneha on Microbiota in the diseases. | 4 | Practical3.5 | CE | Shows-how | BS,C_L, Mnt,PrB L,TBL |
| CO1 | Demonstrate team-based project summarizing the physiology of fat metabolism and the digestion of Sneha from both Ayurvedic and modern perspectives. | 5 | Experiential-Learning3.8 | CAP | Does | RLE,TP W,BS,P AL,DSN |

Practical Training Activity

Practical Training 3.1 Development of a Clinical Format for Pravacharana Sneha Administration.

Demonstration by Faculty:

- Faculty will explain the therapeutic relevance of Pravacharana Sneha, focusing on formulation selection, treatment efficacy, and palatability.
- The rationale behind prescribing Pravacharana Sneha, types of administration, preparation methods, ingredient selection, Rasa integration, and Sneha assessment criteria will be demonstrated.
- PG scholars will be guided to consider these factors, refer to classical texts, interact with seniors and patients, and draft a suitable format.

- Scholars will identify patients unsuitable for Accha Sneha Pana and assess issues related to diet, Satmyata, Prakriti, Agni, and palatability.
- Based on these insights, PG scholars will outline key points and design a preliminary format for Pravicharana Sneha administration.
- They will enter trial data, identify challenges, refine the format, finalize it, and submit the completed version.
- The entire activity will be documented in the logbook.

Practical Training 3.2 Preparation of Sadya Sneha Formulations

Demonstration by faculty:

- Faculty will instruct PG scholars to review classical references on *Sadya Sneha* from Charaka, Sushruta, Vagbhata, and related commentaries.
- Clinical indications, dosage, and criteria for selecting appropriate *Sadya Sneha* formulations will be demonstrated.
- PG scholars will identify three suitable patients, select formulations from classical texts, and assemble the required raw materials.
- The selected *Sadya Sneha* will be prepared and administered to the patients.
- Scholars will observe and record the procedure, monitor for *Snigdha Lakshanas*, and assess patient responses.
- Observations will be documented and discussed with peers and faculty for clinical correlation.

Practical Training 3.3 Demonstration of Avapeedaka Sneha.

Demonstration by faculty:

- Faculty will ask PG scholars to review the theoretical concepts of Avapeedaka Sneha.
- Demonstration will include selection of clinical conditions, suitable Sneha, dosage, and timing for both types of Avapeedaka Sneha.
- 3 patients with Mutra Vaha Srotas disorders will be assigned for administration with appropriate Ghrita.
- PG scholars will counsel the patients and prescribe Avapeedaka Sneha with correct dose, duration, and timing.
- Signs of Samyak Snigdha Lakshana will be observed, recorded, and analyzed.
- Observations will be entered in the logbook and discussed with peers and faculty.

Practical Training 3.4 Planning a Team Based Project over comparison between functions and properties of Fats & classification of Sneha.

Demonstration by faculty:

- Faculty will assign topics for a team-based project comparing the functions and properties of fats and Sneha classification.
- Topics will be distributed among PG scholars with guidance on research methods, resources, and criteria.
- Scholars will gather study material from physiology textbooks, standard articles, classics, and commentaries.
- Collected data will be analyzed, compared, and organized to clarify the relationship between fats and Sneha.
- Conclusions will be drawn and summarized in a PowerPoint presentation.
- The project will be presented in a departmental seminar, followed by a group discussion.

Practical Training 3.5 Conduct Group Discussion and brainstorming session over probable role of sneha on Microbiota in the diseases.

Demonstration by faculty:

- Faculty will introduce PG scholars to gut microbiota, its role in disease pathophysiology, and factors influencing its balance, then assign related topics for group discussion.
- Scholars will research microbiota, its alterations in various diseases, and the impact of fats or milk products using classical texts and modern scientific sources.
- Diseases with parallels in Ayurveda will be selected to explore potential effects of Sneha on microbiota.
- Collected data will be analyzed and integrated from both Ayurvedic and modern perspectives.
- Scholars will evaluate the probable influence of Sneha on microbiota and its implications for disease modulation.
- A brainstorming session will be conducted to interpret findings and draw logical conclusions.
- Final conclusions will be compiled and discussed collectively.

Experiential Learning Activity

Experiential-Learning Learning 3.1: Counseling of patient for Accha Snehapana.

Instructions:

- Understand the clinical superiority of Accha Sneha over Pravicharana Sneha.
- Common concerns such as lipid fears, palatability, cultural or economic issues will be identified through discussion with peers and faculty.
- 5 patients advised Snehapana but hesitant about Accha Sneha will be selected.
- Scholars will counsel and encourage patients to opt for Accha Sneha, addressing their specific concerns.

- Patient responses and outcomes of the counseling will be documented in the logbook.
- Scholars will develop effective techniques for convincing patients towards Accha Sneha and understand when Pravicharana Sneha may be a necessary alternative.

Experiential-Learning Learning 3.2: Comparison between Observations of Samyak Snigdha Lakshanas in Accha and Pravicharana Snehapana

Instructions:

- PG scholars will select 3 patients each for Accha Sneha and Pravicharana Sneha, all indicated for Snehapana before Shodhana.
- A uniform method of Pravicharana Sneha will be applied across the selected patients.
- Daily assessment will be done for signs of Samyak Snigdha Lakshana in both groups.
- Observations will be documented, analyzed, and compared to identify differences between the two Sneha administration methods.
- Findings will be recorded and discussed with peers and faculty for clinical interpretation.

Experiential-Learning Learning 3.3: Illustration and clinical prescription of Avapeedaka Sneha.

Instructions:

- PG scholars will study the procedure and principles of prescribing Avapeedaka Sneha.
- Appropriate clinical conditions and suitable Sneha will be selected for prescription.
- The selected Sneha will be prescribed with correct dosage and timing in 5 patients.
- Patients will be assessed for Samyak Snigdha Lakshanas and clinical improvement.
- Observations will be recorded, analyzed, and discussed as part of the learning process.

Experiential-Learning Learning 3.4: Illustration and Prescription of Auttara Bhaktika Sneha.

Instructions:

- PG scholars will understand the method and principles of prescribing Auttara Bhaktika Sneha.
- Appropriate clinical conditions and suitable Sneha will be selected for its administration.

- Sneha will be prescribed with correct dosage and timing in 5 patients.
- Patients will be monitored for Samyak Snigdha Lakshanas and clinical improvement.
- All observations will be recorded, analyzed, and discussed for clinical understanding.

Experiential-Learning Learning 3.5: Assess changes in Lipid Profile before and after Shamanartha Snehapana.

Instructions:

- PG scholars will select 5 patients indicated for Shamanartha Snehapana.
- Total lipid profile will be assessed before starting Accha Sneha and reassessed after completion, upon appearance of Samyak Snehana signs.
- Changes in lipid profile and clinical signs will be noted and analyzed.
- All findings will be recorded and discussed with peers and faculty.

Experiential-Learning Learning 3.6: Evaluate Lipid Profile Variations Before and After Shodhanartha Snehapana.

Instructions:

- PG scholars will select 5 patients suitable for Shodhanartha Snehapana.
- Total lipid profile will be assessed before starting Accha Sneha and reassessed after the prescribed duration, upon appearance of Samyak Snehana signs.
- Changes in lipid profile and clinical signs will be noted and analyzed.
- All findings will be recorded and discussed with peers and faculty.

Experiential-Learning Learning 3.7: Assessment of Lipid Profile Alterations Before and After Brumhanartha Snehapana.

Instructions:

- Scholars will select 5 patients suitable for Brumhanartha Snehapana.
- Total lipid profile will be assessed before starting Accha Sneha and reassessed after the prescribed duration, upon appearance of Samyak Snehana signs.
- Changes in lipid profile and clinical signs will be noted and analyzed.
- All findings will be recorded and discussed with peers and faculty.

Experiential-Learning Learning 3.8: Exploration and Presentation of a Team-Based on Fat Metabolism and Sneha Pachana.

Instructions:

- Scholars will divide topics related to fat metabolism and Sneha Pachana among themselves.
- Scholars will review the Ayurvedic perspective on digestion, absorption, and metabolism of fats, integrating this with the process of Snehanaupākram (fat administration).
- Collected material will be analyzed, organized, and compared to understand fat metabolism and Sneha digestion.
- Conclusions will be drawn based on the analysis and summarized in a PowerPoint presentation.
- The project will be presented in a departmental seminar followed by a group discussion for deeper insights.

Modular Assessment

Assessment

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.

- 1 Describe specific snehana modalities meant for specific clinical conditions.
- 2 Prepare various snehapravicharana for different patients.
- 3. Analyze and assess the classification of snehadravys and their similarity in context of various types of sneha.
(20 marks)
- Identify and evaluate the role of digestion and metabolism of fats with the mode of action of snehana.
- Sneha in certain clinical conditions based on the knowledge or related gut microbiota and changes.(20 marks))
- Including Viva-voce (10 marks)

4

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Module 4 : Bahya Snehana and their modes of Application

Module Learning Objectives

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

1. Describe the methodologies, techniques, needed medicines and formulations, timings and duration of various procedures of bahya snehana.
2. Comprehend Moordhni tailam with individual indications, contra indications, methodologies, techniques, needed medicines and formulations, timings, duration and effects.
3. Perform various pachakarma procedures of abhyanga, moordhni tailam and other miscellaneous procedures.
4. Discuss the uses of different oils, their ingredients, indications and utility through different way of administrations.
5. Identify the mode of action of bahya snehana in comparison with chemical penetration enhancers.

Unit 1 Application of Bahyasnehana and Massage techniques

1. Utility and Importance of Bahyasnehana
2. Methodology of Abhyanga, Mardana, Unmardana, Padaghata, Samvahana, Utsadana.
3. Different Massage Techniques: Swedish Massage, Thai Massage, Sports Massage, Deep Tissue Massage, Shiatsu Massage.

References: 3,7,8,9,11,13,16,29,30,31,33,34,38,41,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|

| | | | | | | |
|---------------------|---|---|------------------------------|-------------|-----------|--------------------------------|
| CO1,CO2 | Illustrate utility and importance of bahyasnehana and Compare amongst Abhyanga, Mardana, Unmardana, Padaghata, Samvahana, Utsadana. | 1 | Lecture | CAP | Knows-how | L&PPT ,L_VC,L, L&GD |
| CO1,CO2,CO3, CO4 | Demonstrate and explain the procedure of Abhyanga. | 2 | Practical4.1 | PSY- SET | Shows-how | D- BED,CB L,PL,D,T UT |
| CO1,CO2,CO3, CO4 | Perform and deliberate difference between Samvahana, Unmardana and Utsadana. | 2 | Experiential- Learning4.1 | PSY- MEC | Does | SDL,CB L,RLE,T UT,PT |
| CO1 | Explain the methods and techniques of following massage: Swedish Massage, Thai Massage, Sports Massage, Deep Tissue Massage, Shiatsu Massage. | 1 | Lecture | CE | Knows-how | L,L_VC, L&GD,L &PPT |
| CO1,CO2,CO3, CO4 | Demonstrate the techniques involved in Swedish Massage, Thai Massage, Sports Massage, Deep Tissue Massage, and Shiatsu Massage. | 4 | Practical4.2 | PSY- SET | Shows-how | PL,PBL, DIS,PS M,RLE |
| CO1,CO2,CO3, CO4 | Perform and deduce the differences between abhyanga techniques in comparison with other contemporary techniques. | 4 | Experiential- Learning4.2 | PSY- MEC | Does | PBL,CB L,CD,IB L |

Unit 2 Moordhni Tailam and other Bahya Snehana modalities

1. Application Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya and mode of action, of Shiro-Abhyanga, Shirodhara, ShiroPichu and ShiroBasti.
2. Application Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya and mode of action, of Urovasthi, Shiro Upanaha, Shiro Lepa (Talapotichil), Talam, Tarpana, Taila Parishek, Sneha Avagahana, Karna Poorana.

References: 1,7,8,9,11,13,16,27,28,29,30,31,37,38,41,42,45,54,55,56,57

| 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 Teachin g Learnin g Method s |
|--|--|-------------------------------|--|--------------------------------|--|---|
| CO1,CO2,CO4 | Summerise, scrutinize indications, contra indications, methodology, effects and mode of action of Shiro-Abhyanga, Shirodhara, ShiroPichu and ShiroBasti (Moordhni Tailam). | 1 | Lecture | CC | Knows-how | L,L&GD, L&PPT ,PER |
| CO1,CO2,CO3, CO4 | Demonstrate the procedure of <i>Shiro Basti</i> . | 2 | Practical4.3 | PSY- SET | Shows-how | IBL,PT, D- M,TUT, D |
| CO1,CO2,CO3, CO4 | Perform and analyze the difference between the effects Shiro abhyanga and shiro pichu in the patients of insomnia. | 3 | Experiential- Learning4.3 | PSY- ORG | Does | PSM,CB L,RLE,P BL |
| CO1,CO2,CO3, CO4 | Elaborate and analyse indications, contra indications, methodology of Uro Basti, ShiroUpanaha, Shiro Lepa (Talapotchil), Talam, AkshiTarpana, Taila Parishek, Sneha Avagahana, Karna Poorana and mode of action. | 1 | Lecture | CC | Knows-how | PER,L,L &GD,L& PPT |
| CO1,CO2,CO3, CO4,CO5,CO5, CO6 | Demonstrate the procedure of Talam. | 2 | Practical4.4 | PSY- SET | Shows-how | PSM,CD ,CBL,PT ,PBL |
| CO1,CO2,CO3, CO4,CO5,CO5, CO6 | Perform Shiro Basti. | 3 | Experiential- Learning4.4 | PSY- MEC | Does | IBL,PT, CBL,PB L |
| Unit 3 Application of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara | | | | | | |

1. Application Indications, Methodology, duration, time of administration, assessment methods, Pariharya Vishaya and mode of action, of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara.

References: 1,3,7,8,9,11,13,16,28,29,30,34,37,38,41,42

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO1 | Explore Indications, Methodology and mode of action of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara. | 1 | Lecture | CAN | Knows-how | L,L&GD, L&PPT |
| CO1,CO2,CO3, CO4 | Demonstrate the procedure of Takradhara. | 2 | Practical4.5 | PSY- SET | Shows-how | DIS,PT, DA,CBL, TUT |
| CO1,CO2,CO3, CO4 | Perform Gandusha treatment | 2 | Experiential- Learning4.5 | PSY- MEC | Does | PT,PL,S DL,CBL, DIS |

Unit 4 Applications of commonly used Tailas

1. Applications of commonly used Tailas – ingredients, indications, dose route of administration (Pana, Abhyanga, Nasya, Basti).

References: 3,7,8,9,11,13,16,27,28,29,30,33,34,37,38,41,42,45,46,53,54,55,56

| 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 Teachin g Learnin g |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|------------------------------------|
|-------------------------|--|-------------------------------------|--|--------------------------------|--|------------------------------------|

| | | | | | | Methods |
|-----|--|---|---------|-----|-----------|--------------------------|
| CO1 | Discuss the ingredients, indications, dosages and way of use of the following oils. MahaNarayanaTailam, KsheeraBalaTailam, ShuddhaBalaTailam, KottamChukkadiTailam, PrasariniTailam, PrabhanjanaVimardhanaTailam, KarpasasthyadiTailam, VishaGarbhaTailam. | 1 | Lecture | CAN | Knows-how | L&GD,L &PPT ,L |
| CO1 | Discuss the ingredients, indications, dosages and way of use of the following oils. MahaVishagarbhaTailam, Parinata Keri KsheeradiTailam, Maha Masha Tailam, Brahmi Tailam, HimasagaraTailam, TunguDrumadiTailam, Asana EladiTailam, Asana BilwadiTailam, MarichyadiTailam, SahacharadiTailam / Kuzhambu, DhanwantaramTailam / Kuzhambu. | 1 | Lecture | CAN | Knows-how | L&PPT ,DIS,L& GD,L |
| CO1 | Discuss the ingredients, indications, dosages and way of use of the following oils. DurvadiTailam, DineshaValyadiTailam, ValiyaChandanadiTailam, ChinchadiTailam, PindaTailam, LakshadiTailam/ Kuzhambu, BalaswagandhadiTailam/ Kuzhambu, TriphaladyaTailam, MalatyadiKeraTailam, NeeliBhringadiTailam, BringamalakaTailam, PrapoundareekadiTailam. BalaguluchyadiTailam, SahacharadiTailam. | 1 | Lecture | CAN | Knows-how | L,L&GD, DIS |

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|------------------|--|---|--------------------------|---------|-----------|------------------------|
| CO1,CO2,CO3, CO4 | Demonstrate the procedure of Abhyanga using two distinct medicated oils in patients with hemiplegia. | 3 | Practical4.6 | PSY-SET | Shows-how | TUT,CB L,PER,D ,D-M |
| CO1,CO2,CO3, CO4 | Perform Abhyanga or massage using single oil in different neurological conditions. | 6 | Experiential-Learning4.6 | PSY-GUD | Does | RLE,SD L,PSM,P BL,CBL |
| CO1,CO2,CO3, CO4 | Demonstrate and evaluate effects of Shiro Dhara and Shiro Abhyanga using different medicated oils in a single Vata Vyadhi condition. | 3 | Practical4.7 | PSY-SET | Shows-how | CBL,PS M,SDL, PT,D-BED |

Unit 5 Applied part of Chemical penetration enhancers (CPEs), commonly used fatty esters, fatty acids from dermatological formulations in connection with mode of action of Bahya Snehana.

1. Applied aspects of Chemical penetration enhancers (CPEs), commonly used fatty esters, fatty acids from dermatological formulations in connection with mode of action of Bahya Snehana.

References: 7,9,11,13,18,21,32

| 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 Teachin g Learnin g Method s |
|----------------------------------|---|---|--|--|---|--|
| CO1 | Discribe concept, types and mode of action of Chemical Penetration Enhancers. | 1 | Lecture | CC | Knows-how | L&PPT ,DIS,L,L &GD |
| CO1 | Analyze mode of actions of commonly used Fatty Esters Iso Propyl Myristate (IPM), Propylene Glycol Mono Caprylate (PGMC), Propylene Glycol Mono Laurate (PGML)) and Fatty Acids (Oleic acid, Capric | 1 | Lecture | CAN | Knows-how | DIS,L,L &GD,L& PPT |

| | | | | | | |
|-----|---|---|--------------------------|-----|-----------|------------------------|
| | acid, Palmitoleic, Linoleic acid, Ricinoleic acid (RCA), Myristic acid) in dermatological formulations. | | | | | |
| CO1 | Discuss the mode of action of Abhyanga and Chemical Penetration Enhancers (CPEs). | 2 | Practical4.8 | CC | Shows-how | Mnt,DIS,BS,PER,PL |
| CO1 | Develop team-based project exploring the applied anatomy and physiology of skin, pharmacology of dermatological fatty acids and esters in respect to efficacy of Bahya Snehana. | 6 | Experiential-Learning4.7 | CAP | Does | PrBL,RL E,PAL,T BL,PER |

Practical Training Activity

Practical Training 4.1 Demonstration of the Abhyanga technique.

Demonstration by faculty:

- Faculty shall demonstrate standard Abhyanga strokes on a model or patient, emphasizing stroke pressure, speed, direction, and doshic considerations.
- PG scholars shall study relevant surface anatomy—muscles, joints, tendons—to understand safe and effective application.
- Scholars will observe skilled Panchakarma personnel and note variations in technique, hand positioning, and procedural flow.
- Emphasis will be placed on Use of palms and fingers appropriately, Adjusting technique based on Prakriti, Rogavastha, and treatment goals, Patient positioning and comfort during the procedure.
- Scholars will be introduced to regional variations in Abhyanga across India.
- PG scholars will practice under supervision and receive feedback for refinement.

Practical Training 4.2 Demonstration and application of various massage techniques, highlighting their individual methodologies and therapeutic benefits.

Demonstration by Faculty:

- Faculty shall explain the relevant surface anatomy of muscles, ligaments, tendons, and joints to ensure safe and effective application of each massage technique.
- Faculty or certified experts will demonstrate Swedish Massage, Thai Massage, Sports Massage, Deep Tissue Massage, Shiatsu Massage.
- Each technique will be explained in terms of stroke patterns, pressure, direction, rhythm, and therapeutic purpose.

- Demonstrations will be supported by credible external resources (e.g., expert video tutorials, published articles, and selected online lectures).
- PG scholars will Observe the demonstrations carefully, Take structured notes, Practice each massage technique on assigned patients under supervision, Focus on adjusting pressure, stroke direction, speed, and using different parts of the hand for desired outcomes.
- Faculty will facilitate comparisons between these techniques and Abhyanga, guiding scholars in understanding distinctions in methodology, philosophy, and therapeutic goals.
- PG scholars shall record observations on patient responses—such as changes in muscle tone, flexibility, pain relief, or relaxation—and document the findings in their logbooks.

Practical Training 4.3 Demonstration and explanation of the *Shiro Basti* procedure.

Demonstration by Faculty:

- Faculty shall explain the anatomy of the scalp and head relevant to *Shiro Basti*.
- Faculty will demonstrate the complete procedure, including preparation, application, oil management, and removal of *Shiro Basti Yantra*.
- PG scholars shall learn and practice proper sealing using black gram flour, pouring warm medicated oil, maintaining temperature, and post-procedure care (*Pashchat Karma*).
- Each scholar will perform *Shiro Basti* on two patients under supervision.
- Scholars will observe and document therapeutic effects and patient responses in the logbook.

Practical Training 4.4 Demonstration of the *Talam* procedure.

Demonstration by Faculty:

- Faculty shall explain the indications, benefits, and materials required for *Talam*, including Amalaki Churna, buttermilk, and Padma leaf or cotton.
- Faculty will demonstrate the full procedure: paste preparation, patient positioning, application on the forehead, and removal.
- Each PG scholar will perform *Talam* on three patients under supervision, ensuring correct technique and patient comfort.
- Scholars will document the procedure, therapeutic response, and observations in the logbook.

Practical Training 4.5 Demonstration of Takradhara.

Demonstration by faculty:

- Faculty shall explain the indications, duration, and steps of Takradhara, including preparation of Siddha Takra using drugs like Musta and Amalaki.
- Faculty will demonstrate the procedure with focus on liquid flow, consistency, temperature, and safety measures during application.
- PG scholars will be divided into two groups, each performing Takradhara on three patients of psoriasis—one with plain Takra, the other with Siddha Takra.
- Scholars will assess outcomes using the PASI scale, observe patient response, and maintain procedural hygiene and post-care.
- All observations and results will be recorded in logbooks for analysis and evaluation.

Practical Training 4.6 Demonstration of the procedure of Abhyanga using two distinct medicated oils in patients with hemiplegia.

Demonstration by faculty:

- Faculty shall explain the rationale for oil selection in hemiplegia based on Dosha, Rogavastha, and clinical goals.
- PG scholars will be assigned 4 hemiplegic patients—2 treated with one oil and 2 with another (e.g., Dhanvantara Taila vs. Ksheerabala Taila).
- Abhyanga shall be performed daily for a fixed duration over a defined period (e.g., 7 days).
- Scholars will assess outcomes using clinical scales such as the Modified Ashworth Scale and document changes in mobility, tone, and spasticity.
- Observations will be analyzed and discussed with faculty and peers.
- All findings and reflections shall be recorded in the logbook.

Practical Training 4.7 Demonstration and evaluation of effects of Shiro Dhara and Shiro Abhyanga with different oils in single Vata Vyadhi condition.

Demonstration by faculty:

- Faculty will organize an interdepartmental seminar focused on comparing the mode of action of *Abhyanga* and chemical penetration enhancers (CPEs).
- Topics for comparison will be identified and distributed among PG scholars.
- PG scholars will collect references from classical texts, physiology, pharmacology, biochemistry, and standard scientific sources.
- Faculty will guide scholars in compiling, analyzing, and synthesizing the material into concise presentations.
- Each scholar will prepare and present their topic using a PowerPoint presentation within a defined time frame.

- Faculty will moderate the session, ensuring logical flow and clarity in the presentations.
- A brainstorming session will follow to discuss and integrate insights from both Ayurveda and modern science.
- Faculty will help summarize the discussion, highlighting core similarities and differences in mechanisms, and document the final consensus.

Practical Training 4.8 Discuss the pharmacokinetic and therapeutic mechanisms of Abhyanga

Demonstration by faculty:

- Faculty will organize an interdepartmental seminar focused on comparing the mode of action of Abhyanga and chemical penetration enhancers (CPEs).
- Topics for comparison will be identified and distributed among PG scholars.
- PG scholars will collect references from classical texts, physiology, pharmacology, biochemistry, and standard scientific sources.
- Faculty will guide scholars in compiling, analyzing, and synthesizing the material into concise presentations.
- Each scholar will prepare and present their topic using a PowerPoint presentation within a defined time frame.
- Faculty will moderate the session, ensuring logical flow and clarity in the presentations.
- A brainstorming session will follow to discuss and integrate insights from both Ayurveda and modern science.
- Faculty will help summarize the discussion, highlighting core similarities and differences in mechanisms, and document the final consensus.

Experiential Learning Activity

Experiential-Learning Learning 4.1: Performance and analysis of difference between Samvahana, Unmardana and Utsadana.

Instructions:

- PG scholar shall first acquire proficiency in the basic procedure of Abhyanga.
- Practice and perform Samvahana, Unmardana, and Utsadana as per classical descriptions.
- Understand and demonstrate variations in Pressure (mild, moderate, deep), Stroke direction (with or against hair growth), Speed (slow, moderate, fast), Hand techniques (use of palms, fingers, or both).
- Differentiate each procedure based on technique, therapeutic purpose, and indications.
- Observe effects during practice sessions and document findings.
- Share observations with faculty and peers for feedback and refinement.

Experiential-Learning Learning 4.2: Performance and Analysis of differences between *abhyanga* techniques in comparison with other contemporary techniques.

Instructions:

- PG scholar shall perform *Abhyanga* and practice standard techniques of selected contemporary massages such as Swedish Massage, Thai Massage, Sports Massage, Deep Tissue Massage, and Shiatsu.
- Observe and document differences in technique, pressure, stroke, patient positioning, and use of media.
- Analyze the therapeutic intent and physiological basis of each method.
- Compare clinical indications, strengths, and limitations of *Abhyanga* with those of each contemporary technique.
- Conclude with a justified selection of appropriate techniques for various clinical conditions based on evidence and classical principles.

Experiential-Learning Learning 4.3: Performance and analysis of the difference between the effects Shiro *abhyanga* and shiro *pichu* in the patients of insomnia.

Instructions:

- PG scholar shall select patients diagnosed with insomnia and divide them into two groups for administering Shiro *Abhyanga* and Shiro *Pichu* respectively.
- Perform both procedures following classical guidelines and maintain uniformity in duration, *Sneha* selection, and time of administration.
- Monitor and record changes in sleep quality, duration, and associated symptoms using standardized sleep assessment tools and classical parameters.
- Analyze and compare therapeutic responses between both procedures.
- Document findings and discuss conclusions with faculty and peers for clinical interpretation and refinement of practice.

Experiential-Learning Learning 4.4: Performance of Shiro *Basti*.

Instructions:

- PG scholar shall procure all essential materials including black gram flour, *Shiro Basti Yantra*, and prescribed medicated oil.
- Prepare and apply a leak-proof seal on the scalp using black gram flour or the *Shiro Basti* cap to ensure secure containment of the *Sneha*.
- Fill the apparatus with the required quantity of warm medicated oil, maintaining optimal temperature throughout the procedure.
- Learn and execute key steps such as:

- Pouring the oil at the correct temperature
- Monitoring oil level and replacing with warm oil as needed
- Removing the apparatus safely after completion
- Observe and assess the patient for expected outcomes based on classical parameters.
- Record observations, analyze the therapeutic response, and document the findings in the logbook.

Experiential-Learning Learning 4.5: Performance of Gandusha.

Instructions:

- PG scholar shall study the classical types, indications, contraindications, methodology, and mode of action of *Gandusha*.
- Select 3 patients with aphasia due to hemiplegia, and choose an appropriate medicated oil for *Gandusha* based on doshic assessment.
- Demonstrate the standard procedure to patients, including:
 - Warming the oil to body temperature
 - Filling the oral cavity with the prescribed quantity of oil
 - Holding the oil without swallowing for 5–7 minutes
 - Maintaining nasal breathing during the procedure
- Instruct patients to perform the procedure daily for a fixed duration under supervision.
- Observe and document changes in speech function and related symptoms.
- Assess, analyze, and record the therapeutic outcomes in the logbook.

Experiential-Learning Learning 4.6: Performance of Abhyanga or massage using single oil in different neurological conditions.

Instructions:

- PG scholar shall study the composition, pharmacological properties, and clinical indications of available medicated oils.
- Select one multipurpose oil (e.g., *Mahamasha Taila*, *Bala Taila*) suitable for a broad range of neurological conditions.
- Identify three commonly encountered neurological disorders (e.g., *Pakshaghata*, *Gridhrasi*, *Kampavata*) in OPD/IPD settings.
- Select 5 patients from each condition (total 15 patients) and perform *Abhyanga* using the selected oil uniformly across all cases.
- Administer *Abhyanga* for a fixed duration and frequency as per standard protocol.
- Assess the patients pre- and post-therapy using clinical and classical parameters.
- Record observations, analyze therapeutic outcomes, and discuss findings with faculty and peers.

Experiential-Learning Learning 4.7: Preparation of a team-based project exploring the applied anatomy and physiology of skin, pharmacology of dermatological fatty acids and esters in respect to efficacy of Bahya Snehana.

Instructions:

- PG scholars shall form a team and plan a project integrating the following components:
 - Applied anatomy and physiology of the skin
 - Pharmacology of dermatological fatty acids and esters
 - Ayurvedic knowledge of *Tvacha Shareera* and its functions
 - Correlative understanding of these elements in the context of *Bahya Snehana* efficacy
- Divide the topics among team members for focused study and literature review.
- Collect references from classical Ayurvedic texts and commentaries, modern physiology, biochemistry, and pharmacology textbooks, Peer-reviewed journals and credible academic databases.
- Analyze and screen the gathered material to identify clinically and academically relevant insights.
- Each member shall prepare conclusions on their respective subtopics, which will then be compiled and critically reviewed.
- Summarize the entire project with clear interlinking of classical and modern perspectives.
- Present the findings in a structured format to faculty and peers, and submit the final report for evaluation.

Modular Assessment

Assessment

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.

- 1 Describe methodologies, techniques, needed medicines and formulations, timings and duration of various procedures of bahya snehana.
- 2. Explain Moordhni tailam with individual indications, contra indications, methodologies, techniques, needed medicines and formulations, timings, duration and effects.
- 3. Perform various pachakarma procedures of abhyanga, moordhni tailam and other miscellaneous procedures. (40 marks)

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| <ul style="list-style-type: none"> Including Viva-voce (10 marks) <p>Or</p> <ul style="list-style-type: none"> Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | |
|---|--|

Semester No : 5

Module 5 : Principles of Sagni and Niragni Sweda Practice

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

- Describe properties, classification, medicines used in Swedana karma.
- Choose appropriate Swedana protocol understanding the need of the clinical condition from various categories.
- Identify the required advancements in heating modalities and use them for appropriate Swedana purpose.

Unit 1 Essentials of Swedana Upakrama

- Importance and Utility of Swedana
- Based on Swedana Drvya properties effect of swedana
- Application of Swedana as Poorva Karma and pradhana karma,
- Role of Swedana in shakha to koshta gati of Dosha.

References: 1,3,7,8,9,11,13,21,29,30,31,34,38,41,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO1 | Explain Importance, Utility, and Treatment Principles of Swedana Karma as one of the Shat Upakrama, along | 1 | Lecture | CAN | Knows-how | L&PPT ,L&GD |

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| | with its Therapeutic Actions (Karma) based on the Guna of the Dravyas used. | | | | | |
| CO1 | Evaluate the Roles of Swedana Karma as Pūrvakarma and Pradhānakarma; the Importance of Combined Administration of Snehana Karma and Swedana Karma as Pūrvakarma in Panchakarma Chikitsa, and its Role in Facilitating Dosha Gati from Shākha to Koshta. | 1 | Lecture | CK | Knows-how | L&GD,L &PPT |
| CO1 | Illustrate the Classical References Regarding the Utility of Swedana Upakrama and Recent Research Updates on the Clinical Application of Swedana Karma in Various diseases. | 4 | Practical5.1 | CK | Shows-how | PBL,CB L,PrBL, BS |
| CO1 | Illustration of the Actions of Swedana Karma as Pradhānakarma and Pūrvakarma. | 3 | Experiential-Learning5.1 | CS | Does | CBL,L& GD,DIS, PBL |

Unit 2 Categorisation of Swedana

1. Interpretation of difference between Sagni-Niragni, Snigdha-Ruksha, Ekanga-Sarvanga, Mridu-Madhyama-Teekshna
2. Integration of four types of sweda into thirteen types of sweda.
3. Indications, Contra indications of 10 types of Niragni Sweda

References: 1,3,7,8,9,11,13,29,30,31,38,41,42,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO2 | Analyse Differences Between Śagni and Nirāgni Swedana, Ekaṅga and Sarvāṅga Swedana, Rukṣa and Snigdha Swedana, and Mṛdu, Madhyama, and Tīkṣṇa | 1 | Lecture | CE | Knows-how | BS,L&P PT |

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| | Swedana Based on Indications, Types of Heat Transfer, Methodology, and Equipment; Scrutiny of the Methods and Rationale Behind Protection of Vital Organs (Varjyāṅga) During the Swedana Procedure. | | | | | ,DIS,L&GD |
| CO2 | Explain Valuka sweda and Nadi Sweda | 4 | Practical5.2 | PSY-GUD | Shows-how | DL,PrBL,PT,CBL,D |
| CO2 | Discuss Integration of Four Types of Swedana | 1 | Lecture | CAP | Knows-how | DIS,PBL,BS,PrBL |
| CO2 | Perform Ekāṅga Swedana and Sarvāṅga Swedana. | 6 | Experiential-Learning5.2 | PSY-MEC | Does | CBL,PA L,PBL |

Unit 3 Exploration of types of Classical Swedana Indications, Contra indications, Reason behind variations in Vishrama Kala before Vamana and Virechana **References:** 8,9,11,13,29,30

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO2 | Discuss Indications and Contraindications of Swedana Karma; Explanation of the Reasons Behind the Variation in the Duration of Vishrānti Divas for Bahya Snehana and Swedana Procedures Prior to Vamana and Virechana. | 1 | Lecture | CK | Knows-how | BS,L,L&PPT,DIS |
| CO2 | Discuss thirteen Types of Swedana Based on the Herbs Used, Equipment Employed, Indications, Method of Application, and Mode of Heat Transfer. | 1 | Lecture | CK | Knows-how | L&PPT,L&GD,DA,DIS |

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| CO2 | Discuss the Different Varieties of Nirāgni Swedana Based on Methods, Indications, Assessment Criteria, and the Probable Mode of Action of Each Discrete Type of Swedana. | 1 | Lecture | CAN | Knows-how | L&PPT ,CBL,DI S,BS |
| CO2 | Explain Nivāta Śadana, Gurūpravāraṇa, and Atapa Sevana as Swedana Modalities. | 4 | Practical5.3 | PSY- ADT | Shows-how | D- BED,Pr BL,PT,P BL,FC |
| CO2 | Discuss Team-Based Project on the Evaluation of Equipment Used and the Principles of Heat Transfer Involved in the Thirteen Types of Swedana. | 10 | Experiential- Learning5.3 | PSY- MEC | Does | L&PPT ,PAL,CB L,PrBL, C_L |

Unit 4 Analysis of Swedopaga dravya and Swedana drugs

1. Properties, pharmaco kinetics, pharmacodynamics of Swedopaga dravya
2. Properties of Swedana Dravyas used in Sagni Sweda.

References: 3,7,8,9,11,13,20,27,28,29,30,31,37,38,41,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO3 | Discover Properties, Pharmacodynamics, and Pharmacokinetics of Swedopāga Dravya; Exploration of the Possible Methods of Administration of Swedopāga Medicines; and Examination of the Role of Lavaṇa in Swedana Karma. | 1 | Lecture | CK | Knows-how | CBL,DA, JC |
| CO3 | Exploration and Analysis of the Useful Properties of Swedana Dravyas Used in Saṅkara Swedana, Patra | 1 | Lecture | CK | Knows-how | JC,L&G D,DA,L |

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| | Piṇḍa, Chūrṇa Piṇḍa, Jāmbīra Piṇḍa, Śaṣṭikāśāli Piṇḍa, Nāḍi Swedana, Prastāra Swedana, and Upanāha Swedana. | | | | | |
| CO2 | Perform Snigdha Upanāha Swedana, Rukṣa Upanāha Swedana, Śagni Upanāha Swedana, and Nirāgni Upanāha Swedana. | 2 | Practical5.4 | PSY-SET | Shows-how | PBL,PA L,L&PP T ,CBL,DL |
| CO2 | Perform Patra Piṇḍa Swedana. | 3 | Practical5.5 | PSY-ADT | Shows-how | PBL,D- M,CBL, W,C_L |
| CO2 | Perform Nāḍi Swedana. | 3 | Experiential- Learning5.4 | PSY- MEC | Does | DSN,CB L,PBL,P rBL |

Unit 5 Advancement in Instruments used for heating in current era

1. Utility and technology behind heating pads, souna bath, Nadi Swedana yantra.

References: 8,9,11,13,22,25,27,28,30,31,41,42,45,46,53,54,55,57

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO2 | Explain the Nature, Components, Indications, Contraindications, Operational Methods, Mode of Action, and Precautions for Using Heating Pads, Sauna Bath, Heating Tent, Sauna Bathtub, and Nāḍi Swedana Yantra Equipped with Temperature Regulators and Heat Controllers. | 1 | Lecture | CAP | Knows-how | BS,L&G D,FC |

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| CO2,CO8 | Demonstrate the Use of Nāḍi Swedana Yantra. | 2 | Practical5.6 | PSY- MEC | Shows-how | D- M,PAL, CBL,DL, PBL |
| CO2 | Demonstrate the use of sauna bath tent. | 1 | Practical5.7 | PSY- MEC | Shows-how | CBL,RL E,PBL,P T |
| CO2,CO8 | Perform Swedana Using Sthānika and Sarvāṅga Pariśekha Swedana Yantra. | 4 | Experiential- Learning5.5 | PSY- MEC | Does | RLE,PE R,PBL,C BL |

Practical Training Activity

Practical Training 5.1 Compile references of utility of Swedana Upakrama and recent research updates on application of Swedana in various diseases.

Demonstration by the faculty:

- Demonstrate the method of searching the e-Samhita.
- Initiate the discussion on method of searching the e- Samhita for key word Swedana.
- Demonstrate the method of searching search engine for quality articles related to Swedana in UGC care Journals, Web of science and Pubmed indexed Journals.

Practical Training 5.2 Perform Valuka sweda and Nadi Sweda

Demonstration by the Instructor:

- Postgraduate teacher demonstrates examination of the patient prior Valuka Sweda and Nadi Sweda.
- Instructor demonstrate the preparation of medication for Valuka Sweda and Nadi Sweda.
- Instructor demonstrate Valuka Sweda and Nadi Sweda procedure.
- Instructor explains the possible complication and its probable management.

Practical Training 5.3 Prescribe Nivaata Sadan ,Gurupravarana and Atapa Sevana as Swedana modalities.

Demonstration by the faculty:

- Postgraduate teacher demonstrates examination of the patient prior Nivata Shayana, Guru Pravarana and Aatapa Sweda.
- Instructor demonstrate the methodology of prescribing Nivata Shayana, Guru Pravarana and Aatapa Sweda.
- Instructor demonstrate the methodology of observing Samyak Swinna Lakshana.
- Postgraduate scholar shall record the observations in Logbook.

Practical Training 5.4 Perform Snigdha, Ruksha, Sagni, Niragni Upanahasweda.

Demonstration by the faculty:

- Postgraduate teacher demonstrates examination of the patient prior Snigdha, Ruksha, Sagni, Niragni Upanahasweda..
- Instructor demonstrate the preparation of medication for Snigdha, Ruksha, Sagni, Niragni Upanahasweda.
- Instructor demonstrate Snigdha, Ruksha, Sagni, Niragni Upanahasweda. procedure.
- Instructor explains the possible complication and its probable management.

Practical Training 5.5 Perform Patra Piṇḍa Swedana.

Demonstration by the faculty:

- Postgraduate teacher demonstrates examination of the patient prior Patra Pinda Sweda.
- Instructor demonstrate the preparation of medication for Patra Pinda Sweda.
- Instructor demonstrate Patra Pinda Sweda procedure.
- Instructor explains the possible complication and its probable management.

Practical Training 5.6 Demonstrate the Use of Nāḍi Swedana Yantra.

Demonstration by the Faculty:

- Postgraduate teacher demonstrates the specifications of Nadi Sweda Yantra.
- Instructor demonstrate the precautions needed during usage of Nadi Sweda Yantra.
- Instructor explains the methodology of using and possible complication and its probable management.

- Scholar shall record the observations in Logbook.

Practical Training 5.7 Demonstrate the use of sauna bath

Demonstration by the Faculty:

- Demonstrate the specifications of Sauna bath.
- Instructor demonstrate the precautions needed during usage of Sauna bath Tent.
- Instructor explains the methodology of using and possible complication and its probable management.
- Scholar shall record the observations in Logbook.

Experiential Learning Activity

Experiential-Learning Learning 5.1: Discuss the Actions of Swedana Karma as Pradhānakarma and Pūrvakarma.

Instructions:

- Prescribe logically the utility of Swedana Upakrama as Poorvakarma prior Vamana Karma, Virechana Karma, Basti Karma, Nasya Karma and Rakta Mokshana.
- Prescribe logically the utility of Swedana Upakrama as Pradhana Karma in Vata Vyadhi.

Experiential-Learning Learning 5.2: Perform Ekāṅga Swedana and Sarvāṅga Swedana.

Instructions:

- Examine the patient prior Ekanga and Sarvanga Sweda.
- Demonstrate the preparation of medication for Ekanga Sweda and Sarvanga Sweda.
- Demonstrate Ekanga and Sarvanga Sweda procedure.
- Postgraduate scholar shall record the observations in Logbook.

Experiential-Learning Learning 5.3: Design a team based project over the Evaluation of the equipment's used and principles of heat transfer, involved in 13 types of Swedana.

Instructions:

- Understand the principles of instruments used for Sagni Sweda currently in comparison with ancient instruments.
- Demonstrate the different methods of Sagni Swedana procedure.
- Postgraduate scholar shall record the observations in Logbook.

Experiential-Learning Learning 5.4: Demonstrate Nāḍi Swedana.

Instructions:

- Examine the patient prior Nadi Sweda.
- Demonstrate the preparation of medication for Nadi Sweda.
- Demonstrate Nadi Sweda procedure.
- Explains the possible complication and its probable management.

Experiential-Learning Learning 5.5: Discuss Swedana Using Sthānika and Sarvāṅga Parīśekha Swedana Yantra.

Instructions:

- Evaluation of Technical perfectness of the instruments used for Ekanga and Sarvanaga Parisekha Sweda.
- Perform Ekanga and Sarvanga Swedana with the help of Parisekha Sweda Yantra.
- Evaluate the temperature tolerance among clients with various purpose for Ekanga and Sarvanga Parisekha Swedana.
- The observations will be noted and recorded in Logbook.

Modular Assessment**Assessment****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.

- Describe properties, classification, medicines used in Swedana karma.

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| <ul style="list-style-type: none"> Choose appropriate Swedana protocol understanding the need of the clinical condition from various categories. Identify the required advancements in heating modalities and use them for appropriate Swedana purpose.(40marks) Including Viva-voce (10 marks) <p>Or</p> <ul style="list-style-type: none"> Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | |
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Module 6 : Various Modalities, assessment and mode of action of swedana Karma

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| <p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <ol style="list-style-type: none"> Describe the indications, contraindication, methodologies and general precautions before, during and after all types of Swedana. Conduct all types of Swedana modalities independently. Manage the ayoga, atiyoga and emergencies arise during or after the Swedana procedure. Identify the mode of action of Swedana from physiological point of view. |
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| <p>Unit 1 Methodology of different modalities of Swedana Karma</p> <ol style="list-style-type: none"> Indications, Contra indications, Ingredients, Methodology, Instructions to patient and therapists, Application of procedure, Observations during procedure, Precautions by physician, Benefits and Probable Mode of Action of different modalities of Swedana Upakrama <p>References: 1,3,7,8,9,11,13,16,21,27,28,29,30,31,34,37,38,41,42,45,46,53,54,55,56,57</p> |
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| 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 Teachin g Learnin g Method s |
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| CO1 | Gain insight on the Importance of General Preprocedural Protocols (Pūrvakarma) for All Swedana Procedures, Including Medico-Legal Formalities, Daily Health Checkups, Collection of Ingredients as per Required Quantities, Preparation of Instruments, Preparation of Required Formulations, Preparation of the Patient, and Establishment of General Dietary and Behavioral Regimens Along with Precautions During and After Swedana. | 1 | Lecture | CC | Knows-how | L,L&GD, L_VC |
| CO2 | Counsel Patients Scheduled for Swedana Karma. | 4 | Experiential-Learning6.1 | AFT-RES | Does | PBL,TB L,CBL |
| CO1 | Elaboration of the Indications, Contraindications, Ingredients, Methodology, Instructions to Patients and Therapists, Application of Procedure, Observations During Procedure, Precautions by the Physician, Benefits, and Probable Mode of Action of Patra Piṇḍa Swedana and Śaṣṭikā Śāli Piṇḍa Swedana. | 1 | Lecture | CC | Knows-how | BS,L&G D |
| CO2 | Demonstrate and Perform Śaṣṭikā Śāli Piṇḍa Swedana. | 3 | Practical6.1 | PSY-MEC | Shows-how | PT,SIM, CBL,PB L |
| CO1,CO2 | Exploration of the Discrete Indications, Contraindications, Ingredients, Methodology, Instructions to Patients and Therapists, Application of Procedure, Observations During Procedure, Precautions by the Physician, Benefits, and Probable Modes of Action of Chūrṇa Piṇḍa Swedana, Jāmbīra Piṇḍa Swedana, Dhānya Piṇḍa Swedana, Kukkuṭaṇḍa Swedana, Anna Lepana, Kāḍikizhī, and Āvīkizhī. | 1 | Lecture | CAP | Knows-how | D- M,BS,T BL,PER |
| CO2 | Perform Kukkuṭaṇḍa Swedana. | 3 | Experiential-Learning6.2 | PSY-MEC | Does | PL,PT,P BL |
| CO1,CO2 | Perform Jāmbīra Piṇḍa Swedana. | 3 | Practical6.2 | PSY-MEC | Shows-how | D- M,PBL, |

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| | | | | | | RLE,PT, CBL |
| CO1,CO2 | Perform Kādikizhī. | 3 | Experiential-Learning6.3 | PSY-MEC | Does | PrBL,PB L,CBL,T BL,PT |
| CO1 | Gain Insight into the Separate Indications, Contraindications, Methodology, and Probable Modes of Action of Nāḍi Swedana, Bāṣpa Swedana, and Kṣīra Bāṣpa Swedana. | 1 | Lecture | CAN | Knows-how | BS,L&P PT |
| CO1,CO2 | Perform Kṣīra Bāṣpa Swedana. | 3 | Practical6.3 | PSY-SET | Shows-how | PT,PBL, CBL,D- M |
| CO1 | Explore the Discrete Indications, Contraindications, Ingredients, Methodology, and Probable Modes of Action of Pīzicchil (Kāya Seka), Avagāha Swedana, Pariśeka Swedana, Dhānyāmlā Dhāra, Kaṣāya Dhāra, and Kṣīra Dhāra. | 1 | Lecture | CC | Knows-how | L&GD,L &PPT ,L,BS |
| CO1,CO2 | Perform Pīzicchil (Kāya Seka). | 3 | Experiential-Learning6.4 | PSY-MEC | Does | PT,PBL, PSM,Pr BL,CBL |
| CO1,CO2 | Perform Dhānyāmlā Dhāra. | 3 | Practical6.4 | PSY-SET | Shows-how | PBL,SIM ,D- M,PT,C BL |
| CO1 | Summarize the Discrete Indications, Contraindications, Ingredients, Methodology, and Probable Modes of Action of Upanāha Swedana, Vāluka Swedana, Tuṣa Piṇḍa Swedana, Iṣṭikā Swedana, Kaṭī Basti, Jānu Basti, Grīvā Basti, and Pṛṣṭhavanshā Basti. | 1 | Lecture | CC | Knows-how | DIS,L&P PT ,PBL,L& GD |
| CO1,CO2 | Perform Upanāha Swedana. | 3 | Experiential-Learning6.5 | PSY-MEC | Does | CBL,SI M,PBL |

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| CO1,CO2 | Perform Kaṭī Basti. | 1 | Experiential-Learning6.6 | PSY-SET | Does | SIM,CBL,PBL |
| CO1,CO2 | Illustrate and Evaluate the Mode of Action, Indications, Limitations, and Efficacy of Each Swedana Modality. | 4 | Experiential-Learning6.7 | PSY-MEC | Does | W,BS,CBL,PBL,SY |
| CO2 | Explore the Physiology of Heat Regulation in the Body and the Effects of Heating on Body Metabolism | 1 | Lecture | CE | Knows-how | L&GD,L&PPT |

Unit 2 Assessment of Swedana Karma

1. Assessment of samyak Swedana, Atiyoga, Ayoga and complications of Swedana Karma.

References: 7,8,9,11,13,21,27,28,29,30,31,34,37,38,41,42,45,46,53,55,56,57

| 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 Teachin g Learnin g Method s |
|----------------------------------|---|---|--|--|---|--|
| CO1,CO5,CO5 | Interpret the Signs and Symptoms of Samyak Swedana, Ayoga, and Atiyoga from Both Āyurvedic and Physiological Perspectives; Analyze the Probable Complications Such as Burns, Hypovolemia, and Their Management. | 1 | Lecture | CE | Knows-how | L&GD,DIS |
| CO1,CO5,CO5 | Demonstrate and Analyze the Variations in Signs and Symptoms Observed in Patients Undergoing Patra Piṇḍa Swedana, Śaṣṭikā Śāli Piṇḍa Swedana, and Kukkuṭāṇḍa Piṇḍa Swedana. | 2 | Practical6.5 | PSY-MEC | Shows-how | PBL,PL,CBL |
| CO2,CO5,CO5 | Gain insight in symposium for discussion with Faculty Members on the Possible Causes, Signs and Symptoms of Emergencies During Swedana Karma, and their Appropriate Management. | 2 | Practical6.6 | CE | Shows-how | BS |

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| CO2 | Perform Bāṣpa Swedana, Rasnādi Chūrṇa Piṇḍa Swedana, and Śaṣṭikā Śāli Piṇḍa Swedana. | 3 | Experiential-Learning6.8 | PSY-SET | Does | PBL,CBL,PT,PAL |
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Unit 3 Understanding of Swedana from modern perspective

1. Mode of action of Swedana Karma

References: 8,9,11,13,21,25,27,28,29,30,31,32,34,37,38,42,45,46,53,54,55,56,57

| 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 Teachin g Learnin g Method s |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---|
| CO2 | Analyse and Integrate the Types of Heat Involved in Śāgni Swedana. | 1 | Lecture | CC | Knows-how | L_VC,L &PPT |
| CO2 | Interpret the Mode of Action of Swedana Based on the Applied Physiology of Sweating. | 1 | Lecture | CAN | Knows-how | L&GD,B S,L&PP T |
| CO2,CO7 | Design a Collaborative Project with Peers to Explore the Physics Behind Heat, Types of Heat Transfer, and Their Relation to Various Swedana Modalities. | 4 | Practical6.7 | PSY-SET | Shows-how | PBL,PA L,CBL,T PW |
| CO7 | Perform Sarvāṅga Bāṣpa Swedana Procedure in Patients at Different Temperature Settings Ranging from 39°C to 43°C Across Various Seasons. | 2 | Experiential-Learning6.9 | PSY-MEC | Does | PBL,CB L,PAL,T PW |

Practical Training Activity

Practical Training 6.1 **Demonstrate and Perform Śaṣṭikā Śāli Piṇḍa Swedana."**

Demonstration by the faculty:

- Postgraduate teacher demonstrate examination of the patient prior Shashtika Shali Pinda Sweda.

- Instructor demonstrate the preparation of medication for Shashtika Shali Pinda Sweda.
- Instructor demonstrate Shashtika Shali Pinda Sweda procedure.
- Instructor explains the possible complication and its probable management.
- Postgraduate scholar shall record the observations in Logbook.

Practical Training 6.2 Perform Jāmbīra Piṇḍa Swedana.

Demonstration by the faculty:

- Postgraduate teacher demonstrate examination of the patient prior Jambheera Pinda Sweda.
- Instructor demonstrate the preparation of medication for Jambheera Pinda Sweda.
- Instructor demonstrate Jambheera Pinda Sweda procedure.
- Instructor explains the possible complication and its probable management.

Practical Training 6.3 Perform Kṣīra Bāṣpa Swedana.

Demonstration by the faculty:

- Postgraduate teacher demonstrate examination of the patient prior Ksheera Bashpa Sweda.
- Instructor demonstrate the preparation of medication for Ksheera Bashpa Sweda
- Instructor demonstrate Ksheera Bashpa Sweda procedure.
- Instructor explains the possible complication and its probable management.

Practical Training 6.4 Perform Dhānyāmla Dhāra.

Demonstration by the faculty:

- Postgraduate teacher demonstrate examination of the patient prior Dhanyamla Dhara.
- Instructor demonstrate the preparation of medication for Dhanyamla Dhara.
- Instructor demonstrate Dhanyamla Dhara procedure.
- Instructor explains the possible complication and its probable management.
- Postgraduate scholar shall record the observations in Logbook.

Practical Training 6.5 Demonstrate and Analyze the Variations in Signs and Symptoms Observed in Patients Undergoing Patra Piṇḍa Swedana, Śaṣṭikā Śāli Piṇḍa Swedana, and Kukkuṭāṇḍa Piṇḍa Swedana.

Demonstration by the faculty:

- The Postgraduate teacher will explain and demonstrate the Samyak Swinna Lakshana observed in general while performing Swedana Karma.
- Instructor will explain the difference in the observed signs and symptoms in various different varieties of Swedana wsr Patra Pinda Sweda, Shashtika Shali Pinda Sweda and Kukkutanda Pinda Sweda.
- The postgraduate scholar will record the observed symptoms in 20 patients at Panchakarma theatre in Logbook.

Practical Training 6.6 Gain insight in symposium for discussion with Faculty Members on the Possible Causes, Signs and Symptoms of Emergencies During Swedana Karma, and their Appropriate Management.

Demonstration by the faculty:

- The Postgraduate teacher will explain and initiate discussion on possible causes, signs and symptoms of emergencies occur during swedana in general while performing Swedana Karma.
- The Postgraduate teacher will explain the management of emergencies occur during swedana in general while performing Swedana Karma.
- The postgraduate scholar will record the observed symptoms and the management in 20 patients during Panchakarma theatre posting in Logbook.

Practical Training 6.7 Design a Collaborative Project with Peers to Explore the Physics Behind Heat, Types of Heat Transfer, and Their Relation to Various Swedana Modalities.

Demonstration by the faculty:

- The instructor preferably from physics and engineering technology will explain the physics principles about heat generation.
- The instructor will explain the generation of heat in current instruments used for Swedana.
- The instructor will initiate discussion on possibility of invention of instruments used for Swedana.

Experiential Learning Activity

Experiential-Learning Learning 6.1: Counsel Patients Scheduled for Swedana Karma.

Instructions:

- Examination of the patient posted for Swedana Karma considering the fitness.
- Counselling the patient for the procedure of Swedana explaining benefits, risks and complications and duration of the procedure.
- Take written consent for the procedure.
- The legal aspects related to the procedures of Swedana are recorded in the Logbook.
- patients posted for Swedana Karma are counselled and details are written in Log book.

Experiential-Learning Learning 6.2: Perform Kukkuṭaṅḍa Swedana.

Instructions:

- Examine the patient prior Kukkuṭanda Pinda Sweda.
- Demonstrate the preparation of medication for Kukkuṭanda Pinda Sweda.
- Demonstrate Kukkuṭanda Pinda Sweda procedure.

Experiential-Learning Learning 6.3: Perform Kāḍikizhī.

Instructions:

- Examine the patient prior Kaadi Kizhi.
- Demonstrate the preparation of medication for Kaadi Kizhi.
- Demonstrate Kaadi Kizhi. procedure.
- Explain the possible complication and its probable management.

Experiential-Learning Learning 6.4: Perform Pīzicchil (Kāya Seka).

Instructions:

- Examine the patient prior Pizhichil (Kayaseka).
- Demonstrate the preparation of medication for Pizhichil (Kayaseka).
- Demonstrate Pizhichil (Kayaseka) procedure.

- Explain the possible complication and its probable management.
- Postgraduate scholar shall record the observations in case record book.

Experiential-Learning Learning 6.5: Perform Upanāha Swedana.

Instructions:

- Examine the patient prior Upanaha Sweda.
- Demonstrate the preparation of medication for Upanaha Sweda.
- Demonstrate Upanaha Sweda procedure.
- Explains the possible complication and its probable management.
- Postgraduate scholar shall record the observations in Logbook.

Experiential-Learning Learning 6.6: Perform Kaṭī Basti.

Instructions:

- Examine the patient prior Kati Basti.
- Demonstrate the preparation of medication for Kati Basti.
- Demonstrate Kati Basti procedure.
- Explains the possible complication and its probable management.
- Postgraduate scholar shall record the observations in Logbook.

Experiential-Learning Learning 6.7: Illustrate and Evaluate the Mode of Action, Indications, Limitations, and Efficacy of Each Swedana Modality.

Instructions:

- Survey on the temperature tolerance among patients of various Prakruti.
- Comparative analysis of Heat modalities of physiotherapy and Swedana therapy.
- Analyse the limitation of the Swedana therapy in various diseases.
- The Scholar will record the observations in the Logbook.

Experiential-Learning Learning 6.8: Perform Bāṣpa Swedana, Rasnādi Chūrṇa Piṇḍa Swedana, and Śaṣṭikā Śāli Piṇḍa Swedana.

Instructions:

- Examine the patient prior Bashpa Sweda, Rasnadi Churna Pinda Sweda, Shshtika Shali Pinda Sweda.
- Demonstrate the preparation of medication for Bashpa Sweda, Rasnadi Churna Pinda Sweda, Shshtika Shali Pinda Sweda.
- Demonstrate Bashpa Sweda, Rasnadi Churna Pinda Sweda, Shshtika Shali Pinda Sweda procedure.
- Explains the possible complication and its probable management.
- Postgraduate scholar shall record the observations in Logbook.

Experiential-Learning Learning 6.9: Perform Sarvāṅga Bāṣpa Swedana Procedure in Patients at Different Temperature Settings Ranging from 39°C to 43°C Across Various Seasons.

Instructions:

- Sarvanga Bashpa Sweda in different temperature setting the different temperature based on the tolerance and based on occurrence of Samyak Swinna Lakshana.
- Demonstrate optimum temperature for performing the Bashpa Sweda based on occurrence of Samyak Swinna Lakshana.
- Demonstrate the optimum temperature for Bashpa Sweda based on the Prakruti of Patient based on occurrence of Samyak Swinna Lakshana.**Outcome:**
- The postgraduate scholar will be able to examine the patient and prescribe optimum temperature based on occurrence of Samyak Swinna Lakshana.
- The Observations are recorded in the Logbook.

Modular Assessment**Assessment****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.

- Describe the indications, contraindication, methodologies and general precautions before, during and after all types of Swedana.
- Conduct all types of Swedana modalities independently.
- Manage the ayoga, atiyoga and emergencies arise during or after the Swedana procedure.

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| <ul style="list-style-type: none"> Identify the mode of action of Swedana from physiological point of view. (40marks) Including Viva-voce (10 marks) <p>Or</p> <ul style="list-style-type: none"> Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | |
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Semester No : 6

Module 7 : Principles and Practice of MarmaChikitsa

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

- Identify the Marma Points/ Varma Points of the body and apply the knowledge in treatment.
- Demonstrate Abhyanga, Mardhana, Unmardana and Padaghata in Marma Chikitsa
- Demonstrate and apply the Marma Chikitsa in treatment of acute injuries, Sports Injuries, pain management, Deformity correction
- Justify and apply Panchakarma and External allied Panchakarma procedures in management of Sports injuries and Marmabhighata.
- Justify the knowledge of oral medications and external medications in the management of Marma Chikitsa.

Unit 1 Marmasharira and fundamentals of Marma Chikitsa.

- Knowledge of Marmasharira and fundamentals of Marma Chikitsa.
- Varmam points and various techniques in practice for Varmam/ Marma stimulation.

References: 2,4,47

| 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/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows how/Knows how/Know) | 3G Teachin g Learnin g |
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| | | | Experiential Learning | | | Methods |
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| CO1 | Analyze the history and concept of Marma Chikitsa/Varma Chikitsa. | 1 | Lecture | CC | Knows-how | L&GD,DIS,L&PPT |
| CO1 | Define the advantages of Marma Chikitsa in treating diseases. | 1 | Lecture | CC | Knows-how | L&PPT,BS,L&GD,DIS |
| CO1 | Explain the benefits of combining Marma Chikitsa with Panchakarma treatment. | 1 | Lecture | CAP | Knows-how | L,BS,DIS,L&PPT |
| CO1 | Conduct a comparative analysis of Marma points as explained in classical Ayurvedic texts and traditional regional texts, to identify similarities and differences in their classification, anatomical locations, and therapeutic applications. | 1 | Lecture | CK | Knows-how | L&GD,L&PPT,L_VC,DIS |
| CO1 | Compile the similarities and dissimilarities in the understanding of Marma points as explained in various classical Ayurvedic texts as well as in traditional regional literature. | 1 | Practical7.1 | PSY-SET | Shows-how | CBL,SIM,PBL |
| CO1 | Compile the various structure-specific types of Marma (Varma) as explained in classical Ayurvedic texts and in traditional regional literature. | 3 | Practical7.2 | PSY-SET | Shows-how | L&GD,BS,CBL,PBL,D-M |
| CO1 | Illustrate the Marma points on the human body, and understand the benefits and adverse effects of their stimulation as described in classical Ayurvedic texts. | 3 | Experiential-Learning7.1 | PSY-MEC | Does | PL,SIM,CBL,PBL |
| CO1 | Demonstrate the pressure and manner of stimulating Marma (Varma) points at different parts of the human body, as described in classical Ayurvedic and traditional Siddha literature. | 3 | Experiential-Learning7.2 | PSY-MEC | Does | CBL,D-BED,D,PBL,SIM |

Unit 2 Abhyangam/ Mardhana vidhi, Massage techniques used in Marma Chikitsa

1. Information of Abhyangam / Mardhanavidhi, Massage techniques used in Marma Chikitsa

References: 2,4,44

| 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 Teachin g Learnin g Method s |
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| CO1 | Comprehend the methods of Abhyanga and its utility in treating musculoskeletal diseases and acute injuries to soft tissues, muscles, and bones, along with understanding the contraindications of massage in such acute conditions. | 1 | Lecture | CAP | Knows-how | CBL,L&PPT ,L&GD |
| CO1 | Comprehend the benefits of massage in sports medicine by understanding the purview of sports medicine, the scope of sports injuries, and the physiological effects of massage in treating these injuries. | 1 | Lecture | CAP | Knows-how | L&PPT ,L&GD |
| CO2 | Demonstrate the various techniques of Mardana in Ayurveda vis-à-vis contemporary massage methods, and perform them accordingly. | 4 | Practical7.3 | PSY-SET | Shows-how | PBL,D,TBL,CBL, SIM |
| CO1,CO2 | Perform Padaaghata and comprehend its importance in sports medicine for enhancing endurance. | 4 | Experiential-Learning7.3 | PSY-MEC | Does | CBL,D,PBL,SIM, TBL |
| CO1 | Demonstrate various pressure points in management of acute injuries. | 4 | Practical7.4 | PSY-ORG | Shows-how | D-M,D-BED,D |
| CO1 | Comprehend the various Marma (Varmam) points that should not be stimulated during Abhyanga in | 1 | Practical7.5 | PSY-MEC | Shows-how | D-M,CBL, |

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| | comparison with Effleurage and Petrissage massage techniques. | | | | | PBL,D-BED |
| CO1 | Perform various external Para Panchakarma treatments utilized in Marma Chikitsa. | 3 | Experiential-Learning7.4 | PSY-MEC | Does | JC,PBL,FC,CBL,DIS |
| CO1 | Perform various external Panchakarma Chikitsa utilized in Marmachikitsa. | 3 | Experiential-Learning7.5 | PSY-MEC | Does | FC,CBL,PBL,D-BED |

Unit 3 Management of various disease by Varmam/ Marma Chikitsa, utility of Marma Chikitsa and Sports medicine

1. Knowledge of Management of various disease by Varmam/ Marma Chikitsa
2. Utility of Marma Chikitsa and Sports medicine

References: 2,44

| 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 Teachin g Learnin g Method s |
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| CO1 | Dicuss Sports injuries and body response | 1 | Lecture | CC | Knows-how | L&GD,L &PPT ,L_VC |
| CO1 | Discuss the limitations of Marma (Varma) Chikitsa in musculoskeletal injuries and recognize the need for surgical intervention, emergency contemporary management, or careful risk evaluation before planning Marma Chikitsa treatment. | 1 | Lecture | CE | Knows-how | L_VC,L &GD,L& PPT ,CBL |

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| CO1 | Demonstrate the application of Marma Chikitsa in the treatment of sprains and strains. | 2 | Practical7.6 | PSY-ADT | Shows-how | CBL,SI M,DIS,D - BED,Pr BL |
| CO1 | Demonstrate the application of Marma Chikitsa in Pain management. | 3 | Practical7.7 | PSY- MEC | Shows-how | CBL,L_ VC,FC, DIS,PBL |
| CO1 | Demonstrate MarmaChikitsa in deformities secondary to Marmabhighata. | 2 | Practical7.8 | PSY- ADT | Shows-how | PBL,D- BED,CB L,BS |
| CO1 | Perform MarmaChikitsa in Musculoskeletal disease. | 3 | Experiential- Learning7.6 | PSY- ADT | Does | SIM,L& GD,PBL, CBL,D- BED |
| CO1 | Perform Marma Chikitsa in orthopedic diseases such as Osteoarthritis, Rheumatoid Arthritis, Tendonitis, and Bursitis. | 3 | Experiential- Learning7.7 | PSY- MEC | Does | DIS,D- BED,CB L,PBL,D |

Unit 4 Pharmacodynamics and pharmacokinetics of drugs and formulations used in Marma Chikitsa

1. Information on Pharmacodynamics and pharmacokinetics of drugs and formulations used in Marma Chikitsa

References: 2,4,44

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
| CO2 | Explain the pharmacodynamics and pharmacokinetics of oral medications used in Marma Chikitsa, such as | 1 | Lecture | CC | Knows-how | L&GD,L &PPT |

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|-----|---|---|--------------------------|---------|-----------|-------------------------|
| | <i>Mustadi Marma Kashayam, Nadi Kashayam, Lakshadi Guggulu, Abha Guggulu, Laksha Ksheerpaka, Arjuna Ksheerapaka, Ashtavarga Kashayam, Dhanadanayanadi Kashayam, Bala Punarnavadi Kashayam, Godanti Bhasma, Rasa Sindhoora, and Brihatvata Chintamani Rasa.</i> | | | | | |
| CO2 | Explain the pharmacodynamics and pharmacokinetics of external therapy drugs used in Marma Chikitsa, such as <i>Murivenna, Pinda Taila, Pancha Guna Taila, Sahacharadi Tailam, Mukkutu Tailam, Ketakimooladi Tailam, Manjishtadi Lepam, Nagaradi Lepam, Jadamayadi Lepam, Kottam Chikkadi Lepam, Kolakulaththadi Lepam, Grahadhoomadi Lepam, Doshaghna Lepam, Dashanga Lepam, Valiya Marma Gulika, Cheriya Marma Gulika, and Karth Gulika.</i> | 1 | Lecture | CK | Knows-how | L&GD,L &PPT |
| CO1 | Perform the special bandaging techniques used in Marma Chikitsa. | 4 | Experiential-Learning7.8 | PSY-MEC | Does | PrBL,SI M,SDL, PBL,CB L |

Practical Training Activity

Practical Training 7.1 Compile the similarities and dissimilarities in the understanding of Marma points as explained in various classical Ayurvedic texts as well as in traditional regional literature.

Demonstration by the faculty:

- Identify Marma Points explained in Ayurveda which are present in Upper limb, Lower limb, trunk, Head and Neck. Identify them in mannequin.
- Identify Marma Points explained in traditional practice which are present in Upper limb, Lower limb, trunk, Head and Neck. Identify them in mannequin.
- Discuss the similarity and dissimilarities of Marma Points utilized in various school of thought.
- Demonstrate the Marma points on healthy individuals by explaining the surface anatomy.
- Post graduate scholar is expected to make a Project of Traditional understanding of Marma and Varma points and probable anatomical correlation by interacting/ Survey with various Practitioners.

Practical Training 7.2 Compile the various structure-specific types of Marma (Varma) as explained in classical Ayurvedic texts and in traditional regional literature.

Demonstration by the faculty:

- Post graduate teacher is expected to explain and demonstrate various Marma points based on the underlying anatomical structure like VaikalyakaraMarma, SadyoPranaharaMarma, KalantaraMarma, RujakaraMarma, VishalyaghnaMarma, MamsaMarma, Sira Marma, SnayuMarma, AsthiMarma and Sandhi Marma using virtual dissection facility.
- Demonstrate the various varieties of Marma in Healthy individuals.
- Demonstrate structural involvement in each Marma like Sira Marma correlating it to Avedya Sira during Siravyadha.
- Understand the group of Marma points explained in Ayurveda based on fate due to the injury.
- Postgraduate scholar is expected to make a record of each variety of Marma by conducting virtual dissection and correlation with Each variety of Marma like Sadhyopranahara, Kalantara Pranahara, Vaikalyakara Marma.
- Make a record of Each types of Marma among 50 Patients and identify most confronted Marmabhighata in clinical practice.

Practical Training 7.3 Demonstrate the various techniques of Mardana in Ayurveda vis-à-vis contemporary massage methods, and perform them accordingly.

Demonstration by the faculty:

1. Postgraduate teacher is expected to demonstrate Various techniques of Mardana used in Marma Chikitsa and initiate discussion on different varieties used in other system of medical management.
2. Understand the similarities and dissimilarities with Mardhana, Unmardhana and contemporary Massage techniques.
3. Understand the methodology and perform the procedure on patient
4. Make a record of patient satisfaction survey among 30 patients who underwent various Mardhana, Unmardhana.

Practical Training 7.4 Demonstrate various pressure points in management of acute injuries.

Demonstration by the faculty:

- Instructor will demonstrate the examination of patients suffering from acute injuries.
- The limitations and contraindications are highlighted.
- Instructor will demonstrate various pressure Marma points used in management of acute injuries.
- Identify the points for stimulation during acute injuries.
- Understand the pressure points in acute injuries like low back injury, muscle injuries, ankle sprain, paraspinal muscle spasm, meniscal injuries, bursitis, tendonitis, Ligamental injuries.

- Identify most tender area in 50 patients suffering from acute injuries like low back injury, muscle injuries, ankle sprain, paraspinal muscle spasm, meniscal injuries, bursitis, tendonitis, Ligamental injuries.

Practical Training 7.5 Comprehend the various Marma (Varmam) points that should not be stimulated during Abhyanga in comparison with Effleurage and Petrissage massage techniques.

Demonstration by the faculty:

- The postgraduate teacher will demonstrate the Marma points which need to be stimulated during Abhyanga vis a vis Effleurage and petrissage.
- The advantage of combining conventional massage and marma stimulation massage will be explained.
- The points of Marma which should not be stimulated during Abhyanga will be demonstrated.
- Demonstration of the stimulation will be done on 2 patients suffering from musculoskeletal disorder in whom Abhyanga is indicated.
- Scholar will record the points discussed during discussion in Logbook.

Practical Training 7.6 Demonstrate the application of Marma Chikitsa in the treatment of sprains and strains.

Demonstration by the faculty:

- Postgraduate Teacher will demonstrate the examination of patients presented with sprain and strain.
- Postgraduate teacher is expected to demonstrate the Application of Marma Chikitsa in sprain and strain.
- Post graduate scholars are expected to make note of management of acute sprain and strain with Marma Chikitsa and Record it.

Practical Training 7.7 Demonstrate MarmaChikitsa in deformities secondary to Marmabhighata.

Demonstration by the faculty:

- Understand the limitation and advantages along with Demonstrate the methodology of MarmaChikitsa in managing deformities.
- Postgraduate teacher is expected to Demonstrate Marma Chikitsa in deformities secondary to Marmabhighata.
- Scholar is expected to note the observations in logbook.

Practical Training 7.8 Demonstrate the application of Marma Chikitsa in Pain management.

Demonstration by the faculty:

- Instructor is expected to demonstrate the examination and evaluation methodology in various conditions where pain is the presenting symptom.
- Postgraduate teacher is expected to demonstrate the application of Marma Chikitsa in Pain management.
- Demonstrate the method of MarmaChikitsa in acute and chronic pain management .
- Demonstrate the management of acute pain through MarmaChikitsa in clinical condition like Paraspinal muscle spasm, Lumbago, Sciatica, Sacroiliitis, Cervical Radiculopathy, Lumbar Radiculopathy, Calcaneal spur, Head Ache, trigeminal neuralgia.
- Make a record of 30 patients who are suffering from Acute pain and identify the type of Marmabhighata and plan for its treatment.

Experiential Learning Activity

Experiential-Learning Learning 7.1: Mark and identify the Marma points on the human body, and understand the benefits and adverse effects of their stimulation as described in classical Ayurvedic texts.

Instructions:

- Understand the underlying anatomical structure of each Marma.
- Understand the harm of stimulating Marma point when its not essential.
- Stimulate the Marma/ Manipulate the Marma.
- Master decision making for MarmaChikitsa during treatment.
- Examine 30 patients suffering from acute injuries and identify the Marmabhighata and its severity.
- Record the Marma points examined in Patients in logbook.

Experiential-Learning Learning 7.2: Demonstrate the pressure and manner of stimulating Marma (Varma) points at different parts of the human body, as described in classical Ayurvedic and traditional Siddha literature.

Instructions:

- Understand the amount of pressure to be applied at various locations of the body like soft tissues, bony prominence and Musculo skeletal area
- Apply Pressure over peer and experience the pressure to be exerted.
- Demonstrate the Pressure applied in various body parts in case of injury.

- Make a record of 50 patients on whom MarmaChikitsa is been done.

Experiential-Learning Learning 7.3: Perform Padaaghata and comprehend its importance in sports medicine for enhancing endurance.

Instructions:

1. Demonstrate the Padaaghata on mannequin.
2. Demonstrate Padaaghata in healthy individual
3. Demonstrate Padaaghata in diseases of musculoskeletal system.
4. Perform 5 Padaaghata in healthy individual.
5. Record the difference in techniques adapted in healthy and diseased while performing Padaaghata in Logbook.

Experiential-Learning Learning 7.4: Perform various external Para Panchakarma treatments utilized in Marma Chikitsa.

Instructions:

- Demonstrate various Para Panchakarma procedures like Dhara, NadiSweda, Pinda Sveda, Avagaha, UpanahaSveda in Marmabhighata
- Prescribe Panchakarma external therapies in Marmabhighata.

Experiential-Learning Learning 7.5: Perform various external Panchakarma Chikitsa utilized in Marmachikitsa.

Instructions:

- Demonstrate the methodology of selection of Panchakarma Chikitsa in the management of MarmaChikitsa.
- Demonstrate various Panchakarma procedures like Vamana , Virechana, Basti, Nasya in Marmabhighata
- Prescribe Panchakarma in Marma Abhighata.
- Record the various Panchakarma procedures performed in Marmabhighata in Logbook

Experiential-Learning Learning 7.6: Perform MarmaChikitsa in Musculoskeletal disease.

Instructions:

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| <ul style="list-style-type: none"> • Understand the pathology of diseases of musculoskeletal system • Demonstrate the methodology of MarmaChikitsa adapted in musculoskeletal diseases. • Prescribe and demonstrate MarmaChikitsa along with Panchakarma in 10 patients suffering from Low Back ache. • Record the various treatments of Marmabhighata through integration of Panchakarma procedures and Marma Chikitsa in Logbook | |
| <p>Experiential-Learning Learning 7.7: Perform Marma Chikitsa in orthopedic diseases such as Osteoarthritis, Rheumatoid Arthritis, Tendonitis, and Bursitis.</p> | |
| <p>Instructions:</p> <ul style="list-style-type: none"> • Understand the pathology of diseases of Orthopedics. • Demonstrate the methodology of MarmaChikitsa adapted in orthopaedic diseases. • Demonstrate Marma Chikitsa along with Panchakarma in 10 patients suffering from Osteo Arthritis and deformities. • Record the various Marma chikitsa done in patients suffering with orthopaedic disease in Logbook | |
| <p>Experiential-Learning Learning 7.8: Perform the special bandaging techniques used in Marma Chikitsa.</p> | |
| <p>Instructions:</p> <ul style="list-style-type: none"> • Demonstrate importance of bandaging in sports injuries/ other acute injuries. • Demonstrate the varieties of bandaging techniques used in traditional practice and Ayurveda. • Demonstrate Bandaging techniques in 10 patients suffering from ankle sprain and Paraspinal muscle spasm. • Demonstrate the Bandaging techniques in 10 patients suffering from Supraspinatus tendonitis and Tennis elbow. • Record the various Bandaging used in Marma Chikitsa in Logbook | |
| <p>Modular Assessment</p> | |
| <p>Assessment</p> | <p>Hour</p> |
| <p>Instructions—</p> <p>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.</p> | <p>4</p> |

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| <ul style="list-style-type: none"> • Identify the Marma Points/ Varma Points of the body and apply the knowledge in treatment. • Demonstrate Abhyanga, Mardhana, Unmardana and Padaghata in Marma Chikitsa • Demonstrate and apply the Marma Chikitsa in treatment of acute injuries, Sports Injuries, pain management, Deformity correction • Justify and apply Panchakarma and External allied Panchakarma procedures in management of Sports injuries and Marmabhighata. • Justify the knowledge of oral medications and external medications in the management of Marma Chikitsa. • (40marks) • Including Viva-voce (10 marks) <p>Or</p> <ul style="list-style-type: none"> • Any practical in converted form can be taken for assessment. (25 Marks) and • Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | |
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Module 8 : Principles and application of Physiotherapy in association with Panchakarma

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

1. To describe different modalities used in physiotherapy.
2. To demonstrate use of various equipments used in physiotherapy unit.
3. To identify the probable method of application from physiotherapy apart from panchakarma treatment for the same

Unit 1 Principles of Physiotherapy practice

1. Definition and scope of practice of Physiotherapy
2. Biomechanics of human movements and Kinesiology.

References: 5,6,10,12,14,15,17,25,49,50,51,52

| 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/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows how/Knows how/Know) | 3G Teachin g Learnin g |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|------------------------------------|
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| | | | Experiential Learning | | | Methods |
| CO2 | Elaborate Physiotherapy and Describe principles of Biomechanics of human movements in context of force, mechanics of position, mechanics of movements, elasticity, types of muscle contraction, types of muscle work, strength of muscle contraction. | 1 | Lecture | CK | Knows-how | L_VC,L &PPT,PL |
| CO2 | Demonstrate Intermittent Lumbar Traction (ILT) and Static Lumbar Traction techniques. | 2 | Practical8.1 | PSY-GUD | Shows-how | PAL,D,CBL,PT |
| CO2 | Illustrate intermittent traction in patients of cervical spondylosis. | 4 | Experiential-Learning8.1 | PSY-ADT | Does | CBL,PBL,PrBL,PSM |

Unit 2 Applied Science of Exercise and Technique

1. Principles of Therapeutic Exercises
2. Range of Motion
3. Principles of Mobilization/ Manipulation.
4. Stretching and Strengthening exercises.

References: 5,6,10,12,14,15,17,22,25,49,50,51,52

| 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 |
|--------------------------|--|-----------------------------------|--|------------------------------|---|-------------------------------------|
| CO2 | Discuss impact of therapeutic exercise on physical function, Enlist types of range of motion; Description of precautions and contraindications to ROM exercises; understand the principles and procedures for applying ROM techniques. | 1 | Lecture | CK | Knows-how | L_VC,L &PPT |

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|-----|--|---|--------------------------|---------|-----------|-------------------------|
| CO2 | Demonstrate Range of motion of shoulder joint, knee joint, hip joint, elbow joint. | 2 | Practical8.2 | PSY-GUD | Shows-how | D-BED |
| CO2 | Performance of Range of Motion (ROM) techniques in patients diagnosed with Avascular Necrosis of the femoral head. | 3 | Experiential-Learning8.2 | PSY-MEC | Does | CD,PER |
| CO2 | Performance of Range of motion technique in patients of Tennis Elbow. | 3 | Experiential-Learning8.3 | PSY-MEC | Does | D-BED,CB L |
| CO2 | Elucidate joint mobilization and manipulation techniques, describe their indications and limitations, explain contraindications and precautions, and state the various peripheral joint mobilization methods used in musculoskeletal rehabilitation. | 1 | Lecture | CK | Knows-how | L&PPT ,L_VC,L &GD |
| CO2 | Demonstrate Kaltern borne glides and Maitland mobilisation techniques. | 2 | Practical8.3 | PSY-ADT | Shows-how | PT,PSM ,PrBL |
| CO2 | Explore key terms associated with stretching such as Flexibility, Hypomobility, Contractures, and Hypermobility and outline the indications, contraindications, and potential outcomes of therapeutic stretching exercises. | 1 | Lecture | CK | Knows-how | PAL,L& PPT |
| CO2 | Specify treatment to increase muscular strength and function, along with types of exercises to strengthen muscles and restore function. | 1 | Lecture | CAP | Knows-how | L&PPT ,BS |
| CO2 | Performance of stretching exercises. | 2 | Experiential-Learning8.4 | PSY-MEC | Does | PT,TBL, PBL,RL E |

Unit 3 Clinical Application of various modalities of physiotherapy

1. Electrotherapy
2. Heat and cold therapies
3. Electromagnetic wave therapy
4. Radiation therapies.

References: 10,12,14,15,17,22,23,24,25,43,48,49,50,51,52

| 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 Teachin g Learnin g Method s |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---|
| CO2 | Interpret the clinical applications of Electrotherapy, including the types of currents used, and specific modalities such as Transcutaneous Electrical Nerve Stimulation (TENS) and Interferential Therapy (IFT), along with its various types. | 1 | Lecture | CK | Knows-how | L&PPT ,L&GD |
| CO2 | Demonstrate the application of TENS modality. | 2 | Practical8.4 | PSY- GUD | Shows-how | D- BED,Pr BL,PT,P BL,PAL |
| CO2 | Demonstrate the application of IFT. | 2 | Practical8.5 | PSY- GUD | Shows-how | D- BED,Pr BL,PT |
| CO2 | Explore the clinical perspective of Heat Therapy, including the methodology of applying Paraffin Wax, Hot Packs, Hydrotherapy, Contrast Baths, Electric Heating Pads, and Infrared Light; and explain the clinical use of Cold Therapy along with its indications, | 1 | Lecture | CC | Knows-how | L&PPT ,PBL,L& GD,PER |

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| | contraindications, and application methods using Cold Packs, Ice Packs, and Cryotherapy Flow Units. | | | | | |
| CO2 | Explain basic clinical applications of Electromagnetic Field Therapy, including the indications, contraindications, and methodology of applying Short Wave Diathermy (SWD), as well as the clinical use of Ultrasound Therapy with its respective indications, contraindications, and application techniques. | 1 | Lecture | CAP | Knows-how | L&PPT, L&GD |
| CO2 | Demonstrate the application of Short wave Diathermy. | 2 | Practical8.6 | PSY-MEC | Shows-how | PBL,D-BED,PT |
| CO2 | Demonstrate the application of Ultra Sound Therapy. | 2 | Practical8.7 | PSY-MEC | Shows-how | PBL,PT, D-BED |
| CO2 | Perform stretching exercises in patients of Gridhrasi. | 3 | Experiential-Learning8.5 | PSY-MEC | Does | PL,TPW, D-BED |
| CO2 | Demonstrate IFT treatment. | 3 | Experiential-Learning8.6 | PSY-MEC | Does | PrBL,PBL, D-BED |

Unit 4 Rehabilitation and its principles

1. Concept of rehabilitation and Rehabilitation team
2. Activities of Daily Life for Rehabilitation and need of Self-help devices
3. Splints.

References: 6,10,17,22,23,24,25,26,48,49,50,51,52

| 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 Teachin g Learnin g Method s |
|----------------------------------|--|---|--|--|---|--|
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|-----|---|---|--------------------------|---------|-----------|-----------------|
| CO2 | Explain rehabilitation, goals of rehabilitation, preventive rehabilitation, socio vocational rehabilitation in view of assistance in better outcome in patients with handicap, impairment, disability along with physiatrist. | 1 | Lecture | CAP | Knows-how | L_VC,L &PPT |
| CO2 | Explain the significance of physiotherapy in achieving Activities of Daily Leaving (ADL) programme; Explain definition, classification, functions, types of Assistive devices, orthosis, splints. | 1 | Lecture | CAP | Knows-how | L&PPT ,JC,L&G D |
| CO2 | Illustrate the use of the Barthel Index and explain its significance in assessing a patient's level of independence in activities of daily living (ADLs). | 4 | Experiential-Learning8.7 | PSY-MEC | Does | D-BED,TB L |
| CO2 | Illustrate the postural correction exercises. | 3 | Practical8.8 | PSY-MEC | Shows-how | D,PT,PA L |
| CO2 | Diagnose impaired gait and train them proper gait. | 3 | Practical8.9 | PSY-MEC | Shows-how | CBL,D-BED |
| CO2 | Assess patients with Avascular Necrosis in rehabilitation training and support them in regaining a proper gait cycle. | 4 | Experiential-Learning8.8 | PSY-MEC | Does | D,PBL |

Practical Training Activity

Practical Training 8.1 Demonstrate Intermittent Lumbar Traction (ILT) and Static Lumbar Traction techniques.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior Lumbar traction.
- Instructor explains possible precautions to be taken prior planning for Lumbar traction and possible complications.
- Instructor demonstrates the procedure of intermittent and Static Lumbar Traction on patients.

Practical Training 8.2 Demonstrate Range of motion of shoulder joint, knee joint, hip joint, elbow joint.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior demonstrating range of movement in diseased.
- Instructor demonstrates the range of motion of Shoulder joint, Knee Joint , Hip Joint and Elbow Joint with the help of goniometer.
- The observations will be recorded in Logbook.

Practical Training 8.3 Demonstrate Kaltern borne glides and Maitland mobilisation techniques.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior demonstrating Kaltern borne glides and Maitland mobilisation techniques.
- Instructor demonstrates Kaltern borne glides and Maitland mobilisation techniques.

Practical Training 8.4 Demonstrate the application of TENS modality.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior TENS.
- Instructor explains possible precautions to be taken prior planning for TENS and possible complications.
- Instructor demonstrates the procedure of TENS on patients.

Practical Training 8.5 Demonstrate the application of IFT.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior Interferential Therapy.
- Instructor explains possible precautions to be taken prior planning for Interferential Therapy and possible complications.
- Instructor demonstrates the procedure of Interferential Therapy on patients.

Practical Training 8.6 Demonstrate the application of Short wave Diathermy.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior Shortwave Diathermy.
- Instructor explains possible precautions to be taken prior planning for Shortwave Diathermy and possible complications.
- Instructor demonstrates the procedure of Shortwave Diathermy on patients.

Practical Training 8.7 Demonstrate the application of Ultra Sound Therapy.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior Ultrasound therapy.
- Instructor explains possible precautions to be taken prior planning for Ultrasound therapy and possible complications.
- Instructor demonstrates the procedure of Ultrasound therapy on patients.

Practical Training 8.8 Postural correction exercises in patients with kyphosis, increase of lumber lordosis.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient prior Postural correction.
- Instructor demonstrates the procedure of Postural correction exercises on patients.
- The observations will be recorded in Logbook.

Practical Training 8.9 Illustrate impaired gait and train them proper gait.

Demonstration by the faculty:

- Instructor demonstrates the examination of patient with improper gait and explains the cause for the same .
- Instructor demonstrates the procedure of correcting the gait in patients with abnormal gait.

- The observations will be recorded in Logbook.

Experiential Learning Activity

Experiential-Learning Learning 8.1: Apply the intermittent traction in patients of cervical spondylosis.

Instructions:

- Examine the patient prior intermittent traction.
- Demonstrate intermittent traction procedure.
- Postgraduate scholar shall record the observations in Logbook.

Experiential-Learning Learning 8.2: Performance of Range of Motion (ROM) techniques in patients diagnosed with Avascular Necrosis of the femoral head.

Instructions:

- Examine the patient prior demonstrating range of movement in diseased.
- Demonstrates the range of motion of hip joint with the help of goniometer.
- The scholar is expected to perform the same on minimum 5 patients suffering with Avascular necrosis of femur head and record.
- The observations will be recorded in clinical record book.

Experiential-Learning Learning 8.3: Performance of Range of motion technique in patients of Tennis Elbow.

Instructions:

- Examine the patient prior demonstrating range of movement in diseased.
- Demonstrates the range of motion of elbow joint with the help of goniometer.

Experiential-Learning Learning 8.4: Performance of stretching exercises.

Instructions:

- Examine the patient prior demonstrating stretch exercise.

- Explain the varieties of exercises which is utilized and benefits.
- Perform stretch exercises in various clinical condition.

Experiential-Learning Learning 8.5: Perform stretching exercises in patients of Gridhrasi.

Instructions:

- Examine the patient prior demonstrating stretch exercise.
- Explain the varieties of exercises viz. knee-to-chest stretch, piriformis stretch (figure four position), hamstring stretch, cat-cow pose, and hip flexor stretch which is utilized and benefits.
- Perform stretch exercises in various clinical condition.

Experiential-Learning Learning 8.6: Apply IFT in 5 patients of Avascular necrosis of head of femur.

Instructions:

- Demonstrate the examination of patient prior Interferential Therapy.
- Explains possible precautions to be taken prior planning for Interferential Therapy and possible complications.
- Demonstrate the procedure of Interferential Therapy on patients.
- The scholar will be able to perform Interferential Therapy in Avascular necrosis of head of femur.
- The observations will be recorded in Logbook.

Experiential-Learning Learning 8.7: Illustrate the use of the Barthel Index and explain its significance in assessing a patient's level of independence in activities of daily living (ADLs).

Instructions:

- Demonstrate the examination of cerebrovascular accident patients.
- Illustrate of Barthel Index (BI) in patients of hemiplegia.

Experiential-Learning Learning 8.8: Assist patients with Avascular Necrosis in rehabilitation training and support them in regaining a proper gait cycle.

Instructions:

- Demonstrate the examination of patients with hampered Gait.
- Demonstrate and advise proper gait training to the patients and train them till the gait gets corrected.
- Scholar is expected to examine 10 patients with hampered Gait and train them and write in case record.
- The observations will be recorded in Logbook.

Modular Assessment

Assessment

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.

- Describe different modalities used in physiotherapy.
- Demonstrate use of various equipments used in physiotherapy unit.
- Identify the probable method of application from physiotherapy apart from panchakarma treatment for the same (40marks)
- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

4

Paper No : 2(Shodhana Siddhi)

Semester No : 3

Module 9 : Shodhanartha Sneha before Vamana and Virechana Karma, Principles of Vamana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Vamana Dravya and Indications, Contra indications of Vamana Karma

Module Learning Objectives

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

1. Perform the procedure of Shodhanaga Snehapana, Analyse and Describe Jeeryamana, Jeerna, Samyak, Ayoga and Atiyoga of Shodhanaga Snehapana,
2. Manage Snehana Vyapat and management.
3. Analyse different types of Vamana Karma and their formulations
4. Analyse and select appropriate Vamana Dravya
5. Asses the fitness and eligibility for Vamana Karma
6. Gain insight of Pharmacokinetics and dynamics of the Vamana Dravya

Unit 1 Snehapana Procedure before Vamana Karma

1. Importnace of Shodhanartha Sneha and swedana
2. Dose fixation and Importance of Anupana, Importance of Vishrama Kala and diet during Vishrama Kala
3. Assessment of Sneha Jeeryamana, Jeerna Lakshana
4. Assessment of Samyak, Ayoga, Atiyoga Lakshana
5. Sneha Vyapat and management,

References: 1,9,13,29,30,36,38,42,45,46,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Interpret the Methodology of shodhanartha sneha, estimation of dosage | 1 | Lecture | CK | Knows-how | L&PPT |

| | | | | | | |
|-------------|--|---|--------------------------|---------|-----------|---------------|
| CO1 | Estimation of Sneha Matra and Clinical Assessment of Sneha jeeryamana, Sneha jeerna lakshana | 2 | Practical9.1 | PSY-SET | Shows-how | D-BED,CBL |
| CO1 | Assess the Samyak, Ayoga, and Atiyoga of snehana | 3 | Practical9.2 | PSY-SET | Shows-how | CBL,D-BED |
| CO1,CO5,CO5 | Discuss Sneha Vyapat & their pathophysiology and its management | 5 | Experiential-Learning9.1 | PSY-MEC | Does | SDL,CBL,D-BED |
| CO3,CO5,CO5 | Daignose and discuss the management of Sneha Vyapat | 2 | Practical9.3 | PSY-GUD | Shows-how | CBL,PBL |

Unit 2 Introduction to Vamana Karma

1. Concept and Treatment principles of Vamana Karma with relation to prevention, promotion and curative aspects.
2. Clinical importance of Classification of Vamana Karma: Mrudu, Madhyama, Teekshna Vamana

References: 1,3,7,9,13,29,30,36,42,45,46,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO8 | Discuss the importance of Vamana karma with its clinical aspect and Importance of vishram kala and specific diet during vishram kala Summarise the treatment principles of Vamana karma with relation to prevention, promotion and curative aspect | 1 | Lecture | CAP | Knows-how | L&PPT ,L&GD |
| CO1 | Analyse the different scales of severity of Vamana - Mridu, Madhyama, Teekshna Vamana | 2 | Practical9.4 | PSY-GUD | Shows-how | PBL,CBL,D-BED |

Unit 3 Applied Anatomy and Physiology of Gastro Intestinal System in relation to Vamana Karma

1. Anatomy and Physiology of Gastro-Intestinal Tract and its clinical application
2. Functions of Accessory organs in relation to Vamana Karma and its clinical application

References: 20,21

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Summarize the Gastro Intestinal System, Anatomy of Upper, Lower GI Tract & accessory organs of Digestion, Overview of Digestive process, Physiology of Upper GI Tract, Lower GI Tract and functions of Accessory Organs | 3 | Lecture | CK | Knows-how | L&PPT ,L_VC |

Unit 4 Analysis of Vamaka, Vamanopaga Dravya Guna Karma and its clinical application

1. Vamana and Vamanopaga Dravya.
2. Chemical composition and their clinical utility
3. Vamana Yoga available in Charaka Kalpa Sthana
4. Preparations of Vamana Yoga, their ingredients, indications and dosage of Madanaphala Yoga, Jeemutaka Yoga, Ikshvaku Yoga, Dhamargava Yoga, Kutaja Yoga, Krutavedhana Yoga and their clinical application.

References: 1,9,13,19,29,30,33,36,42,45,53,54,55,56

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Analyze the Vamaka and Vamanopaga dravya with its guna karma, Chemical constituents, pharmaco | 2 | Lecture | CAN | Knows-how | PER,L&GD,L&PPT |

| | | | | | | |
|-----------------|---|---|--------------------------|---------|-----------|---------------|
| | kinetics and pharmacodynamics of Vamana dravya and interpretation of their clinical utility | | | | | |
| CO1,CO3,CO5,CO5 | Discuss the vamaka & Vamanopaga dravya | 2 | Experiential-Learning9.2 | PSY-SET | Does | FV,EDU,DIS,DG |
| CO1 | Analyse and classify the Vamana yoga's mentioned in Charaka Kalpasthana with ingredients, indications & clinical importance of dosage & anupana | 2 | Lecture | CK | Knows-how | TBL,L&PPT |
| CO1,CO3 | Clinical utility of different formulations of Madanphala, Jeemootaka, Ikshwaku | 4 | Experiential-Learning9.3 | PSY-MEC | Does | DA,SDL,TBL |
| CO1,CO3 | Clinical utility of different formulations of Dhamargava, Vatsaka, Krutavedhana | 4 | Experiential-Learning9.4 | PSY-MEC | Does | TBL,DL,SDL |

Unit 5 Indications and Contraindications of Vamana karma with rationale

1. Indications of Vamana Karma based on different Avastha of Dosha and Roga.

o Gastro Intestinal System:

Nava Jwara, Ajeerna, Mandagni, Visha peeta, Visuchika, Alasaka, Hrullasa, Mukha Praseka, Avipaka, Aruchi, Arsha, Atisara, Mukha paka, Pandu, Adhoga Raktapitta, Urdhwaga Amlapitta

• Respiratory system:

Shwasa, Kasa, Rajayakshma, Peenasa, Kaphaja Shiroroga

• Central nervous system:

Apasmara, Unmada, Chitta Vibhramsha, Ardita

• Integumentary system:

Kitibha, Ekakusta, Vicharchika, Shwitra Sheetapitta Khalitya, Palitya, Mukhadushika, Granthi, Visarpa

- Endocrinal system:

Hypothyroidism, Hyperthyroidism, Sthoulya, Prameha

- Reproductive system:

Polycystic Ovarian Disease, Infertility, Stanya Dusti, Yoni Vyapat

- Miscellaneous:

Shleepada, Apachi, Hrudroga

- Indication of Vamana in different Clinical Conditions-

Avastha and Sthana of dosha, Age Wise and who are on concomitant medications for any systemic diseases, 2. Contra-Indications of Vamana Karma based on avastha of dosha and roga i. Gastro Intestinal system: Krimi Kosta, Urdwaga Raktapitta, Pleeha, Urdhwa Vata, Udara, Gulma, Arsha, Parshwaruk ii. Respiratory system: Rajayakshma, Nava Pratishyaya iii. Musculo-skeletal system: Vatavyadhi iv. Miscellaneous: Hrudroga, Mutraghata, Baala, Vriddha, Kshudhita, Pipasita v. Contra Indication of Vamana in different Clinical Conditions

References: 1,7,9,29,36,38,42,45,53,54,55,56,57

| 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 |
|-------------------------|---|-------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Enlist the Indications & Contra indications of Vamana Karma, Indications of Vamana karma based on different systems along with their suitable reasonings., Contraindications of Vamana karma based on different systems along with their suitable reasonings. | 1 | Lecture | CK | Knows-how | L&GD,DIS |

| | | | | | | |
|---------|--|---|--------------------------|---------|-----------|---------------|
| CO1,CO3 | Clinical examination of related system to indicate for Vamana Karma | 4 | Practical9.5 | PSY-GUD | Shows-how | D-BED,CBL,IBL |
| CO1,CO3 | Perform the clinical examination to decide indication & contra indication for vamana | 4 | Experiential-Learning9.5 | PSY-MEC | Does | CBL,PBL,SDL |
| CO1,CO3 | Examine clinically the related system to contra indicate for Vamana Karma | 2 | Practical9.6 | PSY-GUD | Shows-how | D-BED,IBL |

Unit 6 Assessment of Kaphotklesha Lakshana and Clinical Interpretation of Concept of Sadhyo Vamana, Ghreya Vamana and Practice of Vasantika Vamana

1. Lakshana before Vamana Karma
2. Clinical application of Sadhyo Vamana and Ghreya Vamana
3. Importance of Vasantika Vamana

References: 1,7,9,29,30,36,38,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO1,CO5, CO5 | Examine clinically the Kaphotklesha lakshana and investigations to be performed before Vamana | 5 | Practical9.7 | PSY-GUD | Shows-how | CBL,SIM,PBL |
| CO1,CO5, CO5 | Interpret clinically the concept of Sadhyo Vamana, Ghreya Vamana | 5 | Experiential-Learning9.6 | PSY-MEC | Does | PBL,CBL |
| CO1,CO3, CO8 | Explain the practice of Vasantika Vamana | 2 | Experiential-Learning9.7 | PSY-SET | Does | CD,CBL,PrBL |

Practical Training Activity

Practical Training 9.1 Assessment of Sneha Matra and lakshana

Demonstration by the Faculty :

- Examine Agni and Ama, plan the sneha if there is nirama lakshana otherwise continue Pachana, Deepana
- Educate the patient about the procedure and regimens to be followed during snehapana
- Select the sneha dravya based on the involvement of dosha and roga and anupana based on sneha
- Administer the hrissyasi matra on the first day during early morning (Suryodaya Kaala)
- Advise the anupana when patient gets thirst or 2-3 sips in 15-20 minutes once
- Observe the lakshana during sneha jeerna kaala and Assess the difference between Sneha jeeryamanajanya trishna, jeernajanya trishna and other jeerna lakshanas
- After Sneha jeerna record the time of administration of sneha and digestion of sneha then calculate the next day dosage.
- Scholar will record the each day timing, matra, lakshana, measures to take during sneha ajeerna in minimum 5 patients.

Practical Training 9.2 Assessment of Shodhananga Snehapana

Demonstration by the Faculty :

- Examine the patient each day before administration of sneha to observe the status of agni and ama
- Assess the pureesha snigdha, Twak snigdha, sneha udwega and demonstrate the assessment with available protocols
- Assess dryness of Twak
- Examine the patient every day to assess Samyak snigdha lakshana at least in 10 patients
- Show the Sneha ayoga and Atiyoga lakshana if observed

Practical Training 9.3 Shodhananga Sneha Vyapat and Chikitsa

Demonstration by the Faculty

- Examine the patient to observe samyak or asamyak lakshana of snehana
- Identify the vyapats during demonstration of shodhananga sneha if seen or give case senario
- Differentiate the symptms under the treatment required immediately or treatment as per the symptoms
- Demonstrate the selection of medicines with rationality
- Idntify/Case senario for the symptoms which needs referral to higher centres

Practical Training 9.4 Assessment of Mridu, Madhyama and Teekshna Vamana

Demonstration by the Faculty :

- Brief over review of the concept and clinical utility of types of vamana karma
- Examine the patient to assess the roga, rogi bala, agni and koshta
- Decide the Vamaka dravya based on agni, koshta, roga & rogi bala
- Observe the administration of Mridu, Madhyama & Teekshna vamana in 5 patients each with respect to dravya and matra
- Assess the Mridu, Madhyama and Teekshna Vamana based on vegiki, maanaki lakshana
- Scholar will record the observations in the logbook of minimum 5 patients

Practical Training 9.5 Examination in indicated patients of Vamana Karma

Demonstration by the Faculty :

- Examine the patient system wise to understand its indications
- Examine the patient to see the fitness based on vaya, dosha avastha, roga avastha
- Demonstrate the interactions with the patient to identify the associated lakshana, doasha and roga
- Show the assessment of mental status of the patient for vamana karma

Practical Training 9.6 Discuss the contra indications in Vamana Karma

Demonstration by the Faculty

- Examine the patient system wise to understand its contra indications
- Examine the patient to see the non fitness based on vaya, dosha avastha, roga avastha
- Demonstrate the interactions with the patient to identify the associated lakshana, doasha and roga
- Show the assessment of mental status of the patient for vamana karma

Practical Training 9.7 Assessment of Kaphotklesha Lakshana and investigations

Demonstration by the Faculty :

- Observe whether patient had taken kapha utklehaskara ahara on vishrama kaala
- Demonstrate the examination of patient to assess kapha utklesha lakshana
- Assess the movement of vikrita dosha during purvakarma based on symptoms
- Decide the safe conduct of vamana karma by observing ECG, G I Endoscopy to avoid complications due to variations in these

Experiential Learning Activity

Experiential-Learning Learning 9.1: Sneha Vyapat and Management

Instructions:

- Identify the vyapat lakshana at least in 5 patients / Case Senario
- Examine the patient having vyapat, identify the reason, system involved, its severity and start the treatment immediately
- Identify the emergency condition and understand its emergency and refer to higher centre if required
- Record the management process adopted

Experiential-Learning Learning 9.2: Method of collection, identification of and preparation of vamaka yoga and vamanopaga yoga

Instructions:

- Follow the identification and collection method of vamaka and vamanopaga dravya
- Examine vamaka drugs to see their genuinity and insect free
- Prepare the different formulations of Madanphala, Jeemootaka, Ikshwaku, Dhamargava, Vatsaka, Krutavedhana and vamanopaga yoga

Experiential-Learning Learning 9.3: Vamana Kalpa

Instructions:

- Collection of different Vamana dravya & discard the dravya which are affected by insects
- Perform the preservation of vamana dravya as per classics for Madanphala, Jeemootaka, Ikswaku Preparation of atleast 10 different vamana kalpa with different combinations with different matra prayoga
- Prepare the formulations based on dosha and roga

Experiential-Learning Learning 9.4: Vamana Kalpa

Instructions:

- Collection of different Vamana dravya & discard the dravya which are affected by insects
- Perform the preservation of vamana dravya as per classics for Dhamargava, Vatsaka, Krutavedhana
- Preparation of atleast 5 different vamana kalpa with different combinations with different matra prayoga
- Prepare the formulations based on dosha and roga

Experiential-Learning Learning 9.5: Demonstration of indication and contra indication of patients for Vamana Karma

Instructions:

- System wise Examination in minimum 5 patients of 5 systems to assess for indications & contra indications
- Perform the Astashtana Pareeksha & Dashavidha Pareeksha
- Identify the dosha sthana, avastha, vaya, kaala

Experiential-Learning Learning 9.6: Sadhyo Vamana and Ghreya Vamana

Instructions:

- Examine the patient to indicate for the procedure

- Decide the dravya for Sadhyo vamana & Ghreya vamana based on lakshana
- Fix the dose of sadhyo vamaka yoga & ghreya vamaka yoga

Experiential-Learning Learning 9.7: Vasantika Vamana

Instructions:

- Examine the person to identify the kapha dosha vriddhi
- Identify kapha vridhi by utilising Biochemical evaluation
- Educate the person about the need of vamana in vasanta rutu in prevention of the diseases

Modular Assessment

Assessment

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.

- Perform the procedure of Shodhanaga Snehapana, Analyse and Describe Jeeryamana, Jeerna, Samyak, Ayoga and Atiyoga of Shodhananga Snehapana, Snehana Vyapat and management.
- Different types of Vamana Karma and their formulations
- Analyse and select appropriate Vamana Dravya
- Asses the fitness and eligibility for Vamana Karma
- Pharmacokinetics and dynamics of the Vamana Dravya
- (40marks)
- Including Viva-voce (10 marks)

4

| | |
|--|--|
| Or | |
| <ul style="list-style-type: none"> Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | |

Module 10 : Vamana Karma-Standard Operative Procedure and Assessment, Mode of action and Recent advances

Module Learning Objectives

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

1. Perform Vamana Karma according to the SOP.
2. Analyse, describe and document Ayoga, Atiyoga and Samyak Yoga of Vamana Karma
3. Manage Vamana Vayapat with Practice of essential treatment modalities
4. Innovate the instruments and standardisation of Vamana Karma instruments and Procedures

Unit 1 Protocol of Vamana Procedure, Assessment of Vamana Vega and Upavega in Dosha Nirharana

1. Purva karma, Pradhana Karma and Paschat Karma of Vamana Karma
2. Utility of Akantapaana during Vamana procedure
3. Assessment of Vega and Upavega
4. Assessment of Dosha nirharana

References: 1,9,11,13,29,30,36,42,45,46,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Explain trividha karma of Vamana (Purva, Pradhana, Paschat karma) | 1 | Lecture | CK | Knows-how | L,L&PPT |
| CO1,CO2, CO3 | Assist and observe Vamana Karma | 5 | Practical10. 1 | PSY-GUD | Shows-how | CBL,PBL |

| | | | | | | |
|-----------------|---|---|---------------------------|---------|------|-------------|
| CO2,CO3 | Perform Pre procedure with clinical application | 3 | Experiential-Learning10.1 | PSY-SET | Does | CBL,SDL,D |
| CO2,CO3 | Perform Procedure in different diseases | 4 | Experiential-Learning10.2 | PSY-SET | Does | D,CBL |
| CO2,CO3 | Perform Post procedure of Vamana Karma | 3 | Experiential-Learning10.3 | PSY-SET | Does | CBL,D |
| CO1 | Assess clinically about Akantapaana dravya - Ksheera, Ikshu Rasa, Dadhi, Mamsa Rasa | 3 | Experiential-Learning10.4 | PSY-MEC | Does | CBL,PT |
| CO1,CO2,CO5,CO5 | Assess clinically the Vamana vega and upavegas | 3 | Experiential-Learning10.5 | PSY-MEC | Does | CBL,DIS,PBL |

Unit 2 Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma

1. Assessment of Samyak, Ayoga and Atiyoga
2. Assessment of Laingiki, Vegiki, Maniki and Antiki Lakshana
3. Identification of Pravara, Madhyama and Avara Shudhi
4. Development of a protocol to handle the vomitus hygienically

References: 1,9,11,13,29,30,36,42,45,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO2,CO5,CO5 | Assess critically the Samyak yoga, Ayoga and Atiyoga lakshanas | 3 | Experiential-Learning10.6 | PSY-MEC | Does | CBL,D,DIS |

| | | | | | | |
|-----------------|---|---|---------------------------|---------|-----------|----------------|
| CO1,CO5, CO5 | Assess the Shuddhi lakshanas (Langiki, Maniki, Vegaki and Antiki) | 3 | Experiential-Learning10.7 | PSY-MEC | Does | D,CBL |
| CO4,CO7 | Develop the protocol to handle the vomitus hygienically | 2 | Lecture | CAP | Knows-how | L&PPT,TPW,L&GD |

Unit 3 Scientific explanation of Samsarjana Krama, Tarpana Vidhi, Rasa Samsarjana Krama

1. Importance and scientific understanding of Samsarjana Krama
2. Scientific explanation of Samsarjana Krama, Tarpana Vidhi, Rasa Samsarjana Krama
3. Importance of different dietic methods used in different clinical conditions.
4. Serving dose fixation of Peyadi kalpa based on Rogi Bala and Dosha Nirharana

References: 1,9,13,29,30,33,36,42,45,46,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO7 | Explain scientific view on Samsarjana krama, Tarpana Vidhi and Rasa Samsarjana Krama and knowledge of nutritional values of preparations mentioned in samsarjana krama | 2 | Lecture | CK | Knows-how | PER,L&PPT,L&GD |
| CO1,CO2 | Demonstrate different dietic preparations and customization of samsarjana krama, Tarpana ahara and Rasa samsarjana | 2 | Practical10.2 | PSY-SET | Shows-how | DIS,D,PT |
| CO3 | Prepare various ahara for Samsarjana krama, Tarpana ahara and Rasa Samsarjana in pathya department | 3 | Experiential-Learning10.8 | PSY-ADT | Does | D,SDL,RLE |

Unit 4 Analysis of Complications of Vamana Karma and their management 1. Complications during Vamana Karma with reasons
2. Management of Complications **References:** 1,9,13,29,30,42,45,53,54,55,56,57

| 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 |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO5,CO5 | Assess the Vamana vyapat with reasons and their management | 3 | Practical10.3 | PSY-GUD | Shows-how | CBL,PBL |
| CO5,CO5, CO7 | Demonstrate the emergency medications, first line of management (Electrolyte imbalance, Haematochezia, Acute Abdominal pain, Cardiac Evaluation) and advise for referral to higher centres. | 1 | Experiential-Learning10.9 | PSY-GUD | Does | D-BED,PBL,CBL |

Unit 5 Mode of Action of Vamana Karma with its Pharmacodynamics, Physiology of Vomitting

1. Vamana Karmukata
2. Physiology of Vomiting
3. Probable mode of action and its pharmacodynamics in each Vamaka Dravya used

References: 1,9,13,29,36,42,45,53,54,55,56,57

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO7 | Illustrate the Vamana Karma Karmukata and analysis of the action of different vamana dravyas | 2 | Lecture | PSY-MEC | Knows-how | L&PPT ,L&GD,BS |
| CO1,CO7 | Discuss the Probable mode of action and pharmacodynamics of Vamana Karma | 4 | Practical10.4 | PSY-MEC | Shows-how | CBL,D-M,PrBL |

Unit 6 Recent advancement and research work

1. Researches on Vamana Karma and instruments for Vamana Karma
2. Research activities by using biochemical analysis
3. Sandardisation and innovative approach in Vamana Karma and instruments

References: 9,11,13,38,46,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO7 | Discuss the Recent Advances in invention and scope of instrumentation in Vamana Karma | 3 | Lecture | CK | Knows-how | L&GD,L_VC,L &PPT ,BS |
| CO1,CO7, CO8 | Explain the various Biochemical Analysis to understand the effect of the Vamana procedure scientifically- Liver Function Test, Lipid Profile, Diabetic Profile, Renal Profile, Thyroid Profile, Serum Electrolytes | 4 | Practical10.5 | PSY-GUD | Shows-how | PBL,CBL,LRI |
| CO7,CO8 | Discuss the recent updates in technology and innovations related to Vamana Karma | 2 | Practical10.6 | PSY-GUD | Shows-how | TPW,PrBL,DL, PER,FV |

Practical Training Activity

Practical Training 10.1 Practical on Vamana Karma

Demonstration by the Faculty:

- Explain the procedure of vamana karma
- Show the examination methods to assess the fitness of the patient for the procedure
- Show the materials required for the procedure
- Demonstrate the complete procedure and scholar will assist the procedure
- Show the Post Procedural methods.

Practical Training 10.2 Preparation of Ahara in Vamana Paschat Karma

Demonstration by the Faculty :

- Decide the Shudhhi and brief overview of samsarjana Krama, tarpana vidhi and rasa samsarjana
- Ask the method of Preparation of Peya, Vilepi, Akruta and Kruta Yusha, Akruta and Kruta Mamsa Rasa
- Show the cases to advise Tarpana Krama and demonstrate the preparation of the Laaja and other dravya
- Demonstrate the preparation of the ahara for Rasa samsarjana krama
- Assess the Serving quantity of peyaadi ahara and timing of peyadi ahara
- Customise the annakaala as per today's diet method by following the concepts
- Proper increase of agni qualitatively to understand nirama dosha

Practical Training 10.3 Vamana Vyapat and Chikitsa

Demonstration by the Faculty :

- Identification of various vamana vyapat / Case scenario
- System related Examination of the patient based on the complications
- Explain and demonstrate the severity of vyapat lakshana with reasons
- Know about the medicines to be used in different vyapat conditions
- Assessment of medicine and dosage to treat complication
- Identify the emergency conditions arising due to vyapat and management
- Scholar will record the various complications and management

Practical Training 10.4 Pharmacodynamics of Vamana Karma

Demonstration by the Faculty :

- Explain about Physiology of Vomitting and function of CTZ
- Observe the difference in the action based on the various yoga used in various disease conditions
- Demonstrate the assessment of dosha nirharana in vomitus
- Demonstrate the symptoms of the patient before and after to analyse the action of karma and dravya
- Demonstrate by Collecting the vega (vomitus) properly after administration of each dravya to study the concept of dosha nirharana through scientific approach

Practical Training 10.5 Biochemical Analysis in Vamana Karma**Demonstration by the Faculty :**

- Brief orientation about the indications of investigations
- Explain the utility of Biochemical investigations on different systems
- Analyse the action of vamana karma based on the biochemical evaluation
- Scholar will record the before after changes in the investigations of minimum 10 patients

Practical Training 10.6 Advances in Vamana Karma**Demonstration by the Faculty :**

- Explain the different innovations done on concepts and instruments of Vamana Karma
- Show to prepare models, posters on innovative instruments
- Show the researches and innovations of instruments based on different scientific papers
- Field visit for innovation centres, scientific research institutes

Experiential Learning Activity**Experiential-Learning Learning 10.1: Conduct of Vamana Purvakarma**

Instructions:

- Examine the patient for the fitness of Vamana Karma
- Assess the kaphotklesha lakshana in the patient
- Based on Koshta, roga & rogi bala, select the required Akantapaana dravya, vamana, vamanopaga dravya and other materials
- Prepare the vamana yoga as per the indication
- Collect the medicines to treat vyapat and emergency conditions arising due to vyapat
- Perform the manasopachara to the patient
- Record the activity in the logbook

Experiential-Learning Learning 10.2: Conduc of Vamana Karma

Instructions:

- Examine the vitals of the patient & monitor regularly during the procedures
- Prepare the indicated Vamana Yoga & decide the dosage
- Observe the expulsion of vamana oushadha
- Conduct the Vamana procedure by different kalpa in minimum 20 cases & minimum 3 with one kalpa
- Assess the vega and upavega

Experiential-Learning Learning 10.3: Conduct of Post Procedure of Vamana Karma

Instructions:

- Examine the vitals of the patient
- Observe the Samyak shudhi lakshana in terms of laingiki and antiki
- Decide the shuddhi of vamana based on maniki and vegiki
- Observe the ayoga & atiyoga lakshana
- Perform post operative procedure in minimum 20 patients

Experiential-Learning Learning 10.4: Assessment of Aakantapaana

Instructions:

- Examine the patient to decide sukumara lakshana
- Analyse the indication of different aakantapaana by performing in minimum 5 patients each
- Observe the effect of aakantapaana dravya on vega pradurbhava
- Record the activity in the logbook

Experiential-Learning Learning 10.5: Assessment of Vamana Vega and Upavega

Instructions:

- Identify the vamana vega and upavega
- Assess the vega gati in the expulsion of oushadha and dosha
- Preapre the protocol to assess the vega and upavega
- Clear demarcation about the vega and upavega to decide the shudhi of the karma

Experiential-Learning Learning 10.6: Assessment of Vamana Lakshana

Instructions:

- Examine the patient to identify the samyak, ayoga & atiyoga lakshana
- Observe the expulsion of aakantapaana dravya, vamana oushadha, vamanopaga dravya and pittanta
- If pittanta not observed in the form of bile, ask the patient about the taste like sour, spice
- Examine the other symptoms which can be observed immediately and before the completion of paschat karma
- Identify the ayoga & atiyoga lakshana and plan the treatment
- Analyse the reasons to cause ayoga & atiyoga lakshana

Experiential-Learning Learning 10.7: Vamana Shudhi

Instructions:

- Observe the number of vega and antiki lakshana
- Record the quantity of dravya given and the amount of vomitus
- Examine the antiki to confirm the normal bile and abnormal bile by color and pH study
- Assess the number of vega and quantity to confirm the shuddhi and to plan samsarjana krama
- Identify the asamyak lakshana and treatment

Experiential-Learning Learning 10.8: Preparation of Ahara for Paschat Karma

Instructions:

- Collect the materials required to prepare the ahara
- Prepare the peyadi ahara, tarpana ahara and ahara for rasa samsarjana by following the ratio as per the reference
- Prepare the alternate ahara for mamsa rasa
- Prepare all types of ahara in minimum 2 times
- Record the preparation details in the logbook

Experiential-Learning Learning 10.9: Primary Management of Emergency conditions

Instructions:

- Identify the emergency conditions arising due to vamana vyapat
- Should know the need of emergency management and when to refer for higher centres
- Knowledge about first line of treatment to handle emergency conditions like using IV Fluids, Anti Emetic
- Record the case details and management applied in the logbook

Modular Assessment

Assessment

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.

- Perform Vamana Karma according to the SOP.
- Analyse, describe and document Ayoga, Atiyoga and Samyak Yoga of Vamana Karma
- Vamana Vayapat with Practice of essential treatment modalities
- Innovate the instruments and standardisation of Vamana Karma instruments and Procedures
- (40marks)
- Including Viva-voce (10 marks)

4

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Semester No : 4

Module 11 : Principles of Virechana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Virechana Dravya, Indications and Contra indications of Virechana Karma

Module Learning Objectives

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

1. Analyse different types of Virechana Karma and their formulations
2. Interpret anatomy and Physiology of Gastro Intestinal System in relation to virechana karma
3. Asses the fitness and eligibility for Virechana Karma
4. Analyse and select appropriate Virechana Dravya
5. Gain insight of Pharmacokinetics and dynamics of the Virechana Dravya

Unit 1 Concept and treatment principles of Virechana Karma with relation to preventive, promotive and curative aspect
Clinical importance of Different Classifications of Virechana and Laxatives 1.Principles of Virechana Karma 2.Classification of Virechana Karma **References:** 1,9,13,29,30,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|---|--------------------------------|--|---------------------------------------|
| CO1,CO8 | Evaluate the Importance of Virechana karma with its clinical aspect and its superiority over Virechana. Describe treatment principles of Virechana karma with relation to prevention, promotion and curative aspect. | 1 | Lecture | CK | Knows-how | L,L&PPT |
| CO5,CO5, CO7 | Classify Virechana Dravya and Laxatives with its pharmacodynamics and their Clinical utility <ul style="list-style-type: none"> • Mrudu, Madhyama, Teekshna Virechana • Snigdha, Rooksha Virechana • Anulomana, Sramsana, Rechana, Bhedhana • Moolini, Phalini, Ksheerini, Twak • Bulk Forming Laxatives • Osmotic Laxatives • Stimulant Laxatives • Emollient Laxatives • Lubricant Laxatives. | 10 | Practical11.1 | PSY-SET | Shows-how | CBL,DIS,IBL |
| CO1 | <ul style="list-style-type: none"> • Differentiate the Physiology in rooksha and snigdha Virechaka drugs • Analysis of different scales of severity of Virechana- Mrudu/Madhyama and Teekshna • Probable physiological changes make the different outcome in Anulomana, Sramasana, Rechana & Bhedhana | 1 | Lecture | CK | Knows-how | PER,L&PPT |

| | | | | | | |
|--|--|--|--|--|--|--|
| | <ul style="list-style-type: none"> Assessment of different chemical constituents of Moolini, Phalini, Ksheerini, Twak Virechaka drugs | | | | | |
|--|--|--|--|--|--|--|

Unit 2 Applied Anatomy and Physiology of Gastro Intestinal System in relation to Virechana Karma

1. Introduction to the Gastro Intestinal System, Anatomy of Upper, Lower GI tract and accessory organs of digestion.
2. Overview of digestive process, Physiology of Upper, Lower GI tract and functions of accessory organs of digestion.

References: 20,21

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO7 | Gain Insight on Gastro Intestinal System, Anatomy of Upper, Lower GI Tract & accessory organs of Digestion | 2 | Lecture | CK | Knows-how | L&PPT ,L_VC |

Unit 3 Analysis of Virechana, Virechanopaga Dravya Guna Karma Virechana yogas and its clinical application 1. Virechana and Virechanopaga Dravya. 2. Chemical composition and their clinical utility 3. Virechana yoga available in Charaka Kalpa Sthana, 4. Preparations of different virechana yoga, their ingredients, indications, dosage of Trivrit Lehya, Vyoshadi Gulika, Abhayadi Modaka, Manibhadra Guda, Kalyanaka Guda, Ichabhedhi Rasa, Danti Lehya, Hareetaki Churna, Avipattikara Churna, Triphala Churna, Aragwadha Churna, Katuki Churna, Hingutriguna Taila, Gandharvahastadi Taila, Nimbamrutadi Eranda Taila, Sukumara Eranda Taila.
References: 7,13,29,30,38,42,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| | | | | | | |

| | | | | | | |
|-------------|--|---|---------------------------|---------|-----------|-----------|
| CO1 | Analyze Virechana and virechanopaga dravya with its guna karma | 1 | Lecture | CK | Knows-how | L&PPT ,DA |
| CO1,CO3 | Evaluate the Chemical constituents, pharmacokinetics and pharmacodynamics of Virechana dravya and interpretation of their clinical utility | 1 | Lecture | CK | Knows-how | TBL,DG |
| CO5,CO5 | Identify and Collect the virechana & virechanopaga dravya | 1 | Experiential-Learning11.1 | PSY-SET | Does | DG,D,SDL |
| CO3 | Classify Virechana yoga's mentioned in Charak Kalpasthana with ingredients, indications & clinical importance of dosage & anupana | 2 | Lecture | CK | Knows-how | L&PPT |
| CO3,CO5,CO5 | Practice and prescribe different formulations of | 4 | Experiential-Learning11.2 | PSY-MEC | Does | TBL,D |
| CO3,CO5,CO5 | Describe clinical utility of different formulations of Taila Kalpana | 3 | Experiential-Learning11.3 | PSY-MEC | Does | D,TBL |
| CO3,CO5,CO5 | Describe clinical Utility of different formulataions of Virechana | 3 | Experiential-Learning11.4 | PSY-MEC | Does | TPW,D,DA |

Unit 4 Indications and Contraindications of Virechana karma with rationale

1. Indications of Virechana Karma based on Avastha of Dosha and Roga

- i. Gastro Intestinal system: Jwara, Pandu, Kamala, Haleemaka, Parshwashula, Gulma, Pleeha, Bhgandara, Arshas, Krimikosta, Garavisha, Visuchika, Udara, Arochaka, Vibandha, Anaha, Udavarta, Chardi, Urdhwaga Raktapitta, Adhoga Amlapitta
- ii. Respiratory system: Shwasa, Kasa, Urdhwaga Rakta Pitta
- iii. Central nervous system: Unamada, Apasmara, Pakshaghata, Ardhavabhedaka
- iv. Integumentary system: Kitibha, Ekakusta, Dadru, Vicharchika, Vipadika, Shwitra, Sheetapitta, Vidradhi, Granthi, Dusta Vrina, Visrapa, Vyanga, Neelika
- v. Musculo-skeletal system: Vatarakta, Amavata, Gridrasi
- vi. Endocrinal system: Hypothyroidism, Sthoulya, Prameha
- vii. Reproductive system: Infertility, Yoni Vyapat, Reto dosha
- viii. Miscellaneous: Hrudroga, Siraja granthi, Vruddhi, Shotha, Madatyaya
- ix. Indication of Virechana in different Clinical Conditions and age factor.

2. Contra Indications of Virechana Karma based on avastha of dosha and roga

- i. Gastro Intestinal

system: Nava Jwara, Alpagni, Adhoga Raktapitta, Atisara, Nava Pratishyaya. Ksata guda, Mukta Nala, Madatyaya ii. Reproductive system: Garbhini, Nava prasuta iii. Contra Indication of Virechana in different Clinical Conditions

References: 1,7,9,13,29,41,42,45,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO5, CO5 | Analyze the Indications & Contra indications of Virechana Karma as per Brihatrayee. Justify the Indications of Virechana karma based on different systems. | 1 | Lecture | CK | Knows-how | L&GD,L&PPT |
| CO1,CO5, CO5 | Justify the Contraindications of Virechana karma based on different systems. | 1 | Lecture | CK | Knows-how | L&GD,L&PPT |
| CO3 | Evaluate clinically the related system to indicate & contra indicate for Virechana Karma | 6 | Practical11. 2 | PSY-GUD | Does | PBL,IBL,CBL |
| CO3 | Perform the clinical examination to decide indication for Virechana Karma | 4 | Experiential- Learning11. 5 | PSY-GUD | Does | PER,SDL,D- BED,PBL,CBL |
| CO3 | Perform the clinical examination to decide contra indication for Virechana Karma | 2 | Experiential- Learning11. 6 | PSY-GUD | Does | CBL,D-BED |

Unit 5 clinical application of Koshta Shodhana, Nitya Virechana and Importance of Sharad Virechana

1.Lakshana before Virechana Karma 2.Clinical application of Koshta Shodhana, Nitya Virechana 3.Importance of Sharad Virechana

References: 1,9,13,29,54,55,56,57

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO3 | Discuss the need of assessment of Pitta vridhi lakshana before Virechana and investigations to be performed before Virechana | 4 | Practical11.3 | PSY-GUD | Shows-how | CBL,D-BED,PBL,PT |
| CO3 | Interpret clinically the Concept of Koshta Shuddhi | 3 | Experiential-Learning11.7 | PSY-MEC | Does | CBL,PBL |
| CO1,CO3 | Explain the Practice of Sharad Virechana | 3 | Experiential-Learning11.8 | PSY-SET | Does | PBL,CBL |
| CO3 | Interpret clinically the Concept of Nitya Virechana and Ghreya Virechana | 3 | Experiential-Learning11.9 | PSY-MEC | Does | IBL,DIS,CBL,D-BED |

Practical Training Activity

Practical Training 11.1 Classification of Virechana

Demonstration by the Faculty :

- Brief over review of the concept and clinical utility of types of virechana karma and laxatives
- Examine the patient to assess the roga, rogi bala, agni and koshta
- Decide the Virechaka dravya based on agni, koshta, roga & rogi bala
- Observe the administration of different varieties of virechana in 5 patients and minimum one to understand varieties of laxatives each with respect to dravya and matra
- Assess each type of virechana based on administration of virechana kalpa in different indicated cases
- Scholar will record the observations in the logbook of minimum 5 patients

Practical Training 11.2 Examination of the Patient to indicate and contra indicate Virechana Karma

Demonstration by the Faculty :

- Examine the patient system wise to understand its indications and contra indications
- Examine the patient to see the fitness based on vya, dosha avastha, roga avastha
- Demonstrate the interactions with the patient to identify the associated lakshana, doasha and roga
- Show the assessment of mental status of the patient for virechana karma

Practical Training 11.3 Assessment of Pitta Vridhi Lakshana

Demonstration by the Faculty :

- Brief overview on importance and need of pitta utkleshana lakshana in virechana
- Show the symptoms in the patient after samyak snigdha lakshana
- Advise the patient to take amla rasayukta ahara
- Demonstrate the assessment of pitta vriddhi lakshana and discuss the role in bringing the dosha from shakha to koshta

Experiential Learning Activity

Experiential-Learning Learning 11.1: Method of identification, collection and preparation of virechana yoga and virecchanopaga yoga

Instructions:

- Follow the identify and collect the method of virechana and virechanopaga dravya
- Examine virechana drugs to see their genuinity and insect free
- Identify the different varieties of virechana dravya

Experiential-Learning Learning 11.2: Virechana lehya Kalpana, Guda Kalpana

Instructions:

- Collection of different Virechana dravya & discard the davya which are affected by insects

- Know the clinical utility of virechana dravya as per classics for Trivrit Lehya, Abhayadi Modaka, Manibhadra Guda, Kalyanaka Guda, Danti Lehya
- Attend Preparation of atleast 5 different Virechana kalpa with different combinations with different matra prayoga
- Prepare the formulations based on dosha and roga

Experiential-Learning Learning 11.3: Virechana Taila Kalpa

Instructions:

- Collection of different Virechana dravya & discard the dravya which are affected by insects
- Know the clinical utility of virechana taila kalpa as per classics for Hingutriguna Taila, Gandharvahastadi Taila, Nimbamrutadi Eranda Taila, Sukumara Eranda Taila
- Attend Preparation of atleast 3 different Virechana kalpa with different combinations with different matra prayoga
- Prepare the formulations based on dosha and roga

Experiential-Learning Learning 11.4: Virechana Vati and Churna kalpa

Instructions:

- Collection of different Virechana dravya & discard the dravya which are affected by insects
- Know the clinical utility of virechana dravya as per classics for Ichabhedi Rasa, Vyoshadi Gulika, Danti Lehya, Avipattikara Churna, Triphala Churna, Hareetaki Churna, Aragwadha Churna, Katuki Churna
- Attend Preparation of atleast 3 different Virechana kalpa with different combinations with different matra prayoga
- Prepare the formulations based on dosha and roga

Experiential-Learning Learning 11.5: Demonstration of examination method to indicate the patients for Virechana Karma

Instructions:

- System wise Examination in minimum 5 patients of 5 systems to assess for indications
- Perform the Astashtana Pareeksha & Dashavidha Pareeksha

- Identify the dosha sthana, avastha, vaya, kaala

Experiential-Learning Learning 11.6: Demonstration of contra indication for Virechana Karma

Instructions:

- System wise Examination in minimum 5 patients of 5 systems to assess for contra indications
- Perform the Astashtana Pareeksha & Dashavidha Pareeksha
- Identify the dosha sthana, avastha, vaya, kaala

Experiential-Learning Learning 11.7: Koshta Shuddhi

Instructions:

- System wise Examination in minimum 5 patients of 5 systems to assess for indications
- Perform the Astashtana Pareeksha & Dashavidha Pareeksha
- Perform the Koshta shuddhi in minimum 5 patients by using different dravya

Experiential-Learning Learning 11.8: Sharad Virechana

Instructions:

- Examine the person to identify the pitta dosha vridhhi
- Identify pitta vridhi by utilising Biochemical evaluation
- Educate the person about the need of virechana in sharad rutu in prevention of the diseases

Experiential-Learning Learning 11.9: Nitya Virechana and Ghreya Virechana

Instructions:

- Perform System wise Examination to assess for indications
- Demonstrate the different avastha's of diseases to indicate Nitya Virechana and Ghreya Virechana
- Prepare the different yoga's of nitya virechana and ghreya virechana
- Perform minimum 5 nitya virechana and minimum 2 ghreya virechana

Modular Assessment

Assessment

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.

- Analyse different types of Virechana Karma and their formulations
- Interpret anatomy and Physiology of Gastro Intestinal System in relation to virechana karma
- Asses the fitness and eligibility for Virechana Karma
- Analyse and select appropriate Virechana Dravya
- Pharmacokinetics and dynamics of the Virechana Dravya
- (40marks)
- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

4

Module 12 : Standard Operative Procedure of Virechana

Module Learning Objectives

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

1. Perform Virechana Karma according to the SOP.
2. Analyse, describe, document and manage Ayoga, Atiyoga and Samyak Yoga of Virechana Karma
3. Manage Virechana Vayapat with Practice of essential Treatment Modalities
4. Innovate the instruments and standardisation of Virechana Karma dravya and instruments

Unit 1 Protocol of Virechana Procedure, Assessment of Virechana Vega and Upavega in dosha nirharana 1. Purva karma, Pradhana Karma and Paschat Karma of Virechana Karma 2. Assessment of Vega and Upavega 3. Assessment of dosha nirharana

References: 1,9,29,30,38,42,45,46,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Summarize the trividha karma of virechana (Purva, Pradhana, Paschat karma), Importance of vishrama kala and specific diet during vishrama kala | 1 | Lecture | CK | Knows-how | L,L&PPT |
| CO1 | Interpret the Importance of vishrama kala and specific diet during vishrama kala | 1 | Lecture | CK | Knows-how | PER,L&PPT |
| CO3 | Perform Purva karma with clinical application | 4 | Experiential-Learning12.1 | PSY-MEC | Does | PBL,CBL,SDL |
| CO3 | Practice clinically the Pradhana karma in different diseases | 8 | Experiential-Learning12.2 | PSY-MEC | Does | CBL,PBL |

| | | | | | | |
|-----|--|---|---------------------------|---------|-----------|--------------|
| CO3 | Perform Paschat karma and clinical importance | 4 | Experiential-Learning12.3 | PSY-MEC | Does | PBL,CBL,SDL |
| CO3 | Assess clinically the utility of different anupanas (Draksha rasa, Triphala kashaya, Aragwadha Kashaya, Ksheera) | 3 | Experiential-Learning12.4 | PSY-SET | Does | CBL,SDL,PBL |
| CO3 | Assess clinically the virechana vega | 3 | Practical12.1 | PSY-SET | Shows-how | CBL |
| CO7 | Discuss the Probable mode of action and pharmacodynamics of Virechana Karma | 4 | Practical12.2 | PSY-MEC | Shows-how | PER,SY,D-M,D |
| CO2 | Assess clinically the Virechana Karma | 5 | Practical12.3 | PSY-GUD | Shows-how | BL,PBL,CBL |

Unit 2 Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga of Virechana Karma 1. Assessment of Samyak Yoga 2. Assessment of Ayoga and Atiyoga 3. Utility of assessment criteria's in clinical practice **References:** 1,9,13,29,34,42,45,53,54,55,56,57

| 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 |
|-------------------|---|----------------------------|---|-----------------------|--|------------------------------|
| CO1,CO3 | Assess the Samyak yoga, Ayoga and Atiyoga lakshanas with critical analysis | 2 | Experiential-Learning12.5 | PSY-SET | Does | PBL,IBL,CBL |

Unit 3 Assessment of Laingiki, Vaigiki, Manaki and Antiki Shuddhi of Virechana Karma 1. Assessment of Laingiki, Vegiki, Maniki and Antiki shuddhi 2. Identify Pravara, Madhyama and Avara Shuddhi 3. Utility of assessment of shuddhi in clinical practice **References:** 1,9,13,29,30,42,45,53,54,55,56,57

| 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/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows s) | 3G Teaching Learning Methods |
|-------------------|---|----------------------------|---------------------------------|-----------------------|-------------------------|------------------------------|
| | | | | | | |

| | | | | | | |
|-----|---|---|------------------------------|---------|---------------------------|--------------------------|
| | | | Experiential Learning | | how/Knows how/Know | |
| CO1 | Assess the Shuddhi lakshanas (Langiki, Maniki, Vegaki and Antiki) | 2 | Experiential-Learning12.6 | PSY-MEC | Does | DIS,CBL |
| CO4 | Develop the clinical protocol to assess shuddhi lakshana | 2 | Lecture | CK | Knows-how | L&PPT ,L_VC,DIS,D-M,L&GD |

Unit 4 Analysis of Complications of Virechana Karma and their management 1. Complications during Virechana Karma with suitable reasons 2. Management of complications **References:** 1,9,13,29,38,42,45,53,54,55,56,57

| 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 |
|--------------------------|--|-----------------------------------|--|------------------------------|---|-------------------------------------|
| CO3,CO5, CO5 | Assess the Virechana vyapat with reasons and their management | 3 | Practical12.4 | PSY-MEC | Shows-how | CD,PBL,CBL |
| CO3,CO5, CO5 | Demonstrate the Emergency medications, first line of management (Electrolyte imbalance, Haematochezia, Acute Abdominal pain, Cardiac Evaluation) and advise for referral to higher centres | 3 | Experiential-Learning12.7 | PSY-MEC | Does | PBL,CBL |
| CO1,CO5, CO5 | Analyze the Virechana Vyapat with suitable reasoning | 1 | Lecture | CK | Knows-how | PER,L&PPT ,DIS |
| CO5,CO5 | Analyze the Virechana vyapat management, Emergencies due to vyapats and management | 1 | Lecture | CK | Knows-how | L&PPT ,DIS,L_VC,PER |

Unit 5 Mode of Action of Virechana Karma with its Pharmacodynamics, Physiology of Defecation 1.Virechana Karmukata 2. Physiology of Defecation 3. Probable mode of action and its pharmacodynamics in each Virechaka Dravya used **References:** 1,9,29,30,38,42,45,53,54,55,56,57

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Illustrate the Virechana Karma karmukata and karmukata of different kalpa in different diseases | 2 | Lecture | CK | Knows-how | L_VC,L&GD,L &PPT |
| CO7 | Interpret the Probable mode of action of virechana karma | 1 | Lecture | CK | Knows-how | DIS,L&PPT |

Unit 6 Recent advancement and research work 1. Research on virechana karma and instruments for Virechana Karma 2. Research activities by using biochemical analysis 3. Standardization and innovative approach in Virechana Karma and instruments

References: 1,13,29,38,56,57

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO7,CO8 | Discuss the Recent Advances in invention and scope of instrumentation in Virechana Karma | 1 | Lecture | CK | Knows-how | L&PPT ,DIS,EDU,L_VC, PER |
| CO7 | Duscuss the studies on various Biochemical Analysis to understand the effect of the Virechana procedure scientifically | 3 | Practical12.5 | PSY-MEC | Shows-how | PBL,CBL,DIS |
| CO7 | Discuss the recent updates on Virechana dravya Pharmacodynamics and network pharmacology. | 2 | Practical12.6 | PSY-MEC | Shows-how | DIS,PER,BS,W ,JC |

Practical Training Activity

Practical Training 12.1 Assessment of Virechana Vega and Upavega

Scholar should independently Perform :

- Educate the patient about the vega and upavega
- Advise to observe the vega to identify the color, approximate quantity
- Based on the patient observation, vegiki and maniki shudhi ca be decided
- Try to develop the assessment criteria and instrumentation to identify the vega and maana

Practical Training 12.2 Pharmacodynamics of Virechana Karma**Demonstration by the Faculty**

- Explain about Physiology of Defecation
- Observe the difference in the action based on the various yoga used in various disease conditions
- Demonstrate the assessment of dosha nirharana by the symptoms exhibiting during vega pravritti
- Demonstrate the symptoms of the patient before and after to analyse the action of karma and dravya
- Scholar will assist to prepare chart / model of pharmacodynamics of virechana drug in any 2 indicated diseases

Practical Training 12.3 Practical on Virechana Karma**Demonstration by the Instructor/Faculty**

- Explain the procedure of virechana karma
- Show the examination methods to assess the fitness of the patient for the procedure
- Show the materials required for the procedure and selction of virechana kalpa as per the disease conditions
- Demonstrate the complete procedure, observations to be made during vega and scholar will assist the preparation of kalpa, virechanopaga dravya and anupana preparation
- Show the Post Procedural methods.

Practical Training 12.4 Virechana Vyapat and Chikitsa

Demonstration by the Faculty

- Identification of various virechana vyapat / Case senario
- System related Examination of the patient based on the complications
- Explain and demonstrate the severity of vyapat lakshana with reasons
- Interpret the medicines to be used in different vyapat conditions
- Assessment of medicine and dosage to treat complication
- Identify the emergency conditions arising due to vyapat and management
- Scholar will record the various complications and management

Practical Training 12.5 Biochemical Analysis in Virechana Karma

Demonstration by the Faculty

- Brief orientation about the indications of investigations- Liver Function Test, Lipid Profile, Diabetic Profile, Renal Profile, Thyroid Profile, Serum Electrolytes
- Explain the utility of Biochemical investigations on different systems
- Analyse the action of virechana karma based on the biochemical evaluation
- Scholar will record the before and after changes in the investigations of minimum 10 patients

Practical Training 12.6 Advances in Virechana Karma

Demonstration by the Faculty

- Explain the different innovations done on concepts and instruments of Virechana Karma
- Show to prepare models, posters on innovative instruments
- Show the researches and innovations of instruments based on different scientific papers

Experiential Learning Activity

Experiential-Learning Learning 12.1: Conduct of Virechanana Purvakarma

Instructions:

- Examine the patient for the fitness of Virechana Karma
- Based on Koshta, roga & rogi bala, select the required virechana, virechanopaga dravya and other materials
- Preapre the virrechana yoga and anupana as per the indication
- Collect the medicines to treat vyapat and emergency conditions arising due to vyapat
- Perform the manasopachara to the patient
- Record the activity in the logbook

Experiential-Learning Learning 12.2: Conducting the Virechana Karma

Instructions:

- Examine the vitals of the patient & monitor regularly during the procedures
- Administer the indicated virechana kalpa in required dosage and advise anupana
- Inform the patient to observe the number of watery discharge and color
- If vega not occurs' plan for virecanopaga dravya
- Conduct the Virechana procedure by different kalpa in minimum 20 cases & minimum 3 with one kalpa
- Assess the vega and upavega

Experiential-Learning Learning 12.3: Conduct of Post Procedure of Virechana Karma

Instructions:

- Examine the vitals of the patient
- Observe the Samyak shudhi lakshana in terms of laingiki and antiki
- Decide the shuddhi of virechana based on maniki and vegiki
- Observe the ayoga & atiyoga lakshana
- Perform post operative procedure in minimum 20 patients

Experiential-Learning Learning 12.4: Preparation and Clinical Utility of Anupana

Instructions:

- Know about different anupana used in virechana karma in different disease conditions
- Prepare minimum 3 anupanas and advise each in minimum 3 patients Anupana
- Analyse the different criterias regarding quantity of anupana to be administered in each patient
- Administer Ushna jala and Sheeta jala for anupana as per the indication and perform in minimum 5 patients

Experiential-Learning Learning 12.5: Assessment of Virechana Lakshana

Instructions:

- Examine the patient to identify the samyak, ayoga & atiyoga lakshana
- Based on the observation made by the patient assess for kaphanta lakshana
- If kaphanta not observed, administer virechanopaga dravya
- Examine the patient to identify the lakshanas like lightness of the body, mild tiredness, feeling fresh
- Identify the ayoga & atiyoga lakshana and plan the treatment
- Analyse the reasons to cause ayoga & atiyoga lakshana

Experiential-Learning Learning 12.6: Virechana Shuddhi

Instructions:

- Assess the number of vega and antiki lakshana
- Record the approximate quantity of dravya given and approximate amount of watery discharge
- Identify the kaphanta
- Assess the number of vega and quantity to confirm the shuddhi and to plan samsarjana krama

- Identify the asamyak lakshana and treatment

Experiential-Learning Learning 12.7: Primary Management of Emergency conditions

Instructions:

- Identify the emergency conditions arising due to virechana vyapat
- Should know the need of emergency management and when to refer for higher centres
- Knowledge about first line of treatment to handle emergency conditions like using IV Fluids, Oral rehydration solution
- Record the case details and management applied in the logbook

Modular Assessment

| Assessment | Hour |
|---|------|
| <p>Instructions—</p> <p>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.</p> <ol style="list-style-type: none"> 1. Perform Virechana Karma according to the SOP. 2. Analyse, describe, document and manage Ayoga, Atiyoga and Samyak Yoga of Virechana Karma 3. Virechana Vyapat with Practice of essential Treatment Modalities 4. Innovate the instruments and standardisation of Virechana Karma dravya and instruments <p>(40marks)</p> <ul style="list-style-type: none"> • Including Viva-voce (10 marks) | 4 |

| | |
|--|--|
| Or | |
| <ul style="list-style-type: none"> Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | |

Semester No : 5

Module 13 : Principles of Nasya Karma, Critical Analysis of Nasya Dravya and Indications, Contra indications of Nasya Karma

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

- Able to analyse different types of Nasya and their formulations
- Able to analyse and select appropriate Nasya Dravya
- Able to assess the fitness and eligibility for Nasya.
- Understand the Pharmacodynamics of the Nasya Karma

Unit 1 Concept and treatment principles of Nasya Karma and Classifications of Nasya

- Concept and treatment principles of Nasya Karma,
- Various Classifications and sub-classifications of Nasya
- Utility of different types of Nasya

References: 1,9,13,29,30,42,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO1 | Illustrate the principles of Nasya therapy | 1 | Lecture | CC | Knows-how | L&PPT |
| CO1 | Explain the principles behind trans-nasal drug delivery | 1 | Lecture | CC | Knows-how | L&PPT ,DIS |

| | | | | | | |
|-----------------|---|---|---------------------------|---------|-----------|------------------|
| CO1 | Interprete the relevance of Nasya in Swastha and Aatura conditions. | 1 | Lecture | CAP | Knows-how | L&GD,L&PPT |
| CO6,CO8 | Counsel the patient about the importance of Nasya in Jeerna Partishyay | 2 | Experiential-Learning13.1 | AFT-REC | Does | PBL,SDL,PSM,CBL |
| CO1 | Describe Different classifications of Nasya with dosage. | 2 | Lecture | CAN | Knows-how | L&PPT |
| CO3,CO4,CO5,CO5 | Demonstrate therapeutic Shodhan Nasya in Peenas by identifying the clinical condition | 3 | Practical13.1 | PSY-GUD | Shows-how | SIM,D,CBL,D-BED |
| CO3,CO4,CO5,CO5 | Administer the Brimhan Nasya with Ksheerbala taila in Avabahuka and observe its effect | 3 | Experiential-Learning13.2 | PSY-MEC | Does | D-BED,CD,PBL,CBL |
| CO2,CO3,CO4 | Describe various types of Nasya depending on the pathophysiological condition of the disease. | 3 | Practical13.2 | PSY-SET | Shows-how | PBL,CBL,D-BED |

Unit 2 Applied Anatomy and Physiology Head and Neck relevant to Nasya Karma

1. Applied Anatomy and Physiology of Head and Neck relevant to Nasya Karma

References: 20,21

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Illustrate the anatomical structure of the external nose and nasal cavity, along with their blood supply and lymphatic drainage. | 2 | Lecture | CC | Knows-how | DL,EDU,D-M,LS,L&PPT |
| CO1 | Explain the physiological function of the nasal mucosa and Nasal absorption of drugs. | 1 | Lecture | CC | Knows-how | L&PPT,EDU,L_VC,LS |

Unit 3 Nasya Dravya and Clinical Interpretation

1. Analysis of Nasya Dravya Guna Karma (drugs of Shirovirechanopaga, Shirovirechana and Sangyasthapaka Mahakashaya) and their Clinical interpretation
2. Pharmacodynamics and Pharmacokinetics of Shirovirechanopaga, Shirovirechana and Sangyasthapaka drugs

References: 1,9,13,33,42,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO2,CO3, CO4 | Administer Nasya by using Shirovirechanopaga dravya and record its assessment and interpretation | 3 | Practical13. 3 | PSY-GUD | Shows-how | SIM,CBL,DA |
| CO2,CO3, CO4 | Perform Nasya with Shirovirechana Dravya and evaluate the outcome with proper interpretation. | 3 | Practical13. 4 | PSY-GUD | Shows-how | CBL,DA,D-BED |
| CO1 | Explain the Clinical interpretation and Pharmacodynamics and Pharmacokinetics of Shirovirechanopaga, Shirovirechana and Sangyasthapaka drugs | 2 | Lecture | CAP | Knows-how | DIS,BS,L&PPT |

Unit 4 Nasya Yoga and their clinical utility 1.Nasya Yoga with ingredients, indications and clinical utility of Shadbindu Taila, Anu taila, Ksheerabala Taila, Karpasastyadi Taila, Masha Taila, Prasarini Taila, Nimba Taila, Bramhi Ghrita, Ghritamanda, Jeemutaka Swarasa, Saindhavadi Yoga, Guda-Nagar Nasya, Kumkumadi Nasya, Mashabaladi Kwath Nasya, Madhukasaradi Nasya, Trikatu, Katphala Churna, Haridradi Dhuma Varti, Dashamula Varti **References:** 1,16,33,38,42,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|

| | | | | | | |
|-------------|--|---|---------------------------|---------|-----------|-------------------|
| CO1,CO4 | Demonstrate Indication and clinical utility of ShadabinduTaila, KarpasastyadiTaila, Masha Taila, PrasariniTaila, BrihatajivakadhyaTaila, NimbaTaila | 4 | Practical13.5 | PSY-SET | Shows-how | DIS,JC,CBL |
| CO1,CO3,CO7 | Discuss the Indication and clinical utility of BramhiGhrita,Ghritamanda, Drakshaswarasa, DadimaSwarasa, JeemutakaSwarasa, Ikshu Rasa, Saindhavadi Yoga, Guda-Nagar Nasya, KumkumadiNasya, MasadiKwathNasya, MadhukasaradiNasya | 6 | Experiential-Learning13.3 | PSY-SET | Does | DA,LS,DIS,BS, TBL |

Unit 5 Indications of Nasya Karma based on Avastha of Dosha and Roga

1. Indications of Nasya Karma based on Avastha of Dosha and Roga

i. Gastro Intestinal system: Kamala, Arochaka ii. Respiratory system: Peenasa, Hikka, Nasagata Raktapitta, Shwasa iii. Musculoskeletal system: Manya Stambha, Shiro Stambha, Skanda Roga, Amsa Shoola, Vishwachi, Apabahuka iv. Central nervous system: Vak Graha, Shirashoola, Swara Bheda, Swara Kshaya, Ardita, Apatanaka, Apatantraka, Hanugraha, Unmada, Apasmara, Ardhavabhedaka, Gadgada, Suryavarta, Pakshaghata, v. Integumentary system: Kusta, Nilika, Vyanga, Dadru, Kotha, vi. Endocrinal system: Galaganda, Sthoulya vii. Reproductive system: PCOD viii. Miscellaneous: Shukra Roga, Akshi shola, Gala Shundika, Vartma Roga, Timira, Adhimanta, Nidranasha, Atinidra, Kruchravabhoda, Danta-Kesha-Smashru Pata, Karna Kshweda, Karna Shoola, Akala Vali Palitya, Asya Shosha, Nasa Shosha, Badhirya, Mano Roga, Visha Vikara, Krimi, Sanyasa.

2. Contra Indications of Nasya Karma based on Avastha of Dosha and Roga

i. Gastro Intestinal system: Ajeerna, Nava jwara, ii. Respiratory system: Nava Pratishyaya, Shwasa, Kasa, Dusta peenasa iii. Reproductive system: Garbhini, Sutika, iv. Miscellaneous: Trishna, Mada, Shrama, Mada, Murcha, Shastra Hata, Shokabhitapta, Gara

References: 1,9,13,29,42,45,53,54,55,56,57

| 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 |
|-------------------|--|----------------------------|---|-----------------------|--|------------------------------|
| CO1 | Examine, analyze and interpret the indications for Nasya therapy and its significance in Ardita (facial palsy). | 5 | Experiential-Learning13.4 | PSY-MEC | Does | PBL,CBL,CD |
| CO1,CO4 | Examine and analyse the clinical condition of the patient to identify the Indication for Nasya in a case of Skandha Roga, Shirosthambha, Vishvachi | 4 | Experiential-Learning13.5 | PSY-MEC | Does | PBL,LRI,CD,SI M,CBL |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|----------------------|
| CO1 | Examine and analyse the clinical condition of different types of Kushtha to identify the Indication for Nasya Karma | 4 | Experiential-Learning13.6 | PSY-MEC | Does | PBL,PrBL,DIS,CD,CBL |
| CO1,CO7 | Symposium on Indications and Contraindications of Nasya and its critical analysis to identify the diseases for indication of Nasya in the present era | 2 | Experiential-Learning13.7 | CS | Knows-how | W,BS,TBL,TPW |
| CO1,CO4 | Demonstrate the clinical condition of the disease Shwasa that is contraindicated for Nasya | 4 | Practical13.6 | PSY-GUD | Shows-how | EDU,CD,D-BED,PBL,CBL |

Practical Training Activity

Practical Training 13.1 Demonstration of Shodhan Nasya in Peenas

Demonstration by the Faculty:

- Teacher will explain the procedure
- PG scholar will greet the patient, explain the procedure to the patients and counsel
- Obtain written consent
- Collect all the required medicines/ Instruments and Equipment
- Examine Avastha and Clinical condition of the patients, Ashtavidha and Dashvidhaparikshan, Vitals
- Abhaynga, Swedana, as per the requirement
- Demonstrate Nasya as per the SOP
- Observe the Lakshana
- Followe BMW guidelines for collection, segregation and disposal

Practical Training 13.2 Description of Nasya depending on the pathophysiological condition

Demonstration by the Faculty:

- Task the students to choose an appropriate prescription with reasoning
- Analyse the signs, symptoms and Dosahavastha in the given case
- Analyse and interpret the clinical condition of the patient
- Prescribe the appropriate Nasya
- The student shall write at least five case studies with different types of prescriptions of Nasya with reasoning

Practical Training 13.3 Administer Nasya by using Shirovirechanopaga dravya

Demonstration by the Faculty:

- Brief Overview of Shirovirechanopag dravya Mahakashaya by the faculty
- Trainer instructed Scholar to practice Nasya by using Shirovirechanopag dravya Mahakashaya
- Obtain all the required medicines/ Instruments and Equipment
- Examine the patients, Ashtavidha and Dashvidhaparikshan, Vitals of the patients
- Abhyanga, Swedan as per the requirement
- Give proper position to the patient for Nasya as per the type Nasya to be given
- Give proper Nasya with the proper selection of Instruments
- Observe the Lakshana and Instruct the patients for pathya-apathya
- Followed BMW guidelines for collection, segregation and disposal
- Practice administering Nasya using different Shirovirechana dravya in 10 patients of different conditions under the guidance of Faculty and document them in Logbook

Practical Training 13.4 Practising of Nasya by using Shirovirechana dravya

Demonstration by the Faculty:

- Brief Overview of Shirovirechana dravya Mahakashaya by the trainer
- Faculty instructed Scholar to practice Nasya by using Shirovirechana
- All the required medicines/ Instruments and Equipment obtained
- Examined the patients, Ashtavidha and Dashvidhaparikshan
- Taken Vitals of the patients
- Given Snehan, Swedan as per the requirement
- Given proper position to the patient for Nasya as per the type Nasya to be
- Given proper Nasya with the proper selection of Instruments
- Scholar Observed the Lakshana and Instructed the patients for pathya-apathya
- Followed BMW guidelines for collection, segregation and disposal

Practical Training 13.5 Demonstration of Indication and clinical utility of ShadabinduTaila, KarpasastyadiTaila, Masha Taila, PrasariniTaila, BrihatajivakadhyaTaila, NimbaTaila

Demonstration by the Faculty:

- Overview of Taila Commonly used for in Nasya
- Introduction of the specific Tailas eg. ShadabinduTaila, KarpasastyadiTaila, Masha Taila, Nripavallabhataila, BrihatajivakadhyaTaila, NimbaTaila
- Explain the Rogadhikar and Doshagnata of the Specific Taila
- Analyse the indications on the basis of Ingredients, Rogadhikar, Doshagnata and precaution during the use
- Demonstrate how to analyse and interpret the clinical condition
- Demonstrate selection of specific Taila on the basis of clinical condition, doshavastha
- Student will observe, interpret and document 10 case studies of different clinical condition and different Taila

Practical Training 13.6 Demonstration of the clinical condition of Shwasa contraindicated for Nasya with reasoning.

Demonstration by the Faculty:

- Brief overview of Contraindications and their importance in clinical practice
- Discuss 5 case studies that illustrate these contraindications
- Demonstrate the examination of the patient of Swasa Roga
- Demonstrate how to analyse and interpret the clinical condition
- The scholar will perform examinations under the supervision of the faculty
- The scholar will record and document the analysis and interpretation

Experiential Learning Activity

Experiential-Learning Learning 13.1: Counseling of the Patient about the importance of Nasya

Instructions:

- Scholar will counsel the patient
- Scholar will discuss their thoughts on the significance of Nasya in promoting health and treating ailments
- With the help of Presentahandouts outs, discuss the key points of Nasya
- Brief Introduction of Nasya and relevance in Ayurveda
- Discussion of types of Nasya and its significance in Pratishaya Nasya
- Explore and counsel how the Nasya is beneficial in Pratishaya Nasya
- Encourage empathy and understanding of patient concerns and fears related to Nasya therapy.

Experiential-Learning Learning 13.2: Administration of Brimhan Nasya with Ksheerbala Taila in Avabahuka and observation of the patient

Instructions:

- Greetings to the patient and explain Nasya Procedure to the Patients and
- Counsel the patient and obtain written consent
- Collect and organise all the required medicines/ Instruments and Equipment
- Examine Avastha and Clinical condition of the patients, Ashtavidha and Dashvidhaparikshan
- Record vitals of the patients
- Perform Abhaynga, Swedana, as per the requirement
- Perform Nasya as per the SOP with Ksheerbal taila
- Observe the Lakshana and document the effects
- Follow BMW guidelines for collection, segregation and disposal of waste
- Perform Brimahan Nasya in 10 patients with different diseases using different Yoga and document in Log book

Experiential-Learning Learning 13.3: Can search for Indications in Samhita and Research paper and interpret clinical conditions to use Bramhi Ghrita, Ghritamanda, Jeemutaka Swarasa, Saindhavadi Yoga, Guda-Nagar Nasya, Kumkumadi Nasya, Mashabaladi Kwath Nasya, Madhukasaradi Nasya, Trikatu, Katphala Churna, Haridradi Dhuma Varti, Dashamula varti

Instructions:

- Faculty will assign the task to the scholar to find the indications and clinical utility of the specific drugs for Nasya
- The scholar will identify the medicine and Search literature on the Specific Medicines from the Samhita
- Identify the Contents of the medicines
- The scholar will search for research papers on the specific drugs and its utility in Nasya from authentic journals
- Identify the Rogadhikar and Doshagnata of the Specific Medicines
- Analyse and interpret the indications on the basis of Samhita, research papers
- The scholar will prepare the presentations and present in class room room
- Document in log book

Experiential-Learning Learning 13.4: Examination, analysis, and interpretation of the indications for Nasya therapy and its significance in Ardita (facial palsy).

Instructions:

- Faculty will assign a case study related to a different stage of Ardita simulated patient
- The scholar shall greet the patient and obtain the verbal consent
- The scholar shall review the given case study
- The scholar shall examine the patient in relation to the affected Srotas/ system
- Scholar examines Ashthavidha and Dashvisdha Parikshana
- Analyse and interpret the Avasttha and conclude as Indicated for Nasya
- Scholar recorded interpretation in Case sheet/Logbook

Experiential-Learning Learning 13.5: Examination and analysis of the indicated condition of Skandha Roga, Shirosthambha, Vishvachi for Nasya

Instructions:

- Faculty will assign real patient/simulated patients- a case study of Skandha Roga, Shirosthambha, Vishvachi to examine and analyse of the clinical condition to identify the Indication for Nasya
- The scholar shall greet the patient and obtain the verbal consent
- The scholar shall review the given case study
- The scholar shall examine the patient in relation to the affected Srotas/ system

- Scholar examines Ashthavidha and Dashvisdha Parikshana
- Scholar analyse and interpret the Lab investigations
- Analyse and interpret the Avasttha of the disease and conclude as Indicated for Nasya
- Scholar recorded interpretation in Case sheet/Logbook

Experiential-Learning Learning 13.6: Examination and interpretation of the Doshavastha and clinical condition to identify the indication of Nasya in Different Kushtha

Instructions:

- Faculty will assign 10 patients of Kushtha to examine and analyse the clinical condition to identify the Indication for Nasya
- The scholar shall greet the patient and obtain the verbal consent
- The scholar shall review the given cases
- The scholar shall examine the patient in relation to the affected Srotas/ system
- Scholar examines Ashthavidha and Dashvisdha Parikshana
- Scholar analyse and interpret the Lab investigations
- Analyse and interpret the types of Kushtha and Avasttha of the Kushtha which are Indicated for Nasya
- Scholar shall record interpretation in Case sheet/Logbook

Experiential-Learning Learning 13.7: Workshop on Indications and Contraindications of Nasya

Instructions:

- Brief Overview of Nasya Karma and the significance of understanding of indications and Contraindications
- Students will synthesise information on indications and contraindications of Nasya from Samhita and research papers.
- Preparation of PowerPoint presentation and discussion
- Discussion on the concept of classification of contra-indications according to the system and its relevance in the clinical practice
- Discussion on critical analysis of indications and contraindications

Modular Assessment

Assessment

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.

1. Able to analyse different types of Nasya and their formulations
2. Able to analyse and select appropriate Nasya Dravya
3. Able to assess the fitness and eligibility for Nasya.
4. Understand the Pharmacodynamics of the Nasya Karma

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

4

Module 14 : Standard Operative Procedure of Nasya karma, NasyaVyapat, Mode of action of Nasya Karma and Recent advances in Nasya Karma

Module Learning Objectives

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

1. Performs Nasya according to the SOP.
2. Analyse Describe and document Ayoga, Atiyoga and Samyak Yoga of Nasya
3. Manage Nasya Vayapat with Practice of essential Treatment Modalities.
4. Innovation of Instruments and standardisation of Nasya instruments

Unit 1 Protocol of Nasya Procedure Preoperative, Operative & Postoperative Procedure

1. Protocol of Nasya Procedure-Pre procedure, Procedure and Post Procedure,
2. Assessment and interpretation of different types of Nasya Kala, dose and duration

References: 1,7,9,13,29,42,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO1 | Poorva karma- Enlist the requirements of the nasya and preparation of the patient before Nasya procedure | 1 | Lecture | CC | Knows-how | L&PPT ,L_VC,EDU |
| CO1,CO2, CO3,CO4 | Administrate of Navan Nasya | 4 | Experiential- Learning14. 1 | PSY-GUD | Shows-how | D-M,SIM,CBL |
| CO2,CO3, CO4 | Performance of post-procedure of Nasya- Dhumapna, Kavala | 3 | Experiential- Learning14. 2 | PSY-MEC | Does | D,CBL |
| CO1,CO2, CO3 | Adminstrate of Avapidak Nasya | 4 | Practical14. 1 | AFT-RES | Shows-how | CBL,SIM,PBL |
| CO1,CO2, CO3,CO4 | Demonstration of the Pradhaman Nasya by using Katphal Nasya in Kaphaj Shirashool | 4 | Practical14. 2 | PSY-GUD | Does | SIM,PBL,CBL, D |
| CO1,CO2, CO3,CO4 | Perform Pradhaman Nasya after Identifying the clinical condition of Jeerna Pratishyay | 4 | Experiential- Learning14. 3 | PSY-GUD | Does | CBL,SIM |
| CO1,CO2, CO3,CO4, CO5,CO5 | Perform Dhoom Nasya by assessing doshavastha | 4 | Experiential- Learning14. 4 | PSY-GUD | Does | CBL,SIM |
| CO1 | Describe the different Kaala of different types Nasya according Dosh and Ritu | 1 | Lecture | CC | Knows-how | L&PPT ,L&GD |
| CO1 | Describe the Fixation of dose and duration of different Nasya with different dravya | 1 | Lecture | CC | Knows-how | L&GD,L&PPT |

| | | | | | | |
|-----|---|---|---------|----|-----------|---------------|
| CO1 | Describe utility of Sneha Nasya accring to Sneha Paka | 1 | Lecture | CC | Knows-how | L&PPT ,DIS,BS |
|-----|---|---|---------|----|-----------|---------------|

Unit 2 Assessment of of Samyak Yoga, Ayoga and Atiyoga of Nasya

1. Clinical Assessment of Samyak Yoga in each type of Nasya.
2. Ayoga and Atiyoga of each type of Nasya.
3. Interpretation of Ayoga and Atiyoga

References: 1,7,9,13,42,45,46,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Explain and Interpret Smayak Yoga, Ayoga and Atiyoga of Nasya-1 | 1 | Lecture | CC | Knows-how | L&PPT ,RP |
| CO1 | Explain and Interpret Smayak Yoga, Ayoga and Atiyoga of Nasya-2 | 1 | Lecture | CC | Knows-how | L&PPT ,RP |
| CO1,CO2, CO3 | Design a new protocol on the basis of observation of Ayoga of Nasya in a patient | 4 | Experiential-Learning14.5 | PSY-ORG | Does | CBL,PSM,PBL,IBL |

Unit 3 Complications of Nasya and Management

1. Complications of Nasya Karma and its reasoning
2. Management of Complications

References: 1,7,9,13,42,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|

| | | | | | | |
|---------------------------|--|---|------------------------------|---------|----------------------------|-----------------|
| | learning) session, the students should be able to) | | Experiential Learning | | how/Knows how/Know) | |
| CO1,CO2, CO4,CO5, CO5 | Discuss the Management of Nasya Vyapat | 4 | Practical14.3 | PSY-GUD | Shows-how | IBL,CBL,PBL,SIM |
| CO1,CO2, CO3,CO4, CO5,CO5 | Explain the investigation, diagnose and respond to Murchha through guided experience | 4 | Practical14.4 | PSY-GUD | Shows-how | SIM,RP,IBL,CBL |

Unit 4 Mode of Actions of Nasya

1. Mode of Action of different types of Nasya Karma with its Pharmacodynamics,
2. Scientific explanation of '*Naasa hi Shiraso Dwaram*'

References: 1,9,38,42,45,53,54,55,56,57

| 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 |
|--------------------------|--|-----------------------------------|--|------------------------------|---|-------------------------------------|
| CO1,CO7 | Describe the mode of action of Nasya Karma | 1 | Lecture | CE | Knows-how | L&PPT ,BS,BL |
| CO1 | Justify " <i>Nasa Hi Shiraso Dwaram</i> " | 1 | Lecture | CC | Shows-how | L&PPT |

Unit 5 Recent advancement and research in Nasya

1. Recent Advances and scope of instrumentation in Nasya Karma
2. Recent researches in Nasya Karma

References: 1,13,29,38,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO7, CO8 | Illustrate the need of advancements in Nasya Instrumentations | 1 | Lecture | CC | Knows-how | SDL,L&PPT |
| CO1,CO7, CO8 | Discuss the recent advancement in instruments for Nasya Karma | 1 | Lecture | CE | Knows-how | L&PPT ,BS |
| CO1,CO7, CO8 | Explain and compile recent research works on Scope of Nasya in unexplored areas | 3 | Experiential-Learning14.6 | CC | Does | TBL,SDL,L&G D,EDU,PBL |
| CO1,CO7, CO8 | Administration of Nasya Karma in Ardit patient with the Nasya Yoga by searching recent resaerch papers | 4 | Practical14.5 | PSY-GUD | Shows-how | PSM,D,SIM,PB L |
| CO1,CO7, CO8 | Summerize and compile different Nasya-yogas to be used in different condition and diseases and their parameters for standardisation. | 4 | Experiential-Learning14.7 | CC | Does | TBL,BL,JC |

Practical Training Activity

Practical Training 14.1 Administration of Avapidak Nasya on patient

Demonstration by the Faculty:

- Faculty explains Avapidak Nasya to the scholar
- Explained them importance of Avapidak Nasya
- Explained the procedure of Avapidak Nasya with the help of Video
- Demonstration on patient as per SOP

Practical Training 14.2 Demonstration of Pradhman Nasya on patient

Demonstration by the Faculty:

- Explained the Procedure to the Patients and obtained written consent
- Ensured availability of all the required medicines/ Instruments and Equipment
- Conducted the examination of the patients including Ashtavidha and Dashvidhaparikshan
- Identified the clinical condition of Kaphaj Shirashoola and interpreted the condition, and explained to the Scholars
- Demonstrated pre-procedure (Snahan-Sweden as per the requirement)
- Demonstrated proper position to the patient for Nasya
- Demonstrated Pradhman Nasya as per the SOP
- Observed the Samyak Lakshana and interpret
- Demonstrated BMW guidelines for collection, segregation, and disposal to be followed
- The scholar participated by assisting the faculty in the demonstration of the procedure

Practical Training 14.3 Management of Nasya Vyapat

Demonstration by the Faculty:

- Discuss the possible Vyapat occurs during Nasya Karma and its reasoning
- Demonstrate the preparation for management of Vyapat
- Demonstrate the Vyapats occurs on Patient/ Simulated patient
- Demonstrate identify the Vyapat
- Demonstrate the examination of the patient during Vyapat
- Demonstrate immediate response actions to take when a Vyapat occurs.
- Divide scholar into Group and provide the Scholar simulated patient.

Scholar Activity

- Every group comes across a predesigned Vyapat scenario with a specific response requirement.
- Guidance will be provided by faculty at the time of practice.
- Analyze and interpret the action taken during the scenario
- Documented in Log book
- Present real life case studies of 5 patients and outcomes

Practical Training 14.4 Exploring Investigation and respond to Murchha occurred during Nasya procedure-

Demonstration by the faculty:

- Brief overview of Complications during Nasya
- Introduce enquiry-based learning and its importance in developing critical thinking and practical skills.
- Pose key question on Murchha as complication of Nasya, What are the signs and symptoms ? What could cause to the patient and how to manage with quick response ?
- Demonstrate on real patient/ simulation

Instruction to Scholar

- Record the sign and symptoms
- Record their observations and interpret
- Scholar shall respond to the complication under the supervision of faculty
- Analyse the efficacy of responses and management strategies.
- Refine their management abilities under supervision of the faculty
- Maintain the log book

Practical Training 14.5 Administer Nasya in Ardit patient with the Nasya yoga published in Research paper

Demonstration by the Faculty:

- Divide into the group and assign to search research papers on Nasya and Ardit
- Search the different Nasya Yoga
- Discuss the properties, indications, Contraindications, Doshagnata, dose of each drug
- Demonstrate to analyse the signs, symptoms and dosahavastha in the Ardit
- Task the students to choose appropriate drug with reasoning from the published papers

Scholar's Activity

- Scholar shall search Nasya yoga **using** appropriate search Engine like Pubmed
- Used the appropriate key words to search the recent researches on Ardit and nasya Yoga
- Analysing and Interpreted and documented of recent advancement

- Guidance will be provided by faculty at the time of practice.
- Observe, Interpret and Documented in Log book
- Present real life case studies of 5 patients of Ardit with different Nasya Yoga published in authenticate Journals and thier outcome

Experiential Learning Activity

Experiential-Learning Learning 14.1: Administrate of Navan Nasya

Instructions:

- Explained the Procedure to the Patients and Counsel
- Obtained written consent
- All the required medicines/ Instruments and Equipment obtained
- Examined the patients, Ashtavidha and Dashvidhparikshan
- Taken Vitals of the patients
- Given Snahan-Swedan as per the requirement
- Given proper position to the patient for Nasya as per the type Nasya to be done
- Given Nasya as per the SOP with the proper selection of dravya
- Observed the Lakshana, interpreted and documented properly
- Followed BMW guidelines for collection, segregation and disposal

Experiential-Learning Learning 14.2: Post-procedure of Nasya-Dhumapna, Kavala

Instructions:

- Ensured obtained written consent
- All the required medicines/ Instruments and Equipment obtained for post-procedure
- Examined the patient
- Ensured Nasya was given as per the SOP
- Observed the Lakshana, interpreted and ensured Samyak Lakshana observed
- Dhumpana- Kavala administered as per the SOP
- Followed BMW guidelines for collection, segregation and disposal

Experiential-Learning Learning 14.3: Performing Pradhama Nasya in Jeerna Pratishya

Instructions:

- Explained the Procedure to the Patients and Counsel
- Obtained written consent
- All the required medicines/ Instruments and Equipment obtained
- Examined the patients, Ashtavidha and Dashvidhaparikshan and assess the clinical condition of Jeerna Pratishya
- Taken Vitals of the patients
- Given Snahan-Sweden as per the requirement
- Given proper position to the patient for Pradhama Nasya
- Given Nasya as per the SOP with the proper selection of Dravya
- Observed the Lakshana, interpreted and documented properly
- Followed BMW guidelines for collection, segregation and disposal

Experiential-Learning Learning 14.4: Performing Dhoom Nasya

Instructions:

- Scholar Greeted the patient
- Explained the Procedure to the Patients and Counsel
- Obtained written consent
- All the required medicines/ Instruments and Equipment obtained
- Examined the patients, Ashtavidha and Dashvidhaparikshan, assessed doshavastha
- Taken Vitals of the patients
- Performed pre-procedure
- Given proper position to the patient for Dhoompana
- Given Dhoompana as per the SOP with the proper selection of Dravya
- Observed the Lakshana, interpreted and documented properly
- Followed BMW guidelines for collection, segregation and disposal

Experiential-Learning Learning 14.5: Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga

Instructions:

- Faculty assign the patient of Nasya
- Student define the Samyak yoga , Ayoga and Atiyoga with their symptoms
- Importance of Assessment of the clinical symptoms for better patient care
- Examine the patient
- Document the symptoms observed during the procedure
- Analyze and interpret symptoms observed.
- Based on the symptoms appropriate recommendation
- In the case of Ayoga, student shall design the protocol
- Focus on monitoring the symptoms and reporting/ documenting of important concerns
- Outline the principal clinical manifestations of Samyak Yoga, Ayoga, and Atiyoga within the framework of Nasya

Experiential-Learning Learning 14.6: Recent resaerch work on Scope of Nasya in unexplored areas

Instructions:

- Divide into group and each group searches for the recent advancement on Nasya using appropriate search Engine like Pubmed
- Used the appropriate key words to search the
- Focusing on identifying the unexplored area of Nasya
- Discussion on findings
- Analysing and Interpreted and documented of recent advancement

Experiential-Learning Learning 14.7: Searching of different Nasya-yogas to be used in different clinical conditions and diseases

Instructions:

- Use the appropriate search Engine
- Use the appropriate key words to search the matter
- Search and compile the different condition and diseases for Nasya yoga
- Identify Specific yoga and disease condition and analyse them
- Search parameters for standardization of Nasya Yoga
- Compile and analyse them

- Document with analysis and interpretation

Modular Assessment

Assessment

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.

1. Performs Nasya according to the SOP.
2. Analyse Describe and document Ayoga, Atiyoga and Samyak Yoga of Nasya
3. Manage Nasya Vayapat with Practice of essential Treatment Modalities.
4. Innovation of Instruments and standardisation of Nasya instruments

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

4

Semester No : 6

Module 15 : Principles of Raktamokshana,Critical Analysis of Instruments and Dravya used in Raktamokshana

Module Learning Objectives

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

1. Able to substantiate the importance of Rakta, identifying Raktadusti and diseases due to Raktadusti.
2. Able to substantiate Raktamokshana types and importance
3. Able to substantiate the Indication and Contra-Indications of Raktamokshana and its role and significance at various stages of the disease

4. Develop decision-making skills for Performing Raktamokshan and management of possible complications at the time of execution

Unit 1 Principles of Raktamokshana

1. Raktadusti and diseases due to Raktadusti and .
2. Importance of Raktamokshana in different clinical conditions and
3. Different types of Classification and their clinical utility

References: 1,9,29,38,45,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Evaluate Raktadushti and its clinical interpretation. | 1 | Lecture | CC | Knows-how | L&PPT |
| CO1 | Interprete different condition of rakta kshaya, Rakta Vriddhi, Rakta dushti and Importance of Raktamokshana in different clinical conditions | 1 | Lecture | CC | Knows-how | L&PPT ,L_VC |
| CO1 | Interpret the reasoning behind considering Rakta as the fourth Dosha and important Sira for Raktamokshana | 4 | Practical15.1 | PSY-MEC | Shows-how | L&GD,EDU,JC |
| CO1 | Analyze the different methods of Raktamokshana and evaluate their therapeutic utility. | 1 | Lecture | CC | Knows-how | L_VC,L&PPT |

Unit 2 Indications and Contraindications of Raktamokshana Indications of Raktamokshana based on Dosha and Roga Avastha i. Gastro Intestinal system: Arsha, Agnisada, Pleeha, Jwara ii. Respiratory system: Putinasa, iii. Musculoskeletal system: Gridrasi, Vishwachi, Khalli, Amavata iv. Circulatory System: Vatarakta (Varicose Vein, Varicocele) v. Central nervous system: Unmada, Apasmara, Anantavata, Suryavarta vi. Integumentary system: Visarpa, Upadamsha, Vaivarnya, Kotha, Pidika, Kusta, Charmadala, Vidarika, Sheetapitta, Mukhadushika, Khalitya vii. Endocrinal system: Raktameha, Medoroga viii. Reproductive system: Dusta Artava, Stana Roga, Pradara ix. Miscellaneous: Mukha Paka, Granthi, Sleepada, Swara kshaya, Mada, Gulma, Nidra Atiyoga, Gala and Danta roga, Ksudra roga, Osta roga, Karnapali roga, Mukharoga, Netra roga, Shiroroga, Arbuda, Apachi, Shotha, Murcha,

Padadari 2. Contra Indications of Raktamokshana based on Dosha and Roga Avastha i. Gastro Intestinal system: Udara, Pandu, Arsha, Pravridha jwara, Ajeerna, Atisara, Chardi ii. Respiratory system: Kasa, Shwasa iii. Central nervous system: Akshepaka, Pakshaghata, Ekanga vikara iv. Reproductive system: Garbhini, nava prasuta, Klaibya, Sutika, v. Miscellaneous: Nidrabhibhoota, Sarvanga Shotha, Mada, Murcha, Shosha, Atinidra, Aandhya, Timira **References:** 1,9,29,30,41,42,45,53,54,56,57

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Identify the 10 diseases for Indications and contraindications for Raktamokshana other than Brihatrayee, analyse and interpret them | 1 | Lecture | CC | Knows-how | L&GD,L&PPT |
| CO1,CO4 | Examine the patient to interpret the general and specific condition of Kshudra Roga for Raktamokshana | 4 | Practical15.2 | PSY-SET | Shows-how | CBL,D-BED,PBL |
| CO1,CO2 | Demonstrate and examine the clinical condition of Sheetpitta indicated for Raktamokshana with reasoning. | 4 | Practical15.3 | PSY-SET | Shows-how | CBL,D-BED,CD,SIM |
| CO1 | Infer the system-wise indications of Raktamokshana along with the specific Doshavastha and associated clinical conditions.-1 | 1 | Lecture | CC | Knows-how | L&GD,L&PPT ,TBL |
| CO1 | Interpret the system-wise indications of Raktamokshana along with the specific Doshavastha and associated clinical conditions. | 1 | Lecture | CC | Knows-how | L&PPT ,L&GD,DIS |
| CO1 | Classify the system wise Contra-Indications with specific Doshavastha for Raktamokshana | 1 | Lecture | CC | Knows-how | TBL,L&GD,L&PPT |
| CO1,CO2 | Interprete the clinical condition of Pakshaghaata contraindicated for Raktamokshana with reasoning. | 4 | Experiential-Learning15.1 | PSY-MEC | Does | PBL,D-BED,SIM,LRI |

| | | | | | | |
|-------------|--|---|---------------------------|---------|------|-------------------|
| CO1,CO4 | Perform examination,analyse and interpret the clinical condition of patient having Gridhrasi indicated for Raktamokshana | 4 | Experiential-Learning15.2 | PSY-MEC | Does | PBL,D-BED,CBL,D |
| CO1,CO6,CO8 | Counsel the patient suffering from Jeerna Vicharchika (Chronic Eczema) having emotional distress, Discuss with patient, how Raktamokshana is indicated for his clinical condition and improve his quality of life. | 3 | Experiential-Learning15.3 | AFT-VAL | Does | PBL,RP,CBL,RLE |
| CO1,CO6 | Counsel and explain the patient for contraindication of Raktamokshana after identification of the clinical condition | 3 | Experiential-Learning15.4 | AFT-VAL | Does | RP,CD,IBL,PBL,RLE |

Unit 3 Instruments and Dravya for different types of Panchakarma

1. Instruments for different types of Raktamokshana- a. Shastrakrita and Ashastrakrita b.Siravyadha, Prachanna,
2. Dravya used for different types Shringa, Jalauka, Alabu, Ghatyantra

References: 9,38,41,42,53,54,56,57

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO4 | Drescribe instruments and dravya used for Shastrakrita types of Raktamokshana with reasoning. | 4 | Practical15.4 | PSY-MEC | Shows-how | EDU,CBL,TBL,D |
| CO1,CO4 | Discuss in group the instruments and Dravya to be used for Ashastrakrita types of Raktamokshana with reasoning. | 4 | Experiential-Learning15.5 | CS | Knows-how | DIS,EDU,IBL,TBL,PBL |

Unit 4 Study of Jalauka (Leeches)

1. Leeches - Morphology, Anatomy, Physiology
2. Various types of leeches, their collection and preservation
3. Bio-chemical effects of constituents of the saliva of leeches and its importance in Jalaukavacharan
4. Recent researches in the treatment of Jalaukavacharan

References: 9,38,42,53,54,55,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO1 | Describe the morphology, anatomy, and physiology of leeches. | 1 | Lecture | CK | Knows-how | L&PPT |
| CO1,CO7 | Summarize the constituents of saliva found in Jalauka and their biochemical effects. | 1 | Lecture | CC | Knows-how | L&PPT |
| CO1 | Organise and categorise the leeches based on their types and identify the Nirvish Jalauka among others | 4 | Experiential-Learning15.6 | PSY-SET | Does | L_VC,SDL,SY, BL,TBL |
| CO1 | Explain the methods of collection and preservation of leeches. | 1 | Lecture | CK | Knows-how | L&PPT ,L_VC |
| CO1,CO2 | Demonstrate the preparation and care of the Leech before and after the Procedure. | 4 | Practical15.5 | PSY-SET | Shows-how | D,EDU |
| CO1,CO4, CO5,CO5 | Examine and perform the management of the complications due to Savish Jalauka | 4 | Experiential-Learning15.7 | PSY-MEC | Does | CBL,SIM,PBL |

Practical Training Activity

Practical Training 15.1 Inference of the rationale behind the classification of Rakta as the fourth Dosha and its identification as an important Sira for Raktamokshana.

Demonstration by the Faculty:

- Divide the scholar in group and assign the work to search literature on Rakta
- Introduce the concept of Raktamokshana and its therapeutic uses.
- Provide the case studies of Raktamokshana
- Scholar shall write a review and shall discuss in journal club

Practical Training 15.2 Examination of the Patient for Raktamokshana**Demonstration by the Faculty :**

- Faculty will provide the case study of Kshudra kushtha to examine and analyse the clinical condition
- Greet the patient and obtain verbal consent for examination
- Scholar will examine Asthavidh and Dashavidh pariksha and the Clinical condition
- Scholar analyse and interpret the Lab investigations with reasoning
- Evaluate the general condition and specific condition on the basis of Symptoms and examinations
- Analyse and interpret the types of Kushtha and Avastha of the Kushtha which are Indicated for Raktamokshana
- Analyse the type of Raktmokshana to be indicated on the basis of clinical condition
- Scholar will record interpretation in Case sheet/Logbook

Practical Training 15.3 Examination of the patient having Sheetpitta indicated for Raktamokshana**Demonstration by the Faculty:**

- Brief overview of Indications of raktamokshana in skin diseases and their importance in clinical practice
- Discuss 5 case studies of Sheetpitta that illustrate indications
- Demonstrate the examination of the patient of Sheetpitta
- Demonstrate how to analyse and interpret the clinical condition
- The scholar will perform examinations under the supervision of the faculty
- The scholar will record and document the analysis and interpretation

Practical Training 15.4 Identification of Instruments and Dravya for Raktamokshana-Shastrakrita

Demonstration by the Faculty:

- Overview of Raktamokshana and significance of selection of appropriate Instruments and Dravya
- Faculty will divide the scholar into groups
- Importance of rational selection of Instruments according to predominance of Dosha, type of Raktamoshana and expected outcome
- Identify the Instruments which are to be used for Raktamokshan and categorize them as per the types of the Raktamokshana
- Identify Dravya to be used for different types of Raktamokshana
- Prepare the note on justification of selection of the Instruments and Dravya considering patient condition, safety, therapeutic outcome

Practical Training 15.5 Preparation and care of the Leech before and after the Procedure.

Demonstration by the Faculty:

- Overview of Jaluakavacharan and significance of proper care of Leech
- Explain the students to select Healthy and Nirvish Leeches
- Explain the ethical consideration and safety protocol when handling live organism
- Demonstrate to clean in turmeric water/other water for the procedure
- Demonstrate how to gently remove the leeches
- Explain how to clean the leeches after procedure and their safe storage
- Discuss the importance of monitoring leeches
- Discuss signs and symptoms of health of leeches and Indramad
- Discuss BMW guidelines for collection, segregation and disposal of waste during the procedure

Experiential Learning Activity

Experiential-Learning Learning 15.1: Interpretation of clinical condition of Pakshaghaata contraindicated for Raktamokshana

Instructions:

- Brief overview of Contraindications and their importance in clinical practice
- Discuss 5 case studies that illustrate these contraindications
- Demonstrate the examination of the patient of Pakshaghaata

- Demonstrate how to analyse and interpret the clinical condition
- The scholar will perform examinations under the supervision of the faculty
- The scholar will record and document the analysis and interpretation

Experiential-Learning Learning 15.2: Examination, analyses and interpretation of the clinical condition of patient having Gridhrasi indicated for Raktamokshana

Instructions:

- Faculty will assign real patient/simulated patients- a case study of Gridhrasi to examine and analyse of the clinical condition to identify the Indication for Raktamokshana
- The scholar shall greet the patient and obtain the verbal consent
- The scholar shall review the provided case study
- The scholar shall examine the patient in relation to the affected Srotas/ system
- Scholar shall examine Ashthavidha and Dashvisdha Parikshana
- Scholar shall analyse and interpret the Lab investigations
- Analyse and interpret the Avastha of the disease and conclude as Indicated for Raktamoshana
- Examine, analyse and interpret the clinical condition of 5 patient having different Vaatvyadhi indicated for Raktamokshana
- Scholar shall record interpretation in Case sheet/Logbook

Experiential-Learning Learning 15.3: Counseling of patient for Raktamokshana in an indicated Condition

Instructions:

- Faculty will assign patients of Jeerna Vicharchika (Chronic Eczema) to examine and analyse the clinical condition to identify the Indication for Raktamokshana
- The scholar shall greet the patient and obtain the verbal consent
- The scholar shall review the given case and examine Ashthavidha and Dashvisdha Parikshana
- Analyse and interpret the types of Jeerna Vicharchika and Avasttha which are Indicated for Raktamokshana
- Analyse the emotional condition of the patient
- Discuss how Raktamokshana might help to reduce the symptoms and improve their quality of life.

- Scholar recorded interpretation in Case sheet/Logbook

Experiential-Learning Learning 15.4: Examination of patient, Identification as contraindicated for Raktamokshana and counseling of the patient

Instructions:

- Faculty will assign patients/ Scenario/Simulated patient to examine and analyse the clinical condition to identify the contraindication for Raktamokshana
- The scholar shall greet the patient and obtain the verbal consent
- The scholar shall review the given case and examine Ashthavidha and Dashvisdha Parikshana
- Analyse and interpret the clinical condition and Dosha Avasttha which are contraindicated for Raktamokshana with reason
- Analyse the emotional condition of the patient
- Discuss how Raktamokshana may not be helpful for the existing clinical condition
- Discuss the alternative treatment for the clinical condition
- Scholar shall record interpretation in Case sheet/Logbook

Experiential-Learning Learning 15.5: Discussion on instruments and Dravya to be used for Ashastrakrita types of Raktamokshana

Instructions:

- Brief Overview of Raktamokshana and the significance of understanding of instruments and Dravya used for Ashastrakrita types of Raktamokshana

- Scholars will synthesize information on instruments and Dravya used for Ashastrakrita types of Raktamokshana from Samhita and research papers.
- Analyse the 10 case studies of each type of Raktamokshan
- Scholar shall prepare presentation and present in the symposium
- Discussion on the concept of instruments and Dravya used for Ashastrakrita types of Raktamokshana and its relevance in the clinical practice
- Discussion on critical analysis of instruments and Dravya used for Ashastrakrita types of Raktamokshana

Experiential-Learning Learning 15.6: Categorization of different types of leeches and Identification of Nirvish Jalauka

Instructions:

- Gather information of various types of leeches, habitat, Medicinal properties, physical appearance
- Gather information of Nirvish Jalauka and their physical identification
- Picture/ Video of different species of leeches and Nirvish Jalauka
- Prepared identification guide to understand easily
- Scholar will observe leeches , document color, size, shape, behaviour/Scholar shall discuss in Symposium
- Identify various types, and Nirvish Jaluaka.
- Ensured Safety handling of the leeches

Experiential-Learning Learning 15.7: Examination and performance of the management of the complications due to Savish Jalauka

Instructions:

- Greeting to the Patients and introduce him/herself
- Ensure that written consent has been obtained from the patient
- Counsel the patient
- Immediate removal of Jalauka, examine the patient, take vitals and document
- Identify the complications like allergic reaction, excessive bleeding
- Plan management strategy and act accordingly
- Monitoring the vitals
- Document observations, finding and treatment given and report the adverse reaction to appropriate authority.

| | |
|---|-------------|
| Modular Assessment | |
| Assessment | Hour |
| <p>Instructions—Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.</p> <ol style="list-style-type: none"> 1. Able to substantiate the importance of Rakta, identifying Raktadusti and diseases due to Raktadusti. 2. Able to substantiate Raktamokshana types and importance 3. Able to substantiate the Indication and Contra-Indications of Raktamokshana and its role and significance at various stages of the disease 4. Develop decision-making skills for Performing Raktamokshan and management of possible complications at the time of execution <p>(40marks)</p> <ul style="list-style-type: none"> • Including Viva-voce (10 marks) <p>Or</p> <ul style="list-style-type: none"> • Any practical in converted form can be taken for assessment. (25 Marks) and • Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | 4 |
| Module 16 : Standard Operative Procedure and Assessment of Raktamokshana Procedure and Recent advances | |
| <p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <ol style="list-style-type: none"> 1. Understand the SOPs for Raktamokshan and their assessment 2. Will able to identify the complications associated with Raktamokshan and able to manage 3. Learn and substantiate the mode of action of raktamoshan 4. Explore recent advancement and researches in the field of Raktamoshana | |

5. Separate aseptic unit for Raktamokshana treatment in Panchakarma unit

Unit 1 Protocol of Raktamokshana

1. Protocol of Raktamokshana Procedure-Pre procedure, Procedure and Post Procedure
2. Administration of Siravyadha and Prachanna
3. Administration of Shringa, Jalouka, Alabu, Ghatyantra

References: 9,53,54,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Describe the requirement for Raktamokshana and compulsory investigations before planning to raktamokshana with reasoning | 1 | Lecture | CC | Knows-how | L&PPT ,DIS |
| CO1,CO2 | Demonstrate the Preparation of the patient for Raktamokshana. | 4 | Practical16.1 | PSY-GUD | Shows-how | D,SIM |
| CO1,CO2,CO4 | Demonstrate the different sites of Siravedhan along with their significance and interpretation. Document the case studies | 4 | Practical16.2 | PSY-SET | Shows-how | D-M,CBL,EDU,D,SIM |
| CO2,CO3,CO4 | Demonstrate Raktamokshana by Siravedha procedure | 4 | Experiential-Learning16.1 | PSY-GUD | Does | D,CBL,SIM |
| CO2,CO3,CO4 | Perform different types of Raktamokshan procedure e.g. Prachhan in different clinical condition | 4 | Experiential-Learning16.2 | PSY-MEC | Does | D-M,CBL,SIM,PB L |

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|-------------|---|---|---------------------------|---------|------|------------|
| CO2,CO3,CO4 | Demonstrate the post- procedure of Raktamokshana | 4 | Experiential-Learning16.3 | PSY-MEC | Does | CBL,SIM |
| CO4,CO6 | Instruct the patient regarding pathya apathya after Raktamokshana | 4 | Experiential-Learning16.4 | AFT-VAL | Does | DIS,CBL,RP |

Unit 2 Assessment of Siravedha and Prachhan procedure

1. Assessment of Samyak yoga
2. Assessment of Ayoga and Atiyoga of Sira Vyadha and Pracchana and analysis of thereof

References: 9,13,42,54,55,56,57

| 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 |
|-------------------|---|----------------------------|---|-----------------------|--|------------------------------|
| CO3,CO4 | Demonstarete the assessment and clinical interpretation of Samyak Yoga, Ayoga and Atiyoga of Siravedha and Prachhana | 4 | Practical16.3 | PSY-MEC | Shows-how | PBL,IBL,RLE, CBL |

Unit 3 Assessment of Jaloukavacharana, Shringa, Alabu and Ghatyantra

1. Assessment of Samyak yoga, Ayoga and Atiyoga of Jaloukavacharana,
2. Assessment of Samyak Yoga, Ayoga and Atiyoga Shringa, Alabu and Ghatyantra

References: 9,13,42,53,54,56,57

| 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/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows) | 3G Teaching Learning Methods |
|-------------------|---|----------------------------|---------------------------------|-----------------------|-----------------------|------------------------------|
| | | | | | | |

| | | | Experiential Learning | | how/Knows how/Know) | |
|-----|--|---|-----------------------|----|---------------------|------------------|
| CO1 | Analyse Samyak Yoga, Ayoga and Atiyoga of Jalaukavacharan and interpretation with reasoning Lecture 1 | 1 | Lecture | CC | Knows-how | L_VC,L&PPT |
| CO1 | Analyse Samyak Yoga, Ayoga and Atiyoga of Jalaukavacharan and interpretation with reasoning- Lecture 2 | 1 | Lecture | CC | Knows-how | L_VC,L&PPT ,L&GD |
| CO1 | Describe Samyak Yoga, Ayoga and Atiyoga of modern technique (cupping, syringing method) of rakatamokshan and interpretation with reasoning | 1 | Lecture | CC | Knows-how | L&PPT ,EDU |

Unit 4 Complications of Raktamokshana and management

1. Complications of different types of Raktamokshana
2. Management of complications with suitable reasoning.
3. Complications due to poisonous Leech application and its management

References: 9,13,42,53,54,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO5, CO5 | Identify the complications during Siravedhan procedure and management thereof | 3 | Experiential-Learning16.5 | PSY-MEC | Does | SIM,CBL |
| CO5,CO5, CO6 | Counsel the patient having complications during Raktamokshan procedure (Prachhan, Alabu-avacharan, Ghatiyontra, Cupping therapy) and prepare plan of management of complications | 3 | Experiential-Learning16.6 | AFT-RES | Does | IBL,CBL,PBL |

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|-----------------|---|---|-------------------|---------|-----------|-------------------------|
| CO4,CO5, CO5 | Prepare the crash card of Lifesaving drugs used in emergency conditions during Raktamokshana | 4 | Practical16. 4 | PSY-SET | Shows-how | CBL,PSM,PBL, TBL,DIS |
| CO4,CO5, CO5 | Demonstrate the emergency drugs to be used in the management complications due to leech application | 4 | Practical16. 5 | PSY-MEC | Shows-how | CBL,SIM,PBL, D-M |

Unit 5 Mode of Action of different types of Raktamokshana with their Pharmacodynamics 1.Karmukata of different types of Raktamokshana 2. Pharmacodynamics of different types of Raktamokshana **References:** 9,13,42,53,54,56,57

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1 | Illustrate the pharmacodynamics of different types of Raktamokshana | 1 | Lecture | CS | Knows-how | L&PPT |
| CO1 | Understanding the pharmacodynamics of different types of Raktamokshana | 1 | Lecture | CS | Knows-how | L&PPT ,BS |
| CO1,CO7 | Understand and substantiate various modes of action of Raktamokshana as per clinical indication. | 1 | Lecture | CAN | Knows-how | L&PPT |
| CO2,CO8 | Describe various investigations to be done prior to Raktamokshana and interpret them | 1 | Lecture | CC | Knows-how | L&PPT ,LRI |

Unit 6 Recent advancements and researches in Rakatamokshan

1. Recent advances in invention and scope of instrumentation in Raktamokshana
2. Modified methods of bloodletting – Cupping, Syringe method, Needle method
3. Scope of Researches related Raktamokshana

References: 9,13,42,53,54,55,56

| 3A Course Outcome | 3B Learning Objective (At the end of the (lecture/practical training /experiential | 3C Notional | 3D Lecture/ Practical | 3E Domain/ Sub Domain | 3F Level (Does/Show | 3G Teaching |
|-------------------------|---|----------------|-----------------------------|--------------------------------|---------------------------|----------------|
|-------------------------|---|----------------|-----------------------------|--------------------------------|---------------------------|----------------|

| | learning) session, the students should be able to) | learning Hours | Training/ Experiential Learning | Sub Domain | s how/Knows how/Know) | Learning Methods |
|---------|---|----------------|---------------------------------|------------|-----------------------|---------------------|
| CO7,CO8 | Enlist the recent advancement of instruments in Raktamokshana karma | 1 | Lecture | CC | Knows-how | SDL,PrBL,TP W,L&PPT |
| CO7,CO8 | Identify the Need of advancements in Raktamokshana Instrumentations. | 1 | Lecture | CAN | Knows-how | L&PPT ,L&GD |
| CO3,CO4 | Perform Raktamokshana with modified methods of Raktamokshana eg. Cupping, Syringe and Needle method | 4 | Experiential-Learning16.7 | PSY-ADT | Does | SIM,D-M,D |

Practical Training Activity

Practical Training 16.1 Preparation of the patient for Raktamokshana.

Demonstration by the Faculty:

- Brief overview of Raktamokshan and its importance in clinical practice
- Discuss 5 case studies that illustrate the indications of Raktamokshan
- Explain the procedure to the patient and ensure the Diet before 45 mins of Raktamokshana
- Obtain written consent from the patient/or from a relative
- Demonstrate the examination of the patient and analyse and interpret the clinical condition
- Collection of essential requirements of instruments, equipments and drugs
- Demonstrate Abhayng and Sweda as per the requirement of Raktamokshana type
- Demonstrate how to prepare the patient for Raktamokshan as per SOP
- The scholar will perform examinations under the supervision of the faculty
- The scholar will record and document the analysis and interpretation

Practical Training 16.2 Demonstration of different sites for Siravedhan along with their significance and interpretation

Demonstration by the Faculty:

- Introduce the importance of correct site for Siravedhan and its therapeutics
- Demonstrate different site of Siravedhan and its importance as per the disease and clinical condition

- Discussion of various case studies
- Discussion on physiological reasons and Marma for choosing specific site to desired outcome
- Assign 5 case studies to the Scholar with different diseases and different sites for Siravedhan

Practical Training 16.3 Assessment of Samyak Yoga, Ayoga and Atiyoga of Siravedha and Prachhana

Demonstration by the Faculty:

- Discuss the Samyak yoga , Ayoga and Atiyoga with their symptoms
- Importance of Assessment of the clinical symptoms for better patient care
- Demonstrate and Observe the symptoms of Samyak yoga, Ayoga and Atiyoga
- Analyze and interpret symptoms observed.
- Based on the symptoms appropriate recommendation
- Focus on monitoring the symptoms and reporting/ documenting of important concerns
- Outline the principal clinical manifestations of Samyak Yoga, Ayoga, and Atiyoga within the framework of Raktamokshana and documented properly
- Scholar shall observe the symptoms in 10 case studies and document the same.

Practical Training 16.4 Preparation of Crash card for the complications of Raktamokshana

Demonstration by the Faculty:

- Brief Overview of possible complications and their life threatening condition
- Overview and Introduction of the drugs and their specific role in treating the complications along with their route and doses
- Discuss the signs of anaphylaxis (e.g., swelling, difficulty breathing) as a serious complication
- Scholar will demonstrate the readiness to prepare crash card that summarize lifesaving drugs
- Explain the role of each drug.
- Hand-outs detailing the lifesaving drugs and their Indications, Contraindications, dose and route
- Show How to prepare proper crash card with mandatory information Scenario-based Simulation and presentation by the students in 3 cases

Practical Training 16.5 Demonstration of emergency drugs to be used in the management complications due to leech application

Demonstration by the Faculty:

- Brief Overview of possible complications due to application of leech and their life threatening condition
- Overview and Introduction of the drugs and their specific role in treating these complications
- Demonstration of Lifesaving Drug Administration
- Guided practice to the scholars
- Monitoring and Assessing the Effects of Administered Drugs
- Vital Signs Monitoring , Reassessment and Documentation
- Scenario-based Simulation and presentation by the scholars in 3 case studies

Experiential Learning Activity

Experiential-Learning Learning 16.1: Demonstration of Raktamokshana by Siravedha procedure

Instructions:

- Briefly explain Siravedha, its benefits, and possible complications, Counsel the patient
- Obtain written consent from the patient
- Collect and organise requirements for Raktmokshan procedure
- Examine the patient , vitals and document
- Required Investigations done and analyze, interpret properly
- Ensure Pre- procedures like Snehana, Swedana done properly as per the requirement
- Ensure PPE is being used
- Demonstrate the step-by-step process of Siravedha **under the supervision of faculty**
- Follow safety protocols and hygiene practices throughout the demonstration.
- Follow BMW guidelines for collection, segregation and disposal
- Perform Siravedha in 10 patients

Experiential-Learning Learning 16.2: Performance of different types of Raktamokshan procedure e.g. Prachhan

Instructions:

- Briefly explain Prachhan its benefits, and possible complications, Counsel the patient
- Obtain written consent from the patient

- Requirements for Raktmokshan collected and organized
- Examine the patient , Asthavidha, Dashvidha Pariksha, take vitals and documented
- Required Investigations done and analyzed, interpreted properly
- Assess clinical condition, decide the type of raktamaokshan
- Ensure Pre- procedures like Snehana, Swedana done properly as per the requirement
- Ensure PPE is being used
- Perform the step-by-step Raktamokshan procedure as per SOP e.g. Prachhan
- Follow safety protocols and hygiene practices throughout the procedure
- Follow BMW guidelines for collection, segregation and disposal
- Preform Prachhan in 15 patients and document the same

Experiential-Learning Learning 16.3: Demonstartion of post- procedure of Raktamokshana

Demonstration by the faculty :

- Demonstrate to ensure that written consent has been obtain from the patient
- All the requirements for Raktmokshan collected and organised
- Examine the patient , take vitals and documented during the procedure
- Scholar shall assist the faculty during the procedure
- Wound care (cleaning, dressing)
- Pain management strategies
- Observe Samyak yog, Ayog and Atiyog lakshana, Analyse and interprete
- Monitoring the potential complications and decided strategy of management of thereof
- Instruct the patient for Aahar, Vihar, pathya-apathya and follow-up care
- Scholar shall observe, interprete, assist and document

Experiential-Learning Learning 16.4: Instruction to the patient regarding pathya apathya after Raktamokshana

Instructions:

- Explain a short overview of Raktamokshana and its significance for patient care, highlighting the importance of Pathya and Apathya.
- Defined Pathya and Apathya with examples relevant to post-Raktamokshana care
- Dietary recommendations (pathya and apathya)

- Explain Lifestyle modifications Ahar, Vihar, Vyayam, Management of Stress
- Emotional and mental health considerations
- Engage in a question-and-answer session with patients to address their concerns.

Experiential-Learning Learning 16.5: Identification of complications during Siravedhan and their management

Instructions:

- Counsel the patient regarding complications
- Examine the patient and take vitals
- Identify the complications, like allergic reaction, hypovolemic shock or excessive bleeding, with reasoning
- Plan management strategy and act accordingly
- Monitoring the vitals
- Document observations, findings and treatment given, and report the adverse action to appropriate authority
- Scholar shall record five case studies of the complications of Siravedha with analysis and management

Experiential-Learning Learning 16.6: Complications during Raktamokshan procedure (Prachhan, Alabu-avacharan, Ghatiyatra, Cupping therapy) and management of complications

Instructions:

- Greetings to the Patients and introduce him/herself
- Scholars must listen to and respond to patients' concerns, showing understanding and providing reassurance and counsel the patient regarding complications
- Examine the patient and take vitals
- Identify the complications analyse them with reasoning
- Plan management strategy and act accordingly
- Monitoring the vitals
- Document observations, findings and treatment given
- Scholar shall record five case studies of the complications during Raktamokshan procedure (Prachhan, Alabu-avacharan, Ghatiyatra, Cupping therapy) with analysis and management
- Scholar should design educational material for patient awareness and to improve communication skill

Experiential-Learning Learning 16.7: Performance of Raktamokshana with different modified methods like Cupping, Syringe and needle method

Instructions:

- Briefly explain modified methods of Raktamokshana eg. Cupping, Syringe and Needle method, its benefits, and possible complications,
- Counsel the patient and obtaine written consent
- Ensure all the requirements for Raktmokshan collected and organised
- Examine the patient , taken vitals and documented
- Ensure essential investigations done and analysed, interpreted properly
- Pre-procedures like Snehana, Swedana done properly as per the requirement
- Ensured PPE is being used
- Show the step-by-step process for Raktamokshana like Siravedh, Cupping with recent advance techniquesObserve the samyak yoga, interprete and document in Log book/Case sheets
- Followed safety protocols and hygiene practices throughout the demonstration.
- Followed BMW guidelines for collection, segregation and disposal
- Perform raktamokshana in 10 patients and record the observation

Modular Assessment

Assessment

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.

1. Understand the SOPs for Raktamokshan and their assessment
2. Will able to identify the complications associated with Raktamokshan and able to mange
3. Learn and substantiate the mode of action of raktamoshan
4. Explore recent advancement and researches in the field of Raktamoshana

(40marks)

Hour

4

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Paper No : 3(Basti Siddhi)

Semester No : 3

Module 17 : APPLIED ANATOMY, PHYSIOLOGY AND IMPORTANCE OF BASTI

Module Learning Objectives

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

1. Elucidate about the applied anatomy, physiology of uro-genital system.
2. Analyze significance of Basti and importance of left lateral position in Basti.
3. Identify and inculcate the ethical considerations of Basti
4. Interpret the applications of Proctosigmoidoscopy and Barium enema.

Unit 1 Applied anatomy, applied physiology, significance of Basti and application of modern technique for Basti Karma

1. Applied anatomy of the urogenital system, large colon and anal region important to Basti Karma practices, including surface anatomy, neuroanatomy, key structures/organs, their anatomical locations, and common anomalies.
2. Applied physiology of urogenital system, Excretory system, large colon, regulation of vital functions, pathophysiological alterations in diseased state
3. Significance of Basti as “Ardha chikitsa” and its vital role in Astanga Ayurveda.
4. Significance of Basti as Shodhana, Shamana, Brimhana (nourishment) and Rasayana (rejuvenation).
5. Importance of left lateral position and any feasible changes in cases of difficulty administering in patients of varied disease conditions.
6. Proto-sigmoidoscopy, barium enema, and its applications in Basti administration.
7. Consideration of ethical aspects for the administration of Basti.

References: 20,21

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
|----------------------------------|--|---|--|--|--|---|

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|-------------|
| CO1 | Elucidate the applied anatomy of the uro-genital system, large colon and anal region | 1 | Lecture | CAP | Knows-how | L&PPT |
| CO3,CO4 | Analyse the applied anatomy of uro-genital system, large colon and anal region | 1 | Practical17.1 | CE | Knows-how | SIM,D |
| CO3,CO4 | Analyse the applied anatomy of- uro-genital system, large colon and anal region | 1 | Practical17.2 | CE | Knows-how | D-M |
| CO3,CO4 | Explore the applied anatomy of uro-genital system, large colon and anal region | 1 | Practical17.3 | PSY-SET | Knows-how | SIM,D-M |
| CO3,CO4 | Perform the examination of the surface anatomy, neuroanatomy, key structures/organs, their anatomical locations and common anomalies important to Basti Karma practices | 3 | Experiential-Learning17.1 | PSY-MEC | Does | D-M,SDL,SIM |
| CO1 | Describe about the applied physiology of uro-genital system, excretory system, large colon | 1 | Lecture | CAP | Knows-how | L&PPT |
| CO3,CO4 | Demonstrate the applied physiology of uro-genital system, excretory system, large colon | 3 | Practical17.4 | PSY-SET | Shows-how | SIM,DL,TBL |
| CO3,CO4 | Assist in the regulation of vital functions, pathophysiological alterations in a diseased state | 3 | Experiential-Learning17.2 | PSY-MEC | Does | PBL,TBL,CBL |
| CO1 | Discuss the significance of Basti as “Ardha chikitsa” and its vital role in Astanga Ayurveda | 2 | Lecture | CAP | Knows-how | L |
| CO3,CO4 | Analyse the significance of Basti as “Ardha chikitsa” and its vital role in Astanga Ayurveda | 2 | Practical17.5 | PSY-SET | Shows-how | CBL,PBL |
| CO3,CO4 | Interpret the application of Basti as Shodhana, Shamana, Brimhana (nourishment) and Rasayana (rejuvenation) | 2 | Experiential-Learning17.3 | PSY-GUD | Does | CBL,PBL,RLE |
| CO1 | Describe the importance of left lateral position and explain for any feasible changes in cases of difficulty | 1 | Lecture | CAN | Knows-how | L_VC |
| CO3,CO4 | Perform Proto-sigmoidoscopy and Barium enema Its applications in Basti administration. | 5 | Experiential-Learning17.4 | PSY-GUD | Does | SIM,SDL,CBL |

| | | | | | | |
|---------|---|---|---------------|---------|-----------|-------------|
| CO3,CO4 | Analyse significance of Basti in left lateral position and assist for any feasible changes in cases of difficulty | 1 | Practical17.6 | PSY-GUD | Knows-how | PBL,CBL |
| CO3,CO4 | Assist Proto-sigmoidoscopy, barium enema, and its applications in Basti administration. | 1 | Practical17.7 | PSY-MEC | Knows-how | SIM,CBL,DIS |

Practical Training Activity

Practical Training 17.1 Applied anatomy of uro-genital system, large colon and anal region

Demonstration by the Faculty-

- The faculty will deliver a structured demonstration of the applied anatomy of the urogenital system, large colon, and anal region within the simulation laboratory setting.
- The session will emphasize anatomical features and their clinical relevance, in the context of Basti Karma procedures.
- Following the demonstration, scholars will compile detailed documentation on the anatomical structures located within each abdominal quadrant that are significant to the practice of Basti Karma.
- Scholars will develop comprehensive compilations on the applied anatomy of these structures.
- Incorporate relevant clinical considerations and modifications necessary for the safe and effective administration of Basti in various pathological conditions.

Practical Training 17.2 Examine and explain the applied anatomy of uro-genital system, large colon and anal region

Demonstration by Faculty-

- The faculty will conduct demonstrations in the simulation lab to exhibit the applied anatomy of the urogenital system, large colon, and anal region.
- The sessions will focus on the anatomical features relevant to clinical practice, especially in relation to Basti Karma.
- Following the demonstration, scholars will independently compile structured notes or reports on the applied anatomy of these regions.
- The compilations will include key anatomical landmarks, functional relevance, and clinical correlations.

Practical Training 17.3 Applied anatomy of uro-genital system large colon and anal region

Demonstration by Faculty-

- The faculty will demonstrate the application of Basti Yantra, with a focus on its relevance to the urogenital system, large colon, and anal region, through case-based learning or simulation lab sessions.
- Scholars will compile detailed notes on the applied anatomy of the key structures and organs in these regions, highlighting their significance in Basti Karma procedures.
- Findings from these examinations will be compiled into reports, which scholars will present and discuss as part of their learning activity.

Practical Training 17.4 Applied physiology of uro-genital system, excretory system, large colon

Demonstration by Faculty-

- The faculty will demonstrate the applied physiology of urogenital system, large colon, and anal region in the simulation lab.
- Scholars will compile key information on the physiology of these structures and organs.
- Take part in group discussions to explore their applied functions in clinical context.

Practical Training 17.5 Significance of Basti as “Ardha chikitsa” and its vital role in Astanga Ayurveda

Demonstration by Faculty-

- The faculty will demonstrate bedside cases and conduct follow-up discussions on patients undergoing Basti Chikitsa.
- Specific focus on illustrating the significance of Basti as “*Ardha Chikitsa*” will be done.
- The session will highlight the therapeutic value and clinical outcomes of Basti in various disease conditions.
- Scholars will be guided to critically assess selected clinical cases that exemplify the role of Basti as *Ardha Chikitsa*.
- Scholars will observe the progression of treatment and evaluate clinical responses.
- Document the rationale behind considering Basti as a cornerstone of Ayurvedic management in relevant conditions.

Practical Training 17.6 Significance of Basti in left lateral position and assist for any feasible changes in cases of difficulty

Demonstration by Faculty-

- The faculty will demonstrate the left lateral position for Basti administration in patients.
- Scholars will observe and study about the importance of left lateral position.
- Scholars will assist for any feasible changes in cases of difficulty.
- Scholars will be given situation/problems involving possible difficulties in giving left lateral position to the patient.

- Scholars should critically analyse the situation and suggest any feasible changes or modifications in such situations.

Practical Training 17.7 Proto-sigmoidoscopy, barium enema, and its applications in Basti administration.

Demonstration by Faculty-

- The faculty, either in the department of Surgery or in the simulation laboratory, will demonstrate the procedures of proctosigmoidoscopy and barium enema.
- A detailed explanation of their indications, contraindications, and clinical relevance will be given.
- Each scholar will be required to observe and assist in a minimum of 3 proctosigmoidoscopy procedures.
- Observe at least 1 barium enema procedure.
- Through structured group discussions, scholars will explore the clinical application of these in relation to Basti administration.

Experiential Learning Activity

Experiential-Learning Learning 17.1: Surface anatomy neuroanatomy, key structures/organs, their anatomical locations and common anomalies important to Basti Karma practices

Instructions-

- Each scholar will independently examine the surface anatomy, neuroanatomy, and anatomical locations of key structures and organs.
- Examine the urogenital system, large colon, and anal region at least 3 times using simulated patients or models in the simulation lab.
- Each scholar will study a minimum of 5 common anomalies related to these regions relevant to Basti Karma practices.
- Findings from these examinations will be compiled into individual case summaries or reports,
- Scholars will present and discuss as part of their learning activity.

Experiential-Learning Learning 17.2: Regulation of vital functions, pathophysiological alterations in diseased state

Instructions-

- Scholars will participate in the regulation of vital functions and identify pathophysiological alterations in diseased states through at least 1 case study and group-based case discussions.
- They will be presented with 3 clinical scenarios involving pathophysiological changes.

- Scholars will be required to assess each case to determine whether Basti Karma should be administered or avoided.

Experiential-Learning Learning 17.3: Significance of Basti as Shodhana, Shamana, Brimhana (nourishment) and Rasayana (rejuvenation)

Instructions-

- Scholars in smaller groups will explore and select 1 research paper or reference from a Samhita.
- Explore significance of Basti as Shodhana, Shamana, Brimhana and Rasayana and demonstrate their interpretation.
- Each scholar should present atleast 1 case of significance of Basti as Shodhana, Shamana, Brimhana or Rasayana each.

Experiential-Learning Learning 17.4: Proto-sigmoidoscopy and Barium enema Its applications in Basti administration.

Instructions-

- Scholars will be instructed to perform per-rectal examinations under appropriate supervision.
- Perform proctosigmoidoscopy on a minimum of 5 patients presenting with ano-rectal pathologies, and in adherence to clinical safety protocols.
- Each Scholars will also be required to gather and analyze information on the application of proctosigmoidoscopy and barium enema in relation to Basti administration.
- The findings will be compiled and presented for discussions facilitating both peer learning and enhanced conceptual understanding.

Modular Assessment

Assessment

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.

- Direct observation (DOPS) of Basti being done and observe for the application of knowledge of surface anatomy and applied physiology. (10 marks)
- OSCE of long case presentation with special reference to applied urogenital systemic examination. (5 marks)
- Identifying the importance of surface anatomy and applied physiology in Basti and record/present it. (5 marks)

2

- Viva-voce. (5 marks)

Or

- Any practical in converted form can be taken for assessment. (10 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (15 Marks)

Module 18 : CLASSIFICATION OF BASTI AND SCREENING OF PATIENT AND DOSE SCHEDULE FOR BASTI

Module Learning Objectives

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

1. Illustrate the various classifications of Basti.
2. Diagnose and manage the specific and general condition of disease and patient for various Basti.
3. Analyse the concepts related to Basti mentioned by various Acharya
4. Perform and prescribe the various Basti mentioned in different diseases in the classical texts.
5. Analyse and interpret the clinical conditions for the indication and contraindications of Basti.
6. Analyse critically the rationale behind contraindication and indications for Basti.
7. Enumerate the dose of different Basti and analyse the dose modification as per Roga-Rogi Bala.
8. Explore the hemodynamic impact of Basti administration on the body.

Unit 1 Classification and utility

1. Classifications of Basti
2. Sub-classifications of Niruha Basti and Sneha Basti
3. Combined Basti regimens, including Yoga, Kala, Karma, and Chaturbhadr Kalpa as per the condition of disease and patient
4. Basti in Samhita with commentaries.

References: 8,29,54

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO1,CO2 | Describe about the different types of Basti, sub-classification of Niruha Basti and Sneha Basti. | 1 | Lecture | CC | Knows-how | L&PPT |
| CO1,CO2, CO4 | Compare the specific and general condition of disease and patient for various Basti | 1 | Lecture | CAN | Knows-how | L&PPT ,L&GD |
| CO1,CO4 | Analyze the concepts related to Basti mentioned by various Acharya and analyse the utility of Basti in healthy individuals | 1 | Lecture | CAP | Knows-how | L&GD,L_VC |
| CO1,CO2 | Enumerate and practise the combined Basti regimen including Yoga, Kala, Karma, and Chaturbhadra Kalpa | 2 | Practical18.1 | PSY-SET | Shows-how | PBL |
| CO1,CO2 | Exhibit and interpret the combined Basti regimen including Yoga, Kala, Karma basti and Chaturbhadra Kalpa | 1 | Experiential-Learning18.1 | PSY-GUD | Shows-how | RLE,CBL |
| CO1,CO2, CO4 | Analyse the specific and general condition of disease and patient for various Basti | 2 | Practical18.2 | PSY-MEC | Shows-how | BL,CBL,PBL |
| CO1,CO4 | Examine the patient, interpret and compare the concepts related to Basti mentioned by various Acharya | 2 | Practical18.3 | PSY-MEC | Shows-how | CBL,D-BED,PBL |
| CO1,CO2, CO4 | Exhibit and analyse the specific and general condition of disease and patient for various Basti | 3 | Experiential-Learning18.2 | PSY-GUD | Does | SDL,PBL |
| CO1,CO4 | Examine and perform the concepts related to Basti mentioned by various Acharya | 3 | Experiential-Learning18.3 | PSY-GUD | Does | CBL,BS |
| CO1 | Evaluate Dwadasha-Prasrutika Basti Siddhi Adhyaya and its role in allievating diseases. | 2 | Lecture | CAP | Knows-how | L&PPT ,L&GD |

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|---------|---|---|---------------------------|---------|-----------|---------------------|
| CO1 | Interpret and compare key classical commentaries on the concept and practice of Basti | 2 | Practical18.4 | CAP | Shows-how | PBL,CBL,SY,D-BED,PL |
| CO3,CO4 | Implement Basti in different diseases mentioned in the classical texts. | 2 | Practical18.5 | CE | Shows-how | CBL,BS,PBL |
| CO1 | Examination and interpretation of the commentaries on Basti topic | 3 | Experiential-Learning18.4 | PSY-SET | Does | JC,BL,CBL,RLE |
| CO4 | Practice Dwadasha-Prasrutika Basti Siddhi Adhyaya and its role in alleviating diseases. | 3 | Experiential-Learning18.5 | PSY-GUD | Does | BS,CBL,RP,PBL |

Unit 2 Screening of the patient, dosages and schedules of different type of Basti

1. Indications of Basti, its role and significance at the various stages of diseases (Vyadhi Avastha).
2. Contraindications for Basti with reasoning. Contraindications with rationale based on present-day medical practices.
3. Importance of Anuvasana Basti before Niruha Basti and Niruha Basti and Anuvasana Basti before Uttara Basti.
4. Dose schedules of Niruha Basti, Sneha Basti, Anuvasana Basti, Matra Basti, Siddha Basti, Yapana Basti, Uttara Basti.
5. Modifications in dose of Basti and its utility based on Rogi and Roga Bala.
6. Impact of Haemodynamic status of the body for the administration of Basti.

References: 7,9,19,29,40,54,55

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO1,CO3, CO4 | Demonstrate and interpret the indications of Basti in different Pathophysiological conditions of diseases. | 4 | Practical18.6 | PSY-SET | Shows-how | PL,PBL,CBL |
| CO1,CO3, CO4 | Present the indications of Basti in various pathophysiological condition of disease | 3 | Experiential-Learning18.6 | PSY-GUD | Does | CBL,JC,DIS |
| CO1,CO3, CO4 | Analyze the indications of Basti from Bruhatrayi and interpret its role in different diseases. | 2 | Lecture | CE | Knows-how | L&PPT |

| | | | | | | |
|-----------------|---|---|----------------------------|---------|-----------|----------------|
| CO1,CO4 | Demonstrate and interpret the rationale behind the contraindications of Basti as per Ayurvedic Samhita. | 5 | Practical18.7 | PSY-SET | Shows-how | PBL,CBL,DIS |
| CO1,CO3,CO4 | Present the utility of Basti in various pathophysiological condition of disease | 2 | Experiential-Learning18.7 | PSY-GUD | Does | JC,RP,CBL,DIS |
| CO1,CO3 | Analyze the contraindications for Basti from Bruhatrayi | 2 | Lecture | CE | Knows-how | L&GD,DIS,L&PPT |
| CO1 | Demonstrate and interpret the importance of Niruha Basti before Uttar Basti | 2 | Practical18.8 | PSY-SET | Shows-how | CBL,D-BED |
| CO3,CO4,CO5,CO5 | Present the contraindications of Basti based on Ayurvedic Samhita. | 4 | Experiential-Learning18.8 | PSY-MEC | Does | JC,RP,CBL,PL |
| CO1 | Demonstrate and interpret the importance of Anuvasana Basti and Niruha Basti before Uttar Basti | 1 | Practical18.9 | PSY-SET | Shows-how | D-BED,CBL |
| CO3,CO4,CO5,CO5 | Illustrate the contraindications of Basti based present-day medical practices. | 3 | Experiential-Learning18.9 | PSY-MEC | Does | JC,PL,RP,CBL |
| CO1 | Describe the importance of Anuvasana Basti before Niruha Basti | 1 | Lecture | CAP | Knows-how | DIS,L&GD,L&PPT |
| CO2,CO3 | Demonstrate and interpret the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti | 1 | Practical18.10 | PSY-GUD | Shows-how | CBL |
| CO1,CO2 | Illustrate, display and practice the sequence of Anuvasana Basti and Niruha Basti before Uttar Basti | 3 | Experiential-Learning18.10 | PSY-GUD | Does | CBL,DIS |
| CO2 | Evaluate the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti | 1 | Lecture | CK | Knows-how | L&PPT ,L&GD |
| CO2,CO3 | Demonstrate and interpret the dose schedules of Niruha Basti | 1 | Practical18.11 | PSY-SET | Shows-how | CBL |
| CO2,CO3 | Illustrate, display and practice the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti | 3 | Experiential-Learning18.11 | PSY-MEC | Does | DIS,CBL |

| | | | | | | |
|------------------------------------|--|---|--------------------------------|---------|-----------|------------|
| CO2,CO3 | Illustrate,display and practice the dose schedules of Sneha Basti, Anuvasana Basti and Matra Basti | 2 | Experiential-Learning18.1 2 | PSY-SET | Shows-how | CBL |
| CO2,CO3 | Demonstrate and interpret the dose schedules of Sneha Basti, Anuvasana Basti and Matra Basti | 1 | Practical18.1 2 | PSY-SET | Shows-how | CBL |
| CO2,CO3 | Illustrate,display and practice the dose schedules of Uttar Basti | 1 | Experiential-Learning18.1 3 | PSY-MEC | Does | CBL |
| CO2,CO3 | Evaluate the dose schedules of Sneha Basti, Anuvasana Basti and Matra Basti | 1 | Lecture | CK | Knows-how | L&GD,L&PPT |
| CO2,CO3 | Demonstrate and interpret the dose schedules of Uttar Basti | 1 | Practical18.1 3 | PSY-SET | Shows-how | DIS,CBL |
| CO1,CO4 | Interpret and perform dose modifications based on Rogi and Roga Bala | 3 | Experiential-Learning18.1 4 | PSY-GUD | Does | DIS,CBL |
| CO2,CO3 | Evaluate the dose schedules of Uttar Basti | 1 | Lecture | CK | Knows-how | L&GD,L&PPT |
| CO3 | Explore, enlist and display the possible modifications in the dose of various Basti | 2 | Practical18.1 4 | PSY-SET | Shows-how | PBL |
| CO1,CO3 | Interpret and perform dose modifications based on Rogi and Roga Bala | 2 | Experiential-Learning18.1 5 | PSY-GUD | Does | CBL,DIS |
| CO3 | Evaluate and analyse the possible modifications in dose of various Basti | 1 | Lecture | CAP | Knows-how | L&PPT ,DIS |
| CO1,CO2 | Describe the haemodynamic status of the body for the administration of Basti | 1 | Lecture | CAN | Knows-how | L&PPT ,DIS |
| CO3 | Explore, enlist and display the possible modifications in the dose of various Basti | 2 | Practical18.1 5 | PSY-SET | Shows-how | PBL |
| Practical Training Activity | | | | | | |

Practical Training 18.1 Combined Basti regimen including Yoga, Kala, Karma, and Chaturbhadra Kalpa

Demonstration by the Faculty-

- The faculty will demonstrate the concepts of *Yoga, Kala, Karma, and Chaturbhadra Kalpana* in patients to scholars.
- Showcasing of the necessary materials, performing the complete procedures, and explaining the post-procedural care involved in each type of *Basti*.
- Scholars will be encouraged to deepen their understanding of the fundamental principles underlying combined *Basti* regimens.
- Critical reading of relevant research articles and active participation in group discussions.
- Using 3 selected case studies, scholars will be guided to observe, document, and enumerate the application of combined *Basti* regimens in varying pathological conditions.

Practical Training 18.2 Specific and general condition of disease and patient for various Basti

Demonstration by the Faculty-

- The faculty will demonstrate the general condition of disease and patient for various Basti.
- Scholars will observe atleast 10 patients and enlist and describe the specific and general pathophysiological conditions of disease in these patients for administration of Basti .
- With the help of given problem/situation scholars are encouraged to observe the specific and general condition of disease in patients for Basti.

Practical Training 18.3 Interpretation of the the concepts related to Basti mentioned by various Acharya

Demonstration by the Faculty-

- The faculty will enlist concepts related to Basti mentioned by various Acharya in different Samhita like Su. Chi. 37, Su. Chi. 38, Cha. Si. 12, Cha. Si. 8, A. Hru. 4.
- Faculty will facilitate case discussion sessions wherein rationale behind choosing specific basti mentioned by various acharyas in different Samhita will be discussed.
- Scholars will select 10 real bed side cases.
- In these cases, Samhita based clinical case discussion and critical analysis will be done.
- A clinical discussion will be conducted to evaluate the selection of appropriate *Basti* formulations described by various Acharyas across different Samhitas.
- Scholars will examine the patient as per Samhita and compare the observations reported in each case.

Practical Training 18.4 Interpretation of the commentaries on Basti topic

Demonstration by the Faculty-

- Faculty will enlist the various commentaries on Basti topic mentioned by various acharyas (for e.g. Chakrapanitika on Cha. Si. 1, Dalhan tika on Su. Chi. 37 and Su. Chi. 38 , Arundatta and Hemadritika on A. Hru. Kalpasthan 4)
- Scholars will analyse and interpret the commentaries on Basti topic mentioned by various acharyas.
- Scholars will arrange symposium wherein different case discussion will be done through presentation of cases or scenarios.
- Faculty will facilitate atleast 3 case discussion sessions wherein rationale behind choosing specific basti mentioned in different commentaries will be discussed.
- Scholars will be encouraged in active reading of atleast 10 research articles wherein different commentaries on basti topic are presented.

Practical Training 18.5 Implementation of the role of Basti in different diseases mentioned in the classical texts.

Demonstration by the Faculty-

- Faculty will discuss and demonstrate the role of specific Basti in different pathophysiological conditions of diseases (vyadhiavastha) mentioned in the classical texts.
- Faculty will discuss the rationale behind the administration of basti in different pathophysiological states of the disease.
- Scholars are encouraged to actively observe 10 real bed side patients with different pathophysiological states of the disease.
- Observe the role of specific basti therein.
- Scholars will critically analyse the research article and interpret the role of basti in different diseases mentioned in classical texts.

Practical Training 18.6 Indications of Basti in different pathophysiological conditions of diseases

Demonstration by the Faculty-

- Faculty will guide the scholars to enlist and describe the indications of Basti mentioned in ayurvedic samhita.
- Faculty will demonstrate and interpret the indications of Basti in different pathophysiological conditions of diseases.
- Scholars will observe indications of Basti with the help of 10 case studies of different diseases and interpret its role in different pathophysiological conditions of diseases.
- Allow scholars to observe clinical indications of Basti with the help of 5 bed side real clinical cases.
- Scholars will be given reflective writing assignment.

Practical Training 18.7 Explore, enlist and display the possible modifications in the dose of various Basti

Demonstration by the Faculty-

- With the help of 3 given problems scholars are encouraged to showcase the possible modification of doses in basti according to the different pathophysiology of the disease, the bala of patient, vyadhibala, vaya, kala, prakruti and desha.
- With the help the 3 case studies scholars are encouraged to gain insight about the possible modification of doses in basti according to the different pathophysiology of the disease, the bala of patient, vyadhibala, vaya, kala, prakruti, and desha.
- Scholars will note down the modifications of doses studied in their journals.

Practical Training 18.8 Explore, enlist and display the possible modifications in the dose of various Basti

Demonstration by the Faculty-

- With the help of 3 given problems scholars are encouraged to showcase the possible modification of doses in basti according to the different pathophysiology of the disease, the bala of patient, vyadhibala, vaya, kala, prakruti and desha.
- With the help the 3 case studies scholars are encouraged to gain insight about the possible modification of doses in basti according to the different pathophysiology of the disease, the bala of patient, vyadhibala, vaya, kala, prakruti, and desha.
- Scholars will note down the modifications of doses studied in their journals.

Practical Training 18.9 Demonstrate and interpret the rationale behind the contraindications of Basti as per Ayurvedic Samhita.

Demonstration by the Faculty-

- Faculty will guide the scholar to enlist and describe the contraindications of Basti mentioned in Samhita.
- Faculty will demonstrate and interpret the rationale behind the contraindications of Basti as per Ayurvedic Samhita.
- Faculty will engage the scholars to enlist and describe contraindications of Basti and its reasoning mentioned in Samhita with help of guided group discussions.
- With the help of given problem/situation scholars will be encouraged to Interpret the rationale behind the contraindications of Basti as per Ayurveda.
- Encourage scholars to Interpret the rationale behind the contraindications of Basti as per Ayurveda with the help of 3 case studies.
- Scholars will be given reflective writing assignment.

Practical Training 18.10 Niruha Basti and Uttar Basti Sequence

Demonstration by the Faculty-

- Faculty will demonstrate and interpret the importance of Niruha Basti before Uttar Basti
- Scholars will observe the benefits of following the sequence of Niruha Basti before Uttarbasti
- Observe 3 case studies where Niruha Basti is administered before Uttar Basti and provide the rationale behind following this sequence.
- Gain insight about the possible benefits of giving Niruha Basti before Uttar Basti with guided group discussions.
- Scholars will note down the findings in their logbook.

Practical Training 18.11 Anuvasana Basti and Uttar Basti Sequence

Demonstration by the Faculty-

- Faculty will demonstrate and interpret the importance of Anuvasana Basti before Uttar Basti
- Scholars will observe the benefits of following the sequence of Anuvasan Basti before Uttarbasti
- Observe 3 case studies where Anuvasana Basti is administered before Uttar Basti and provide the rationale behind following this sequence.
- Gain insight about the possible benefits of giving Anuvasana Basti before Uttar Basti with guided group discussions.
- Scholars will note down the findings in their logbook.

Practical Training 18.12 Demonstrate and interpret the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti

Demonstration by the Faculty-

- Faculty will guide the scholars to enlist and describe the Niruha Basti, Yapana Basti and Siddha Basti.
- Conduct guided classroom discussions to encourage scholars to propose possible dose schedules of Niruha Basti, Yapana Basti and Siddha Basti and give rationale behind proposed dose schedules of Niruha Basti, Yapana Basti and Siddha Basti.
- With the help of visual aids and ppt presentations scholars are encouraged to propose the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti.
- Observe 10 case studies to demonstrate and interpret the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti.
- Scholars will be given reflective writing assignment for the same.

Practical Training 18.13 Dose schedules of Niruha Basti.

Demonstration by the Faculty-

- Faculty will guide the scholars to enlist and describe the Niruha Basti.
- While demonstrating faculty will give insight about the possible dose schedules of Niruha Basti.
- Conduct guided classroom discussions to encourage scholars to propose possible dose schedules of Niruha Basti and give rationale behind proposed dose schedules of Niruha Basti.
- With the help of visual aids and ppt presentations scholars are encouraged to propose the dose schedules of Niruha Basti.
- Observe 10 case studies to demonstrate and interpret the dose schedules of Niruha Basti.
- Scholars will be given reflective writing assignment for the same.

Practical Training 18.14 Enlist and describe the sneha basti, anuvasana basti, and matra basti.

Demonstration by the Faculty-

- Faculty will enlist and describe the snehabasti, anuvasanabasti, and matra basti.
- Faculty will demonstrate and interpret the dose schedules of Sneha Basti, Anuvasana Basti and Matra Basti
- Faculty will guide the scholars to gain insight, demonstrate and interpret the importance of the dose schedules of snehabasti, anuvasana and matra basti.
- With the help of 10 case studies scholars are encouraged to develop insight about the possible rationale behind the dose schedules of sneha basti, anuvasana basti and matra basti.
- With the help of guided group discussions scholars are encouraged to demonstrate and interpret about the dose schedules of sneha basti, anuvasana basti and matra basti.

Practical Training 18.15 Dose schedules of Uttar Basti

Demonstration by the Faculty-

- Faculty will guide the scholars to enlist and describe about the dose schedules in Uttarbasti in males and females.
- Faculty will demonstrate and Interpret the dose schedules of Uttar Basti in males and females (Mutrashaya and Garbhashaya gata Basti)
- Scholars will demonstrate and interpret about the importance of dose schedules of uttarbasti.
- With the help of 3 case studies scholars will develop insight about the possible benefits of dose schedules of uttarbasti.
- With the help of given problems/situations scholars will be encouraged to observe and interpret the rationale behind the dose schedules of uttarbasti.
- Scholars will be given reflective writing assignment for the same.

Experiential Learning Activity

Experiential-Learning Learning 18.1: The combined Basti regimen including Yoga, Kala, Karma basti and Chaturbhadra Kalpa

INSTRUCTION :

- Scholars will assess patient conditions and independently decide the appropriate combined Basti regimen to administer.
- Scholars will provide a clear rationale based on clinical findings and Ayurvedic principles.
- With the help of at least 10 documented clinical cases, scholars will be guided to analyze and perform the complete combined Basti regimen.
- Scholars will develop decision-making skills and procedural proficiency in diverse clinical scenarios under guidance.

Experiential-Learning Learning 18.2: Specific and general condition of disease and patient for various Basti

INSTRUCTION :

- Scholars will be provided with 10 situations/problems which includes certain specific and general pathophysiological conditions of disease.
- Scholars will analyse the situation and critically decide whether to administer the basti in this situation.
- Scholars will discuss 10 case studies and discuss the specific and general pathophysiological conditions of disease therein.
- Scholars will critically decide whether to administer the basti in this patient.

Experiential-Learning Learning 18.3: Implementation of the concepts related to Basti mentioned by various Acharya

INSTRUCTION :

- Scholars will enlist concepts related to Basti mentioned by various Acharya in different Samhita like Su. Chi. 37, Su. Chi. 38, Cha. Si. 12, Cha. Si. 8, A. Hru. 4
- Faculty will facilitate case discussion sessions wherein rationale behind choosing specific basti mentioned by various acharyas in different Samhita will be discussed.
- Scholars will select 10 real bed side cases. In these cases scholars will implement the various Basti.
- Scholars will prepare a compilation of all the findings and record it in their log book.

Experiential-Learning Learning 18.4: Interpretation of the commentaries on Basti topic

Instructions-

- Scholars will compile the various commentaries on Basti topic mentioned by various acharyas (for e.g. Chakrapanitika on Cha. Si. 1, Dalhan tika on Su. Chi. 37 and Su. Chi. 38, Arundatta and Hemadritika on A. Hru. Kalpasthana 4)
- Scholars will analyse and interpret the commentaries on Basti topic mentioned by various Acharyas.
- Scholars will attend at least 5 case discussion sessions wherein rationale behind choosing specific basti mentioned in different commentaries will be discussed.
- Scholars will be encouraged in active reading of atleast 3 research articles wherein different commentaries on basti topic are presented.

Experiential-Learning Learning 18.5: Dwadasha-Prasrutika Basti Siddhi Adhyaya and its role in allievating diseases.

INSTRUCTION :

- Scholars will engage in guided classroom discussions.
- The foundational concepts and principles of Prasrutika Basti from Charaka Samhita, Siddhi Sthana, Adhyaya 8 will be analyzed and interpreted.
- Scholars will actively practice structured role-play sessions, discussing the clinical application of Dwadasha-Prasrutika Basti as described in the Siddhi Adhyaya.
- The scholar will interpret therapeutic relevance of Basti in the alleviation of various disease conditions through simulated clinical scenarios.
- A minimum of 5 case-based discussion sessions, 35 documented case studies will be conducted to explore appropriate dosage schedules and the rationale behind selecting specific Prasrutika Basti.
- Emphasis will be placed on clinical decision-making, individualization of therapy, and correlation with classical Ayurvedic principles.

Experiential-Learning Learning 18.6: Indications of Basti in various stages of disease.

INSTRUCTION :

- Faculty will guide the scholar to enlist the indications of basti mentioned in ayurvedic samhitas.
- Scholar will showcase indications of Basti in various pathophysiological condition of the disease.
- Scholar will analyse the role and significance of Basti in various pathophysiological stages of disease.
- With the help of at least 3 real bed side cases scholars will analyse indications of basti chikitsa in a specific pathophysiological state of a disease.

- With the help of atleast 3 cases the scholars will demonstrate and analyse the indications of basti in various stages of disease.

Experiential-Learning Learning 18.7: Utility of Basti in various pathophysiological condition of disease

INSTRUCTION :

- Faculty will guide the scholar to enlist the utility of basti mentioned in ayurvedic samhitas.
- Scholar will showcase utility of Basti in various pathophysiological condition of the disease.
- Scholar will analyse the role, significance and utility of Basti in various pathophysiological stages of disease.
- With the help of at least 3 real bed side cases scholars will analyse utility of basti chikitsa in a specific pathophysiological state of a disease.
- With the help of atleast 3 cases the scholars will demonstrate and analyse the role and utility of basti in various stages of disease.

Experiential-Learning Learning 18.8: Present the contraindications of Basti based on Ayurvedic Samhita.

Instructions-

- Scholars will showcase the contraindications based on Ayurvedic Samhita.
- Scholars are encouraged to showcase the contraindications based on Ayurveda Samhita with the help of active participation in critical journal reading and discussion groups.
- With the help of critical reading of research articles scholars are encouraged to demonstrate, interpret and practice the contraindications based on Ayurveda Samhita.

Experiential-Learning Learning 18.9: Illustrate the contraindications of Basti based present-day medical practices.

Instructions-

- Scholars will gain insight about the present day lifestyle disorders.
- Scholars will showcase the contraindications based on present-day medical practices.
- Scholars are encouraged to showcase the contraindications based on present-day medical practices with the help of active participation in critical journal reading and discussion groups.

- With the help of critical reading of research articles scholars are encouraged to demonstrate, interpret and practice the contraindications based on present-day medical practices.

Experiential-Learning Learning 18.10: Illustrate, display and practice the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti

INSTRUCTION :

- To gain insight about the importance of various dose schedules of niruha, yapana and siddha basti.
- To illustrate, display and practice the various dose schedules given for different basti mentioned in the ayurvedic amhitas.
- To decide and give the rationale behind the proposed dose schedules of Niruha Basti, Yapana Basti and Siddha Basti in different pathophysiological stages of vyadhi

Experiential-Learning Learning 18.11: Illustrate, display and practice the sequence of Anuvasana Basti and Niruha Basti before Uttar Basti

Instructions-

- Gain insight about the importance of sequence of administering anuvasana, and niruhbasti before uttarbasti.
- Illustrate, display and practice the sequence of Anuvasana Basti and Niruha Basti before Uttar Basti.
- Discuss the possible rationale behind the sequence of anuvasana, niruh and uttarbasti.
- Scholar will discuss 3 case studies where Anuvasana Basti and Niruha Basti is administered before Uttar Basti and give the rationale behind following the sequence.
- With the help of at least 3 real bed side cases scholars are encouraged to practice the sequence of Anuvasana Basti and Niruha Basti before Uttar Basti and give the rationale and importance of following this sequence.

Experiential-Learning Learning 18.12: Dose schedules of Sneha Basti, Anuvasana Basti and Matra Basti

Instructions-

- Scholars are encouraged to discuss the possible dose schedules of sneha basti, anuvasana basti and matra basti in a specific pathophysiological condition of a vyadhi, with the help of active group discussions.
- With the help of at least 3 case studies scholars are encouraged to practice, decide and give rationale behind the dose schedules of sneha basti, anuvasana basti and matra basti

Experiential-Learning Learning 18.13: Dose schedules of Uttar Basti

Instructions-

- Illustrate and display dose schedule of uttarbasti with references provided in ayurvedic samhitas.
- With the help of 3 real bed side cases scholars are encouraged to decide the dose schedule of uttarbasti and give the rationale for the decided dose schedule.
- With the help of 3 case studies the scholars are encouraged to observe and practice the effects of different dose schedules of uttarbasti according to different pathophysiological stages of a disease.

Experiential-Learning Learning 18.14: Dose modifications based on Rogi Bala

Instructions-

- Gain insight about the Roga, Rogibala, Agnibala, Ritu, Desh, Kala, Vaya, Satmya and Satva.
- Perform dose modifications based on Rogi and Roga Bala
- Demonstrate the benefits of dose modifications based on Rogi and Roga Bala.
- With the help of atleast 3 case studies the scholars will interpret and decide the dose modifications based on Rogi and Roga Bala alongwith Agnibala, Ritu, Desh, Kala, Vaya, Satmya and Satva.
- With the help of atleast 3 bed side cases scholars will interpret and practice the dose modifications based on Rogi and Roga Bala alongwith Agnibala, Ritu, Desh, Kala, Vaya, Satmya and Satva.

Experiential-Learning Learning 18.15: Dose modifications based on Rogi and Roga Bala

Instructions-

- Gain insight about the Roga, Rogibala, Agnibala, Ritu, Desh, Kala, Vaya, Satmya and Satva.
- Perform dose modifications based on Rogi and Roga Bala
- Demonstrate the benefits of dose modifications based on Rogi and Roga Bala.
- With the help of atleast 3 case studies the scholars will interpret and decide the dose modifications based on Rogi and Roga Bala alongwith Agnibala, Ritu, Desh, Kala, Vaya, Satmya and Satva.
- With the help of atleast 3 bed side cases scholars will interpret and practice the dose modifications based on Rogi and Roga Bala alongwith Agnibala, Ritu, Desh, Kala, Vaya, Satmya and Satva.

Modular Assessment

Assessment

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.

- Observe a scholar perform Niruha Basti, Anuvasana Basti and Uttara Basti administration and evaluate skill, technique, and post-procedure care. (25 marks)
- Presentation of a scenario assessing diagnostic reasoning, treatment planning, and management of Basti complication (25 marks)
- Document the management and recovery in the ADR logbook (5 marks)
- Present clinical scenarios representing Ayoga, Atiyoga, and Samyak Yoga of Niruha, Anuvasana, and Uttara Basti. Scholars will analyze symptoms, identify, justify and suggest appropriate management (15 marks)
- Including Viva-voce (15 marks)

Or

- Any practical in converted form can be taken for assessment. (40 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (35 Marks)

6

Semester No : 4

Module 19 : PHARMAKOKINETICS AND PHARMACODYNAMICS OF BASTI DRAVYAS

Module Learning Objectives

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

1. Interpret the clinical uses of drugs used in Basti.
2. Illustrate the pharmacodynamics, and pharmacokinetics of the drugs for Basti procedures.
3. Describe and analyse the clinical application of Dravya indicated in Shad Skandha for Basti preparation.
4. Analyse various types of Ghrita, Taila, Vasa and Majja useful in Basti.

Unit 1 Pharmacokinetics and Pharmacodynamics of Basti Dravya, Shada Skandha, Asthapanopaga and Anuvasanopaga Mahakashaya

1. Analysis and utility of drugs used in Basti.

2. Pharmacodynamics and pharmacokinetics of the drugs for Basti procedures (drugs of Asthapanopaga and Anuvasanopaga Mahakashaya)
3. Dravya indicated in Shad Skandha for Basti preparation
4. Various types of Ghrita and Taila useful in Anuvasana Basti; Anuvasana Basti with Vasa and Majja along with their merits and demerits.

References: 9,45,54

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO4,CO5, CO5 | Describe the Kalpas and their clinical utility mentioned for Basti in Brihatrayi. | 1 | Lecture | CC | Knows-how | L&PPT |
| CO3,CO4 | Illustrate the clinical utility of Kalpas mentioned for Basti in Brihatrayi and Laghutrayi | 3 | Practical19.1 | PSY-MEC | Shows-how | CBL |
| CO3,CO4 | Highlight and present the clinical utility of the kalpa mentioned for Basti in Brihatrayi and Laghutrayi | 3 | Experiential-Learning19.1 | PSY-GUD | Shows-how | SDL,CBL |
| CO3,CO4 | Discuss the Kalpas and their clinical utility mentioned for Basti in Laghutrayi. | 1 | Lecture | CC | Knows-how | DIS |
| CO3 | Illustrate mode of action of Asthapanopaga and Anuvasanopaga Gana. | 3 | Practical19.2 | PSY-GUD | Shows-how | CBL |
| CO3 | Display and interpret the pharmaco-therapeutic action of drugs of Asthapanopaga and Anuvasanopaga Gana. | 3 | Experiential-Learning19.2 | PSY-GUD | Shows-how | CBL,SDL |
| CO3 | Enlist and Discuss the pharmacokinetics and pharmacodynamics of the Asthapanopaga and Anuvasanopaga Dravya. | 1 | Lecture | CAP | Knows-how | FV,DIS |
| CO3,CO4 | Illustrate the clinical application of Dravya of Shad Skandha used in Basti | 1 | Practical19.3 | PSY-GUD | Shows-how | CBL |

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|---------|--|---|---------------------------|---------|-----------|---------|
| CO1,CO3 | Analyze and evaluate the selection of Ghrita for Anuvasan Basti | 2 | Experiential-Learning19.3 | PSY-GUD | Does | SDL,CBL |
| CO1,CO3 | Analyze and evaluate the selection of appropriate Basti Dravya in different Vyadhi | 1 | Practical19.4 | PSY-GUD | Shows-how | PBL |
| CO1,CO3 | Interpret and display the selection of Taila,Vasa and Majja for Anuvasan Basti | 4 | Experiential-Learning19.4 | PSY-GUD | Shows-how | SDL,CBL |
| CO3,CO4 | Enlist and explain the Dravyas of Shad Skandha used in Basti. | 1 | Lecture | CAP | Knows-how | L&PPT |
| CO1,CO3 | Illustrate the advantages of using Ghrita, Taila, Vasa and Majja in Anuvasan Basti. | 1 | Practical19.5 | PSY-ADT | Shows-how | CBL |
| CO1,CO3 | Interpret the advantage of using taila for Anuvasan Basti in various clinical conditions | 1 | Experiential-Learning19.5 | PSY-ADT | Shows-how | CBL,SDL |
| CO1,CO3 | Enlist the importance and utility of Ghrita,Taila,Vasa and Majja for Anuvasana Basti. | 1 | Lecture | CAP | Knows-how | L&PPT |
| CO1,CO3 | Illustrate the disadvantages of using Ghrita,Taila,Vasa and Majja in Anuvasan Basti | 1 | Practical19.6 | PSY-ADT | Shows-how | JC,CBL |

Practical Training Activity

Practical Training 19.1 Clinical utility of the kalpas mentioned for Basti in BrihatTrayi and LaghuTrayi

Demonstration by the Faculty-

- Faculty will ask the scholars to enlist and illustrate various kalpas with their references and clinical utility mentioned for Basti in Bruhatrayi and Laghutrayi.
- Scholars will enumerate and illustrate various kalpas mentioned for Basti in Bruhatrayi and Laghutrayi.
- Scholars will observe and showcase the effects and clinical utility of drug described for Basti in Bruhatrayi and Laghutrayi.
- Scholars will observe 3 cases and carry out a detailed study of various kalpas mentioned for Basti in each case.
- Scholars will write down the case studies in their journals.

Practical Training 19.2 Highlight mode of action of Asthapanopaga and Anuvasanopaga Gana.

Demonstration by the Faculty-

- Faculty will ask the scholars to enumerate and describe various drugs mentioned in Asthanopagagana and Anuvasanopagagana mentioned in Charaka Samhita.
- Illustrate the mode of action of various drugs mentioned in Asthanopagagana and Anuvasanopagagana.
- Scholars will gain insight about the mode of action of drugs in Asthanopagagana and Anuvasanopagagana with the help of critical reading of 2 research articles and samhitas.
- Scholars with the help of 2 cases will illustrate mode of action of each drug of Asthanopagagana and Anuvasanopagagana.
- Scholars will note down the mode of action of Asthanopagagana and Anuvasanopagagana in their logbook.

Practical Training 19.3 Illustrate the clinical application of Dravya of Shad Skanda used in Basti

Demonstration by the Faculty-

- Faculty will ask the scholars to enlist and illustrate shad skanda and use of drugs mentioned in shad skanda.
- Discuss and interpret the clinical application of shad skanda in Basti chikitsa.
- Gain insight about the indications and application of different drugs mentioned in shad skanda in different pathophysiological conditions.
- Scholars showcase their knowledge of 25 different drugs in shad skanda and its clinical utility in Basti chikitsa through active classroom discussion and powerpoint presentations.
- Scholars will develop insight about the indications and application of different drugs mentioned in shad skanda through different pathophysiological conditions through atleast 5 cases.
- Scholars will be given reflective writing assignment.

Practical Training 19.4 Analyze and critically evaluate the selection of appropriate Basti Dravya in different Vyadhi.

Demonstration by the Faculty-

- To analyse different pathophysiological states of vyadhi.(Vyadhi avastha)
- Showcase and prove the selection of appropriate Basti dravya used according to different pathophysiological conditions of disease.
- Scholars will showcase different drugs indicated for Basti chikitsa in different samhitas with the help of active classroom discussions.
- Scholars will gain insight about the mode of action of different Basti dravyas in different disease conditions.
- Scholars with the help of 3 case studies will develop insight about the indications and selection of appropriate Basti dravya in different pathophysiological condition of disease(Vyadhi avastha).

- Scholars will be given the reflective writing assignment.

Practical Training 19.5 Illustrate and analyse the advantages of using Ghrita, Taila, Vasa and Majja in Anuvasan Basti

Demonstration by the Faculty-

- Faculty will encourage the scholars to learn about the indications, properties and mode of action of ghrita, taila, vasa, majja in Basti.
- Scholars will highlight the advantages of using ghrita, taila, vasa, majja in Basti.
- With the help of 3 different problems/ conditions provided to the scholars, they will develop insight about the usage of ghrita or taila or vasa or majja for Basti in different conditions of the vyadhi.
- This will help the scholars to decide which snehadravya (Ghrita/Taila/Vasa/Majja) to use in which condition.
- With the help of 3 case studies scholars gain knowledge about the advantages of using ghrita or taila or vasa or majja in different pathophysiological conditions of the disease.
- Scholars will note down their findings in their logbook.

Practical Training 19.6 The disadvantages of using Ghrita, Taila, Vasa and Majja in Anuvasan Basti.

Demonstration by the Faculty-

- Faculty will guide the scholars to learn about the various disadvantages of ghrita, taila, vasa and majja for Basti.
- Faculty will guide the scholars to gain insight about the various disadvantages of using Ghrita, Taila, Vasa and Majja for Basti in different pathological condition of diseases.
- Scholars will learn about different disadvantages of ghrita or taila or vasa or majja through critical reading of atleast 2 research articles and learn where not to use them for Basti chikitsa.
- Scholars with the help of classroom discussion will learn about the various disadvantages and adverse effects of using ghrita in certain pathophysiological condition of vyadhi. Similarly, scholars will gain insight about the various disadvantages and adverse effects of using taila or vasa or majja in different pathophysiological condition of vyadhi.
- Scholars will be able to learn various disadvantages of using ghrita, taila, vasa and majja for Anuvasana Basti in different pathological conditions of diseases.
- Scholars will note down their findings in the logbook.

Experiential Learning Activity

Experiential-Learning Learning 19.1: Clinical utility of the kalpa mentioned for Basti in Brihatrayi and Laghutrayi

Instructions-

- Enlist and describe the kalpas with their references and clinical utility mentioned for bastichikitsa described in laghutrayi and bruhatrayi.
- Scholars will enumerate and showcase various kalpas with their effect and clinical utility mentioned for Basti chikitsa in laghutrayi and brihatrayi.
- Scholars will observe 3 cases and carry out a detailed study of kalpas mentioned for basti in brihatrayi and laghutrayi in each case.

Experiential-Learning Learning 19.2: Mode of Action of Asthapanopaga and Anuvasanopaga gana.

Instructions-

- Enumerate and describe the drugs mentioned in Asthapanopaga gana and Anuvasanopaga gana for Basti in Charaka Samhita.
- To develop insight about mode of action of each drug mentioned in Asthapanopaga gana and Anuvasanopaga gana.
- Scholars with the help of 5 cases will illustrate the mode of action of drugs of Asthapanopaga gana and Anuvasanopaga gana.
- Scholars will gain insight about the mode of action of drugs in Asthapanopaga gana and Anuvasanopaga gana with the help of critical reading of 2 research articles.

Experiential-Learning Learning 19.3: Analyze and evaluate the selection of Ghrita for Anuvasan Basti.

Instructions-

- To gain insight about the benefits of Ghrita for Anuvasan basti.
- To analyze and evaluate the selection of Ghrita for Anuvasan basti.
- Scholars with the help of 3 case studies will develop insight about the indications and selection of appropriate Ghrita for Anuvasan Basti in different pathophysiological disease condition.

Experiential-Learning Learning 19.4: Interpret the selection of Taila,Vasa and Majja for Anuvasan Basti.

Instructions-

- Scholars with the help of 6 case studies will gain insight about the indications and selection of appropriate Taila, Vasa and Majja basti dravya in different pathophysiological condition of disease.

Experiential-Learning Learning 19.5: Interpret the advantage of using taila for Anuvasan Basti in various clinical conditions

Instructions-

- Scholars with the help of case based learning should learn about the benefits for using tail for Anuvasana Basti in various clinical conditions.
- With the help of 3 case based studies scholars will interpret the advantage and importance of using Taila for Anuvasan Basti in various clinical conditions.

Modular Assessment

Assessment

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.

- Observe the scholar during the clinical application of Ghrita, Taila, Vasa, Majja in Basti. (10 marks)
- Present clinical scenarios where scholars will analyze symptoms, identify, justify and suggest appropriate Dravya for Basti (10 marks)
- Including Viva-voce (5 marks)

2

Or

- Any practical in converted form can be taken for assessment. (10 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (15 Marks)

Module 20 : METHODOLOGY FOR NIRUHA BASTI, ANUVASANA BASTI AND UTTAR BASTI

Module Learning Objectives

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

1. Describe each step of Basti administration.
2. Perform Basti administration by taking all aseptic measures.
3. Evaluate and justify the vital role of each step in different Basti.
4. Analyze and Differentiate the symptoms of Ayoga, Atiyoga and Samyak Yoga of each type of Basti.
5. Examine and diagnose the symptoms of Basti Vyapad and practice the essential treatment modalities.
6. Enumerate and perform the management during and after each Basti therapy.
7. Identify and assess the role of Pariharya Vishaya and Parihara Kala.
8. Interpret and perform the thorough steps in reporting of adverse drug reactions of Basti.
9. Maintaing Separate aspetic uttar Basti unit in Panchakarma

Unit 1 Purvakarma, administration and observation of Niruha Basti, Anuvasana Basti, and Uttara Basti.

1. Purvakarma for Niruha Basti; Pathya before, during and after Niruha Basti, Anuvasana Basti and Uttara Basti.
2. Precautions and aseptic measures.
3. The vital role of each step, along with all the steps of administration of various Niruha Basti, Anuvasana Basti and Uttara Basti
4. Observations during and after Niruha Basti, Anuvasana Basti and Uttara Basti, Basti Pratyagamana

References: 1,29,54

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO2,CO3 | Describe the Pre-preparation for Niruha Basti and explain Pathya before, during and after Niruha Basti | 1 | Lecture | CC | Knows-how | L&GD,L_VC |
| CO2,CO3 | Administer and monitor Purvakarma and Pathya for Niruha Basti | 2 | Practical20.1 | PSY-SET | Shows-how | CBL,PBL |
| CO2,CO3 | Practise preparation of Niruha Basti | 2 | Experiential-Learning20.1 | PSY-GUD | Does | PBL,SDL,CBL, D |

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|---------|--|---|---------------------------|---------|-----------|-------------|
| CO2,CO3 | Discuss the Pre-preparation for Niruha Basti and explain Pathya before, during and after Anuvasana Basti | 1 | Lecture | CC | Knows-how | L_VC,L&GD |
| CO2,CO3 | Administer and monitor Purvakarma and Pathya for Anuvasana Basti | 1 | Practical20.2 | PSY-SET | Shows-how | PBL,CBL |
| CO2,CO3 | Discuss the Pre-preparation for Uttar Basti and describe Pathya before, during and after Uttar Basti | 1 | Lecture | CC | Knows-how | L_VC,L&GD |
| CO2,CO3 | Practise preparation of Anuvasana Basti | 1 | Experiential-Learning20.2 | PSY-GUD | Does | PBL,CBL,SDL |
| CO2,CO3 | Evaluate the process of Niruha Basti administration by taking all aseptic measures | 1 | Lecture | CC | Knows-how | L_VC |
| CO2,CO3 | Administer and monitor Purvakarma and Pathya for Uttara Basti | 1 | Practical20.3 | PSY-SET | Shows-how | CBL |
| CO2,CO3 | Practise preparation of Uttara Basti | 1 | Experiential-Learning20.3 | PSY-GUD | Does | PBL,CBL |
| CO2,CO3 | Perform Niruha Basti administration by taking all aseptic measures | 2 | Experiential-Learning20.4 | PSY-GUD | Does | CBL |
| CO2,CO3 | Evaluate the process of Anuvasana Basti administration by taking all aseptic measures | 1 | Lecture | CC | Knows-how | L_VC |
| CO2,CO3 | Administer Niruha Basti by taking all aseptic measures | 2 | Practical20.4 | PSY-SET | Shows-how | CBL,PBL,TPW |
| CO2,CO3 | Perform Niruha Basti administration by taking all aseptic measures | 1 | Experiential-Learning20.5 | PSY-GUD | Does | CBL |
| CO2,CO3 | Administer Anuvasana Basti by taking all aseptic measures | 2 | Practical20.5 | PSY-SET | Shows-how | CBL,PBL |
| CO2,CO3 | Perform Anuvasana Basti administration by taking all aseptic measures | 3 | Experiential-Learning20.6 | PSY-GUD | Does | CBL |

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|---------|---|---|---------------------------|---------|-----------|---------------|
| CO2,CO3 | Evaluate the process of Uttar Basti administration by taking all aseptic measures | 1 | Lecture | CC | Knows-how | L_VC |
| CO2,CO3 | Administer Uttara Basti by taking all aseptic measures | 2 | Practical20.6 | PSY-SET | Shows-how | PBL,CBL |
| CO2,CO3 | Analyse the Basti Pratyagaman time and gain insight into its potential systemic effect. | 2 | Lecture | CC | Knows-how | L&PPT ,L&GD |
| CO2,CO3 | Assess Basti Pratyagaman time and analyse potential systemic effect. | 4 | Practical20.7 | PSY-SET | Shows-how | D-BED,CBL |
| CO2,CO3 | Perform Uttara Basti administration by taking all aseptic measures | 2 | Experiential-Learning20.7 | PSY-GUD | Does | CBL |
| CO2,CO3 | Analyse and document observation and outcomes before, during and after different Basti | 5 | Experiential-Learning20.8 | PSY-GUD | Does | D-BED,CBL,DIS |

Unit 2 Samyakyoga, Ayoga and Atiyoga Lakshana and management of Vyapata

1. Symptoms of Samyakyoga, Ayoga and Atiyoga Lakshana.
2. Various Vyapat of Niruha Basti and Anuvasana Basti and their key treatment modalities.
3. Management during and after Niruha Basti, Anuvasana Basti and Uttara Basti.
4. Role of Pariharya Vishaya and Parihara Kala

References: 1

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO2,CO3 | Illustrate the symptoms of Ayoga and Samyak Yoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 1 | Lecture | CAN | Knows-how | L&PPT |
| CO2,CO3 | Illustrate the symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttar Basti | 1 | Lecture | CAN | Knows-how | L_VC,L&GD,L&PPT |

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|---------|--|---|----------------------------|---------|-----------|---------------|
| CO2,CO3 | Examine, diagnose and document the symptoms of Ayoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 | Practical20.8 | PSY-SET | Shows-how | D-BED,TBL |
| CO5,CO5 | Elucidate the symptoms of Basti Vyapad. | 2 | Lecture | CAN | Knows-how | L_VC,L&PPT |
| CO2,CO3 | Examine, diagnose and document the symptoms of Samyak yoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 | Practical20.9 | PSY-SET | Shows-how | TBL,D-BED |
| CO2,CO3 | Examine and assess the symptoms of Ayoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 3 | Experiential-Learning20.9 | PSY-GUD | Does | CBL,TBL |
| CO2,CO3 | Examine, diagnose and document the symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 1 | Practical20.10 | PSY-SET | Shows-how | CBL,D-BED,PBL |
| CO2,CO3 | Assess and examine the symptoms of Samyak Yoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 | Experiential-Learning20.10 | PSY-MEC | Does | CBL,D-BED |
| CO2,CO3 | Examine, diagnose and document the symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 1 | Practical20.11 | PSY-SET | Shows-how | PBL,D-BED,CBL |
| CO2,CO3 | Assess and examine the symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 | Experiential-Learning20.11 | PSY-MEC | Does | CBL,D-BED |
| CO5,CO5 | Elucidate the Pariharya Vishaya and Parihara Kala | 1 | Lecture | CAP | Knows-how | L_VC,L&PPT |
| CO5,CO5 | Demonstrate and monitor the symptoms of Basti Vyapad | 3 | Practical20.12 | PSY-SET | Shows-how | CBL,D-BED,PBL |
| CO5,CO5 | Practice management of Basti Vyapat alongwith its essential treatment modalities. | 3 | Experiential-Learning20.12 | PSY-GUD | Does | PBL,CBL,D-BED |
| CO5,CO5 | Demonstrate the management during and after each Basti therapy. | 1 | Practical20.13 | PSY-SET | Shows-how | D-BED,CBL |

| | | | | | | |
|---------|--|---|--------------------------------|---------|-----------|-----------------|
| CO5,CO5 | Practise management of Basti retention and infections | 2 | Experiential-Learning20.1 3 | PSY-GUD | Does | PBL,CBL,D-BED |
| CO5,CO5 | Demonstrate the management during and after each Basti therapy. | 1 | Practical20.1 4 | PSY-SET | Shows-how | CBL,D-BED |
| CO5,CO5 | Perform the management during and after each Basti therapy. | 2 | Experiential-Learning20.1 4 | PSY-GUD | Does | SIM,RLE,PBL,CBL |
| CO5,CO5 | Demonstrate the Pariharya Vishaya and Parihara Kala. | 2 | Practical20.1 5 | PSY-SET | Shows-how | D-BED,PBL |
| CO5,CO5 | Examine, assess and analyse the role of Pariharya Vishaya and Parihara Kala. | 3 | Experiential-Learning20.1 5 | PSY-MEC | Does | SDL,DIS |

Unit 3 Reporting of adverse drug reactions and medicolegal cases

1. Adverse drug reactions.
2. Medicolegal Cases

References: 18

| 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 |
|----------------------------------|--|---|--|--|---|---|
| CO5,CO5 | Acquire in-depth knowledge and reporting of adverse drug reactions of Basti | 2 | Lecture | CC | Knows-how | L&GD |
| CO5,CO5 | Record and explain the reporting of medicolegal cases of Basti | 3 | Practical20.1 6 | PSY-SET | Shows-how | SIM,PSM,IBL,PBL |

| | | | | | | |
|---------|---|---|--------------------------------|---------|------|------------------------|
| CO5,CO5 | Perform reporting of medicolegal cases of Basti | 5 | Experiential-Learning20.1 6 | PSY-GUD | Does | PSM,PBL,RLE, FV,CBL |
|---------|---|---|--------------------------------|---------|------|------------------------|

Practical Training Activity

Practical Training 20.1 Each step of Purvakarma and Pathya for Niruha Basti

Demonstration by the Faculty-

- Scholars will be required to independently administer Purvakarma to patients prior to Niruha Basti under supervision, and critically analyze the clinical context.
- Each scholar will maintain a detailed record of at least 10 patients who have undergone Purvakarma for Niruha Basti.
- Document the procedures performed, observations made, and the rationale for their application based on patient condition.

Practical Training 20.2 Each step of Purvakarma and Pathya for Anuvasana Basti

Demonstration by the Faculty-

- Scholars will be required to independently administer Purvakarma to patients prior to Anuvasana Basti under supervision, and critically analyze the clinical context.
- Each scholar will maintain a detailed record of at least 20 patients who have undergone Purvakarma for Anuvasana Basti.
- Document the procedures performed, observations made, and the rationale for their application based on patient condition.

Practical Training 20.3 Each step of Purvakarma and Pathya for Uttara Basti

Demonstration by the Faculty-

- Scholars will be required to independently administer Purvakarma to patients prior to Uttara Basti under supervision, and critically analyze the clinical context.
- Each scholar will maintain a detailed record of at least 5 patients who have undergone Purvakarma for Uttara Basti.
- Document the procedures performed, observations made, and the rationale for their application based on patient condition.

Practical Training 20.4 Process of Niruha, administration by taking all aseptic measures

Demonstration by the Faculty-

- The faculty will demonstrate and explain each step for Basti administration by taking all aseptic measures.
- Scholars will observe at least 10 cases that involve the process of Niruha Basti administration.
- Scholar will assist in positioning and administration of Niruha Basti by taking all aseptic measures in at least 10 patients.
- Scholars will record the process during the administration of Basti.

Practical Training 20.5 Process of Anuvasana Basti administration with all aseptic measures

Demonstration by the Faculty-

- The faculty will demonstrate and explain each step for Basti administration by taking all aseptic measures.
- Scholars will observe at least 10 cases that involve the process of Anuvasana Basti administration.
- Scholar will assist in positioning and administration of Anuvasana Basti by taking all aseptic measures in at least 20 patients.
- Scholars will record the process during the administration of Basti.

Practical Training 20.6 Process of Uttara Basti administration with aseptic measures

Demonstration by the Faculty-

- The faculty will demonstrate and explain each step for Garbhashaya gata and Mutrashaya gata Uttara Basti administration by taking all aseptic measures.
- Scholars will observe at least 10 cases that involve the process of Uttara Basti administration.
- Scholars will assist in positioning and administration of Uttara Basti by taking all aseptic measures in at least 5 patients.
- Scholars will record the process during the administration of Basti.

Practical Training 20.7 Basti Pratyagaman time and potential systemic effect of Basti

Demonstration by the Faculty-

- The faculty will demonstrate the Basti administration, Basti Pratyagaman, and explain the potential systemic effect of Basti.
- Scholars are encouraged to actively observe 10 real bedside patients with different pathophysiological states of the disease and observe and document the action of specific Basti therein.
- With the help of 10 case studies scholars will be encouraged to enumerate and observe and document the therapeutic action and potential systemic effects of Basti.

- With the help of given problem/situation scholars will be encouraged to observe the specific systemic effects and general condition of the disease in patients for Basti.

Practical Training 20.8 Symptoms of Ayoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Demonstration by the Faculty-

- The faculty will demonstrate and explain the Ayoga signs and symptoms during different Basti procedures in patients.
- Scholars will observe atleast 10 patients and enlist and observe the specific signs and symptoms after basti administration in these patient.
- With the help of given problem/situation scholars are encouraged to observe the administrating methods.
- Observe preparatory methods in various Basti to prevent Ayoga.
- Scholars will critically analyse the research article and interpret the Ayoga mentioned in classical texts.

Practical Training 20.9 Symptoms of Samyak yoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Demonstration by the Faculty-

- The faculty will demonstrate and explain the Samyak signs and symptoms during different Basti procedures in patients.
- Scholars will observe atleast 10 patients and enlist and observe the specific signs and symptoms after basti administration in these patient.
- With the help of given problem/situation scholars are encouraged to observe the administrating methods.
- Observe preparatory methods in various Basti to facilitate samyak Yoga.
- Scholars will critically analyse the research article and interpret the Samyak Yoga mentioned in classical texts.

Practical Training 20.10 Symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Demonstration by the Faculty-

- The faculty will demonstrate and explain the Atiyoga signs and symptoms during different Basti procedures in patients.
- Scholars will observe atleast 10 patients and enlist and observe the specific signs and symptoms after basti administration in these patient.
- With the help of given problem/situation scholars are encouraged to observe the administrating methods.
- Observe preparatory methods in various Basti to prevent Atiyoga.

- Scholars will critically analyse the research article and interpret the Atiyoga mentioned in classical texts.

Practical Training 20.11 Symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Demonstration by the Faculty-

- The faculty will demonstrate and explain the Atiyoga signs and symptoms during different Basti procedures in patients.
- Scholars will observe atleast 10 patients and enlist and observe the specific signs and symptoms after basti administration in these patient.
- With the help of given problem/situation scholars are encouraged to observe the administrating methods.
- Observe preparatory methods in various Basti to prevent Atiyoga.
- Scholars will critically analyse the research article and interpret the Atiyoga mentioned in classical texts.

Practical Training 20.12 Monitoring the symptoms of Basti Vyapad

Demonstration by the Faculty-

- The faculty will demonstrate and explain the Basti Vyapad to patients.
- Scholars will be encouraged to actively observe 10 real bed side patients with different pathophysiological states of the disease and observe the complication of basti therein.
- With the help of a given problem/situation/case studies, scholars are encouraged to observe the administration methods in patients, preparatory methods in various Basti and complication of various basti.
- Scholars will critically analyze the research article and interpret the complication of Basti in different diseases mentioned in classical texts.

Practical Training 20.13 Management during and after Basti therapy

Demonstration by the Faculty-

- The faculty will demonstrate the management of complication during and after Basti therapy.
- Scholars will be involved in case discussion sessions of Basti Vyapad and management mentioned by various Acharyas in different Samhita.
- Scholars will select 10 real bedside cases and critically analyze for any adverse systemic effects and their management.

Practical Training 20.14 Management during and after each Basti therapy.

Demonstration by the Faculty-

- The faculty will demonstrate the management of complication during and after Basti therapy.
- Scholars will be involved in case discussion sessions of Basti Vyapad and management mentioned by various Acharyas in different Samhita.
- Scholars will select 10 real bedside cases and critically analyze for any adverse systemic effects and their management.

Practical Training 20.15 Pariharya Vishaya and Parihara Kala

Demonstration by the Faculty-

- The faculty will demonstrate and explain the Pariharya Vishaya and Parihara Kala for Basti Karma.
- Scholars will learn about all the Pariharya vishya during Parihar kala mentioned in different samhitas with the help of active classroom discussions.
- Scholars with the help of 10 case studies will learn about the appropriate Pariharya Vishaya in different pathophysiological conditions of vyadhi.

Practical Training 20.16 Reporting of medicolegal cases of Basti

Demonstration by the Faculty-

- The faculty will demonstrate the documentaion in medicolegal cases.
- With the help of 2 different problems/ conditions provided to the scholars, they will record and document the incident reporting, and procedure details.
- Scholars will be encouraged to learn the significance of follow-up care, confidentiality and legal documentation.

Experiential Learning Activity

Experiential-Learning Learning 20.1: Pre-preparation of Niruha Basti

Instructions-

- Scholars will perform per-rectal examinations and proctosigmoidoscopy on a minimum of five patients presenting with anorectal pathologies, under appropriate supervision.
- Scholars will be responsible for ensuring proper pre-procedural preparation for each case, including the readiness of materials and patient preparation protocols.

- In addition, each scholars will independently prepare Niruha Basti for at least 30 patients, gaining hands-on experience in formulation, dosage accuracy, and procedural standards essential for effective Basti administration.

Experiential-Learning Learning 20.2: Pre-preparation of Anuvasana Basti

Instructions-

- Scholars will illustrate the regulation of vital functions, and pathophysiological alterations after Sneha and Swedana Karma by at least 1 case-based discussion in groups.
- Each scholar will be provided with 5 situations involving pathophysiological alterations after Sneha and Swedana Karma.
- The scholar will then be asked to critically analyze and decide whether to give or avoid basti karma in these situations.
- Scholars will be responsible for ensuring proper pre-procedural preparation for each case, including the readiness of materials and patient preparation protocols.
- In addition, each scholar will independently prepare Anuvasana Basti for at least 50 patients.
- The scholar will gain hands-on experience in formulation, dosage accuracy, and procedural standards essential for effective Basti administration.

Experiential-Learning Learning 20.3: Pre- preparation of Uttara Basti

Instructions-

- Scholars will illustrate the regulation of vital functions, and pathophysiological alterations after Sneha and Swedana Karma by at least 1 case-based discussion in groups.
- Each scholar will be provided with 5 situations involving pathophysiological alterations after Sneha and Swedana Karma.
- The scholar will be then asked to critically analyze and decide whether to give or avoid basti karma in these situations.
- Scholars will be responsible for ensuring proper pre-procedural preparation for each case, including the readiness of materials and patient preparation protocols.
- In addition, each scholar will independently prepare Uttara Basti (Mutrashaya and Garbhasaya gata Uttara Basti) for at least 5 patients.
- The scholar will gain hands-on experience in formulation, dosage accuracy, and procedural standards essential for effective Basti administration.

Experiential-Learning Learning 20.4: Niruha Basti administration with aseptic measures

Instructions-

- Scholars will perform per-rectal examinations and patient positioning for Basti administration on a minimum of 20 patients under the guidance of clinical faculty.
- Each scholar will independently perform Niruha Basti on at least 20 patients, following all standard aseptic precautions.
- This practical exposure aims to develop procedural competence, confidence, and adherence to clinical protocols

Experiential-Learning Learning 20.5: Niruha Basti administration with aseptic measures

Instructions-

- Scholars will perform per-rectal examinations and patient positioning for Basti administration on a minimum of 20 patients under the guidance of clinical faculty.
- Each scholar will independently perform Niruha Basti on at least 20 patients, following all standard aseptic precautions.
- This practical exposure aims to develop procedural competence, confidence, and adherence to clinical protocols

Experiential-Learning Learning 20.6: Anuvasana Basti administration with aseptic measures

Instructions-

- Each scholar is required to perform per-rectal examinations and position patients appropriately for Basti administration in at least 20 clinical cases, under supervision.
- Scholars will collect and document detailed information on the types of catheters used, techniques of administration, and various methods of drug delivery during Basti procedures.
- Each scholar shall perform Anuvasana Basti on a minimum of 30 patients, strictly adhering to aseptic protocols.

Experiential-Learning Learning 20.7: Uttara Basti administration with aseptic measures

Instructions-

- Scholars will perform per-vaginal examination and Uttara basti positioning on atleast 5 patients.
- Scholars will perform aseptic protocol of Uttara basti (Mutrashayad and Garbhashaya gata) administration on atleast 5 patients.
- Scholars will discuss 2 case studies and discuss the specific and general pathophysiological conditions of disease (vyadhiavastha) therein.

- Scholars should critically decide whether to administer the basti in such patients.

Experiential-Learning Learning 20.8: Observation and outcomes before, during and after different Basti

Instructions-

- Scholars will participate in case discussion sessions wherein potential systemic effects and analysis for any adverse systemic effects mentioned by various acharyas in different Samhita will be discussed.
- Scholars will select 10 real bed side cases.
- In these cases, scholars will critically analyze the therapeutic action and potential systemic effects and analyze for any adverse systemic effects.

Experiential-Learning Learning 20.9: Symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Instructions-

- Conduct simulated patient sessions for Niruha, Anuvasana, and Uttara Basti to help scholars identify and document Atiyoga symptoms, including onset, duration, and severity.
- Scholars will practice abdominal palpation to correlate clinical signs with symptoms.
- In a workshop, they will develop and role-play response plans, demonstrating medication application and patient communication.
- Conclude with a group debrief to reflect on challenges and patient-centered management strategies.

Experiential-Learning Learning 20.10: Management during and after each Basti therapy.

Instructions-

- Scholars will be involved in case discussion sessions of Basti Vyapad and management mentioned by various Acharyas in different Samhita.
- Scholars will select 10 real bedside cases and critically analyze for any adverse systemic effects and their management.
- Each scholar will collect information about Basti Vyapad and management and will record the findings.
- Scholars will perform management for basti complication on at least 5 patients.

Experiential-Learning Learning 20.11: Symptoms of Ayoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Instructions-

- Begin with a simulated patient session for each type of Basti (Niruha, Anuvasana, Uttara), where scholars observe patient presenting symptoms of Ayoga.
- For each type, scholars will identify key signs, symptoms and document their observations, including onset time, duration, and severity of each symptom.
- Organize a workshop where scholars develop response plans for different symptoms of Ayoga in each Basti type.
- Scholars role-play their response with a peer acting as the patient, practicing how to apply medications and explain the interventions to the patient.
- Conclude with a group debrief where scholars share their experiences from each activity, discuss challenges, and reflect on patient-centered approaches to managing Ayoga symptoms.

Experiential-Learning Learning 20.12: Symptoms of Samyak Yoga of Niruha Basti, Anuvasana Basti and Uttara Basti

Instructions-

- Begin with a simulated patient session for each type of Basti (Niruha, Anuvasana, Uttara), where scholars observe patient presenting symptoms of Samyak Yoga.
- For each type, scholars will identify key signs and symptoms and document their observations, including onset time, duration, and severity of each symptom.
- Conduct a practical session where scholars learn to measure and interpret vital signs and abdominal signs, which can indicate Samyak yoga in Basti therapy.
- Organize a workshop where scholars develop post procedure plans for different symptoms of Samyak Yoga in each Basti type.
- Conclude with a group debrief where scholars share their experiences from each activity, discuss symptoms, and reflect on patient-centered approaches to achieve Samyak Yoga symptoms.

Experiential-Learning Learning 20.13: Essential treatment modalities for Basti Vyapad

Instructions-

- Begin with a session where scholars review common complications of Basti therapy and the associated Ayurvedic management principles.
- Divide students into small groups, and assign each group a specific Basti Vyapad case scenario to analyze.
- Each group will identify symptoms, likely causes, and the corresponding treatment modalities using Ayurvedic guidelines.
- In a supervised setting, scholars will participate in a simulated environment where they practice responding to their assigned Basti Vyapad scenario.

- Guide scholars in administering supportive therapies and discuss the rationale behind each intervention.
- Hold a group discussion for scholar to share their experiences, observations, and reflect on treatment effectiveness and patient response.

Experiential-Learning Learning 20.14: Management of Basti retention and iatrogenic infections

Instructions-

- The scholar will perform the management of complication during and after Basti therapy. Scholars will be involved in case discussion sessions of Basti Vyapad and management mentioned by various Acharyas in different Samhita.
- Scholars will select 10 real bedside cases and critically analyze for any adverse systemic effects and their management.
- Each scholar will document their observations and note any complications or unexpected outcomes they witnessed.
- Hold a debriefing session where scholars discuss case outcomes, management decisions, and reflect on best practices for enhancing patient care during and after Basti therapy.

Experiential-Learning Learning 20.15: Role of Pariharya Vishaya and Parihara Kala.

Instructions-

- Scholars will learn about all the Pariharya Vishaya during Parihara kala in different Samhitas with the help of active classroom discussions.
- Scholars with the help of 10 case studies will learn about the appropriate Pariharya Vishaya during Parihar Kala in the different pathophysiological conditions of Vyadhi.

Experiential-Learning Learning 20.16: Reporting of medicolegal cases of Basti

Instructions-

- Reporting of medicolegal cases with the help of a field visit by the scholars to a local police station or district hospital.
- Compile the processed and reported medicolegal cases.
- With the help of 2 different problems/ conditions provided to the scholars, they will record and document the incidence and procedure details.
- Scholars will also be encouraged to learn the significance of follow-up care, confidentiality, and legal documentation.

Modular Assessment

| Assessment | Hour |
|---|------|
| <p>Instructions—</p> <p>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.</p> <ul style="list-style-type: none"> • Observe a scholar perform Niruha Basti, Anuvasana Basti and Uttara Basti administration and evaluate skill, technique, and post-procedure care. (20 marks) • Presentation of a scenario assessing diagnostic reasoning, treatment planning, and management of Basti complication (20 marks) • Document the management and recovery in the ADR logbook (5 marks) • Present clinical scenarios representing Ayoga, Atiyoga, and Samyak Yoga of Niruha, Anuvasana, and Uttara Basti. Scholars will analyze symptoms, identify, justify and suggest appropriate management (15 marks) • Including Viva-voce (15 marks) <p>Or</p> <ul style="list-style-type: none"> • Any practical in converted form can be taken for assessment. (40 Marks) and • Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (35 Marks) | 6 |
| Semester No : 5 | |
| Module 21 : Contents of Niruha Basti, method of mixing and analysis of prepared Basti | |
| <p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <ol style="list-style-type: none"> 1. Describe of contents of various types of Niruha Basti, their ratio, methods of mixing of Basti Dravya. 2. The physiochemical changes during Basti preparation when mixed in different sequences. 3. Properly formed Niruha Basti and its physical properties (emulsions, viscosity, specific gravity, pH). 4. Dravya of Niruha Basti to modify it into Mridu or Tikshna Basti. | |
| Unit 1 Contents of Niruha Basti, method of mixing and analysis of prepared Basti | |

1. Significance of contents of various types of Niruha Basti, their ratio, methods of mixing of Basti Dravya.
2. The physiochemical changes during Basti preparation, when mixed in different sequences.
3. Properly formed Niruha Basti and its physical properties (emulsions, viscosity, specific gravity, pH).
4. Dravya of Niruha Basti to modify it into Mridu or Tikshna Basti.

References: 9,42,45,54

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO3 | Classify the usage of different Dravya to make Basti Mridu and Teekshna | 1 | Lecture | CC | Knows-how | DIS,L&PPT |
| CO3,CO4 | Differentiate the physiochemical changes in Basti on preparation when mixed in different sequences and using mortar pestle, mixer and palm | 1 | Lecture | CC | Knows-how | DIS |
| CO3 | Demonstrate and observe the changes on usage of different Dravya to make Basti Mridu and Teekshna | 2 | Practical21.1 | PSY-SET | Knows-how | DA,CBL,DIS,DL |
| CO3,CO4 | Practice and analyze the clinical utility of Mridu and Teekshna Basti Dravya | 2 | Experiential-Learning21.1 | PSY-GUD | Does | CBL,D-BED |
| CO2,CO3 | Describe the method of mixing of Basti Dravya | 1 | Lecture | CAP | Knows-how | L&PPT |
| CO2,CO3 | Assess the physiochemical changes during Basti preparation when mixed in different sequences | 1 | Practical21.2 | PSY-SET | Shows-how | CBL,DIS |
| CO2,CO3 | Analyse the changes in viscosity, specific gravity and pH in properly formed Basti | 2 | Experiential-Learning21.2 | PSY-GUD | Does | TBL,CBL |
| CO3,CO4 | Illustrate the clinical utility of the using different contents of basti in different pathophysiological conditions of disease | 1 | Lecture | CAP | Knows-how | L&PPT |

| | | | | | | |
|---------|--|---|---------------------------|---------|-----------|-------------------|
| CO2,CO3 | Examine and record the changes in viscosity, specific gravity and pH in properly formed Basti. | 1 | Practical21.3 | PSY-SET | Shows-how | DA,DIS,DL |
| CO2,CO3 | Practice the preparation of different Niruha Basti and Yapan Basti | 4 | Experiential-Learning21.3 | PSY-GUD | Does | TPW |
| CO3 | Enlist the contents of Niruha Basti and Illustrate the ratio of each content | 1 | Lecture | CAP | Knows-how | L&PPT |
| CO3,CO4 | Assess and demonstrate the changes due to Prakshepa Dravya and practice the use of different Prakshepa dravya | 2 | Experiential-Learning21.4 | PSY-MEC | Does | CBL,PBL |
| CO2,CO3 | Demonstrate the method of mixing of Basti Dravya and assess the changes in preparation of basti using mortar pestle, mixer and palm. | 2 | Practical21.4 | PSY-SET | Shows-how | DIS,PT |
| CO1,CO3 | Analyse different ratio of contents of basti based on dosha and clinical utility | 2 | Practical21.5 | PSY-ADT | Shows-how | CBL |
| CO3 | Discuss and analyze the significance of the each content of Basti | 2 | Practical21.6 | PSY-SET | Shows-how | DIS,TBL |
| CO2,CO3 | Demonstrate various contents of Niruha and Yapan basti with their preparations and analysis of the lakshana of properly formed Basti as per classics | 3 | Experiential-Learning21.5 | PSY-SET | Does | D-BED,DIS,SDL,CBL |

Practical Training Activity

Practical Training 21.1 Demonstrate and observe the changes on usage of different Dravya to make Basti Mridu and Teekshna

Demonstration by the Faculty

- Faculty will guide the scholars to enlist different dravya used in basti preparation.
- Faculty will help the scholar to demonstrate and observe the changes on usage of different Dravya to make Basti Mridu and Teekshna.
- Each scholar will prepare Mridu Basti and Teekshna Basti—using the prescribed Dravya in 4 cases provided.
- Scholars will compare their findings and analyze the clinical relevance of formulation differences, concluding with discussions on therapeutic applications
- Scholars will be divided into two groups—one preparing Mridu Basti, the other Teekshna Basti—using the prescribed Dravya.
- The mixing process will be conducted in the research lab, in coordination with the Rasashastra lab, to ensure accurate preparation and scientific integration.
- Each scholar will examine and document physicochemical parameters such as viscosity, solubility, stability, and emulsification that makes the basti Mridu and Teekshna respectively.

Practical Training 21.2 Assess the physicochemical changes during Basti preparation when mixed in different sequences

Demonstration by the Faculty-

- Faculty will guide the scholars to prepare basti in different sequences and assess the physicochemical changes during Basti preparation when mixed in different sequences
- Scholars with the help of 2 cases will assess the physicochemical changes during Basti preparation when mixed in different sequences
- Scholars will note down the physicochemical changes during Basti preparation when mixed in different sequences.
- Each scholar will be provided with the same Basti ingredients. Each scholar will prepare Basti by varying the sequence of mixing (e.g., oil first vs. decoction first).
- Scholars will then observe and record changes in viscosity, stability of the emulsion, and appearance.
- After completing the preparation, each scholar will compare their results and discuss how the order of mixing affects the physicochemical properties of Basti.

Practical Training 21.3 Examine and record the changes in viscosity, specific gravity and pH in properly formed Basti.

Demonstration by the faculty-

- Faculty will guide the scholars to examine and record the changes in viscosity, specific gravity and pH in properly formed Basti.
- Faculty will organize a guided discussion where scholars interpret the importance of changes in viscosity, specific gravity and pH in properly formed Basti.

- Scholars will be provided samples of properly prepared Basti and guided in using specific lab equipment like a viscometer, hydrometer, and pH meter with collaboration and integration with Rasashastra lab.
- Scholars will follow a step-by-step procedure to independently measure each parameter and interpret their results in their logbook.
- Scholars will enlist and examine different drugs used in basti preparation and record the changes in viscosity, specific gravity and pH according to different drugs used in basti preparation.

Practical Training 21.4 Demonstrate the method of mixing of Basti Dravya and assess the changes in preparation of basti using mortar pestle, mixer and palm.

Demonstration by the faculty-

- Faculty will demonstrate the method of mixing of Basti Dravya and assess the changes in preparation of basti using mortar pestle, mixer and palm.
- Faculty will guide scholars in analyzing the advantages and limitations of each method and their impact on the quality and clinical suitability of the final Basti mixture.
- Each scholar will carry out the mixing process in the research laboratory, integrating with the Rasashastra lab.
- Scholars will observe the texture, consistency, temperature, and homogeneity of each preparation.
- Each scholar will be assigned one method to prepare Basti using mortar pestle, mixer and palm.
- They will document variations in emulsification, consistency, and temperature.
- Each scholar will present their findings in a clinical discussion, analyzing the advantages and limitations of each method and their impact on the quality and clinical suitability of the final Basti mixture.

Practical Training 21.5 Showcase different ratio of contents of basti based on dosha and clinical utility

Demonstration by the Faculty-

- Faculty will encourage the scholars to develop insight about the different ratios of contents of basti based on dosha.
- Scholar will highlight the clinical utility of different ratio of contents of basti
- Scholars with the help of team based learning will enlist different ratio of contents of basti based on dosha and highlight the clinical utility of different ratio of contents of basti.
- Scholars will discuss different ratio of contents of basti based on dosha and gain insight about clinical utility of different ratio of contents of basti.

Practical Training 21.6 Discuss and analyze the significance of the each content of Basti

Demonstration by the Faculty-

- Faculty will guide the scholar to enlist different contents of basti
- Faculty will guide the scholar to gain insight and analyze the significance of the each content of Basti
- Scholars will be encouraged to enlist and note the various contents of basti. Scholars with the help of team based learning will gain insight about the significance of the each content of Basti.
- Scholars will discuss and analyze the significance of the each content of basti.

Experiential Learning Activity

Experiential-Learning Learning 21.1: Practice and analyze the clinical utility of Mridu and Teekshna Basti Dravya

INSTRUCTION

- Scholars will enlist different dravya used in preparation of basti and their characteristics.
- Scholars will prepare different Mridu and Teekshna basti with the help of different dravya and assess the clinical utility in them.
- Scholars will be provided with the necessary ingredients and asked to prepare Mridu and Teekshna Basti individually, following the steps.
- During the preparation, scholars will be closely supervised, receiving feedback on their technique, proportion accuracy, and consistency of the final mixture.
- 5 clinical case scenarios will be provided where a patient requires Mridu Basti and Teekshana Basti to treat a specific condition
- Scholars will be tasked with selecting appropriate ingredients for the Basti preparation and adjusting the Dravya based on the patient's condition.
- After preparing the Basti, scholars will reflect on their choices, explaining the rationale behind the selection of ingredients, the therapeutic intent, and the potential clinical outcomes.

Experiential-Learning Learning 21.2: Analyse the changes in viscosity, specific gravity and pH in properly formed Basti

- Scholars will gain insight about viscosity, specific gravity and pH of properly formed basti.
- Scholars will assess and analyze the changes in viscosity, specific gravity and pH in properly formed basti.

INSTRUCTIONS-

- Scholars will be provided with 5 clinical cases where Basti therapy was used for specific conditions. Scholars will be tasked with preparing Basti formulations suitable for these conditions, adjusting viscosity, specific gravity, and pH accordingly, and measuring the changes.
- Following the preparation, scholars will reflect on how these factors affect drug absorption, retention time, and patient comfort, discussing their insights in a group setting.
- Scholars will prepare 10 Basti and will carry out the mixing process in the research laboratory, integrating with the Rasashastra lab.
- Use viscometers, hydrometers, and pH meters to determine the viscosity, specific gravity, and pH of their formulation.
- Each scholar will discuss their insights and results .

Experiential-Learning Learning 21.3: Practice the preparation of different Niruha Basti and Yapan Basti

INSTRUCTIONS-

- Scholars will gain insight about different Niruha and Yapan Basti.
- Scholars will practice the preparation of different Niruha Basti and Yapan Basti
- Scholars will individually prepare Niruha Basti and Yapan basti using provided ingredients, following standard procedures.
- Faculty will supervise and give feedback on technique, proportions, and consistency.
- A clinical case scenario will be presented requiring pathophysiological condition-specific Niruha and Yapan Basti. Scholars will select and adjust ingredients based on the patient's condition.
- Post-preparation, scholars will justify their choices, discussing therapeutic intent and expected outcomes..

Experiential-Learning Learning 21.4: Assess and demonstrate the changes due to Prakshepa Dravya and practice the use of different Prakshepa dravya

Instructions-

- Scholars will enlist different prakshepa dravya used in preparation of basti.
- Scholars will assess how different Prakshepa Dravyas influence the properties of a Basti formulation.
- Scholars will enlist different prakshepa dravya used in preparation of basti. Scholars will demonstrate the basti in atleast 5 cases and discuss the Roga Bala, Rogi Bala for changes in the prakshepa dravya in each case.
- Record their observations, noting how each Prakshepa modifies the properties and efficacy of the formulation.
- Scholars will select suitable Prakshepa Dravya based on the patient's condition and treatment goal in 5 case problems provided.
- Then justify their choices through a discussion, explaining their relevance to specific doshas and clinical scenarios.

Experiential-Learning Learning 21.5: Demonstrate various contents of Niruha and Yapan basti with their preparations and analysis of the lakshana of properly formed Basti as per classics

INSTRUCTIONS-

- Scholars will enlist various contents of Niruha basti and Yapan Basti as per classics.
- Scholars will demonstrate the preparation of Niruha basti and Yapan Basti.
- Scholars will gain insight about the lakshana of properly formed Basti as per classics.
- With the help of 3 case based studies scholars will enlist various contents of Niruha basti and Yapan Basti each.
- Scholars will collect all the ingredients, their sequence in mixing, and the essential equipment used.
- Scholars will gain insight about the lakshana of properly formed Basti as per classics in these patients.
- Scholars will perform pre-preparation of Niruha Basti and yapan basti with each step and discuss their preparation and lakshana of properly formed basti as per classics.

Modular Assessment

| Assessment | Hour |
|--|------|
| <p>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.</p> <ul style="list-style-type: none"> • Evaluate the scholars's ability to prepare various types of niruha basti, assess mixing technique, identify physiochemical changes and recognise the characteristics of properly formed basti (20marks) • Evaluate the scholars's ability through Viva -Voce (5marks) <p>or</p> <p>Any practical in converted form can be taken for assessment. (25 Marks)</p> <p>or</p> <p>Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (25 Marks)</p> | 2 |

Module 22 : BASTI FORMULATIONS

Module Learning Objectives

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

1. Analyze the ingredients of various important Basti formulations.
2. Demonstrate the method of preparation of various Basti formulations.
3. Interpret the clinical utility of various Basti formulations.
4. Administer various Niruha, Anuvasana and Uttara Basti in different clinical conditions
5. Design the role of Basti in emerging lifestyle diseases

Unit 1 Various Basti formulations

1. Various Basti formulations and their clinical utility like Piccha Basti, Kshira Basti, Mustadi Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti, Madhutailika Basti, Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Krimighna Basti, Lekhana Basti, Vrishya Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti, Kusthagna Basti, Shodhana Basti, Takra Basti, Churna Basti, Siddha Basti, Yuktaratha Basti, Ashwagandhadi Anuvasana, Pippalyadi Anuvasana Basti, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila, Shatavaryadi Taila or Shatavaryadi Ghrita, Brihat Saidhavadi Taila.
2. Formulations for Uttara Basti- Panchavalkala Kashaya, Triphala Kashaya, Dashmool Kashaya, Yastimadhu Taila, Dashmool Taila, Jatyadi Ghrita, Shatavaryadi Ghrita, Phala Ghrita, Dadimadi Ghrita.

References: 1,7,9,19,29,45,54

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO3 | Analyze the contents of Piccha Basti, Kshira Basti, Mustadi Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti and Madhutailika Basti. | 2 | Lecture | CAN | Knows-how | L&GD,L&PPT |
| CO3 | Demonstrate and interpret the preparation and importance of Piccha Basti, Kshira Basti, Mustadi | 4 | Practical22.1 | PSY-SET | Shows-how | CBL,PT |

| | | | | | | |
|-----|---|---|---------------------------|---------|-----------|-------------|
| | Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti and Madhutailika Basti. | | | | | |
| CO3 | Illustrate the preparation and interpretation of the clinical utility of Piccha Basti, Kshira Basti, Mustadi Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti and Madhutailika Basti. | 6 | Experiential-Learning22.1 | PSY-MEC | Does | CBL,D,D-BED |
| CO3 | Analyze the contents of Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti. | 3 | Lecture | CAN | Knows-how | L&PPT ,L&GD |
| CO3 | Illustrate and prepare Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti. | 3 | Practical22.2 | PSY-SET | Shows-how | CBL,D,D-BED |
| CO3 | Administer and analyse the clinical utility of Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti. | 6 | Experiential-Learning22.2 | PSY-MEC | Does | CBL,PBL |
| CO3 | Analyze the contents of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti , Kusthagna Bast , Yuktaratha Basti , Siddha Basti ,Churna Basti ,Takra Basti. | 2 | Lecture | CK | Knows-how | L&PPT ,L&GD |
| CO3 | Demonstrate and interpret the clinical utility of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti Kusthagna Basti, Yuktaratha Basti, Siddha Basti, Churna Basti, Takra Basti. | 3 | Practical22.3 | PSY-SET | Shows-how | D-BED,D,CBL |

| | | | | | | |
|-----|--|---|---------------------------|---------|-----------|-----------------|
| CO3 | Illustrate the preparation and interpret the clinical utility of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti and Kusthagna Basti, Yuktaratha Basti, Siddha Basti ,Churna Basti ,Takra Basti. | 6 | Experiential-Learning22.3 | PSY-MEC | Does | CBL |
| CO3 | Analyze the contents of following Anuvasan Basti-Vajigandhadi Basti, Pippalyadi Basti, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila and Shatavaryadi Taila or Shatavaryadi Ghrita, Shatavhadi Basti, Bruhat Saindhavadi Basti | 3 | Lecture | CAN | Knows-how | L&PPT ,L&GD |
| CO3 | Illustrate and prepare various Anuvasana Basti-Vajigandhadi Taila, Pippalyadi Taila, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila and Shatavaryadi Taila, Shatavaryadi Ghrita Basti, Shatavhadi Taila, Bruhat Saindhavadi Taila | 8 | Practical22.4 | PSY-SET | Shows-how | CBL,D,D-BED |
| CO3 | Demonstrate and analyse the clinical utility of Vajigandhadi Taila, Pippalyadi Taila , Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila and Shatavaryadi Taila or Shatavaryadi Ghrita Basti, Shatavhadi Taila, Bruhat Saindhavadi Taila. | 8 | Experiential-Learning22.4 | PSY-MEC | Does | C_L,IBL |
| CO3 | Analyze the contents of Panchavalkala Kashaya Uttara Basti, Triphala Kashaya Uttara Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttaraa Basti, Jatyadi Ghrita Uttara Basti, Shatavaryadi Ghrita Uttara Basti, Phala Ghrita Uttara Basti and Dadimadi Ghrita Uttar Basti. | 4 | Lecture | CAN | Knows-how | L&GD,L&PPT |
| CO3 | Illustrate and prepare Panchavalkala Kashaya Uttara Basti, Triphala Kashaya Uttara Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttara Basti, Jatyadi | 8 | Practical22.5 | PSY-SET | Shows-how | D,D-M,D-BED,CBL |

| | | | | | | |
|-----|--|---|---------------------------|---------|------|---------|
| | Ghrita Uttara Basti, Shatavaryadi Ghrita Uttara Basti, Phala Ghrita Uttar Basti and Dadimadi Ghrita Uttara Basti. | | | | | |
| CO3 | Demonstrate and analyse the clinical utility of Panchavalka Kashaya Uttara Basti, Triphala Kashaya Uttara Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttara Basti, Jatyadi Ghrita Uttara Basti, Shatavaryadi Ghrita Uttara Basti, Phala Ghrita Uttara Basti and Dadimadi Ghrita Uttara Basti. | 8 | Experiential-Learning22.5 | PSY-MEC | Does | DIS,CBL |

Unit 2 Basti in emerging lifestyle diseases Role and utility of Basti in emerging lifestyle diseases (for e.g. Diabetes,Hyperthyroidism,PCOD,SLE) **References:** 29

| 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 Hours | 3D Lecture/ Practical Training/ Experiential Learning | 3E Domain/ Sub Domain | 3F Level (Does/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|----------------------------------|--|--|--|---|
| CO4 | Analyse the role of Basti in emerging lifestyle diseases like diabetes, hyperthyroidism, PCOD, SLE, etc | 1 | Lecture | CAP | Knows-how | L&PPT ,JC |
| CO4 | Evaluate and analyze the role of Basti in emerging lifestyle diseases like diabetes, hyperthyroidism, PCOD, SLE,etc | 4 | Practical22.6 | PSY-SET | Shows-how | CBL,JC,IBL |
| CO4 | Demonstrate the role of Basti in emerging lifestyle diseases like diabetes, hyperthyroidism, PCOD, SLE, etc | 5 | Experiential-Learning22.6 | PSY-ORG | Does | PL,CBL |

Practical Training Activity

Practical Training 22.1 Demonstrate and interpret the preparation and importance of Piccha Basti, Kshira Basti, Mustadi Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti and Madhutailika Basti

Demonstration by the faculty-

- Demonstrate the detailed process of preparing various Basti while emphasizing the proportions and mixing sequence.
- Practice preparing different Basti in small groups while being monitored and receiving feedback from the teacher.
- The scholar will perform a live demonstration of 5 Basti, showing each step of preparation with detailed knowledge of proportions and sequence.
- Use of Audio-Visual Aids (e.g., charts, videos, or slides) to highlight the importance of sequence of ingredients and the emulsification process.
- Scholars will observe and take notes during the demonstration, paying special attention to the viscosity, homogeneity, and consistency of the final mixture, as per classical guidelines.
- Conduct 10 live demonstrations or guided practice sessions for scholars to prepare different Basti formulations.
- Divide scholars into small groups, with each group assigned to prepare 2 Basti following the proper steps and proportions.
- Encourage scholars to follow each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Observe and document patient responses during and after Basti administration in 50 patients and enter it in logbook.

Practical Training 22.2 Prepare Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti.

Demonstration by the faculty-

- Faculty will guide the scholars to gain insight about the detailed process of preparing various Niruha Basti while emphasizing the proportions and mixing sequence.
- Practice preparing different Niruha Basti in small groups while being monitored and receiving feedback from the faculty.
- The scholar will perform a live demonstration of 5 Basti, showing each step of preparation with detailed knowledge of proportions and sequence
- Scholars will observe and take notes during the demonstration, paying special attention to the viscosity, homogeneity, and consistency of the final mixture, as per classical guidelines.
- Conduct 10 live demonstrations or guided practice sessions for scholars to prepare different Basti formulations.
- Divide scholars into small groups, with each group assigned to prepare 2 Basti following the proper steps and proportions.
- Encourage scholars to follow each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Observe and document patient responses during and after Basti administration in 10 patients and enter it in logbooks.

Practical Training 22.3

Demonstrate and interpret the clinical utility of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshokleshana Basti, Chakshusya Basti and Kusthagna Basti, Yuktaratha Basti , Siddha Basti , Churna Basti , Takra Basti.

Demonstration by the faculty-

- Faculty will guide the scholars to gain insight about the detailed process of preparing various Niruha Basti while emphasizing the proportions and mixing sequence.
- Practice preparing different Niruha Basti in small groups while being monitored and receiving feedback from the teacher.
- The scholars will perform a live demonstration of 5 Basti, showcasing each step of preparation with detailed study of proportions and sequence.
- Scholars will observe and take notes during the demonstration, paying special attention to the viscosity, homogeneity, and consistency of the final mixture, as per classical guidelines.
- Conduct 10 live demonstrations or guided practice sessions for scholars to prepare different Basti formulations.
- Divide scholars into small groups, with each group assigned to prepare 2 Basti following the proper steps and proportions.
- Encourage scholars to follow each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Observe and document patient responses during and after Basti administration in 10 patients and enter it in logbooks.

Practical Training 22.4 Illustrate and prepare various Anuvasana Basti- Vajigandhadi Taila, Pippalyadi Taila, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila, Shatavaryadi Taila, Shatavaryadi Ghrita Basti, Shatavhadi Taila, Bruhat Saidhavadi Taila.

Demonstration by the Faculty-

- Faculty will guide the scholars to gain insight about the detailed process of preparing various Anuvasana Basti while emphasizing the proportions and mixing sequence.
- Practice preparing different Basti in small groups while being monitored and receiving feedback from the teacher.
- Scholars will learn about the preparation of Anuvasana Basti and its specific dose(matra).
- Scholars will also learn about the mixing and emulsification of the Anuavasana dravya with honey or saindhav, if required.
- Conduct 10 live demonstrations or guided practice sessions for students to prepare different basti formulations.
- Divide scholars into small groups, with each group assigned to prepare 2 basti following the proper steps and proportions.
- Encourage students to follow each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Observe and document patient responses during and after basti administration in 10 patients and enter it in logbooks.

Practical Training 22.5 Illustrate and prepare Panchavalkala Kashaya Uttara Basti, Triphala Kashaya Uttara Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttara Basti, Jatyadi Ghrita Uttara Basti, Shatavaryadi Ghrita Uttara Basti, Phala Ghrita Uttara Basti and Dadimadi Ghrita Uttar Basti.

Demonstration by the Faculty-

- Faculty will guide the scholars to gain insight about the detailed process of preparing various Basti while emphasizing the proportions and mixing sequence.
- Practice preparing different Basti individually under monitoring and necessary feedbacks of the faculty.
- Conduct 5 live demonstrations or guided practice sessions for scholars to prepare different Basti formulations.
- Scholars are encouraged to select appropriate Uttar Basti dravya according to different pathological conditions of the disease and give rationale behind it.
- Divide scholars into small groups, with each group assigned to prepare 2 basti following the proper steps and proportions.
- Encourage scholars to follow each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Observe and document patient responses during and after Basti administration in 5 patients and enter it in logbooks.

Practical Training 22.6 Evaluate and analyze the role of Basti in emerging lifestyle diseases like diabetes, hyperthyroidism, PCOD, SLE,etc

Demonstration by the faculty-

- Faculty should guide the scholars to gain insight about the role of Basti in emerging lifestyle diseases
- Investigate current studies on Basti's efficacy in treating emerging lifestyle diseases. Encourage critical analysis of research findings to integrate traditional practices with modern medical evidence.
- Analyze and exhibit administration of basti in atleast 5 specific patient cases of newly emerging lifestyle diseases. Comprehend and justify the use of specific basti in the patient.
- The scholars are given 2 cases each and the complete analysis of the patient is done in log book. The probable basti management is planned and discussed among the class.

Experiential Learning Activity

Experiential-Learning Learning 22.1:

Illustrate the preparation and interpretation of the clinical utility of Piccha Basti, Kshira Basti, MustadiYapana Basti, Baladi Yapana Basti, ShatavaryadiYapana Basti and Madhutailika Basti

INSTRUCTION :

- Demonstrate and interpret the clinical utility of Basti formulations.
- Explore and showcase the importance of different ingredients used in various important Basti formulations.
- Scholars by means of hands-on activities will explore, identify, record and understand the importance of ingredients used in various Basti formulations.
- Audio-Visual Aids will be used for demonstrating the drugs used in different Basti formulations.
- Scholars will gain insight about the role of each component (e.g., oils, decoctions, Prakshepa Dravya) and comprehend their contribution to the therapeutic effects of Basti.
- At-least 10 live demonstrations or guided practice sessions will be done for students to prepare different Basti formulations.
- Scholars will demonstrate each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Scholars will administer Basti using simulation and real clinical cases in at least 10 cases and record responses during and after Basti administration in these patients and enter it in logbooks.
- Scholars will record therapeutic outcomes and any immediate or delayed reactions to the different formulations, enabling them to link formulation choices with clinical results.
- Practice case-based learning and problem based learning in patients and facilitate discussion sessions wherein rationale behind choosing specific Basti formulations for various clinical conditions are discussed.

Experiential-Learning Learning 22.2: Administer and analyse the clinical utility of Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, ManjishtadiNiruha Basti, Dashamuladi Basti, Ardhamatrika Basti.

Instructions-

- Demonstrate and interpret the clinical utility of Basti formulations.
- Explore and showcase the importance of different ingredients used in various important Basti formulations.
- Scholars by means of hands-on activities will explore, identify, record and understand the importance of different ingredients used in various Basti formulations.
- Scholars will gain insight about the role of each component (e.g., oils, decoctions, Prakshepa Dravya) and comprehend their contribution to the therapeutic effects of Basti.

- At-least 10 live demonstrations or guided practice sessions will be done for scholars to prepare different Basti formulations.
- Scholars will demonstrate each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Scholars will perform administration of Basti using simulation and real clinical cases in at least 10 cases and record responses during and after Basti administration in these patients and enter it in logbooks.
- Scholars will record therapeutic outcomes and any immediate or delayed reactions to the different formulations, enabling them to link formulation choices with clinical results.
- Practice case-based learning and problem based learning in patients and facilitate discussion sessions wherein rationale behind choosing specific Basti formulations for various clinical conditions are discussed.

Experiential-Learning Learning 22.3: Illustrate the preparation and interpret the clinical utility of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva RogharaNiruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti and Kusthagna Basti, Yuktaratha Basti, Siddha Basti, Churna Basti, Takra Basti

INSTRUCTIONS:

- Demonstrate and interpret the clinical utility of Basti formulations.
- Explore and showcase the importance of different ingredients used in various important Basti formulations.
- Scholars by means of hands-on activities will explore, identify, record and understand the importance of different ingredients used in various Basti formulations.
- Scholars will gain insight about the role of each component (e.g., oils, decoctions, Prakshepa Dravya) and comprehend their contribution to the therapeutic effects of Basti.
- At-least 10 live demonstrations or guided practice sessions will be showcased for students to prepare different Basti formulations.
- Scholars will demonstrate each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Scholars will learn to administer Basti using simulation and real clinical cases in at least 10 cases and record the responses during and after Basti administration in these patients and enter it in logbooks.
- Scholars will record therapeutic outcomes and any immediate or delayed reactions to the different formulations, enabling them to link formulation choices with clinical results.
- Practice case-based learning and problem based learning in patients and facilitate discussion sessions wherein rationale behind choosing specific Basti formulations for various clinical conditions are discussed.

Experiential-Learning Learning 22.4: Demonstrate and analyse the clinical utility of Vajigandhadi Taila, Pippalyadi Taila, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila and Shatavaryadi Taila or Shatavaryadi Ghrita Basti, Shatavhadi Taila, Bruhat Siandhavadi Taila.

INSTRUCTION :

- Demonstrate and interpret the clinical utility of specified Basti formulations.
- Explore and highlight the importance of ingredients used in various important Basti formulations.
- Scholars by means of hands-on activities will explore, identify, record and understand the importance of different ingredients used in various Basti formulations.
- Scholars will gain insight about the role of each component (e.g., oils, decoctions, Prakshepa Dravya) and comprehend their contribution to the therapeutic effects of Basti.
- At-least 10 live demonstrations or guided practice sessions will be showcased for students to prepare different Basti formulations.
- Scholars will demonstrate each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Scholars will learn to administer Basti using simulation and real clinical cases in at least 10 cases and record the responses during and after Basti administration in these patients and enter it in logbooks.
- Scholars will record therapeutic outcomes and any immediate or delayed reactions to the different formulations, enabling them to link formulation choices with clinical results.
- Practice case-based learning and problem based learning in patients and facilitate discussion sessions wherein rationale behind choosing specific Basti formulations for various clinical conditions are discussed.

Experiential-Learning Learning 22.5: Demonstrate and analyse the clinical utility of Panchavalkala Kashaya Uttara Basti, Triphala Kashaya Uttar Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttara Basti, JatyadiGhrita Uttara Basti, Shatavaryad iGhrita Uttara Basti, Phala Ghrita Uttara Basti and Dadimadi Ghruta Uttara Basti.

INSTRUCTION :

- Showcase the preparation of specified Basti formulations along with interpretation of their clinical utility.
- Explore and evaluate the importance of different ingredients used in various Basti formulations.
- Scholars by means of hands-on activities will explore, identify, record and analyze the importance of different drugs used in these Basti formulations.
- Scholars will gain insight about the role of each component (e.g., oils, decoctions, Prakshepa Dravya) and present their contribution to the therapeutic effects of Basti.
- At-least 5 live demonstrations or guided practice sessions will be showcased for scholars to prepare different Basti formulations.
- Scholars will demonstrate each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Scholars will perform administration of Basti using simulation and real clinical cases in at least 5 cases and record the patient responses during and after Basti administration in them and enter it in logbooks.

- Scholars will record therapeutic outcomes and any immediate or delayed reactions to the different formulations, enabling them to link formulation choices with clinical results.
- Practice case-based learning and problem based learning in patients and facilitate discussion sessions wherein rationale behind choosing specific Basti formulations for various clinical conditions are discussed.

Experiential-Learning Learning 22.6:

Demonstrate the role of Basti in emerging diseases like diabetes, hyperthyroidism, PCOD, SLE, etc

INSTRUCTIONS :

- Create insight about the clinical utility of various Basti formulations in emerging lifestyle disorders.
- Exhibit various Niruha, Anuvasana and Uttar Basti in different emerging clinical conditions through Bed side Experiential learning, Research based learning, Case-based learning, Hands on training, Problem-based learning
- Scholars by means of hands-on activities will gain insight about the appropriate Basti for emerging lifestyle disorders.
- Scholars will evaluate and discuss the role of each component (e.g., oils, decoctions, Prakshepa Dravya) and highlight their contribution to the therapeutic effects of Basti.
- Scholars will demonstrate each step meticulously, from measuring ingredients to mixing and adjusting the dose for specific clinical applications.
- Scholars will showcase administration of Basti using simulation and real clinical cases in at least 5 cases and record responses during and after Basti administration in these patients and enter it in logbooks.
- Scholars will record therapeutic outcomes and any immediate or delayed reactions to the different formulations, enabling them to link formulation choices with clinical results.
- Practice case-based learning and problem based learning in patients and facilitate discussion sessions where in rationale behind choosing specific Basti formulations for various clinical conditions are discussed.

Modular Assessment

| Assessment | 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. | 6 |
| <ul style="list-style-type: none"> • Evaluate the scholars's ability through Viva -Voce (10marks) • Evaluate the scholars's ability through Quiz competition by allotting them different basti formulation (25marks) | |

- Evaluate the the scholars's ability by giving them topic on basti formultion and asking them to prepare powerpoint presentation (15marks)
- Assessing the scholar's ability by giving them a case with pathophysiological condition and asking them to recommend basti formulation on a particular disease (25marks)

or

Any practical in converted form can be taken for assessment. (45 Marks)

and

Any experiential as portfolio/reflections/presentations, can be taken as an assessment. (30 Marks)

Semester No : 6

Module 23 : Handling Emergencies in Panchakarama

Module Learning Objectives

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

1. Lifesaving drugs used in complications of Snehan, Swedan,Vamana, Virechana, Basti, Nasya and Raktamokshana.
2. Management of certain complications using contemporary medical sciences approach for Haematemesis, Epistaxi,Hypotension, Vasovagal shock, Fainting, Gibleeding,Hypoglycemia,Dyslipidemia Convulsions/ Seizures, Hyperpyrexia, Hypertension, Acute asthmatic Attack, Dyspnoea, Anaphylactic shock, Hyperglycemia, Burns, Septicemia, Bed sores, Cardiorespiratory arrest, sudden stoppage of breathing/ Apnoea, Acute Fissure, Rectal prolapse, Ketoacidosis, Dehydration.

Unit 1 Emergency conditions in Panchkarma with their management

1. Lifesaving drugs used in complications of Snehan, Swedan,Vamana, Virechana, Basti, Nasya and Raktamokshana.
2. Management of certain complications using contemporary medical sciences approach for Haematemesis,Epistaxis,Hypotension, Vasovagal shock,Fainting, GI bleeding,Dehydration, Hypoglycemia,Dyslipidemia, convulsions/ seizures, Hyperpyrexia, Hypertension,Burns, Septicemia, Bed sores, Cardiorespiratory arrest, sudden stoppage of breathing/ apnoea,Ketoacidosis,Acute Fissure, Rectal Prolapse,

References: 18

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO5,CO5 | Describe the general treatment protocol for various complications of Panchakarma | 1 | Lecture | CE | Knows-how | L&GD,L&PPT ,BS |
| CO5,CO5 | Manage and record certain complications like burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea, acute fissure, rectal prolapse, ketoacidosis. | 2 | Practical23.1 | PSY-SET | Shows-how | PBL,DIS,SIM |
| CO5,CO5 | Practice management of certain complications like burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea,acute fissure, rectal prolapse, ketoacidosis | 3 | Experiential-Learning23.1 | PSY-GUD | Does | JC,DIS,CBL |
| CO5,CO5 | Describe and compare the various complications that can occur during Panchkarma | 1 | Lecture | CAN | Knows-how | L&PPT ,BS,L&GD |
| CO5,CO5 | Manage and document certain complications of hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthamatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia | 2 | Practical23.2 | PSY-SET | Shows-how | DIS,SIM,D- BED,PBL |
| CO3,CO4, CO5,CO5 | Practice management of certain complications hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthamatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia | 3 | Experiential-Learning23.2 | PSY-MEC | Does | PL,JC,RP,CBL |
| CO5,CO5 | Enlist and explain the use of live saving drugs in complications of Basti, Nasya and Raktamokshana Karma | 2 | Lecture | CAP | Knows-how | BS,L&PPT ,L&GD |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|-----------------------|
| CO5,CO5 | Examine and monitor certain complications like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding and dehydration | 2 | Practical23.3 | PSY-SET | Shows-how | D-BED,PBL,SIM,DIS,CBL |
| CO1,CO2 | Practice management of certain complications like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding, dehydration | 3 | Experiential-Learning23.3 | PSY-GUD | Does | DIS,CBL |
| CO5,CO5 | Illustrate the life -threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma | 2 | Lecture | CK | Knows-how | L&PPT,BS,L&GD |
| CO2,CO3 | Demonstrate the use of life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma. | 3 | Practical23.4 | PSY-GUD | Shows-how | DIS,PBL |
| CO5,CO5 | Practice the use of life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma. | 4 | Experiential-Learning23.4 | PSY-MEC | Does | CBL,SIM,D-BED |
| CO5,CO5 | Enlist and explain the use of live saving drugs in complications of Vaman and Virechan | 1 | Lecture | CK | Knows-how | L&GD,BS,L&PPT |
| CO5,CO5 | Assess and record the life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma. | 3 | Practical23.5 | PSY-SET | Shows-how | PBL,DIS,D-BED |
| CO5,CO5 | Manage and record life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma | 5 | Experiential-Learning23.5 | PSY-MEC | Does | PBL,RP,SDL,CBL |
| CO5,CO5 | Describe and analyse the life threatening conditions in that can occur in Vaman and Virechan | 1 | Lecture | CK | Knows-how | L&GD,L&PPT |
| CO5,CO5 | Examine and assess the management and use of life saving drugs in life- threatening conditions that can occur during Vaman and Virechan | 4 | Practical23.6 | PSY-SET | Shows-how | DIS,D-BED,PBL |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|--------------------|
| CO5,CO5 | Examine, record and practice the management and use of life saving drugs in life- threatening conditions that can occur during Vaman and Virechan | 4 | Experiential-Learning23.6 | PSY-GUD | Does | D-BED,CBL,SIM, RLE |
| CO5,CO5 | Enlist and explain the use of live saving drugs in complications of Snehan and swedan | 1 | Lecture | CK | Knows-how | L&PPT ,BS,L&GD |
| CO5,CO5 | Examine and assess the management and use of life saving drugs in life- threatening conditions that can occur during Snehan and Swedan | 4 | Practical23.7 | PSY-SET | Shows-how | SIM,PBL,DIS |
| CO5,CO5 | Examine, record and practice the management and use of life saving drugs in life-threatening conditions that can occur during Snehan and Swedan | 4 | Experiential-Learning23.7 | PSY-GUD | Does | DIS,RP,CBL |
| CO5,CO5 | Describe and analyse the life threatening conditions that can occur during the Snehan and swedan | 1 | Lecture | CK | Knows-how | L&GD,BS,DIS,L &PPT |

Practical Training Activity

Practical Training 23.1 Observe and record certain complications burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea,acute fissure, rectal prolapse, ketoacidosis.

Demonstration by the faculty-

- Faculty will guide the scholars to gain insight about the concept of burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea, acute fissure, rectal prolapse and ketoacidosis.
- Scholars will learn to examine and monitor these complications.
- Each scholar will be assigned different complication scenarios.
- Scholars will perform a role-play simulating the recognition and management of a specific complication, including patient interaction, medication adjustment, and emergency care.
- Faculty will provide feedback on clinical accuracy and teamwork
- Faculty will guide the scholars to carry out group discussion on management of certain complications burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea, acute fissure, rectal prolapse and ketoacidosis.

Practical Training 23.2 State and document certain complications of hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthamatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia

Demonstration by the faculty-

- Faculty will guide the scholars to gain insight about the concept of hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthmatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia.
- Scholars will learn to examine and monitor these complications.
- Each scholar will be assigned different complication scenarios like hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthmatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia.
- Scholars will perform a role-play simulating the recognition and management of a specific complication, including patient interaction, medication adjustment, and emergency care.
- Faculty will provide feedback on clinical accuracy and teamwork.
- Faculty will guide scholars to carry out group discussion on management of certain complications of hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthmatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia.

Practical Training 23.3 Examine and monitor certain complications like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding and dehydration

Demonstration by the Faculty-

- Faculty will guide the scholars to gain insight about the concept of haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding and dehydration
- Scholars will learn to examine and monitor these complications.
- Each scholar will be assigned different complication scenarios.
- Scholars will perform a role-play simulating the recognition and management of a specific complication, including patient interaction, medication adjustment, and emergency care.
- Faculty will provide feedback on clinical accuracy and teamwork
- Scholars will participate in group discussions, compare strategies, and document patient responses.

Practical Training 23.4 Demonstrate the use of life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma.

Demonstration by the faculty-

- Faculty will guide the scholars to explore and enlist various life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma mentioned in Samhita.
- Faculty will guide the scholars to demonstrate and analyse the use of life saving drugs in life- threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma.
- With the help of 5 hypothetical problems given scholar are encouraged to identify and respond to life-threatening conditions by use of life saving drugs that may arise during Basti, Nasya and Raktamokshana Karma.
- Each scenario will follow a problem-based approach to enhance clinical reasoning and decision-making skills.
- Faculty will demonstrate the administration of emergency drugs and interventions for conditions like hypovolemic shock, excessive bleeding, or diarrhea.
- Scholars will closely observe all clinical steps, including symptom recognition, intervention, and patient stabilization.
- Post-scenario, scholars will participate in reflective discussions to reinforce learning and clarify clinical reasoning.

Practical Training 23.5 Record the life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma.

Demonstration by the Faculty-

- Faculty will guide the scholars explore and enlist various life- threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma.
- Scholars will examine and assess the possible management of life- threatening conditions
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions that may arise during Basti, Nasya and Raktamokshana Karma.
- Scholars will examine and assess the management of life- threatening condition and record them in their logbooks
- Faculty will guide the scholars to carry out group discussion on life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma.

Practical Training 23.6 Examine and assess the management and use of life saving drugs in life- threatening conditions that can occur during Vaman and Virechan

Demonstration by the faculty-

- Faculty will guide the scholars explore and enlist various life- threatening conditions that can occur during Vaman and Virechan
- Scholars will examine and assess the possible management in these life- threatening conditions
- To evaluate and analyze the use of life saving drugs in these conditions.
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions that may arise during Vaman and Virechan.
- Scholars will examine and assess the management and use of life saving drugs in life- threatening condition and record them in their logbooks.
- Faculty will guide scholars to carry out group discussion for management and use of life saving drugs in life- threatening conditions that can occur during Vaman and Virechan

Practical Training 23.7 Examine and assess the management and use of life saving drugs in life- threatening conditions that can occur during Snehan and Swedan

Demonstration by the faculty-

- Faculty will guide the scholar explore and enlist various life- threatening conditions that can occur during Snehan and Swedan.
- Scholars will examine and assess the possible management of life- threatening conditions
- To evaluate and analyse the use of life saving drugs in life- threatening conditions
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions that may arise during Snehan and Swedan.
- Scholars will examine and assess the management and use of life saving drugs in life- threatening condition and record them in their logbooks
- Faculty will guide scholars to carry out group discussion for the management and use of life saving drugs in life- threatening conditions that can occur during Snehan and Swedan .

Experiential Learning Activity

Experiential-Learning Learning 23.1: Perform the management of complications like burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea,acute fissure, rectal prolapse, ketoacidosis

INSTRUCTION:

- Scholars will gain insight about the concept of burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea, acute fissure, rectal prolapse and ketoacidosis.
- Scholars will learn to examine and monitor these complications.
- Using at least 3 case studies, scholars will practice managing Panchakarma complications with contemporary medical approaches, justifying drug selection.
- Scholars will observe and take notes during the demonstration, paying special attention to the symptoms, and step-wise management and record the cases in logbook.
- Scholars will be grouped for role-play, where one acts as the patient and another as the healthcare provider managing conditions like burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea, acute fissure, rectal prolapse, ketoacidosis. The scholar will monitor vitals, administer fluids, and stabilize the patient.
- Following each role-play, groups will conduct peer reviews to assess management effectiveness and explore alternatives.

Experiential-Learning Learning 23.2: Practice management of certain complications hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthmatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia

Instructions-

- Scholars will gain insight about the concept of hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthmatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia.
- Scholars will learn to examine and monitor these complications.
- Using at least 3 case studies, scholars will practice managing panchakarma complications with contemporary medical approaches, justifying drug selection.
- Scholars will observe and take notes during the demonstration, paying special attention to the symptoms, and step-wise management and record the cases in logbook.
- Scholars will be grouped for role-play, where one acts as the patient and another as the healthcare provider managing conditions like hypoglycemia, hyperlipidemia, convulsions/seizures, hyperpyrexia, hypertension, acute asthmatic attack, dyspnoea, anaphylactic shock, hyperglycemia. The scholar will monitor vitals, administer fluids, and stabilize the patient.
- Following each role-play, groups will conduct peer reviews to assess management effectiveness and explore alternatives.

Experiential-Learning Learning 23.3: Practice management of certain complications like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding, dehydration

Instructions-

- Scholars will gain insight about the concept of haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding and dehydration
- Scholars will learn to examine and monitor these complications.
- Using at least 3 case studies, scholars will practice managing panchakarma complications with contemporary medical approaches, justifying drug selection.
- Scholars will observe and take notes during the demonstration, paying special attention to the symptoms, and step-wise management and record the cases in logbook.
- Scholars will be grouped for role-play, where one acts as the patient and another as the healthcare provider managing conditions like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding, and dehydration. The scholar will monitor vitals, administer fluids, and stabilize the patient.
- Following each role-play, groups will conduct peer reviews to assess management effectiveness and explore alternatives.

Experiential-Learning Learning 23.4: Practice the use of life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma.

Instructions-

- Scholars will explore and enlist various life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma mentioned in Samhita.
- Scholars will demonstrate and practice the use of life-saving drugs in complications of Basti, Nasya and Raktamokshana Karma.
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions by use of life saving drugs that may arise during Basti, Nasya and Raktamokshana Karma.
- Each scenario will follow a problem-based approach to enhance clinical reasoning and decision-making skills.
- With the help the 2 case studies scholars are encouraged to gain insight about use of various life saving drugs in Basti, Nasya and Raktamokshana Karma.
- Scholars will practice emergency procedures, including IV insertion, oxygen administration, and life-saving drug dosing.
- Scholars will conduct simulated emergency scenarios involving complications during Basti, Nasya, and Raktamokshana procedures

- Faculty will demonstrate the administration of emergency drugs and interventions for conditions like hypovolemic shock, excessive bleeding, or diarrhea.
- Scholars will closely observe all clinical steps, including symptom recognition, intervention, and patient stabilization.
- Post-scenario, scholars will participate in reflective discussions to reinforce learning and clarify clinical reasoning.

Experiential-Learning Learning 23.5: Manage and record life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma

INSTRUCTIONS

- Scholars will explore and enlist various life- threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma
- Scholars will develop insight to manage and record life- threatening conditions in Basti, Nasya and Raktamokshana Karma
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions that may arise during Basti, Nasya and Raktamokshana Karma.
- Scholars will examine and assess the management and use of life saving drugs in life- threatening condition and record them in their logbooks
- With the help the 5 case studies scholars are encouraged to gain insight about the possible management of life threatening diseases and use of various life saving drugs in them.
- The faculty will demonstrate the management of these conditions in scenario or simulation on models or patients.
- Scholars will be asked to role-play, identifying potential life-threatening conditions based on the patient's symptoms.
- Discuss possible causes, and formulate step-by-step management plans, including the use of emergency ayurvedic interventions and modern life-saving techniques.

Experiential-Learning Learning 23.6: Examine, record and practice the management and use of life saving drugs in life- threatening conditions that can occur during Vaman and Virechan

INSTRUCTIONS

- Scholar will explore and enlist various life- threatening conditions that can occur during Vaman and Virechan.
- Scholars will examine and assess the possible management of life- threatening conditions.
- To evaluate and analyze the use of life saving drugs in life- threatening conditions.
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions that may arise during Vaman and Virechan.
- Scholars will examine and assess the management and use of life saving drugs in life- threatening condition and record them in their logbooks

- With the help the 2 case studies scholars are encouraged to gain insight about the possible management of life threatening diseases and use of various life saving drugs in them.
- The faculty will demonstrate the management of these conditions in scenario or simulation on models or patients.
- In a mock clinical setting, scholars will be assigned roles to assess each situation, administer emergency care, and monitor patient response.
- Discuss possible causes and formulate step-by-step management plans, including the use of emergency ayurvedic interventions and modern life-saving techniques.

Experiential-Learning Learning 23.7: Examine, record and practice the management and use of life saving drugs in life-threatening conditions that can occur during Snehan and Swedan

INSTRUCTIONS

- Scholars will explore and enlist various life- threatening conditions that can occur during Snehan and Swedan.
- Scholars will examine, record and practice the possible management of life- threatening conditions.
- To evaluate and analyze the use of life saving drugs in life- threatening conditions.
- With the help of 5 hypothetical problems given scholars are encouraged to identify and respond to life-threatening conditions that may arise during Snehan and Swedan.
- Scholars will examine and assess the management and use of life saving drugs in life- threatening condition and record them in their logbooks
- With the help the 2 case studies scholars are encouraged to gain insight about the possible management of life threatening diseases and use of various life saving drugs in them.
- The scholars will demonstrate the management of these conditions in scenario or simulation on models or patients.
- In a mock clinical setting, scholars will be assigned roles to assess each situation, administer emergency care, and monitor patient response.
- Discuss possible causes and formulate step-by-step management plans, including the use of emergency Ayurvedic interventions and modern life-saving techniques.

Modular Assessment

| Assessment | 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.

- Evaluate the scholars's ability by giving them situation regarding the emergency in Panchakarma and asking them to assess and analyse and describe the treatment protocol. (20marks)
- Assesing the scholars's ability by giving them peer reviewed article on emergency in Panchakarma and asking them to give their opinion regarding the article. (5 marks)
- Assess the scholars's clinical-decision making and emergency management skills through a stimulated Panchkarma complication that require propmt medical intervention. (20 marks)
- Viva-voce-(5 marks)

4

or

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

and

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

Module 24 : Recent Advances in Basti

Module Learning Objectives

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

1. Describe the Immunological and metabolic responses of Basti.
2. Interpret the mode of action based on recent advances in Basti
3. Discuss Gut microbiome and per rectal drug administration
4. Identify the Various Basti Dosha and state their recent advancements.

Unit 1 Immunological, metabolic response and standardization

1. Immunological and metabolic responses of Basti.
2. Standardization of Basti Karma.
3. Research thoughts on different Biomarkers in Basti:
4. Gut & Digestive Function Biomarker- Gut Microbiome Composition, Stool pH, Bowel Transit Time.

5. Inflammatory Markers- CRP, Tumor Necrosis Factor (TNF), Interleukin-6 (IL-6), ESR.
6. Metabolic Markers- FBS, HbA1c, Insulin Sensitivity.
7. Hormonal Markers- Cortisol, Thyroid Hormones, Testosterone/Estrogen/Progesterone.
8. Immune Function Markers- Immunoglobulin E, Lymphocyte Subsets (CD4+, CD8+ T cells).

References: 29

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO7 | <p>Describe the Immunological and metabolic responses of Basti.</p> <p>Describe Gut & Digestive Function Biomarker- Gut Microbiome Composition, Stool pH, Bowel Transit Time in context of Basti</p> <p>Describe Inflammatory Markers- CRP, Tumor Necrosis Factor (TNF), Interleukin-6 (IL-6), ESR in context of Basti</p> | 1 | Lecture | CK | Knows-how | L&PPT ,L&GD,JC |
| CO7 | <p>Describe Metabolic Markers- FBS, HbA1c, Insulin Sensitivity</p> <p>Describe Hormonal Markers- Cortisol, Thyroid Hormones, Testosterone/Estrogen/Progesterone</p> <p>Describe Immune Function Markers- Immunoglobulin E, Lymphocyte Subsets (CD4+, CD8+ T cells)</p> | 1 | Lecture | CK | Knows-how | JC,L&GD,L&PPT |

| | | | | | | |
|-----|---|---|---------------------------|---------|-----------|------------|
| CO7 | Examine and analyze the Immunological and metabolic responses of Basti. | 7 | Experiential-Learning24.1 | PSY-SET | Does | CBL |
| CO7 | Describe and demonstrate the Gut & Digestive Function Biomarker- Gut Microbiome Composition, Stool pH, Bowel Transit Time in context of Basti | 5 | Practical24.1 | PSY-SET | Shows-how | LRI,CBL |
| CO2 | Describe Standard Operating Procedure (SOP) of Basti | 1 | Lecture | CAN | Knows-how | L&GD,L&PPT |
| CO7 | Describe Gut Brain mechanism related to Basti Therapy. | 1 | Lecture | CC | Knows-how | L&GD,L&PPT |
| CO2 | Describe, demonstrate and record Standard Operating procedure(SOP) of Basti | 5 | Practical24.2 | PSY-SET | Shows-how | D,SIM |
| CO2 | Perform Standard Operating Procedure(SOP) of Basti | 8 | Experiential-Learning24.2 | PSY-GUD | Does | D,SIM |

Unit 2 Gut microbiome, molecular biology, drug administration through anal route

1. Gut Brain mechanism related to Basti Therapy.
2. Recent advances in per rectal drug administration.
3. Molecular biology and gut microbiome regarding per rectal drug administration.

References: 4,29

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO7 | Discuss the mode of action based on recent advances in Basti | 2 | Lecture | CAP | Knows-how | L_VC,L&PPT |

| | | | | | | |
|-----|---|---|---------------------------|---------|-----------|----------------------|
| CO7 | Discuss the Molecular biology and Gut microbiome regarding per rectal drug administration | 1 | Lecture | CE | Knows-how | L_VC,JC,L&PP T |
| CO7 | Describe and analyze the mode of action of basti based on recent advances in Basti | 5 | Practical24.3 | PSY-SET | Shows-how | SY,TBL,DIS,PL, JC |
| CO7 | Evaluate and interpret the mode of action of basti based on recent advances in Basti | 6 | Experiential-Learning24.3 | PSY-MEC | Shows-how | CBL,JC |

Unit 3 Advancement in Basti

1. Advantages and disadvantages of modified Basti Yantra.
2. Advancements in Basti Yantra, Basti Netra.
3. Management of various Basti Doshas.

References: 29

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO7 | Distinguish advantages and disadvantages of modified Basti Yantra. | 3 | Lecture | CAN | Knows-how | PAL,JC,L&GD |
| CO7 | Demonstrate and Identify the Various Basti Yantra Doshas and state their recent advancements. | 5 | Practical24.4 | PSY-SET | Shows-how | PAL,JC |
| CO7 | Explain recent advancements in Basti Yantra Doshas and methods to manage various Basti Yantra Dosha. | 5 | Experiential-Learning24.4 | PSY-MEC | Shows-how | SIM,PrBL |

Practical Training Activity

Practical Training 24.1

Describe and demonstrate the Gut & Digestive Function Biomarker- Gut Microbiome Composition, Stool pH, Bowel Transit Time in context of Basti

Demonstration by the faculty-

- Faculty will guide the scholars to describe and record different : Gut & Digestive Function Biomarker in context of Basti
- Develop insight to analyse and interpret different : Gut & Digestive Function Biomarker in context of Basti
- Scholars will gain insight about the different Gut & Digestive Function Biomarkers in Basti with the help of critical reading of 2 research articles.
- Scholars with the help of 2 cases will gain insight about the different Gut & Digestive Function Biomarkers in Basti.
- Scholars will be given reflective writing assignment.

Practical Training 24.2

Describe, demonstrate and record Standard Operating procedure(SOP) of Basti

Demonstration by the faculty-

- Faculty will describe and demonstrate the standard operating procedure of Basti ensuring consistency in therapeutic practice.
- Practice and perform the preparation of Basti following a standardized protocol and accurately record each step to ensure repeatability and precision in clinical settings.
- Create and plan standardization of Basti procedure.
- During this hands-on practice on 10 cases, scholars will complete a structured checklist or Basti preparation log, documenting the specific quantities of ingredients, mixing methods, timing, and any variations observed during the preparation.
- Scholars will learn to administer Basti according to SOP in 10 patients and document it in journal.

Practical Training 24.3

Describe and analyze the mode of action of basti based on recent advances in Basti

Demonstration by the faculty-

- Faculty should encourage the scholars to explore the relationship between mode of action and enteric nervous system in patients undergoing Basti therapy.
- Critical analysis of mode of action of Basti in contemporary science and ayurveda.
- Scholars will gain insight about the mode of action of Basti with the help of critical reading of 2 research articles and Ayurvedic Samhita.

- A Symposium will be arranged for scholars. In the symposium scholars will compile, present and discuss the mode of action of basti.

Practical Training 24.4

Demonstrate and Identify the Various Basti Yantra Doshas and state their recent advancements.

Demonstration by the Faculty-

- Faculty should guide the scholars to identify and demonstrate different types of Basti Yantra Dosha and discuss their clinical significance and diagnosis.
- Diagnose and state the Basti yantra Dosha in practical case studies and explore recent advancements in the management of these doshas.
- Scholars are encouraged to identify the various Basti Doshas like Basti Netra Dosha, Basti Putaka Dosha, Basti Daata Dosha through demonstration-based teaching and learning.
- Scholars will engage in a guided discussion on how these doshas manifest during Basti therapy, focusing on their signs and clinical features.
- Demonstrate and practice the management of various Basti Dosha in atleast 3 cases.
- Scholars will gain insight about various Basti yantra dosha and its management with respect to recent advancements.

Experiential Learning Activity

Experiential-Learning Learning 24.1:

Examine and analyze the Immunological and metabolic responses of Basti

INSTRUCTIONS-

- Evaluate and analyze the immunological responses to Basti therapy by measuring specific immune markers in subjects before and after treatment.
- Observe and analyze the metabolic responses to Basti therapy by monitoring key physiological parameters.
- Engage scholars in actively observing and recording changes in gut microbiome composition, stool pH, and bowel transit time pre- and post-Basti administration.
- Scholars with 2 case studies should evaluate and present the noting about gut microbiome during experiential sessions.

Experiential-Learning Learning 24.2:

Perform Standard Operating Procedure(SOP) of Basti

INSTRUCTIONS-

- Enable scholars to perform the Standard Operating Procedure of Basti by practicing each step .
- Perform and document the Standard Operating Procedure of Basti
- Observe and document the steps involved in Basti standardization.
- Practice Basti administration in 10 cases through Standard Operating Procedure(SOP)
- Actively perform the preparation of ingredients, precise measurements, consistency of the dravya (medicine), and the method of administration of Basti through case-based learning, bed side learning methods.

Experiential-Learning Learning 24.3:

Evaluate and interpret the mode of action based on recent advances in Basti.

INSTRUCTIONS-

- Facilitate scholars understanding of the mode of action of Basti through the thorough examination of recent researches and case studies
- Evaluate and interpret the practical application of Basti techniques while interpreting the underlying mechanisms of action according to recent advances.
- With the help of critical reading of 2 research articles scholars will develop insight about scientific advancements regarding the mode of action of Basti.
- With the help of 3 case studies scholars will interpret and discuss about recent scientific advancements regarding mode of action of Basti.

Experiential-Learning Learning 24.4:

Explain recent advancements in Basti Yantra Doshas and methods to manage various Basti Yantra Dosha.

INSTRUCTIONS-

- Showcase recent advancements in Basti Yantra dosha.
- Enable scholars to apply theoretical knowledge in a practical setting by managing different Basti Yantra Doshas.

- Compare classical texts with new evidence and trends in Basti Yantra Dosha.
- Scholars will study and analyze atleast 5 case studies of Basti Yantra Dosha, its recent advancements and its management. Scholars should interpret and document it.

Modular Assessment

Assessment

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.

- Assesing the scholars's ability by giving them peer reviewed article and asking them to give their opinion regarding the article. (15marks)
- Assesing the scholars's ability by giving them the topic and asking them to prepare power point presentation. (15marks)
- Assessing the scholars's ability by asking them to prepare the chart regarding concerned topic.(10 marks)
- Viva-voce-10 marks

4

or

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

and

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

Paper No : 4(Naimittika Panchakarma Siddhi)

Semester No : 3

Module 25 : Applied Panchakarma in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa

Module Learning Objectives

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

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa.
3. Develop clinical skills through hands-on procedures, critical analysis and customised Panchakarma procedures in these diseases.
4. Develop decision-making skills for the administration of Panchakarma procedures and the management of possible complications at the time of execution.

Unit 1 Dhatusravan sansthan

1. Samprapti Vigyan and Vyadhi Vinishchaya in Dhatusravan sansthan
2. Procedural management of Dhatusravan sansthan vikara
3. Administration of panchakarma in Dhatusravan sansthan vikara
4. Specialised panchakarma procedure in Dhatusravan sansthan vikara

References: 1,7,9

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO4 | Interprete pathological characteristics, differential diagnosis of Dhatusravan sansthan (Hormonal imbalance in male and female) and its treatment principles with Panchakarma protocols. Knowledge | 4 | Lecture | CAP | Knows-how | L&PPT |

| | | | | | | |
|---------|--|---|---------------------------|---------|-----------|-------------|
| | and interpretation of emerging diseases like PCOS, Male infertility, female infertility, menopausal syndrom, Thyroid dysfunction, Autoimmune Thyroiditis with refence to Dhatu formation and agnimandya, . | | | | | |
| CO4 | Examine the patient to judge suitability for Panchakarma procedures in Dhatustravan sansthan disease patients | 3 | Practical25.1 | PSY-GUD | Shows-how | D-BED,PT |
| CO4 | Administer of Panchakarma protocols in Dhatustravan sansthan disease patients | 3 | Practical25.2 | PSY-GUD | Does | D-BED |
| CO4 | Assess and analyse the efficacy of selected Panchakarma protocol in Dhatustravan sansthan disease patients | 3 | Experiential-Learning25.1 | PSY-MEC | Does | CBL,PrBL |
| CO4 | Develop customized Panchakarma procedures in Dhatustravan sansthan disease patients | 3 | Experiential-Learning25.2 | CS | Knows-how | PBL,BS,CBL |
| CO4 | Illustrate customized Panchakarma procedures in Dhatustravan sansthan (Hormonal imbalance in male and female) | 4 | Experiential-Learning25.3 | CE | Shows-how | PBL,CBL |
| CO4 | Illustrate customized Panchakarma procedures in Chittavikara | 1 | Experiential-Learning25.4 | PSY-ORG | Knows-how | CBL,PBL,JC |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Shwasa patients | 3 | Practical25.3 | PSY-GUD | Shows-how | D,D-BED,CBL |

Unit 2 Chittavikara

1. Samprapti Vigyan and Vyadhi Vinishchaya of Chittavikara
2. Principles of management of Chittavikara
3. Procedural management of of Chittavikara
4. Administration of panchakarma in of Chittavikara
5. Specialized panchakarma procedure in of Chittavikara

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|---|---|--|--|--|---|
| CO4 | Interpret pathological characteristics, differential diagnosis of Chittavikara in respect to Psychological diseases, personality disorders and unmad spectrum of diseases and its treatment principles with Panchakarma protocols. Knowledge and interpretation of emerging diseases. | 2 | Lecture | CAP | Knows-how | PL,BL,L&PPT |
| CO4 | Examine the patient to judge suitability for Panchakarma procedures in Chittavikara patients | 2 | Practical25.4 | PSY-GUD | Shows-how | CBL,D-BED |
| CO4 | Administer of Panchakarma protocols in Chittavikara | 2 | Practical25.5 | PSY-GUD | Does | PT,D-BED |
| CO4 | Assess and analyse the efficacy of selected Panchakarma protocol in Chittavikara | 2 | Experiential-Learning25.5 | PSY-GUD | Does | PrBL,BL,CBL,JC |
| CO4 | Develop customized Panchakarma procedures in Chittavikara | 1 | Experiential-Learning25.6 | PSY-ORG | Knows-how | PBL,PL,CBL |

Unit 3 Kasa

1. Samprapti Vigyan and Vyadhi Vinishchaya in Kasa
2. Principles of management
3. Procedural management of Kasa
4. Administration of panchakarma in Kasa
5. Specialised panchakarma procedure in Kasa

References: 1,7

| 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 | 3D Lecture/ Practical | 3E Domain/ | 3F Level (Does/Show | 3G Teaching |
|----------------------------------|--|------------------------|--------------------------------------|-----------------------|------------------------------------|------------------------|
|----------------------------------|--|------------------------|--------------------------------------|-----------------------|------------------------------------|------------------------|

| | learning) session, the students should be able to) | learning Hours | Training/ Experiential Learning | Sub Domain | s how/Knows how/Know) | Learning Methods |
|---------|---|----------------|---------------------------------|------------|-----------------------|------------------|
| CO4 | Interprete pathological characteristics, differential diagnosis of Kasa with special reference to Bronchitis, Bronchiectasis and ILD (interstitial lung disease) and its treatment principles with Panchakarma protocols. | 2 | Lecture | CAP | Knows-how | L,PL,W |
| CO4 | Examine the patient to judge suitability for Panchakarma procedures in Kasa patients | 2 | Practical25.6 | PSY-GUD | Shows-how | D-BED,CD, CBL |
| CO4 | Administer of Panchakarma protocols in Kasa | 2 | Practical25.7 | PSY-GUD | Does | CBL,PT,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma Management in Kasa | 1 | Experiential-Learning25.7 | PSY-MEC | Knows-how | PL,CBL,JC,PBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Kasa | 1 | Experiential-Learning25.8 | CAN | Knows-how | PAL,DIS,BS |
| CO4,CO7 | Illustrate customized Panchakarma procedures in Kasa | 2 | Experiential-Learning25.9 | CE | Shows-how | PBL,CBL |

Unit 4 Shwasa

1. Samprapti Vigyan and Vyadhi Vinishchaya in Shwasa
2. Principles of management
3. Procedural management of Shwasa
4. Administration of panchakarma in Shwasa
5. Specialized panchakarma procedure in Shwasa

References: 1,7

| 3A Course Outcome | 3B Learning Objective (At the end of the (lecture/practical training /experiential | 3C Notional learning Hours | 3D Lecture/ Practical Training/ | 3E Domain/ Sub Domain | 3F Level (Does/Shows | 3G Teaching Learning Methods |
|-------------------|--|----------------------------|---------------------------------|-----------------------|----------------------|------------------------------|
|-------------------|--|----------------------------|---------------------------------|-----------------------|----------------------|------------------------------|

| | learning) session, the students should be able to) | | Experiential Learning | | how/Knows how/Know) | |
|---------|--|---|----------------------------|---------|---------------------|----------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Shwasa with special reference to Bronchial asthma, COPD, Pneumonia and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 2 | Lecture | CAP | Know | TUT,PER |
| CO4,CO7 | Administer Panchakarma treatment in Shwasa | 3 | Practical25.8 | PSY-GUD | Does | CBL,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma protocol in Shwasa | 4 | Experiential-Learning25.10 | PSY-MEC | Does | JC,CBL |
| CO4,CO7 | Develop and Evaluate customized Panchakarma procedures in Shwasa | 4 | Experiential-Learning25.11 | PSY-MEC | Does | CBL,PrBL |

Practical Training Activity

Practical Training 25.1 Examination of Patient for Panchakarma in Dhatushravan sansthan disease patients

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 25.2 Application of Panchakarma in Dhatushravan sansthan disease patients

Demonstration by the faculty

- After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the demonstrator followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 25.3 judge suitability of Patient for Panchakarma procedures in Shwasa

Demonstration by Faculty:

- Instructions for Hands on training/Guided response:
- The students will be instructed to observe the bedside examination by the instructor, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas will be demonstrated by instructor and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The instructor will affirm the suitability of the patient for procedural management.
- After identifying suitability of patients for procedural management,
- Faculty will demonstrate particular procedure as per the standard operative method.

Practical Training 25.4 Examination to fix Panchakarma procedures in Chittavikara

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Practical Training 25.5 Perform Panchakarma protocols in Chittavikara

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 25.6 Examination to fix the Panchakarma procedures in Kasa

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 25.7 Application of Panchakarma procedures in Kasa

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 25.8 Panchakarma in Shwasa

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Experiential Learning Activity

Experiential-Learning Learning 25.1: Analysis of efficacy of Panchakarma protocol in Dhatustravan sansthan disease patients

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 25.2: Design Panchakarma procedures in Dhatustravan sansthan disease patients

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 25.3: Customized Panchakarma procedures in Dhaturavan sansthan (Hormonal imbalance in male and female)

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication.

Experiential-Learning Learning 25.4: Customized Panchakarma procedures in Chittavikara

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions

- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Instructions :

- The instructor shall clarify the goal of session
- The instructor will guide about appropriate search strategy. Scholars will be directed to identify high impact, peer reviewed journals and research articles on this particular disease and its management well in advance preferably 1-2 weeks before the discussion
- The instructor will assign roles to the participants such as presenter, critic, clinician, facilitator etc
- The article will be discussed structuring and giving emphasis to population, intervention, comparison, study design, results, discussion, strength and weakness, relevance etc
- The instructor will facilitate the discussion by asking targeted questions regarding the generalisability of the findings and correlations with existing established protocols
- The instructor will summarize the points with critical insights, identify the knowledge gap and future reading
- Multiple articles will be discussed with peers and presented in the departmental seminars.

Experiential-Learning Learning 25.5: Analysis of efficacy of Panchakarma protocol in Chittavikara

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 25.6: Develop customized Panchakarma procedures in Chittavikara

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 25.7: Assessment and analysis of Panchakarma Management in Kasa

Instructions

- Student has to assess the condition based on the disease specific subjective and objective parameters.
- Evaluate the changes in parameters after procedural management in the different patients.
- Scholar will compare the results with that of previous data.
- Students will be instructed to prepare a project on procedural management of the disease.
- The scholars will discuss the efficacy of the procedural management in the department.
- Scholars will identify the journals and research articles on the particular disease and procedure.
- Selected articles will be discussed with peers and presented in the departmental seminars.

Experiential-Learning Learning 25.8: Customized Panchakarma procedures in Kasa

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome

- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 25.9: Panchakarma procedures in Kasa

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 25.10: Panchakarma procedures in Shwasa

Instructions

- Scholars will examine and document a new case.
- Scholars will debate about the procedural management needful in the case.
- The scholars will design a customized procedural protocol for the patients.
- The scholars will execute the developed protocol in the case.
- Scholars will evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- Scholars will be assigned with the mentioned activity by the instructor in minimum 5 patients.

Experiential-Learning Learning 25.11: Panchakarma protocol in Shwasa

Instructions

- Student has to assess the condition based on the disease specific subjective and objective parameters.
- Evaluate the changes in parameters after procedural management in the different patients.
- Scholar will compare the results with that of previous data.
- Students will be instructed to prepare a project on procedural management of the disease.
- The scholars will discuss the efficacy of the procedural management in the department.
- Instructions for Journal club:
- Scholars will identify the journals and research articles on the particular disease and procedure.
- Selected articles will be discussed with peers and presented in the departmental seminars.

Instructions:

- The instructor shall clarify the goal of session
- The instructor will guide about appropriate search strategy. Scholars will be directed to identify high impact, peer reviewed journals and research articles on this particular disease and its management well in advance preferably 1-2 weeks before the discussion
- The instructor will assign roles to the participants such as presenter, critic, clinician, facilitator etc
- The article will be discussed structuring and giving emphasis to population, intervention, comparison, study design, results, discussion, strength and weakness, relevance etc
- The instructor will facilitate the discussion by asking targeted questions regarding the generalisability of the findings and correlations with existing established protocols
- The instructor will summarize the points with critical insights, identify the knowledge gap and future reading
- Multiple articles will be discussed with peers and presented in the departmental seminars.

Modular Assessment

Assessment

Hour

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

4

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa.
3. Develop clinical skills through hands-on procedures, critical analysis and customised Panchakarma procedures in these diseases.
4. Develop decision-making skills for the administration of Panchakarma procedures and the management of possible complications at the time of execution.

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential work, such as portfolio/ reflections/ presentations, can be taken as an assessment. (25 Marks)

Module 26 : Panchakarma treatment in Arsha,Amlapitta,Udawarta,Grahani and Udara

Module Learning Objectives

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

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in Arsha,Amlapitta,Udawarta,Grahani and Udara
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Arsha

1. Samprapti Vigyan and Vyadhi Vinishchaya in Arsha
2. Principles of management

3. Procedural management of Arsha
4. Administration of panchakarma in Arsha
5. Specialized panchakarma procedure in Arsha

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Arsha (Haemorrhoids) and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 2 | Lecture | CAN | Knows-how | L,L_VC,L &PPT |
| CO4,CO7 | Discuss the patient to judge suitability for Panchakarma procedures in Arsha patients | 1 | Practical26.1 | PSY-GUD | Shows-how | D-BED |
| CO4,CO7 | Panchakarma treatment in Arsha | 1 | Practical26.2 | PSY-GUD | Does | PT,D- BED,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma protocol in Arsha | 2 | Experiential- Learning26.1 | PSY-MEC | Does | PBL,CBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Arsha | 2 | Experiential- Learning26.2 | CAN | Knows-how | CBL,BS |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Arsha | 2 | Experiential- Learning26.3 | PSY-MEC | Shows-how | PBL,CBL |

Unit 2 Amlapitta

1. Samprapti Vigyan and Vyadhi Vinishchaya in Amlapitta
2. Principles of management
3. Procedural management of Amlapitta
4. Administration of panchakarma in Amlapitta

5. Specialized panchakarma procedure in Amlapitta

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Amlapitta in respect to, Peptic ulcers, Non ulcer dyspepsia, and GERD and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements in gastroenterology. | 1 | Lecture | CAN | Knows-how | L&PPT ,DIS,FC |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Amlapitta patients | 1 | Practical26.3 | PSY-GUD | Shows-how | PAL,D- BED |
| CO4,CO7 | Administer of established Panchakarma treatment in Amlapitta | 1 | Practical26.4 | PSY-GUD | Does | PT,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma protocol in Amlapitta | 1 | Experiential- Learning26.4 | CE | Does | CBL,JC |
| CO4,CO7 | Develop customized Panchakarma procedures in Amlapitta | 1 | Experiential- Learning26.5 | CE | Knows-how | PL,CBL |

Unit 3 Udawarta

1. Samprapti vighatana of Udawarta
2. Principles of management
3. Procedural management of Udawarta
4. Administration of panchakarma in Udawarta with comorbidity
5. Specialized panchakarma procedure in Udawarta

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Describe differential diagnosis of Udawarta with special reference to Functional dyspepsia, GERD, IBS, Urinary retention, psychogenic anuria, Gastroparesis, aerophagia and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 3 | Lecture | CAP | Knows-how | L_VC,L&PPT |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Udawarta | 3 | Practical26.5 | PSY-GUD | Shows-how | CBL,D-BED |
| CO4,CO7 | Administration of established Panchakarma treatment in Udawarta | 3 | Practical26.6 | PSY-GUD | Does | PT,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Udawarta | 2 | Experiential-Learning26.6 | PSY-MEC | Does | CBL,JC |
| CO4,CO7 | Develop customized Panchakarma procedures in Udawarta | 2 | Experiential-Learning26.7 | CAN | Knows-how | BS,CBL |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Udawarta | 2 | Experiential-Learning26.8 | CE | Shows-how | PAL,PL,CBL |

Unit 4 Grahani

1. Samprapti vighatana of Grahani
2. Principles of management
3. Procedural management of Grahani
4. Administration of panchakarma in Grahani with comorbidity
5. Specialized panchakarma procedure in Grahani

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|--|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Intereprete pathological characteristics, differential diagnosis of Grahani with special reference to irritable bowel syndrome and Inflammatory Bowel disease and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements in Irritable Bowel disease, Crohn's disease, Ulcerative collitis, colon cancer | 2 | Lecture | CAN | Knows-how | L&PPT ,FC |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Grahani patients | 4 | Practical26.7 | PSY-GUD | Shows-how | D-BED |
| CO4,CO7 | Administration of established Panchakarma treatment in Grahani | 4 | Practical26.8 | PSY-GUD | Does | PT,D- BED |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Grahani | 4 | Experiential- Learning26.9 | PSY-MEC | Does | JC,CBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Grahani | 2 | Experiential- Learning26.10 | CAP | Knows-how | BS,JC |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Grahani | 2 | Experiential- Learning26.11 | CE | Shows-how | CBL,PL,P AL |
| Unit 5 Udara <ol style="list-style-type: none"> 1. Samprapti vighatana of Udara 2. Principles of management 3. Procedural management of Udara 4. Administration of panchakarma in Udara with comorbidity 5. Specialized panchakarma procedure in Udara | | | | | | |

| References: 1,7 | | | | | | |
|---|--|---|--|--|--|---|
| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
| CO4,CO7 | Discuss differential diagnosis of Udara in respect Ascites and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements in splenomegaly, hepatomegaly, ascitic fluid analysis, Sonographical interpretation, various scans to assess the conditions of patients. | 2 | Lecture | CAP | Knows-how | FC,BL |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Udara patients | 1 | Practical26.9 | PSY-GUD | Shows-how | PT,D-BED |
| CO4,CO7 | Discuss Management of Panchakarma treatment in Udara | 1 | Practical26.10 | PSY-GUD | Does | D-BED |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Udara | 2 | Experiential-Learning26.12 | PSY-MEC | Does | JC,CBL |
| CO4,CO7 | Develop and Evaluate customized Panchakarma procedures in Udara | 2 | Experiential-Learning26.13 | PSY-MEC | Shows-how | CBL,BS |
| Practical Training Activity | | | | | | |
| Practical Training 26.1 Panchakarma procedures in Arsha | | | | | | |
| Demonstration by the faculty | | | | | | |
| <ul style="list-style-type: none"> • After understanding the core concepts of examination, • The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated. • Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated. | | | | | | |

- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 26.2 Panchakarma in Arsha

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 5 cases

Practical Training 26.3 Panchakarma procedures in Amlapitta

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 26.4 Panchakarma treatment in Amlapitta

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic

- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 26.5 Panchakarma procedures in Udawarta

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 26.6 Panchakarma treatment in Udawarta

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 26.7 Panchakarma treatment in Grahani

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 26.8 Panchakarma procedures in Grahani

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 26.9 Panchakarma treatment in Udara

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.

- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 10 cases

Practical Training 26.10 Panchakarma procedures in Udara

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Experiential Learning Activity

Experiential-Learning Learning 26.1: Panchakarma protocol in Arsha

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 26.2: Panchakarma procedures in Arsha

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 26.3: Panchakarma procedures in Arsha

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.

Experiential-Learning Learning 26.4: Panchakarma protocol in Amlapitta

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion

- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 26.5: Panchakarma procedures in Amlapitta

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 26.6: Panchakarma in Udawarta

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.

- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 26.7: Panchakarma procedures in Udawarta

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 26.8: Panchakarma procedures in Udawarta

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 26.9: Panchakarma in Grahani

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 26.10: Panchakarma procedures in Grahani

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 26.11: Panchakarma procedures in Grahani

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 26.12: Panchakarma in Udara

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 26.13: Panchakarma procedures in Udara

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches

- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Modular Assessment

Assessment

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.

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in **Arsha, Amlapitta, Udawarta, Grahani and Udara**
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

4

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Semester No : 4

Module 27 : Applied Panchakarma in selected diseases of Raktadushti

Module Learning Objectives

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

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in selected diseases of Raktadushti
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Kustha (Mandala, Ekakustha, Vicharchika, Vipadika, Kitibha, Sidhma), Shwitra, Sheetapitta Samprapti Vigyan and Vyadhi Vinishchaya, Principles of management, Procedural management, Administration of panchakarma, Specialized panchakarma procedure in,

1. Mandala Kushtha
2. Ekakustha
3. Vicharchika
4. Vipadika
5. Kitibha Kushtha
6. Sidhma Kushtha
7. Shwitra
8. Sheetapitta

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
|----------------------------------|--|---|--|--|--|---|

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|-------------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Kustha (Mandala, Ekakustha, Vicharchika, Vipadika, Kitibha, Sidhma), Shwitra, Sheetapitta with special reference to various skin disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements in diagnostic tools in various skin diseases, Psoriasis, different dermatitis, Herpes zoster, Pamphigus vulgaris, Atopic dermatitis, Lichen planus. | 4 | Lecture | CAP | Knows-how | FC,BL |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in selected skin diseases | 3 | Practical27.1 | PSY-GUD | Shows-how | D,D-BED,PAL |
| CO4,CO7 | Provide established Panchakarma treatment in selected skin diseases | 3 | Practical27.2 | PSY-GUD | Does | D,PT |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in selected skin diseases | 3 | Experiential-Learning27.1 | PSY-MEC | Does | CBL,PBL |
| CO4,CO7 | Develop customized Panchakarma procedures in selected skin diseases | 3 | Experiential-Learning27.2 | CAN | Knows-how | PAL,BS |
| CO4,CO7 | Evaluate customized Panchakarma procedures in selected skin diseases | 4 | Experiential-Learning27.3 | CE | Shows-how | PAL,PL |

Unit 2 Vatashonita

1. Samprapti Vigyan and Vyadhi Vinishchaya in Vatashonita
2. Principles of management
3. Procedural management of Vatashonita
4. Administration of panchakarma in Vatashonita
5. Specialized panchakarma procedure in Vatashonita

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Vatashonita in respect to Rheumatoid arthritis, Gout, SLE, Mixed connective disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 2 | Lecture | CAP | Know | FC,L&PP T |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Vatashonita patients | 2 | Practical27.3 | PSY-GUD | Knows-how | D- BED,L_V C |
| CO4,CO7 | Provide established Panchakarma treatment in Vatashonita | 2 | Practical27.4 | PSY-GUD | Does | PT,D- BED |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Vatashonita | 2 | Experiential- Learning27.4 | PSY-MEC | Does | CBL,IBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Vatashonita | 1 | Experiential- Learning27.5 | CAN | Knows-how | JC,BS |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Vatashonita | 1 | Experiential- Learning27.6 | CE | Shows-how | CBL,BS,D A |

Unit 3 Visarpa

1. Samprapti Vigyan and Vyadhi Vinishchaya in Visarpa
2. Principles of management
3. Procedural management of Visarpa
4. Administration of panchakarma in Visarpa
5. Specialized panchakarma procedure in Visarpa

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Visarpa with special reference to Herpes Zoster, Bullous Pamphigus, Erysipelas and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 2 | Lecture | CAP | Knows-how | L_VC,L&PPT |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Visarpa patients | 2 | Practical27.5 | PSY-GUD | Shows-how | PAL,D-BED |
| CO4,CO7 | Administer of established Panchakarma treatment in Visarpa | 2 | Practical27.6 | PSY-GUD | Does | PT,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Visarpa | 1 | Experiential-Learning27.7 | PSY-GUD | Does | PBL,CBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Visarpa | 1 | Experiential-Learning27.8 | CAN | Knows-how | PAL,BS,I BL |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Visarpa | 2 | Experiential-Learning27.9 | CE | Shows-how | JC,BS |

Unit 4 Pandu-kamala

1. Samprapti Vigyan and Vyadhi Vinishchaya in Pandu-Kamala
2. Principles of management of Blood disorders, Liver diseases in detail
3. Procedural management of Pandu-Kamala
4. Administration of panchakarma in Pandu-Kamala
5. Specialized panchakarma procedure in Pandu-Kamala

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Gain insight about pathological characteristics, differential diagnosis of Pandu- Kamala with special reference to Anaemia, Jaundice, Liver disorders and various blood disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements in Liver diseases and blood disorders. | 2 | Lecture | CAN | Knows-how | BL,BS |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Pandu- Kamala patients | 3 | Practical27.7 | PSY-GUD | Shows-how | D-BED,PT |
| CO4,CO7 | Administer Panchakarma treatment in Pandu- Kamala | 3 | Practical27.8 | PSY-GUD | Does | D-BED |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Pandu- Kamala | 4 | Experiential-Learning27.10 | PSY-GUD | Does | PBL,CBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Pandu- Kamala | 4 | Experiential-Learning27.11 | CAN | Knows-how | BS,JC,PA L |

Practical Training Activity

Practical Training 27.1 Examination of the patient to judge suitability for Panchakarma procedures in selected skin diseases

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator followed by students performing the same activity relevant to the condition associated.

- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 27.2 Panchakarma treatment in selected skin diseases

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Practical Training 27.3 Examination of the patient to judge suitability for Panchakarma procedures in Vatashonita patients

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 27.4 Panchakarma treatment in Vatashonita

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.

- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 27.5 Examination for Panchakarma procedures in Visarpa

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 27.6 Panchakarma treatment in Visarpa

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 27.7 Panchakarma procedures in Pandu- Kamala patients

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 27.8 Panchakarma treatment in Pandu- Kamala

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Experiential Learning Activity

Experiential-Learning Learning 27.1: Panchakarma in selected skin diseases

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.

- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 27.2: Panchakarma procedures in selected skin diseases

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 27.3: Panchakarma procedures in selected skin diseases

Instruction

- At the start of the session, the scholars are triggered either by a real case or simulated case, experimental data, video clips, articles, experiments etc
- Among scholars, one will be selected as the chair and another person as scribe to record the discussion
- The chair will read out the scenario, or if it is a real case a clinical history will be presented
- The group will discuss and unclear or unfamiliar terms will be clarified
- The main clinical issue will be identified by the group
- The scholars will be turned to self-directed learning about the problem
- Each scholar will research about the case through all resources
- Scholars regroup and share their findings

- The scholars will again visit the case and prepare a panchakarma protocol for the case
- The instructor will act as a facilitator and not content expert

Experiential-Learning Learning 27.4: Panchakarma in Vatashonita

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 27.5: Panchakarma procedures in Vatashonita

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 27.6: Panchakarma procedures in Vatashonita

Instructions

- After understanding the core concepts of examination,
- The Scholars will be instructed to observe the bedside examination by the instructor, followed by Scholars performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by instructor to identify avastha of the patient and the Scholars will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The instructor will affirm the suitability of the patient for procedural management.
- Multiple cases will be examined by the scholars

Experiential-Learning Learning 27.7: Panchakarma procedures in Visarpa

Instructions

- Before playing video, The instructor will clearly outline what learners should be able to do after watching the video
- The instructor will draft a script and organise the activity into logical sections
- The instructor will explain step by step the case examinations in video including both modern and ayurvedic criteria
- The instructor will analyse the clinical findings in the video of previous cases
- The instructor shall summarize the key concepts covered and give inputs for further improvisation

Experiential-Learning Learning 27.8: Panchakarma procedures in Visarpa

Instructions

- The scholars will execute the developed protocol in the case.
- Scholars will evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.

Experiential-Learning Learning 27.9: Panchakarma in Visarpa

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 27.10: Panchakarma in Pandu- Kamala

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 27.11: Panchakarma procedures in Pandu- Kamala

Instructions

- The instructor shall clarify the goal of session

- The instructor will guide about appropriate search strategy. Scholars will be directed to identify high impact, peer reviewed journals and research articles on this particular disease and its management well in advance preferably 1-2 weeks before the discussion
- The instructor will assign roles to the participants such as presenter, critic, clinician, facilitator etc
- The article will be discussed structuring and giving emphasis to population, intervention, comparison, study design, results, discussion, strength and weakness, relevance etc
- The instructor will facilitate the discussion by asking targeted questions regarding the generalisability of the findings and correlations with existing established protocols
- The instructor will summarize the points with critical insights, identify the knowledge gap and future reading
- Multiple articles will be discussed with peers and presented in the departmental seminars.

Modular Assessment

Assessment

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.

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in **selected diseases of Raktadushti**
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

4

(40marks)

- Including Viva-voce (10 marks)

Or

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

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

Module 28 : Applied Panchakarma in Sthaulya, Karshya, Prameha & Hridroga

Module Learning Objectives

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

- Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
- Explain Procedural management in Sthaulya, Karshya, Prameha & Hridroga
- Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
- Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Sthaulya-Karshya

- Samprapti Vigyan and Vyadhi Vinishchaya in Sthaulya-Karshya
- Principles of management
- Procedural management of Sthaulya-Karshya
- Administration of panchakarma in Sthaulya-Karshya
- Specialized panchakarma procedure in Sthaulya-Karshya

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Sthaulya -Karshya with special reference to Obesity, endocrinal disorders and Malnutrition and its treatment principles with | 4 | Lecture | CAP | Knows-how | FC,IBL |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|----------|
| | Panchakarma protocols. Knowledge and interpretation of recent advancements. | | | | | |
| CO4,CO7 | Administer Panchakarma procedures in Sthaulya - Karshya | 3 | Practical28.1 | PSY-GUD | Shows-how | D-BED |
| CO4,CO7 | Administer Panchakarma treatment in Sthaulya - Karshya | 3 | Practical28.2 | PSY-GUD | Does | D-BED,PT |
| CO4,CO7 | Administer Panchakarma in Sthaulya -Karshya | 3 | Experiential-Learning28.1 | PSY-MEC | Does | CBL,PBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Sthaulya -Karshya | 3 | Experiential-Learning28.2 | CAN | Knows-how | JC,BS |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Sthaulya -Karshya | 4 | Experiential-Learning28.3 | PSY-GUD | Shows-how | CBL,PL |

Unit 2 Prameha

1. Samprapti Vigyan and Vyadhi Vinishchaya in Prameha
2. Principles of management
3. Procedural management of Prameha
4. Administration of panchakarma in Prameha
5. Specialized panchakarma procedure in Prameha

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO4,CO7 | interpret pathological characteristics, differential diagnosis of Prameha in respect to Diabetes Mellitus and its treatment principles with Panchakarma protocols. Knowledge and | 5 | Lecture | CAN | Knows-how | BL,FC |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|----------|
| | interpretation of recent advancements in various Non communicable diseases, Metabolic syndrome, obesity, HTN etc. | | | | | |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Prameha patients | 5 | Practical28.3 | PSY-GUD | Shows-how | D-BED,PT |
| CO4,CO7 | Administer established Panchakarma treatment in Prameha | 5 | Practical28.4 | PSY-GUD | Does | PAL,D |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma in Sthaulya -Karshya | 5 | Experiential-Learning28.4 | PSY-MEC | Does | SDL |
| CO4,CO7 | Develop customized Panchakarma procedures in Prameha | 5 | Experiential-Learning28.5 | CAN | Knows-how | SDL |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Prameha | 5 | Experiential-Learning28.6 | CE | Shows-how | SDL |

Unit 3 Hridroga

1. Samprapti Vigyan and Vyadhi Vinishchaya in Hridroga
2. Principles of management
3. Procedural management of Hridroga
4. Administration of panchakarma in Hridroga
5. Specialized panchakarma procedure in Hridroga

References: 1,7

| 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 |
|----------------------------------|--|---|--|--|---|---|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Hridroga with special reference to cardiovascular diseases and its treatment | 1 | Lecture | CAP | Knows-how | FC,L |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|------------|
| | principles with Panchakarma protocols. Knowledge and interpretation of recent advancements in ECG, Doppler, Angiography, CABG, Angioplasty, Various stents. | | | | | |
| CO4,CO7 | Examine the patient to judge suitability for Panchakarma procedures in Hridroga patients | 2 | Practical28.5 | PSY-GUD | Shows-how | L_VC,D-BED |
| CO4,CO7 | Administer established Panchakarma treatment in Hridroga | 2 | Practical28.6 | PSY-GUD | Does | D,D-BED |
| CO4,CO7 | Develop customized Panchakarma procedures in Hridroga | 1 | Experiential-Learning28.7 | CE | Shows-how | BS |

Practical Training Activity

Practical Training 28.1 General and systemic examination of the patient to judge suitability for Panchakarma procedures in Sthaulya - Karshya patients

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 28.2 Perform established Panchakarma treatment in Sthaulya -Karshya

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Practical Training 28.3 Examination to judge suitability for Panchakarma procedures in Prameha

Demonstration by the faculty

- After identifying suitability of patients for procedural management,
- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 28.4 Panchakarma treatment in Prameha

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 28.5 Examination to judge suitability for Panchakarma procedures in Hridroga

Demonstration by the faculty

- After understanding the core concepts of examination,
- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Practical Training 28.6 Panchakarma treatment in Hridroga

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Experiential Learning Activity

Experiential-Learning Learning 28.1: Assess and analyse the efficacy of selected Panchakarma in Sthaulya -Karshya

Instruction

- At the start of the session, the scholars are triggered either by a real case or simulated case, , experimental data, video clips, articles, experiments etc
- Among scholars, one will be selected as the chair and another person as scribe to record the discussion
- The chair will read out the scenario, or if it is a real case a clinical history will be presented
- The group will discuss and unclear or unfamiliar terms will be clarified
- The main clinical issue will be identified by the group
- The scholars will be turned to self-directed learning about the problem
- Each scholar will research about the case through all resources
- Scholars regroup and share their findings
- The scholars will again visit the case and prepare a panchakarma protocol for the case
- The instructor will act as a facilitator and not content expert

Experiential-Learning Learning 28.2: Panchakarma procedures in Sthaulya -Karshya

Instructions

- The instructor shall clarify the goal of session
- The instructor will guide about appropriate search strategy. Scholars will be directed to identify high impact, peer reviewed journals and research articles on this particular disease and its management well in advance preferably 1-2 weeks before the discussion
- The instructor will assign roles to the participants such as presenter, critic, clinician, facilitator etc
- The article will be discussed structuring and giving emphasis to population, intervention, comparison, study design, results, discussion, strength and weakness, relevance etc
- The instructor will facilitate the discussion by asking targeted questions regarding the generalisability of the findings and correlations with existing established protocols
- The instructor will summarize the points with critical insights, identify the knowledge gap and future reading
- Multiple articles will be discussed with peers and presented in the departmental seminars.

Experiential-Learning Learning 28.3: Panchakarma procedures in Sthaulya -Karshya

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches

- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 28.4: Panchakarma in Sthaulya -Karshya

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 28.5: Panchakarma procedures in Prameha

Instructions

- The instructor will define the driving question related to a real case or simulated clinical case
- The scholars will acquire basic understanding of the condition through syndicate learning or seminar (Anatomy, Pathophysiology, Diagnostic approaches, Current knowledge about the management etc)
- Under the guidance of the instructor the scholars will plan a management protocol with multiple aspects like conservative approaches, rehabilitation, prevention etc
- The scholars will be divided into small groups accordingly
- The draft will be presented in front of the faculties for critique

- The final draft will be presented through posters/slide presentation

Experiential-Learning Learning 28.6: Panchakarma procedures in Prameha

Instruction

- At the start of the session, the scholars are triggered either by a real case or simulated case, , experimental data, video clips, articles, experiments etc
- Among scholars, one will be selected as the chair and another person as scribe to record the discussion
- The chair will read out the scenario, or if it is a real case a clinical history will be presented
- The group will discuss and unclear or unfamiliar terms will be clarified
- The main clinical issue will be identified by the group
- The scholars will be turned to self-directed learning about the problem
- Each scholar will research about the case through all resources
- Scholars regroup and share their findings
- The scholars will again visit the case and prepare a panchakarma protocol for the case
- The instructor will act as a facilitator and not content expert

Experiential-Learning Learning 28.7: Panchakarma procedures in Hridroga

Instruction

- At the start of the session, the scholars are triggered either by a real case or simulated case, experimental data, video clips, articles, experiments etc
- Among scholars, one will be selected as the chair and another person as scribe to record the discussion
- The chair will read out the scenario, or if it is a real case a clinical history will be presented
- The group will discuss and unclear or unfamiliar terms will be clarified
- The main clinical issue will be identified by the group
- The scholars will be turned to self-directed learning about the problem
- Each scholar will research about the case through all resources
- Scholars regroup and share their findings
- The scholars will again visit the case and prepare a panchakarma protocol for the case
- The instructor will act as a facilitator and not content expert

Modular Assessment

| Assessment | Hour |
|---|------|
| <p>Instructions—Conduct a structured modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6C.</p> <ol style="list-style-type: none"> 1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications. 2. Explain Procedural management in Sthaulya, Karshya, Prameha & Hridroga 3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases. 4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution. <p>(40marks)</p> <ul style="list-style-type: none"> • Including Viva-voce (10 marks) <p>Or</p> <ul style="list-style-type: none"> • Any practical in converted form can be taken for assessment. (25 Marks) and • Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks) | 4 |
| Semester No : 5 | |
| Module 29 : Applied Panchakarma in selected Vatavyadhi | |
| <p>Module Learning Objectives (At the end of the module, the students should be able to)</p> <ol style="list-style-type: none"> 1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications. 2. Explain Procedural management in Vatavyadhi 3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases. | |

4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Maha VataVyadhi

1. Samprapti Vigyan and Vyadhi Vinishchaya in mahavatavyadhi
2. Principles of management
3. Procedural management of mahavatavyadhi
4. Administration of panchakarma in mahavatavyadhi
5. Specialized panchakarma procedure in mahavatavyadhi

References: 1,7

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Analyze pathological characteristics, differential diagnosis of selected Vatavyadhi such as Pakshaghata, Ardita, Ekangaroga, Sarvangaroga, Kampavata, Mamsagatavata and Udavarta with special reference to various neurological and muscular diseases and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 5 | Lecture | CAN | Knows-how | JC,DIS,FC,PL,L&PPT |
| CO4,CO7 | Examine general and systemic signs of the patient to judge suitability for Panchakarma procedures in Maha Vatavyadhi patients | 4 | Practical29.1 | PSY-GUD | Shows-how | D-BED,D,CBL |
| CO4,CO7 | Discuss Maha Vatavyadhi with established Panchakarma | 4 | Practical29.2 | PSY-MEC | Shows-how | CBL,D |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|----------------|
| CO4,CO7 | Assess and analysis of the efficacy of selected Panchakarma protocol in Maha Vatavyadhi | 5 | Experiential-Learning29.1 | PSY-MEC | Does | JC,CBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Maha Vatavyadhi | 5 | Experiential-Learning29.2 | PSY-ADT | Does | TBL,BS,CBL,IBL |
| CO4,CO7 | Evaluate of customized Panchakarma procedures in Maha Vatavyadhi | 5 | Experiential-Learning29.3 | CE | Knows-how | PBL,CBL |

Unit 2 Samanya Vatavyadhi

1. Samprapti Vigyan and Vyadhi Vinishchaya in Samanya Vatavyadhi
2. Principles of management
3. Procedural management of Samanya Vatavyadhi
4. Administration of panchakarma in Samanya Vatavyadhi
5. Specialized panchakarma procedure in Samanya Vatavyadhi

References: 1,7

| 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 |
|-------------------|---|----------------------------|---|-----------------------|--|------------------------------|
| CO4,CO7 | Analyze pathological characteristics, differential diagnosis of Samanya Vatavyadhi in respect to Musculoskeletal and neurological disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 4 | Lecture | CAN | Knows-how | L&PPT, BL, FC, DIS, L_VC |
| CO4,CO7 | Examine general and systemic features of the patient to judge suitability for Panchakarma procedures in Samanya Vatavyadhi patients | 4 | Practical29.3 | PSY-GUD | Shows-how | L_VC, PBL, CBL, D-BED |
| CO4,CO7 | Management of Samanya Vatavyadhi with established Panchakarma treatments | 5 | Practical29.4 | PSY-MEC | Shows-how | D,CBL |

| | | | | | | |
|---------|--|---|---------------------------|---------|-----------|------------------------|
| CO4,CO7 | Assessment and analysis of the efficacy of selected Panchakarma protocol in Samanya Vatavyadhi | 4 | Experiential-Learning29.4 | PSY-MEC | Does | IBL,PrBL, TBL,SDL, PBL |
| CO4,CO7 | Development of customized Panchakarma procedures in Samanya Vatavyadhi | 4 | Experiential-Learning29.5 | PSY-ADT | Does | CBL,PBL, BS,JC,IB L |
| CO4,CO7 | Evaluate of customized Panchakarma procedures in Samanya Vatavyadhi | 5 | Experiential-Learning29.6 | CE | Knows-how | PL,CBL |

Unit 3 Apasmara Panchakarmeeya siddhi in Apasmara References: 1,7

| 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 |
|--------------------------|--|-----------------------------------|--|------------------------------|---|-------------------------------------|
| CO4,CO7 | Analyze pathological characteristics, differential diagnosis of Apasmara with special reference to Seizure disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 2 | Lecture | CAP | Knows-how | DIS,L_VC ,BL,FC,L &PPT |
| CO4,CO7 | Examine general and systemic features of the patient to judge suitability for Panchakarma procedures in Apasmara patients | 2 | Practical29.5 | PSY-GUD | Shows-how | L_VC,PA L,D-BED |
| CO4,CO7 | Discuss Apasmara with established Panchakarma procedures | 2 | Practical29.6 | PSY-MEC | Shows-how | D-M,D,PT |
| CO4,CO7 | Assess and analysis of the efficacy of selected Panchakarma protocol in Apasmara | 1 | Experiential-Learning29.7 | PSY-MEC | Does | PBL,SDL, SIM,IBL,JC |
| CO4,CO7 | Develop customized Panchakarma procedures in Apasmara | 1 | Experiential-Learning29.8 | PSY-ADT | Knows-how | DA,BS,IB L,TBL,JC |

| | | | | | | |
|---------|--|---|---------------------------|----|------|--------|
| CO4,CO7 | Evaluate customized Panchakarma procedures in Apasmara | 2 | Experiential-Learning29.9 | CE | Does | CBL,PL |
|---------|--|---|---------------------------|----|------|--------|

Unit 4 Pain management

1. Pathophysiology
2. WHO analgesics ladder
3. Common procedures for pain relief
4. Role of Panchakarma in acute and chronic pain management.
5. Role of Panchakarma in Pain Gateways
6. Specialised procedural techniques for pain management

References: 1,7

| 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 |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Analyze the pathophysiology of pain in acute and chronic conditions Explain common procedures for pain relief WHO analgesics ladder | 4 | Lecture | CAN | Knows-how | L_VC,DIS ,BL,L&PP T,FC |
| CO4,CO7 | Examine and observation of the patient to judge suitability for Panchakarma procedures in Pain management | 4 | Practical29.7 | PSY-GUD | Shows-how | PAL,PBL, D- BED,L_V C |
| CO4,CO7 | Discuss Pain and established Panchakarma | 5 | Practical29.8 | PSY-MEC | Shows-how | D- M,PBL,D- BED,CBL, L_VC |

| | | | | | | |
|---------|--|---|----------------------------|---------|------|---------------------------|
| CO4,CO7 | Develop and evaluation of customized Panchakarma procedures in Pain management | 7 | Experiential-Learning29.10 | PSY-ADT | Does | FC,C_L,T BL,PL,PB L |
|---------|--|---|----------------------------|---------|------|---------------------------|

Practical Training Activity

Practical Training 29.1 Examination of the patient to judge suitability for Panchakarma procedures in Maha Vatavyadhi

Demonstration by Faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the instructor, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by instructor to identify avastha of the patient and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The instructor will affirm the suitability of the patient for procedural management.
- Multiple cases will be examined by the scholars

Instructions for Video based learning:

- Before playing video, The instructor will clearly outline what learners should be able to do after watching the video
- The instructor will draft a script and organise the activity into logical sections
- The instructor will explain step by step the case examinations in video including both modern and ayurvedic criterias
- The instructor will analyse the clinical findings in the video of previous cases
- The instructor shall summarize the key concepts covered and give inputs for further improvisation

Practical Training 29.2 Management of Maha Vatavyadhi with established Panchakarma

Demonstration

- The suitability of the patient for the procedural management will be analysed and explained by the demonstrator
- The demonstrator will check the arrangement of instruments and materials required for the procedure
- The scholars will demonstrate patient positioning, safety measures and hygiene protocol
- The students will be instructed to perform the procedure as per the standard operative method.
- The demonstrator shall provide a real time feedback on technique, consistency, patient interaction and understanding of the procedures.

- If necessary video recording can also be used for analysis
- The exercise will be repeated in different Mahavatavyadhi with different presentations (or in different stages) and the instructor will justify the changes in the protocol
- The scholar shall record minimum 20 cases

Practical Training 29.3 Examination and observation of the patient to judge suitability for Panchakarma procedures in Samanya Vatavyadhi

Demonstration by faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 29.4 Management of Samanya Vatavyadhi with established Panchakarma treatments

Demonstration

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Practical Training 29.5 Examination and observation of the patient to judge suitability for Panchakarma procedures in Apasmara

Demonstration by the faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the idemonstrator followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated by demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 29.6 Management of Apasmara with established Panchakarma procedures

Demonstration

- Choose a standard patient who will simulate signs and symptoms of Apasmara. The patient should be trained to express the typical features.
- The procedure room should be ensured with a clean, well-ventilated and well equipped with all materials for the procedure gathered.
- The demonstrator will explain the procedure to the scholar/learner and ensure their understanding and consent for using the simulated patient for educational purposes.
- A theoretical overview of the Apasmara and procedures will be given to the scholars
- The scholars shall be assigned role play such as therapists and simulated patient
- The demonstrator or learner should conduct a thorough initial assessment of the simulated patient including Prakruthi and vikruthi (dasavidhapareeksha)
- The pre-main-post procedure steps will be performed
- The simulated patient will act according to the instructor's cues
- The patient will be frequently evaluated for any discomfort
- The response to the procedure will be recorded
- After the procedure, a debrief with scholars will be conducted to review what went well, what could have been improved, and how they can apply the learned concepts to real-life practice.

Practical Training 29.7 Assess Management of pain with established Panchakarma procedures

Demonstration by the faculty

After identifying suitability of patients for procedural management,

- The demonstrator will introduce the concept, procedural details and discuss its relevance in the topic
- The demonstrator will explain about the hygiene protocol and patient preparation
- The scholars will be instructed to perform the procedure step by step as per the standard operative method.
- The demonstrator shall provide a feedback on technique, patient interaction and understanding of the procedures
- The demonstrator will assess the scholars using a scoring rubric
- The scholar shall record minimum 20 cases

Practical Training 29.8 Examine the patient to judge suitability for Panchakarma procedures in Pain management

Demonstration by the faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas (Dasavidha, Astavidha) will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Instructions for Video based learning:
- The scholar shall observe the video of previous cases by the instructor/experts and analyse the clinical findings
- The demonstrator shall summarize the key concepts covered and give input for further improvisation

Experiential Learning Activity

Experiential-Learning Learning 29.1: Assess and analysis of selected Panchakarma protocol in Maha Vatavyadhi Presentation in Journal Club

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions

- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 29.2: Development of customized Panchakarma procedures in Maha Vatavyadhi

Instructions

- The instructor will define the driving question related to a real case with Mahavatavyadhi or simulated clinical case
- The scholars will acquire basic understanding of the condition through syndicate learning or seminar (Anatomy, Pathophysiology, Diagnostic approaches, Current knowledge about the management etc)
- Under the guidance of the instructor the scholars will plan a management protocol with multiple aspects like conservative approaches, rehabilitation, prevention etc
- The scholars will be divided into small groups accordingly
- The draft will be presented in front of the faculties for critique
- The final draft will be presented through posters/slide presentation

Experiential-Learning Learning 29.3: Evaluatate customized Panchakarma procedures in Maha Vatavyadhi

Instructions

- The instructor will introduce a case to the scholar
- Scholar will examine, document and present the scenerio of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspectives and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The activity shall be done in different diseases under Mahavatavyadhi with varied presentations (Avastha)

Experiential-Learning Learning 29.4: Assessment and analysis of the efficacy of selected Panchakarma protocol in Samanya Vatavyadhi

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 29.5: Development of customized Panchakarma procedures in Samanya Vatavyadhi

Instructions

- At the start of the session, the scholars are triggered either by a real case or simulated case, , experimental data, video clips, articles, experiments etc
- Among scholars, one will be selected as the chair and another person as scribe to record the discussion
- The chair will read out the scenario, or if it is a real case a clinical history will be presented
- The group will discuss and unclear or unfamiliar terms will be clarified
- The main clinical issue will be identified by the group
- The scholars will be turned to self-directed learning about the problem
- Each scholar will research about the case through all resources
- Scholars regroup and share their findings
- The scholars will again visit the case and prepare a panchakarma protocol for the case
- The instructor will act as a facilitator and not content expert

Experiential-Learning Learning 29.6: Evaluate customized Panchakarma procedures in Samanya Vatavyadhi
Presentation in Journal Club

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- Scholars will perform the selected procedures in the patient
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and submit the report for publication

Experiential-Learning Learning 29.7: Assessment and analysis of the efficacy of selected Panchakarma protocol in Apasmara

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 29.8: Development of customized Panchakarma procedures in Apasmara

Instructions for Journal club:

- The instructor shall clarify the goal of session
- The instructor will guide about appropriate search strategy. Scholars will be directed to identify high impact, peer reviewed journals and research articles on Apasmara (Seizure disorders) and its management well in advance preferably 1-2 weeks before the discussion
- The instructor will assign roles to the participants such as presenter, critic, clinician, facilitator etc

- The article will be discussed structuring and giving emphasis to population, intervention, comparison, study design, results, discussion, strength and weakness, relevance etc
- The instructor will facilitate the discussion by asking targeted questions regarding the generalisability of the findings and correlations with existing established protocols
- The instructor will summarize the points with critical insights, identify the knowledge gap and future reading
- A final protocol for Apasmara will be presented by the scholars addressing various stages of Apasmara

Experiential-Learning Learning 29.9: Evaluate customized Panchakarma procedures in Apasmara
Presentation in Journal Club

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The instructor will detail about the specialised procedural practises from regional traditions if any
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 29.10: Develop customized Panchakarma procedures in Pain management

Instructions

- The instructor will introduce the task of developing protocol for pain management to the scholars
- The instructor will assign pre reading materials on pain mechanism, pain assessment tools and pain management strategies with Ayurvedic perspectives
- The instructor will identify the key issues in the management of pain through Ayurveda
- The scope of specialised protocols including regional practices will be explained by the instructor

- The scholars will be divided into small groups of minimum two members. They will debate about the topic
- The instructor will walk around and address any questions as needed
- Scholars from each group will be called to share their proposal for the protocol
- The instructor will address any misconceptions and confusions
- The scope of different protocols will be summarized by the instructor

Modular Assessment

Assessment

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.

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in **Vatavyadhi**
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

6

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Module 30 : Applied Panchakarma in Mutrakrichra & Mutraghata

Module Learning Objectives

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

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in Mutrakrichra & Mutraghata
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Mootrakrichra

1. Samprapti Vigyan and Vyadhi Vinishchaya in Moothrakrichra
2. Principles of management
3. Procedural management of
4. Moothrakrichra
5. Administration of panchakarma in Moothrakrichra
6. Specialized panchakarma procedure in Moothrakrichra

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|-------------------------|---|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Analyze pathological characteristics, differential diagnosis of Mutrakrichra with special reference to urological disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 2 | Lecture | CAP | Knows-how | BL,FC,DIS,L&PPT,W |
| CO4,CO7 | Discuss suitability for Panchakarma procedures in Mutrakrichra patients | 2 | Practical30.1 | PSY-GUD | Does | D-BED,PAL,L_VC |

| | | | | | | |
|---------|---|---|---------------------------|---------|-----------|-------------------|
| CO4,CO7 | Discuss Mutrakrichra with established Panchakarma procedures | 3 | Practical30.2 | PSY-MEC | Shows-how | D-BED,PT |
| CO4,CO7 | Discuss efficacy of selected Panchakarma protocol in Mutrakrichra | 2 | Experiential-Learning30.1 | PSY-MEC | Shows-how | CBL,IBL,DA,JC |
| CO4,CO7 | Develop customized Panchakarma procedures in Mutrakrichra | 2 | Experiential-Learning30.2 | PSY-ADT | Does | IBL,JC,D A,CBL,BS |
| CO4,CO7 | Evaluation of customized Panchakarma procedures in Mutrakrichra | 3 | Experiential-Learning30.3 | CE | Does | CBL,PL |

Unit 2 Mootraghata

1. Samprapthivinjana of Moothraghata
2. Principles of management of Moothraghata
3. Administration of Panchakarma in Moothraghata
4. Specialised procedural techniques in Moothraghata

References: 1,7

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Interpret pathological characteristics, differential diagnosis of Mootraghata in respect to urological disorders and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 3 | Lecture | CAP | Knows-how | W,L&PPT,FC,DIS,BL |
| CO4,CO7 | Discuss suitability for Panchakarma procedures in Mootraghata patients | 2 | Practical30.3 | PSY-GUD | Shows-how | D-BED,PBL,L_VC,CBL |

| | | | | | | |
|---------|--|---|---------------------------|---------|-----------|------------------|
| CO4,CO7 | Performance of established Panchakarma treatment in Mootraghata | 3 | Practical30.4 | PSY-MEC | Shows-how | D-M,SIM,PT,D |
| CO4,CO7 | Discuss efficacy of selected Panchakarma protocol in Mootraghata | 2 | Experiential-Learning30.4 | PSY-MEC | Does | PBL,CBL,JC |
| CO4,CO7 | Develop customized Panchakarma procedures in Mootraghata | 2 | Experiential-Learning30.5 | PSY-ADT | Does | DA,JC,CBL,BS,IBL |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Mootraghata | 2 | Experiential-Learning30.6 | CE | Does | CBL,PL |

Practical Training Activity

Practical Training 30.1 Examination and observation of the patient to judge suitability for Panchakarma procedures in Mutrakrichra

Demonstration by the faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the instructor, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas will be demonstrated by instructor and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The instructor will affirm the suitability of the patient for procedural management.
- Students will be assigned with the mentioned activity by the instructor in minimum 5 patients.

Practical Training 30.2 Management of Mutrakrichra with established Panchakarma procedures

Demonstration by the faculty

- The demonstrator will introduce the case and explain the target of treatment
- The suitability of the patient for the procedural management will be analysed and explained by the demonstrator especially those on other medications etc
- The demonstrator will check the arrangement of instruments and materials required for the procedure
- The scholars will demonstrate patient positioning, safety measures and hygiene protocol

- The students will be instructed to perform the procedure as per the standard operative method.
- The demonstrator shall provide a real time feedback on technique, consistency, patient interaction and understanding of the procedures.
- If necessary video recording can also be used for analysis

Practical Training 30.3 Examination and observation of the patient to judge suitability for Panchakarma procedures in Mootraghata

Demonstration by the faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas will be demonstrated and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Students will be assigned with the mentioned activity by the idemonstrator in multiple cases.

Practical Training 30.4 Assess established Panchakarma treatment in Mootraghata

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Experiential Learning Activity

Experiential-Learning Learning 30.1: Assessment and analysis of the efficacy of selected Panchakarma protocol in Mutrakrichra

Instructions

- The instructor will give a real patient situation or show a video of the patient who have diagnosed as Mutrakrichra
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the case from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The instructor will justify the protocol of procedures including specialised regional methods selected in the case
- The specified protocol of treatment will be administered by the scholars or therapists under the supervision of the instructor
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.
- Similar exercise shall be done in varied cases of Mutrakrichra

Experiential-Learning Learning 30.2: Development of customized Panchakarma procedures in Mutrakrichra

Instructions

- The instructor will introduce a case to the scholars (preferably one week before the discussion)
- Scholars will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- The instructor will guide about the specialised procedures and their scope
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 30.3: Evaluation of customized Panchakarma procedures in Mutrakrichra

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem

- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 30.4: Assess and analysis of the efficacy of selected Panchakarma protocol in Mootraghata Presentation in Journal Club

Instructions

- The instructor will give a real patient situation or show a video of the patient who have diagnosed as Mootraghata
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the case from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The instructor will justify the protocol of procedures selected in the case
- The specified protocol of treatment will be administered by the scholars or therapists under the supervision of the instructor
- The changes will be periodically assessed by the scholars
- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.
- Similar exercise shall be done in varied cases of Mootraghata

Experiential-Learning Learning 30.5: Develop customized Panchakarma procedures in Mootraghata

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome

- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- The designed protocol will be practised in multiple cases

Experiential-Learning Learning 30.6: Evaluate customized Panchakarma procedures in Mootraghata

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Modular Assessment

Assessment

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.

1. Diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.

2.Explain Procedural management in **Mutrakrichra & Mutraghata**

Hour

2

3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.

4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution. (40 marks)

1. Viva-voce-10 marks

or

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

or

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

Semester No : 6

Module 31 : Applied Panchakarma in Sotha & Amavata

Module Learning Objectives

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

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in Sotha & Amavata
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Shotha

1. Samprapthivinjana of Shotha
2. Principles of management of Shotha
3. Administration of Panchakarma in Shotha
4. Administration of Panchakarma in Shotha with Yakrudroga, Hridroga and Vrikkaroga

5. Specialised procedural techniques in Shotha

References: 1,7

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Analyze pathological characteristics, differential diagnosis of Shotha with special reference to Odema and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 5 | Lecture | CAP | Knows-how | BL,DIS,F C,L_VC,P L |
| CO4,CO7 | Perform general and systemic examination of the patient to judge suitability for Panchakarma procedures in Shotha patients | 5 | Practical31.1 | PSY-GUD | Shows-how | PBL,CBL, D-BED |
| CO4,CO7 | Discuss importance of Panchakarma treatment in Shotha | 5 | Practical31.2 | PSY-MEC | Shows-how | L_VC,PB L,PSM,C BL |
| CO4,CO7 | Assess and analyse the efficacy of selected Panchakarma protocol in Shotha | 5 | Experiential-Learning31.1 | PSY-MEC | Shows-how | JC,SDL,C BL,PBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Shotha | 5 | Experiential-Learning31.2 | PSY-ADT | Does | BS,JC,SD L,IBL,DA |
| CO4,CO7 | Evaluate customized Panchakarma procedures in Shotha | 5 | Experiential-Learning31.3 | PSY-MEC | Does | CBL,SDL, PL |

Unit 2 Amavata

1. Samprapthi vinjana and Vyadhivinishchaya of Amavata
2. Principles of management
3. Procedural management of Amavata

4. Administration of Panchakarma in Amavata with comorbidities
5. Specialised procedural techniques in Amavata

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|---|---|--|--|--|---|
| CO4,CO7 | Analyze pathological characteristics, differential diagnosis of Amavata with special reference to Rheumatic fever and spondyloarthropathies and its treatment principles with Panchakarma protocols. Knowledge and interpretation of recent advancements. | 5 | Lecture | CAP | Knows-how | L&PPT ,L_VC,BL, SY |
| CO4,CO7 | Perform general and systemic examination of the patient to judge suitability for Panchakarma procedures in Amavata patients | 5 | Practical31.3 | PSY-GUD | Shows-how | PBL,D- BED,CBL |
| CO4,CO7 | Perform established Panchakarma treatment in Amavata | 5 | Practical31.4 | PSY-GUD | Shows-how | PSM,CBL ,PBL |
| CO4,CO7 | Assess the efficacy of selected Panchakarma protocol in Amavata | 5 | Experiential- Learning31.4 | PSY-MEC | Does | JC,PBL,S DL,CBL |
| CO4,CO7 | Develop customized Panchakarma procedures in Amavata | 6 | Experiential- Learning31.5 | PSY-ADT | Does | PL,CBL,J C,DIS,DA |

Practical Training Activity

Practical Training 31.1 Examination and observation of the patient to judge suitability for Panchakarma procedures in Shotha

Demonstration by the faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the instructor, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas will be demonstrated by the demonstrator and the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.

Practical Training 31.2 Management of Shotha with established Panchakarma procedures

Demonstration

- The demonstrator will introduce a case with diagnosis of Sotha to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- The demonstrator will guide with probing questions
- The demonstrator will justify the selection of procedural protocol for the case
- Scholars will perform the selected procedures in the patient
- Multiple cases will be documented by the scholars.

Practical Training 31.3 Examination and observation of the patient to judge suitability for Panchakarma procedures in Amavata

Demonstration by the faculty

After understanding the core concepts of examination,

- The students will be instructed to observe the bedside examination by the demonstrator, followed by students performing the same activity relevant to the condition associated.
- Various pareekshas will be demonstrated by the students will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management.
- Students will be assigned with the mentioned activity by the instructor in minimum 5 patients.

Practical Training 31.4 Perform established Panchakarma treatment in Amavata

Demonstration by the faculty

- The demonstrator will give a brief clinical history and ayurvedic analysis of the case including stage of dosha, sameekshyabhavas, srotas etc
- The scholars will do necessary examination of the patient
- The demonstrator will explain about the Panchakarma protocol for the given case and justify
- All the materials for performing the procedure will be gathered
- The demonstrator will detail about the operative procedure step by step
- The scholars will perform the procedures under supervision and necessary feedback will be given by the demonstrator

Experiential Learning Activity

Experiential-Learning Learning 31.1: Assessment and analysis of the efficacy of selected Panchakarma protocol in Shotha

Instructions

- Student has to assess the condition based on the disease specific subjective and objective parameters.
- The scholar will Evaluate the changes in parameters after procedural management in the different patients.
- Scholar will compare the results with that of previous data.
- Scholar will be instructed to prepare a project on procedural management of the disease.
- The scholar will discuss the efficacy of the procedural management in the department.

Instructions for Journal club:

- Scholars will identify the journals and research articles on the particular disease and procedure.
- Selected articles will be discussed with peers and presented in the departmental seminars.

Experiential-Learning Learning 31.2: Development of customized Panchakarma procedures in Shotha

Instructions

- At the start of the session, the scholars are triggered either by a real case or simulated case, , experimental data, video clips, articles, experiments etc
- Among scholars, one will be selected as the chair and another person as scribe to record the discussion
- The chair will read out the scenario, or if it is a real case a clinical history will be presented
- The group will discuss and unclear or unfamiliar terms will be clarified

- The main clinical issue will be identified by the group
- The scholars will be turned to self-directed learning about the problem
- Each scholar will research about the case through all resources
- Scholars regroup and share their findings
- The scholars will again visit the case and prepare a panchakarma protocol for the case
- The instructor will act as a facilitator and not content expert

Experiential-Learning Learning 31.3: Evaluate customized Panchakarma procedures in Shotha

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Experiential-Learning Learning 31.4: Assessment and analysis of the efficacy of selected Panchakarma protocol in Amavata Presentation in journal club

Instructions

- The instructor will give a real patient situation or show a video of the problem
- The instructor will guide the scholars to formulate meaningful questions regarding the problem
- The scholars will gather background knowledge about the problem from multiple sources
- The scholars will be advised to assess the status of the case using validated scales
- The specified protocol of treatment will be administered by the scholars or therapists
- The changes will be periodically assessed by the scholars

- The scholars will organise the data and draw conclusions
- The instructor will check the data and guide interpretation
- The scholars will present their findings through reports, presentations, posters, or digital media.

Experiential-Learning Learning 31.5: Develop and evaluate of customized Panchakarma procedures in Amavata
Presentation in journal club

Instructions

- The instructor will introduce a case to the scholar (preferably one week before the discussion)
- Scholar will examine, document and present the scenario of the case in the group
- Scholars will be assigned to collect and read literatures about the case prior to the discussion
- Scholars will analyse and present their approaches
- The instructor will guide with probing questions
- Scholars will debate about the procedural management needful in the case
- The instructor will discuss each perspective and their outcome
- The scholars will design a customized procedural protocol for the case.
- The scholar will execute the developed protocol in the case.
- Scholars will follow up and evaluate the efficacy using validated scales.
- Multiple cases will be documented by the scholars.
- The scholar will prepare the report, present in the department and finalize the protocol for the disease.
- The designed protocol will be published by the scholars

Modular Assessment

Assessment

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.

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in **Sotha & Amavata**

Hour

4

3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

Module 32 : Applied Panchakarma in supportive management of diseases

Module Learning Objectives

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

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in malignancy, palliative care and sports medicine.
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

Unit 1 Planning of Panchakarma in Malignancy

1. Samprapthighataka leading to Carcinogenesis
2. Principles of supportive management of Cancer through Panchakarma

References: 1,7

| 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 |
|-------------------------|--|-------------------------------------|--|--------------------------------|--|---------------------------------------|
| CO4,CO7 | Analyse and interpret Ayurvedic perspective of Cancer with special reference to Carcinoma, Sarcoma, melanoma, Lymphoma and Leukemia and specific diagnostic procedures in oncology Comprehensive understanding of treatment options in oncology Understand principles of administration of Panchakarma in Cancer | 3 | Lecture | CAP | Knows-how | L&PPT ,BS,BL,L_ VC |
| CO4,CO7 | Examine Cancer patients to check suitability for Panchakarma | 6 | Practical32.1 | PSY-GUD | Shows-how | PBL,IBL, PT,D- BED,FV |
| CO4,CO7 | Assess and analyse administration of Panchakarma in Cancer cases | 5 | Experiential-Learning32.1 | PSY-MEC | Does | FV,CBL,P BL,SDL |
| CO4,CO7 | Develop Panchakarma schedule for Cancer | 6 | Experiential-Learning32.2 | PSY-ADT | Does | IBL,JC,B S,TBL,CB L |

Unit 2 Panchakarma in palliative medicine

1. Philosophy, principles and scope of palliative care
2. Principles of Symptom management
3. End of life care
4. Panchakarma in palliative care

References: 1,7

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
| CO4,CO7 | Discuss Philosophy, principles and scope of palliative care Analyse principles of symptom management and end of life care | 3 | Lecture | CAP | Knows-how | JC,BL,FC ,L&PPT ,BS |
| CO4,CO7 | Examine cases seeking palliative care | 3 | Practical32.2 | PSY-GUD | Shows-how | PBL,CBL |
| CO4,CO7 | Administer Panchakarma procedures in Palliative care | 3 | Practical32.3 | PSY-GUD | Shows-how | PSM,L_V C,PBL,D, CBL |
| CO4,CO7 | Identify role of panchakarma in Palliative Care (PC) | 5 | Experiential- Learning32.3 | PSY-MEC | Shows-how | PSM,C_L, CBL,PrBL ,IBL |
| CO4,CO7 | Discuss customized protocol of Panchakarma for Palliative care | 6 | Experiential- Learning32.4 | PSY-MEC | Shows-how | PBL,SY,C _L,TBL,B S |

Unit 3 Panchakarma in Sports Medicine

1. Introduction
2. Medical Aspects of Sports Medicine
3. Administration of Panchakarma in Athletes care and rehabilitation

References: 20,21

| 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/Show s how/Knows how/Know) | 3G Teaching Learning Methods |
|----------------------------------|--|---|--|--|--|---|
|----------------------------------|--|---|--|--|--|---|

| | learning) session, the students should be able to) | | Experiential Learning | | how/Knows how/Know) | |
|---------|--|---|---------------------------|---------|---------------------|------------------------|
| CO4,CO7 | Discuss medical aspects of Sports Medicine-management techniques in sports related injuries and rehabilitation | 4 | Lecture | CAP | Knows-how | PL,DIS,B S,JC,BL |
| CO4,CO7 | Discuss Panchakarma scehdule in Sports related injuries and rehabilitation | 4 | Practical32.4 | PSY-GUD | Shows-how | D-M,CBL,P SM,PrBL, TBL |
| CO4,CO7 | Procedural management for maintaining fitness of athlets | 4 | Practical32.5 | PSY-MEC | Does | L_VC,D,C BL |
| CO4,CO7 | Administer customized Panchakarma schedule for Sports injuries and rehabilitation | 4 | Experiential-Learning32.5 | PSY-ADT | Does | CBL,BL,D IS,BS,PB L |

Practical Training Activity

Practical Training 32.1 Examination of Cancer patients to judge suitability for Panchakarma

Demonstration by faculty

- The demonstrator shall ensure a safe and conducive learning environment preferably in clinical skill lab or private clinical examination room
- The demonstrator shall choose a standardised patient who will simulate the signs and symptoms of the disease. He shall be briefed about their role, including presenting symptoms and medical history related to disease.
- Clinical examination tools (stethoscope, thermometer, pulse oximeter, peak flow meter) and educational aids (e.g., disease symptom charts, clinical examination checklists) should be ready in the easy space
- The demonstrator shall explain the aim of the session, outline the expectations for the examination, including history-taking, physical examination, and communication with the simulated patient (SP)

- The demonstrator shall emphasize the importance of patient-centred communication and professionalism
- The scholar shall obtain a focussed history and perform all relevant clinical examination in SP under the guidance of the instructor
- The scholar should offer a clear and empathetic explanation to SP about the condition based on the findings.
- The demonstrator shall discuss the scope of Panchakarma, suitability for procedural management and the possible management plans or recommendations
- The demonstrator shall provide constructive feedback to the scholar about their history taking, clinical examination and quality of communication with SP
- The demonstrator shall organise a post session review through a group discussion where students can reflect on their experience, discuss any challenges they faced, and share learning points.
- The scholar should keep a record of the event

Practical Training 32.2 Examination of cases seeking palliative care

The scholars should be posted in Palliative care unit and after understanding the core concepts of examination,

- The scholars will be instructed to observe the bedside examination by the demonstrator, followed by scholars performing the same activity relevant to the condition associated.
- Various pareekshas (Astavidha, Dasavidha) will be demonstrated and the scholars will be instructed to observe the same, receive, understand and imitate the methods demonstrated.
- The demonstrator will affirm the suitability of the patient for procedural management with respect to the examinations conducted
- Scholars will be assigned with the mentioned activity by the demonstrator in minimum 5 patients.
- The scholars shall keep a record of the examination conducted

Practical Training 32.3 Administration of Panchakarma procedures in Palliative care

Demonstration by the faculty

- The scholars shall perform the activity in PC patients available in the ward or they shall be posted in PC units
- After recording a detailed examination of the patient the scholar shall perform the procedure as per standard operative method under the guidance of the demonstrator
- Minimum 5 cases should be recorded

Practical Training 32.4 Performance of Panchakarma schedule in Sports related injuries and rehabilitation

Instructions

- The scholars shall be posted in Sports clinic if available in the hospital or other specialty centres
- After documentation of clinical examination and assessment of the injury occurred to the patient, the scholar shall be asked to perform the procedural management under the guidance of the instructor. The assessments should be repeated after the course of treatment/ follow up and records should be maintained
- The communication skills, professionalism and procedural skills shall be assessed daily.
- Minimum 5 different types of Sports related injuries should be recorded in detail.

Practical Training 32.5 Procedural management for maintaining fitness of athletes

Instructions

- Ask the scholars to assess the fitness of an athlete (VO_2 max, strength tests, flexibility evaluations etc) under the guidance of the instructor
- Identify the individual goal with each athlete (improving endurance, strength, agility)
- Perform a baseline testing protocol using fitness trackers or apps to monitor
- Perform a personalised procedural protocol guided by the instructor
- Use training software or spreadsheets to plan and track workouts
- Apply principles of progressive overload to ensure continuous improvement
- Use video analysis to review form and technique.
- Conduct regular fitness assessments to measure improvements.
- Solicit feedback from athletes regarding their experience.
- The activity should be repeated in multiple cases
- Record all details, prepare and publish the data through poster, presentation, project report or article

Experiential Learning Activity

Experiential-Learning Learning 32.1: Assessment and analysis of administration of Panchakarma in Cancer cases

Instructions

The scholars shall access the cases if the institute have cancer ward or they shall visit a recognised cancer centre and do the following

- The demonstrator will identify the scope of procedural management as preventive, curative and supportive care in Cancer

- The demonstrator will clarify the purpose of procedural intervention in Cancer case like improving the Quality of Life, managing the complications etc
- After recording history and clinical examination the scholars shall make an assessment of the case before the administration of procedures using validated scales
- The scholars shall assist/observe the administration of Panchakarma in the case
- The scholars shall make assessment after each procedure and completing the whole course of treatment and follow up
- Scholars will be assigned with the mentioned activity by the instructor in minimum 5 patients.

Experiential-Learning Learning 32.2: Development of Panchakarma schedule for Cancer

The scholars shall access the cases of Cancer if the institute have or they shall visit a recognised cancer centre and do the following

- The demonstrator will identify a suitable case and clarify the objectives of intervention in the case
- The scholars will perform/record a detailed history taking and clinical examination
- The scholars will do a brainstorming to fix the protocol of procedural management in the case
- The demonstrator will guide about the selection of procedures in the case and will check the feasibility of administration of procedures in the case
- The scholars will execute/assist the procedures in the case under the supervision of the demonstrator
- The scholars shall make an assessment about the changes in the patient brought by the interventions
- The demonstrator shall verify the records and guide the scholars to present the data through publication, presentation etc

Discussion in Journal club

- The demonstrator will guide to select recent high quality publication on ayurvedic management of cancer in reputed journal
- Preference will be given to include systematic reviews, randomized controlled trials, or large cohort studies
- The selected article will be shared among the scholars atleast 48 hours before the session
- The demonstrator shall provide a summary of key points or a set of guiding questions to focus reading
- The session will start by introducing the article title, authors, publication details etc and will further proceed through the design, observation, discussion, summary and conclusion
- The scholars shall link the findings to current practises of Ayurvedic management of cancer
- The participants will be encouraged to share their perspectives and critiques.
- The changes or affirmations in clinical protocol will be discussed and a final protocol will be prepared
- Participant feedback on the session's effectiveness will be collected

- The demonstrator shall assess understanding and application of the discussed concepts.

Experiential-Learning Learning 32.3: Identification of role of panchakarma in Palliative Care

Instructions

- The instructor will identify a case requiring palliative care
- The scholars will assess the status of the patient using validated scales under the guidance of the instructor
- The instructor will plan and justify a protocol for Palliative Care for the disease
- The scholars will perform procedural management for the patient as per the schedule
- The scholars will evaluate the changes as and when required
- The observations will be recorded and published through reports or presentations
- Minimum 5 different diseases requiring Palliative Care should be recorded

Experiential-Learning Learning 32.4: Creation of customized protocol of Panchakarma for Palliative care

Instructions

- Ask the scholars to examine and document a new case (with same disease)
- Ask the scholars to acquire basic understanding of the condition through brainstorming or syndicate learning
- Debate about the procedural management needful in the case
- Ask the scholars to finally design a procedural protocol for the patient
- Perform procedures as per the design
- Evaluate the efficacy using validated scales
- Test the efficacy in multiple cases
- Conclude the Panchakarma protocol for the disease
- Ask the scholars to record Palliative Care protocol for minimum 5 diseases

Group discussion

- The instructor will explain about the purpose of the meeting
- The instructor will further explain about how the discussion should proceed and how the scholars should get involved in the activity
- Preferably a handout may be given
- One scholar will be asked to present the history and examination findings of a ward patient

- Other scholars will be asked to discuss about the case presented
- The scholar will present further data on investigations and diagnosis
- Other scholars will continue the discussion
- The scholar will further explain about the treatment plan based on procedural management
- Other scholars will discuss and develop a plan with due consideration of sameekshyabhavas
- The instructor will offer concluding remarks with clarifications for unresolved issues
- The scholar will present the final protocol for the case
- The scholars will perform procedures as per the design
- The scholars will evaluate the efficacy using validated scales
- The scholars should record Palliative Care protocol for minimum 5 diseases

Experiential-Learning Learning 32.5: Develop customized Panchakarma schedule for Sports injuries and rehabilitation

Instructions

- The instructor explains about the purpose of the meeting
- The instructor further explains about how the discussion should proceed and how the scholars should get involved in the activity
- Preferably a handout may be given
- One scholar is asked to present the history and examination findings of a ward patient admitted with Sports injury
- Other scholars are asked to discuss about the case presented
- The scholar presents further data on investigations and diagnosis
- Other scholars continue the discussion
- The scholar further explains about the treatment plan based on procedural management
- Other scholars discuss (by group) and develop the plan
- The instructor offers concluding remarks with clarifications for unresolved issues
- The scholar present the final protocol for the case
- The finalised protocol is performed in multiple cases and recorded
- If real patients not available, Scholars shall be instructed to read identified peer-reviewed, indexed research journals Research published on Panchakarma procedures used in the sports injuries
- Discussions shall be done to formulate the schedule

Modular Assessment

Assessment

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.

1. Analyse the diagnostic criteria, interpret the investigations and screening of reports and decision-making diagnosis of different conditions of diseases to plan and execute Panchakarma procedures and understand possible complications.
2. Explain Procedural management in malignancy, palliative care and sports medicine.
3. Develop clinical skills through hands on procedures, critical analysis and customized Panchakarma procedures in these diseases.
4. Develop decision making skill for administration of Panchakarma procedures and management of possible complications at the time of execution.

(40marks)

- Including Viva-voce (10 marks)

Or

- Any practical in converted form can be taken for assessment. (25 Marks) and
- Any experiential as portfolio/reflections/presentation, can be taken as an assessment. (25 Marks)

4

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)

| Practical No* | Practical name | Hours |
|---------------|---|-------|
| 1.1 | Demonstration of the use of Lavana in enhancing the effectiveness of Snehapana. | 4 |
| 1.2 | Demonstration of comparative application of Single Sneha and Yamak Sneha. | 4 |
| 1.3 | Demonstration of clinical implementation of Abhyanga in skin disorders, considering Dosha predominance in Tvacha. | 4 |
| 1.4 | Develop team-based project on applied anatomy and physiology of musculoskeletal structures with focus on Janu Sandhigata Vata and infer effects of Snehana and Swedana. | 4 |
| 1.5 | Illustration of an autonomic nervous system responses to Abhyanga and Swedana in Vata Vyadhi. | 4 |
| 2.1 | Development of a questionnaire to assess Prakruti, Koshtha, Agni strength, and Jarana ability. | 3 |
| 2.2 | Formulation and implementation of a dosage schedule for Shamanartha Snehapana using Hriseyasi Matra. | 3 |
| 2.3 | Development of a proforma to assess Pachana Karma. | 2 |
| 2.4 | Development of a clinical assessment format for Samyak Snigdha Lakshanas in any type of Snehapana. | 4 |
| 2.5 | Evaluation of the effects of a specific medicated Ghrita administered as Shamanartha Snehapana in managing cognitive disorders. | 3 |
| 2.6 | Compilation of Ghrita formulations from classical texts as a departmental team-based project. | 3 |
| 2.7 | Demonstration of Udvartana. | 2 |
| 3.1 | Development of a Clinical Format for Pravicharana Sneha Administration. | 4 |
| 3.2 | Preparation of Sadya Sneha Formulations | 4 |
| 3.3 | Demonstration of Avapeedaka Sneha. | 2 |
| 3.4 | Planning a Team Based Project over comparison between functions and properties of Fats & classification of Sneha. | 6 |
| 3.5 | Conduct Group Discussion and brainstorming session over probable role of sneha on Microbiota in the diseases. | 4 |
| 4.1 | Demonstration of the Abhyanga technique. | 2 |
| 4.2 | Demonstration and application of various massage techniques, highlighting their individual methodologies and therapeutic benefits. | 4 |

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| 4.3 | Demonstration and explanation of the Shiro Basti procedure. | 2 |
| 4.4 | Demonstration of the Talam procedure. | 2 |
| 4.5 | Demonstration of Takradhara. | 2 |
| 4.6 | Demonstration of the procedure of Abhyanga using two distinct medicated oils in patients with hemiplegia. | 3 |
| 4.7 | Demonstration and evaluation of effects of Shiro Dhara and Shiro Abhyanga with different oils in single Vata Vyadhi condition. | 3 |
| 4.8 | Discuss the pharmacokinetic and therapeutic mechanisms of Abhyanga | 2 |
| 5.1 | Compile references of utility of Swedana Upakrama and recent research updates on application of Swedana in various diseases. | 4 |
| 5.2 | Perform Valuka sweda and Nadi Sweda | 4 |
| 5.3 | Prescribe Nivaata Sadan ,Gurupravarana and Atapa Sevana as Swedana modalities. | 4 |
| 5.4 | Perform Snigdha, Ruksha, Sagni, Niragni Upanahasweda. | 2 |
| 5.5 | Perform Patra Piṇḍa Swedana. | 3 |
| 5.6 | Demonstrate the Use of Nāḍi Swedana Yantra. | 2 |
| 5.7 | Demonstrate the use of sauna bath | 1 |
| 6.1 | Demonstrate and Perform Śaṣṭikā Śāli Piṇḍa Swedana." | 3 |
| 6.2 | Perform Jāmbīra Piṇḍa Swedana. | 3 |
| 6.3 | Perform Kṣīra Bāṣpa Swedana. | 3 |
| 6.4 | Perform Dhānyāmla Dhāra. | 3 |
| 6.5 | Demonstrate and Analyze the Variations in Signs and Symptoms Observed in Patients Undergoing Patra Piṇḍa Swedana, Śaṣṭikā Śāli Piṇḍa Swedana, and Kukkuṭāṇḍa Piṇḍa Swedana. | 2 |
| 6.6 | Gain insight in symposium for discussion with Faculty Members on the Possible Causes, Signs and Symptoms of Emergencies During Swedana Karma, and their Appropriate Management. | 2 |
| 6.7 | Design a Collaborative Project with Peers to Explore the Physics Behind Heat, Types of Heat Transfer, and Their Relation to Various Swedana Modalities. | 4 |
| 7.1 | Compile the similarities and dissimilarities in the understanding of Marma points as explained in various classical Ayurvedic texts as well as in traditional regional literature. | 1 |
| 7.2 | Compile the various structure-specific types of Marma (Varma) as explained in classical Ayurvedic texts and in traditional regional literature. | 3 |
| 7.3 | Demonstrate the various techniques of Mardana in Ayurveda vis-à-vis contemporary massage methods, and perform them accordingly. | 4 |

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| 7.4 | Demonstrate various pressure points in management of acute injuries. | 4 |
| 7.5 | Comprehend the various Marma (Varmam) points that should not be stimulated during Abhyanga in comparison with Effleurage and Petrissage massage techniques. | 1 |
| 7.6 | Demonstrate the application of Marma Chikitsa in the treatment of sprains and strains. | 2 |
| 7.7 | Demonstrate MarmaChikitsa in deformities secondary to Marmabhighata. | 2 |
| 7.8 | Demonstrate the application of Marma Chikitsa in Pain management. | 3 |
| 8.1 | Demonstrate Intermittent Lumbar Traction (ILT) and Static Lumbar Traction techniques. | 2 |
| 8.2 | Demonstrate Range of motion of shoulder joint, knee joint, hip joint, elbow joint. | 2 |
| 8.3 | Demonstrate Kaltern borne glides and Maitland mobilisation techniques. | 2 |
| 8.4 | Demonstrate the application of TENS modality. | 2 |
| 8.5 | Demonstrate the application of IFT. | 2 |
| 8.6 | Demonstrate the application of Short wave Diathermy. | 2 |
| 8.7 | Demonstrate the application of Ultra Sound Therapy. | 2 |
| 8.8 | Postural correction exercises in patients with kyphosis, increase of lumber lordosis. | 3 |
| 8.9 | Illustrate impaired gait and train them proper gait. | 3 |
| 9.1 | Assessment of Sneha Matra and lakshana | 2 |
| 9.2 | Assessment of Shodhananga Snehapana | 3 |
| 9.3 | Shodhananga Sneha Vyapat and Chikitsa | 2 |
| 9.4 | Assessment of Mridu, Madhyama and Teekshna Vamana | 2 |
| 9.5 | Examination in indicated patients of Vamana Karma | 4 |
| 9.6 | Discuss the contra indications in Vamana Karma | 2 |
| 9.7 | Assessment of Kaphotklesha Lakshana and investigations | 5 |
| 10.1 | Practical on Vamana Karma | 5 |
| 10.2 | Preparation of Ahara in Vamana Paschat Karma | 2 |
| 10.3 | Vamana Vyapat and Chikitsa | 3 |
| 10.4 | Pharmacodynamics of Vamana Karma | 4 |
| 10.5 | Biochemical Analysis in Vamana Karma | 4 |
| 10.6 | Advances in Vamana Karma | 2 |
| 11.1 | Classification of Virechana | 10 |

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| 11.2 | Examination of the Patient to indicate and contra indicate Virechana Karma | 6 |
| 11.3 | Assessment of Pitta Vridhi Lakshana | 4 |
| 12.1 | Assessment of Virechana Vega and Upavega | 3 |
| 12.2 | Pharmacodynamics of Virechana Karma | 4 |
| 12.3 | Practical on Virechana Karma | 5 |
| 12.4 | Virechana Vyapat and Chikitsa | 3 |
| 12.5 | Biochemical Analysis in Virechana Karma | 3 |
| 12.6 | Advances in Virechana Karma | 2 |
| 13.1 | Demonstration of Shodhan Nasya in Peenas | 3 |
| 13.2 | Drescription of Nasya depending on the pathophysiological condition | 3 |
| 13.3 | Administer Nasya by using Sirovirechanopaga dravya | 3 |
| 13.4 | Practising of Nasya by using Shirovirechana dravya | 3 |
| 13.5 | Demonstration of Indication and clinical utility of ShadabinduTaila, KarpasastyadiTaila, Masha Taila, PrasariniTaila, BrihatajivakadhyaTaila, NimbaTaila | 4 |
| 13.6 | Demonstration of the clinical condition of Shwasa contraindicated for Nasya with reasoning. | 4 |
| 14.1 | Administration of Avapidak Nasya on patient | 4 |
| 14.2 | Demonstration of Pradhanan Nasya on patient | 4 |
| 14.3 | Management of Nasya Vyapat | 4 |
| 14.4 | Exploring Investigation and respond to Murchha occured during Nasya procedure- | 4 |
| 14.5 | Administer Nasya in Ardit patient with the Nasya yoga published in Research paper | 4 |
| 15.1 | Inference of the rationale behind the classification of Rakta as the fourth Dosha and its identification as an important Sira for Raktamokshana. | 4 |
| 15.2 | Examination of the Patient for Raktamokshana | 4 |
| 15.3 | Examination of the patient having Sheetpitta indicated for Raktamokshana | 4 |
| 15.4 | Identification of Instruments and Dravya for Raktamokshana-Shastrakrita | 4 |
| 15.5 | Preparation and care of the Leech before and after the Procedure. | 4 |
| 16.1 | Preparation of the patient for Raktamokshana. | 4 |
| 16.2 | Demonstration of different sites for Siravedhan along with their significance and interpretation | 4 |
| 16.3 | Asessment of Samyak Yoga, Ayoga and Atiyoga of Siravedha and Prachhana | 4 |

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| 16.4 | Preparation of Crash card for the complications of Raktamokshana | 4 |
| 16.5 | Demonstration of emergency drugs to be used in the management complications due to leech application | 4 |
| 17.1 | Applied anatomy of uro-genital system, large colon and anal region | 1 |
| 17.2 | Examine and explain the applied anatomy of uro-genital system, large colon and anal region | 1 |
| 17.3 | Applied anatomy of uro-genital system large colon and anal region | 1 |
| 17.4 | Applied physiology of uro-genital system, excretory system, large colon | 3 |
| 17.5 | Significance of Basti as “Ardha chikitsa” and its vital role in Astanga Ayurveda | 2 |
| 17.6 | Significance of Basti in left lateral position and assist for any feasible changes in cases of difficulty | 1 |
| 17.7 | Proto-sigmoidoscopy, barium enema, and its applications in Basti administration. | 1 |
| 18.1 | Combined Basti regimen including Yoga, Kala, Karma, and Chaturbhadra Kalpa | 2 |
| 18.2 | Specific and general condition of disease and patient for various Basti | 2 |
| 18.3 | Interpretation of the the concepts related to Basti mentioned by various Acharya | 2 |
| 18.4 | Interpretation of the commentaries on Basti topic | 2 |
| 18.5 | Implementation of the role of Basti in different diseases mentioned in the classical texts. | 2 |
| 18.6 | Indications of Basti in different pathophysiological conditions of diseases | 4 |
| 18.7 | Explore, enlist and display the possible modifications in the dose of various Basti | 2 |
| 18.8 | Explore, enlist and display the possible modifications in the dose of various Basti | 2 |
| 18.9 | Demonstrate and interpret the rationale behind the contraindications of Basti as per Ayurvedic Samhita. | 5 |
| 18.10 | Niruha Basti and Uttar Basti Sequence | 2 |
| 18.11 | Anuvasana Basti and Uttar Basti Sequence | 1 |
| 18.12 | Demonstrate and interpret the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti | 1 |
| 18.13 | Dose schedules of Niruha Basti. | 1 |
| 18.14 | Enlist and describe the sneha basti, anuvasana basti, and matra basti. | 1 |
| 18.15 | Dose schedules of Uttar Basti | 1 |
| 19.1 | Clinical utility of the kalpas mentioned for Basti in BrihatTrayi and LaghuTrayi | 3 |
| 19.2 | Highlight mode of action of Asthapanopaga and Anuvasanopaga Gana. | 3 |
| 19.3 | Illustrate the clinical application of Dravya of Shad Skanda used in Basti | 1 |

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| 19.4 | Analyze and critically evaluate the selection of appropriate Basti Dravya in different Vyadhi. | 1 |
| 19.5 | Illustrate and analyse the advantages of using Ghrita, Taila, Vasa and Majja in Anuvasan Basti | 1 |
| 19.6 | The disadvantages of using Ghrita, Taila, Vasa and Majja in Anuvasan Basti. | 1 |
| 20.1 | Each step of Purvakarma and Pathya for Niruha Basti | 2 |
| 20.2 | Each step of Purvakarma and Pathya for Anuvasana Basti | 1 |
| 20.3 | Each step of Purvakarma and Pathya for Uttara Basti | 1 |
| 20.4 | Process of Niruha, administration by taking all aseptic measures | 2 |
| 20.5 | Process of Anuvasana Basti administration with all aseptic measures | 2 |
| 20.6 | Process of Uttara Basti administration with aseptic measures | 2 |
| 20.7 | Basti Pratyagaman time and potential systemic effect of Basti | 4 |
| 20.8 | Symptoms of Ayoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 |
| 20.9 | Symptoms of Samyak yoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 |
| 20.10 | Symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 1 |
| 20.11 | Symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 1 |
| 20.12 | Monitoring the symptoms of Basti Vyapad | 3 |
| 20.13 | Management during and after Basti therapy | 1 |
| 20.14 | Management during and after each Basti therapy. | 1 |
| 20.15 | Pariharya Vishaya and Parihara Kala | 2 |
| 20.16 | Reporting of medicolegal cases of Basti | 3 |
| 21.1 | Demonstrate and observe the changes on usage of different Dravya to make Basti Mridu and Teekshna | 2 |
| 21.2 | Assess the physiochemical changes during Basti preparation when mixed in different sequences | 1 |
| 21.3 | Examine and record the changes in viscosity, specific gravity and pH in properly formed Basti. | 1 |
| 21.4 | Demonstrate the method of mixing of Basti Dravya and assess the changes in preparation of basti using mortar pestle, mixer and palm. | 2 |
| 21.5 | Showcase different ratio of contents of basti based on dosha and clinical utility | 2 |
| 21.6 | Discuss and analyze the significance of the each content of Basti | 2 |
| 22.1 | Demonstrate and interpret the preparation and importance of Piccha Basti, Kshira Basti, Mustadi Yapana Basti, Baladi Yapana Basti, Shatavaryadi Yapana Basti and Madhutailika Basti | 4 |

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| 22.2 | Prepare Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, Manjishtadi Niruha Basti, Dashamuladi Basti, Ardhamatrika Basti. | 3 |
| 22.3 | Demonstrate and interpret the clinical utility of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva Roghara Niruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti and Kusthagna Basti, Yuktaratha Basti , Siddha Basti , Churna Basti , Takra Basti. | 3 |
| 22.4 | Illustrate and prepare various Anuvasana Basti- Vajjigandhadi Taila, Pippalyadi Taila, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila, Shatavaryadi Taila, Shatavaryadi Ghrita Basti, Shatavhadi Taila, Bruhat Saidhavadi Taila. | 8 |
| 22.5 | Illustrate and prepare Panchavalkala Kashaya Uttara Basti, Triphala Kashaya Uttara Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttara Basti, Jatyadi Ghrita Uttara Basti, Shatavaryadi Ghrita Uttara Basti, Phala Ghrita Uttara Basti and Dadimadi Ghrita Uttar Basti. | 8 |
| 22.6 | Evaluate and analyze the role of Basti in emerging lifestyle diseases like diabetes, hyperthyroidism, PCOD, SLE,etc | 4 |
| 23.1 | Observe and record certain complications burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea,acute fissure, rectal prolapse, ketoacidosis. | 2 |
| 23.2 | State and document certain complications of hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthmatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia | 2 |
| 23.3 | Examine and monitor certain complications like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding and dehydration | 2 |
| 23.4 | Demonstrate the use of life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma. | 3 |
| 23.5 | Record the life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma. | 3 |
| 23.6 | Examine and assess the management and use of life saving drugs in life-threatening conditions that can occur during Vaman and Virechan | 4 |
| 23.7 | Examine and assess the management and use of life saving drugs in life-threatening conditions that can occur during Snehan and Swedan | 4 |
| 24.1 | Describe and demonstrate the Gut & Digestive Function Biomarker- Gut Microbiome Composition, Stool pH, Bowel Transit Time in context of Basti | 5 |
| 24.2 | Describe, demonstrate and record Standard Operating procedure(SOP) of Basti | 5 |
| 24.3 | Describe and analyze the mode of action of basti based on recent advances in Basti | 5 |
| 24.4 | Demonstrate and Identify the Various Basti Yantra Doshas and state their recent advancements. | 5 |

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| 25.1 | Examination of Patient for Panchakarma in Dhatushravan sansthan disease patients | 3 |
| 25.2 | Application of Panchakarma in Dhatushravan sansthan disease patients | 3 |
| 25.3 | judge suitability of Patient for Panchakarma procedures in Shwasa | 3 |
| 25.4 | Examination to fix Panchakarma procedures in Chittavikara | 2 |
| 25.5 | Perform Panchakarma protocols in Chittavikara | 2 |
| 25.6 | Examination to fix the Panchakarma procedures in Kasa | 2 |
| 25.7 | Application of Panchakarma procedures in Kasa | 2 |
| 25.8 | Panchakarma in Shwasa | 3 |
| 26.1 | Panchakarma procedures in Arsha | 1 |
| 26.2 | Panchakarma in Arsha | 1 |
| 26.3 | Panchakarma procedures in Amlapitta | 1 |
| 26.4 | Panchakarma treatment in Amlapitta | 1 |
| 26.5 | Panchakarma procedures in Udawarta | 3 |
| 26.6 | Panchakarma treatment in Udawarta | 3 |
| 26.7 | Panchakarma treatment in Grahani | 4 |
| 26.8 | Panchakarma procedures in Grahani | 4 |
| 26.9 | Panchakarma treatment in Udara | 1 |
| 26.10 | Panchakarma procedures in Udara | 1 |
| 27.1 | Examination of the patient to judge suitability for Panchakarma procedures in selected skin diseases | 3 |
| 27.2 | Panchakarma treatment in selected skin diseases | 3 |
| 27.3 | Examination of the patient to judge suitability for Panchakarma procedures in Vatashonita patients | 2 |
| 27.4 | Panchakarma treatment in Vatashonita | 2 |
| 27.5 | Examination for Panchakarma procedures in Visarpa | 2 |
| 27.6 | Panchakarma treatment in Visarpa | 2 |
| 27.7 | Panchakarma procedures in Pandu- Kamala patients | 3 |
| 27.8 | Panchakarma treatment in Pandu- Kamala | 3 |
| 28.1 | General and systemic examination of the patient to judge suitability for Panchakarma procedures in Sthaulya -Karshya patients | 3 |
| 28.2 | Perform established Panchakarma treatment in Sthaulya -Karshya | 3 |

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| 28.3 | Examination to judge suitability for Panchakarma procedures in Prameha | 5 |
| 28.4 | Panchakarma treatment in Prameha | 5 |
| 28.5 | Examination to judge suitability for Panchakarma procedures in Hridroga | 2 |
| 28.6 | Panchakarma treatment in Hridroga | 2 |
| 29.1 | Examination of the patient to judge suitability for Panchakarma procedures in Maha Vatavyadhi | 4 |
| 29.2 | Management of Maha Vatavyadhi with established Panchakarma | 4 |
| 29.3 | Examination and observation of the patient to judge suitability for Panchakarma procedures in Samanya Vatavyadhi | 4 |
| 29.4 | Management of Samanya Vatavyadhi with established Panchakarma treatments | 5 |
| 29.5 | Examination and observation of the patient to judge suitability for Panchakarma procedures in Apasmara | 2 |
| 29.6 | Management of Apasmara with established Panchakarma procedures | 2 |
| 29.7 | Assess Management of pain with established Panchakarma procedures | 5 |
| 29.8 | Examine the patient to judge suitability for Panchakarma procedures in Pain management | 4 |
| 30.1 | Examination and observation of the patient to judge suitability for Panchakarma procedures in Mutrakrichra | 2 |
| 30.2 | Management of Mutrakrichra with established Panchakarma procedures | 3 |
| 30.3 | Examination and observation of the patient to judge suitability for Panchakarma procedures in Mootraghata | 2 |
| 30.4 | Assess established Panchakarma treatment in Mootraghata | 3 |
| 31.1 | Examination and observation of the patient to judge suitability for Panchakarma procedures in Shotha | 5 |
| 31.2 | Management of Shotha with established Panchakarma procedures | 5 |
| 31.3 | Examination and observation of the patient to judge suitability for Panchakarma procedures in Amavata | 5 |
| 31.4 | Perform established Panchakarma treatment in Amavata | 5 |
| 32.1 | Examination of Cancer patients to judge suitability for Panchakarma | 6 |
| 32.2 | Examination of cases seeking palliative care | 3 |
| 32.3 | Administration of Panchakarma procedures in Palliative care | 3 |
| 32.4 | Performance of Panchakarma schedule in Sports related injuries and rehabilitation | 4 |
| 32.5 | Procedural management for maintaining fitness of athletes | 4 |

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)

| Experiential learning No* | Experiential name | Hours |
|---------------------------|---|-------|
| 1.1 | Application and counselling of patients for use of Ghrita as Shodhanapoorva and Shamana Snehapana. | 4 |
| 1.2 | Performance and comparative analysis between effects of Abhyanga using single Sneha and Yamaka Sneha. | 4 |
| 1.3 | Performance and comparison between effects of Abhyanga with and without Nadi Sweda. | 4 |
| 1.4 | Performance of Janu Basti followed by Lepa application. | 5 |
| 1.5 | Preparation of a team-Based Project on on cerebrum and cerebellum anatomy with relevance to Snehana and Swedana in Vata Vyadhi. | 4 |
| 1.6 | Performance of Abhyanga using condition-specific oils for flaccid and spastic muscle tones. | 5 |
| 2.1 | Application and Counseling of Hrasva and Madhyama Matra in Snehapana. | 7 |
| 2.2 | Development of strategies for counseling Reluctant Patients to Improve Acceptance of Snehapana. | 7 |
| 2.3 | Comparison of the clinical effectiveness of a Selected Ghrita via Snehapana and Nasya in Neurological Disorders. | 5 |
| 2.4 | Comparative Clinical Evaluation of Two Ghritas in the Same Neurological Condition. | 5 |
| 2.5 | Performance of Udvartana and Udgharshana. | 2 |
| 3.1 | Counseling of patient for Accha Snehapana. | 3 |
| 3.2 | Comparison between Observations of Samyak Snigdha Lakshanas in Accha and Pravicharana Snehapana | 3 |
| 3.3 | Illustration and clinical prescription of Avapeedaka Sneha. | 3 |
| 3.4 | Illustration and Prescription of Uttara Bhaktika Sneha. | 3 |
| 3.5 | Assess changes in Lipid Profile before and after Shamanartha Snehapana. | 3 |
| 3.6 | Evaluate Lipid Profile Variations Before and After Shodhanartha Snehapana. | 3 |
| 3.7 | Assessment of Lipid Profile Alterations Before and After Brumhanartha Snehapana. | 3 |
| 3.8 | Exploration and Presentation of a Team-Based on Fat Metabolism and Sneha Pachana. | 5 |

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| 4.1 | Performance and analysis of difference between Samvahana, Unmardana and Utsadana. | 2 |
| 4.2 | Performance and Analysis of differences between abhyanga techniques in comparison with other contemporary techniques. | 4 |
| 4.3 | Performance and analysis of the difference between the effects Shiro abhyanga and shiro pichu in the patients of insomnia. | 3 |
| 4.4 | Performance of Shiro Basti. | 3 |
| 4.5 | Performance of Gandusha. | 2 |
| 4.6 | Performance of Abhyanga or massage using single oil in different neurological conditions. | 6 |
| 4.7 | Preparation of a team-based project exploring the applied anatomy and physiology of skin, pharmacology of dermatological fatty acids and esters in respect to efficacy of Bahya Snehana. | 6 |
| 5.1 | Discuss the Actions of Swedana Karma as Pradhānakarma and Pūrvakarma. | 3 |
| 5.2 | Perform Ekāṅga Swedana and Sarvāṅga Swedana. | 6 |
| 5.3 | Design a team based project over the Evaluation of the equipment's used and principles of heat transfer, involved in 13 types of Swedana. | 10 |
| 5.4 | Demonstrate Nāḍi Swedana. | 3 |
| 5.5 | Discuss Swedana Using Sthānika and Sarvāṅga Pariśekha Swedana Yantra. | 4 |
| 6.1 | Counsel Patients Scheduled for Swedana Karma. | 4 |
| 6.2 | Perform Kukkuṭaṅḍa Swedana. | 3 |
| 6.3 | Perform Kāḍikizhī. | 3 |
| 6.4 | Perform Pīzicchil (Kāya Seka). | 3 |
| 6.5 | Perform Upanāha Swedana. | 3 |
| 6.6 | Perform Kaṭī Basti. | 1 |
| 6.7 | Illustrate and Evaluate the Mode of Action, Indications, Limitations, and Efficacy of Each Swedana Modality. | 4 |
| 6.8 | Perform Bāṣpa Swedana, Rasnādi Chūrṇa Piṅḍa Swedana, and Śaṣṭikā Śāli Piṅḍa Swedana. | 3 |
| 6.9 | Perform Sarvāṅga Bāṣpa Swedana Procedure in Patients at Different Temperature Settings Ranging from 39°C to 43°C Across Various Seasons. | 2 |
| 7.1 | Mark and identify the Marma points on the human body, and understand the benefits and adverse effects of their stimulation as described in classical Ayurvedic texts. | 3 |

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| 7.2 | Demonstrate the pressure and manner of stimulating Marma (Varma) points at different parts of the human body, as described in classical Ayurvedic and traditional Siddha literature. | 3 |
| 7.3 | Perform Padaaghata and comprehend its importance in sports medicine for enhancing endurance. | 4 |
| 7.4 | Perform various external Para Panchakarma treatments utilized in Marma Chikitsa. | 3 |
| 7.5 | Perform various external Panchakarma Chikitsa utilized in Marmachikitsa. | 3 |
| 7.6 | Perform MarmaChikitsa in Musculoskeletal disease. | 3 |
| 7.7 | Perform Marma Chikitsa in orthopedic diseases such as Osteoarthritis, Rheumatoid Arthritis, Tendonitis, and Bursitis. | 3 |
| 7.8 | Perform the special bandaging techniques used in Marma Chikitsa. | 4 |
| 8.1 | Apply the intermittent traction in patients of cervical spondylosis. | 4 |
| 8.2 | Performance of Range of Motion (ROM) techniques in patients diagnosed with Avascular Necrosis of the femoral head. | 3 |
| 8.3 | Performance of Range of motion technique in patients of Tennis Elbow. | 3 |
| 8.4 | Performance of stretching exercises. | 2 |
| 8.5 | Perform stretching exercises in patients of Gridhrasi. | 3 |
| 8.6 | Apply IFT in 5 patients of Avascular necrosis of head of femur. | 3 |
| 8.7 | Illustrate the use of the Barthel Index and explain its significance in assessing a patient's level of independence in activities of daily living (ADLs). | 4 |
| 8.8 | Assist patients with Avascular Necrosis in rehabilitation training and support them in regaining a proper gait cycle. | 4 |
| 9.1 | Sneha Vyapat and Management | 5 |
| 9.2 | Method of collection, identification of and preparation of vamaka yoga and vamanopaga yoga | 2 |
| 9.3 | Vamana Kalpa | 4 |
| 9.4 | Vamana Kalpa | 4 |
| 9.5 | Demonstration of indication and contra indication of patients for Vamana Karma | 4 |
| 9.6 | Sadhya Vamana and Ghreya Vamana | 5 |
| 9.7 | Vasantika Vamana | 2 |
| 10.1 | Conduct of Vamana Purvakarma | 3 |
| 10.2 | Conduc of Vamana Karma | 4 |
| 10.3 | Conduct of Post Procedure of Vamana Karma | 3 |

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| 10.4 | Assessment of Aakantapaana | 3 |
| 10.5 | Assessment of Vamana Vega and Upavega | 3 |
| 10.6 | Assessment of Vamana Lakshana | 3 |
| 10.7 | Vamana Shudhi | 3 |
| 10.8 | Preparation of Ahara for Paschat Karma | 3 |
| 10.9 | Primary Management of Emergency conditions | 1 |
| 11.1 | Method of identification, collection and preparation of virechana yoga and virecchanopaga yoga | 1 |
| 11.2 | Virechana lehya Kalpana, Guda Kalpana | 4 |
| 11.3 | Virechana Taila Kalpa | 3 |
| 11.4 | Virechana Vati and Churna kalpa | 3 |
| 11.5 | Demonstration of examination method to indicate the patients for Virechana Karma | 4 |
| 11.6 | Demonstration of contra indication for Virechana Karma | 2 |
| 11.7 | Koshta Shuddhi | 3 |
| 11.8 | Sharad Virechana | 3 |
| 11.9 | Nitya Virechana and Ghreya Virechana | 3 |
| 12.1 | Conduct of Virechanana Purvakarma | 4 |
| 12.2 | Conducting the Virechana Karma | 8 |
| 12.3 | Conduct of Post Procedure of Virechana Karma | 4 |
| 12.4 | Preparation and Clinical Utility of Anupana | 3 |
| 12.5 | Assessment of Virechana Lakshana | 2 |
| 12.6 | Virechana Shuddhi | 2 |
| 12.7 | Primary Management of Emergency conditions | 3 |
| 13.1 | Counseling of the Patient about the importance of Nasya | 2 |
| 13.2 | Administration of Brimhan Nasya with Ksheerbala Taila in Avabahuka and observation of the patient | 3 |
| 13.3 | Can search for Indications in Samhita and Research paper and interpret clinical conditions to use Bramhi Ghrita, Ghritamanda, Jeemutaka Swarasa, Saindhavadi Yoga, Guda-Nagar Nasya, Kumkumadi Nasya, Mashabaladi Kwath Nasya, Madhukasaradi Nasya, Trikatu, Katphala Churna, Haridradi Dhuma Varti, Dashamula varti | 6 |
| 13.4 | Examination, analysis, and interpretation of the indications for Nasya therapy and its significance in Ardita (facial palsy). | 5 |

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| 13.5 | Examination and analysis of the indicated condition of Skandha Roga, Shirosthambha, Vishvachi for Nasya | 4 |
| 13.6 | Examination and interpretation of the Doshavastha and clinical condition to identify the indication of Nasya in Different Kushtha | 4 |
| 13.7 | Workshop on Indications and Contraindications of Nasya | 2 |
| 14.1 | Administrative of Navan Nasya | 4 |
| 14.2 | Post-procedure of Nasya-Dhumapna, Kavala | 3 |
| 14.3 | Performing Pradhama Nasya in Jeerna Pratishyay | 4 |
| 14.4 | Performing Dhoom Nasya | 4 |
| 14.5 | Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga | 4 |
| 14.6 | Recent research work on Scope of Nasya in unexplored areas | 3 |
| 14.7 | Searching of different Nasya-yogas to be used in different clinical conditions and diseases | 4 |
| 15.1 | Interpretation of clinical condition of Pakshaghaata contraindicated for Raktamokshana | 4 |
| 15.2 | Examination, analyses and interpretation of the clinical condition of patient having Gridhrasi indicated for Raktamokshana | 4 |
| 15.3 | Counseling of patient for Raktamokshana in an indicated Condition | 3 |
| 15.4 | Examination of patient, Identification as contraindicated for Raktamokshana and counseling of the patient | 3 |
| 15.5 | Discussion on instruments and Dravya to be used for Ashastrakrita types of Raktamokshana | 4 |
| 15.6 | Categorization of different types of leeches and Identification of Nirvish Jalauka | 4 |
| 15.7 | Examination and performance of the management of the complications due to Savish Jalauka | 4 |
| 16.1 | Demonstration of Raktamokshana by Siravedha procedure | 4 |
| 16.2 | Performance of different types of Raktamokshan procedure e.g. Prachhan | 4 |
| 16.3 | Demonstration of post- procedure of Raktamokshana | 4 |
| 16.4 | Instruction to the patient regarding pathya apathya after Raktamokshana | 4 |
| 16.5 | Identification of complications during Siravedhan and their management | 3 |
| 16.6 | Complications during Raktamokshan procedure (Prachhan, Alabu-avacharan, Ghatyantra, Cupping therapy) and management of complications | 3 |
| 16.7 | Performance of Raktamokshana with different modified methods like Cupping, Syringe and needle method | 4 |

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| 17.1 | Surface anatomy neuroanatomy, key structures/organs, their anatomical locations and common anomalies important to Basti Karma practices | 3 |
| 17.2 | Regulation of vital functions, pathophysiological alterations in diseased state | 3 |
| 17.3 | Significance of Basti as Shodhana, Shamana, Brimhana (nourishment) and Rasayana (rejuvenation) | 2 |
| 17.4 | Proto-sigmoidoscopy and Barium enema Its applications in Basti administration. | 5 |
| 18.1 | The combined Basti regimen including Yoga, Kala, Karma basti and Chaturbhadra Kalpa | 1 |
| 18.2 | Specific and general condition of disease and patient for various Basti | 3 |
| 18.3 | Implementation of the concepts related to Basti mentioned by various Acharya | 3 |
| 18.4 | Interpretation of the commentaries on Basti topic | 3 |
| 18.5 | Dwadasha-Prasrutika Basti Siddhi Adhyaya and its role in allievating diseases. | 3 |
| 18.6 | Indications of Basti in various stages of disease. | 3 |
| 18.7 | Utility of Basti in various pathophysiological condition of disease | 2 |
| 18.8 | Present the contraindications of Basti based on Ayurvedic Samhita. | 4 |
| 18.9 | Illustrate the contraindications of Basti based present-day medical practices. | 3 |
| 18.10 | Illustrate, display and practice the dose schedules of Niruha Basti, Yapana Basti and Siddha Basti | 3 |
| 18.11 | Illustrate, display and practice the sequence of Anuvasana Basti and Niruha Basti before Uttar Basti | 3 |
| 18.12 | Dose schedules of Sneha Basti, Anuvasana Basti and Matra Basti | 2 |
| 18.13 | Dose schedules of Uttar Basti | 1 |
| 18.14 | Dose modifications based on Rogi Bala | 3 |
| 18.15 | Dose modifications based on Rogi and Roga Bala | 2 |
| 19.1 | Clinical utility of the kalpa mentioned for Basti in Brihatrayi and Laghutrayi | 3 |
| 19.2 | Mode of Action of Asthapanopaga and Anuvasanopaga gana. | 3 |
| 19.3 | Analyze and evaluate the seiection of Ghrita for Anuvasan Basti. | 2 |
| 19.4 | Interpret the selection of Taila,Vasa and Majja for Anuvasan Basti. | 4 |
| 19.5 | Interpret the advantage of using taila for Anuvasan Basti in various clinical conditions | 1 |
| 20.1 | Pre-preparation of Niruha Basti | 2 |

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| 20.2 | Pre-preparation of Anuvasana Basti | 1 |
| 20.3 | Pre- preparation of Uttara Basti | 1 |
| 20.4 | Niruha Basti administration with aseptic measures | 2 |
| 20.5 | Niruha Basti administration with aseptic measures | 1 |
| 20.6 | Anuvasana Basti administration with aseptic measures | 3 |
| 20.7 | Uttara Basti administration with aseptic measures | 2 |
| 20.8 | Observation and outcomes before, during and after different Basti | 5 |
| 20.9 | Symptoms of Atiyoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 |
| 20.10 | Management during and after each Basti therapy. | 2 |
| 20.11 | Symptoms of Ayoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 3 |
| 20.12 | Symptoms of Samyak Yoga of Niruha Basti, Anuvasana Basti and Uttara Basti | 2 |
| 20.13 | Essential treatment modalities for Basti Vyapad | 3 |
| 20.14 | Management of Basti retention and iatrogenic infections | 2 |
| 20.15 | Role of Pariharya Vishaya and Parihara Kala. | 3 |
| 20.16 | Reporting of medicolegal cases of Basti | 5 |
| 21.1 | Practice and analyze the clinical utility of Mridu and Teekshna Basti Dravya | 2 |
| 21.2 | Analyse the changes in viscosity, specific gravity and pH in properly formed Basti | 2 |
| 21.3 | Practice the preparation of different Niruha Basti and Yapan Basti | 4 |
| 21.4 | Assess and demonstrate the changes due to Prakshepa Dravya and practice the use of different Prakshepa dravya | 2 |
| 21.5 | Demonstrate various contents of Niruha and Yapan basti with their preparations and analysis of the lakshana of properly formed Basti as per classics | 3 |
| 22.1 | Illustrate the preparation and interpretation of the clinical utility of Piccha Basti, Kshira Basti, MustadiYapana Basti, Baladi Yapana Basti, ShatavaryadiYapana Basti and Madhutailika Basti | 6 |
| 22.2 | Administer and analyse the clinical utility of Erandamuladi Niruha Basti, Panchaprasritika Basti, Prasritika Basti, Kshara Basti, Vaitarana Basti, ManjishtadiNiruha Basti, Dashamuladi Basti, Ardhamatrika Basti. | 6 |
| 22.3 | Illustrate the preparation and interpret the clinical utility of Krimighna Basti, Lekhana Basti, Vrishya Basti, Sarva RogharaNiruha Basti, Brimhana Basti, Vataghna Basti, Pittaghna Basti, Kaphaghna Basti, Doshotkleshana Basti, Chakshusya Basti and Kusthagna Basti, Yuktaratha Basti, Siddha Basti, Churna Basti, Takra Basti | 6 |

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| 22.4 | Demonstrate and analyse the clinical utility of Vajigandhadi Taila, Pippalyadi Taila, Ashwagandha Taila, Narayana Taila, Jatyadi Taila, Kasisadi Taila and Shatavaryadi Taila or Shatavaryadi Ghrita Basti, Shatavhadi Taila, Bruhat Siandhavadi Taila. | 8 |
| 22.5 | Demonstrate and analyse the clinical utility of Panchavalkala Kashaya Uttara Basti, Triphala Kashaya Uttar Basti, Dashmool Kashaya Uttara Basti, Yastimadhu Taila Uttara Basti, Dashmool Taila Uttara Basti, Jatyadi Ghrita Uttara Basti, Shatavaryadi Ghrita Uttara Basti, Phala Ghrita Uttara Basti and Dadimadi Ghrita Uttara Basti. | 8 |
| 22.6 | Demonstrate the role of Basti in emerging diseases like diabetes, hyperthyroidism, PCOD, SLE, etc | 5 |
| 23.1 | Perform the management of complications like burns, septicemia, bed sores, cardiorespiratory arrest, sudden stoppage of breathing/apnoea, acute fissure, rectal prolapse, ketoacidosis | 3 |
| 23.2 | Practice management of certain complications hypoglycemia, hyperglycemia, dyslipidemia, convulsions/seizures, hyperpyrexia, acute asthamatic attack, dyspnoea, anaphylactic shock, hypertension, hyperglycemia | 3 |
| 23.3 | Practice management of certain complications like haematemesis, epistaxis, hypotension, vasovagal shock, fainting, GI bleeding, dehydration | 3 |
| 23.4 | Practice the use of life-saving drugs in complications that can occur during Basti, Nasya and Raktamokshana Karma. | 4 |
| 23.5 | Manage and record life-threatening conditions that can occur during Basti, Nasya and Raktamokshana Karma | 5 |
| 23.6 | Examine, record and practice the management and use of life saving drugs in life-threatening conditions that can occur during Vaman and Virechan | 4 |
| 23.7 | Examine, record and practice the management and use of life saving drugs in life-threatening conditions that can occur during Snehan and Swedan | 4 |
| 24.1 | Examine and analyze the Immunological and metabolic responses of Basti | 7 |
| 24.2 | Perform Standard Operating Procedure(SOP) of Basti | 8 |
| 24.3 | Evaluate and interpret the mode of action based on recent advances in Basti. | 6 |
| 24.4 | Explain recent advancements in Basti Yantra Doshas and methods to manage various Basti Yantra Dosha. | 5 |
| 25.1 | Analysis of efficacy of Panchakarma protocol in Dhatushran sansthan disease patients | 3 |
| 25.2 | Design Panchakarma procedures in Dhatushran sansthan disease patients | 3 |
| 25.3 | Customized Panchakarma procedures in Dhatushran sansthan (Hormonal imbalance in male and female) | 4 |
| 25.4 | Customized Panchakarma procedures in Chittavikara | 1 |

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| 25.5 | Analysis of efficacy of Panchakarma protocol in Chittavikara | 2 |
| 25.6 | Develop customized Panchakarma procedures in Chittavikara | 1 |
| 25.7 | Assessment and analysis of Panchakarma Management in Kasa | 1 |
| 25.8 | Customized Panchakarma procedures in Kasa | 1 |
| 25.9 | Panchakarma procedures in Kasa | 2 |
| 25.10 | Panchakarma procedures in Shwasa | 4 |
| 25.11 | Panchakarma protocol in Shwasa | 4 |
| 26.1 | Panchakarma protocol in Arsha | 2 |
| 26.2 | Panchakarma procedures in Arsha | 2 |
| 26.3 | Panchakarma procedures in Arsha | 2 |
| 26.4 | Panchakarma protocol in Amlapitta | 1 |
| 26.5 | Panchakarma procedures in Amlapitta | 1 |
| 26.6 | Panchakarma in Udawarta | 2 |
| 26.7 | Panchakarma procedures in Udawarta | 2 |
| 26.8 | Panchakarma procedures in Udawarta | 2 |
| 26.9 | Panchakarma in Grahani | 4 |
| 26.10 | Panchakarma procedures in Grahani | 2 |
| 26.11 | Panchakarma procedures in Grahani | 2 |
| 26.12 | Panchakarma in Udara | 2 |
| 26.13 | Panchakarma procedures in Udara | 2 |
| 27.1 | Panchakarma in selected skin diseases | 3 |
| 27.2 | Panchakarma procedures in selected skin diseases | 3 |
| 27.3 | Panchakarma procedures in selected skin diseases | 4 |
| 27.4 | Panchakarma in Vatashonita | 2 |
| 27.5 | Panchakarma procedures in Vatashonita | 1 |
| 27.6 | Panchakarma procedures in Vatashonita | 1 |
| 27.7 | Panchakarma procedures in Visarpa | 1 |
| 27.8 | Panchakarma procedures in Visarpa | 2 |
| 27.9 | Panchakarma in Visarpa | 1 |
| 27.10 | Panchakarma in Pandu- Kamala | 4 |
| 27.11 | Panchakarma procedures in Pandu- Kamala | 4 |

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| 28.1 | Assess and analyse the efficacy of selected Panchakarma in Sthaulya - Karshya | 3 |
| 28.2 | Panchakarma procedures in Sthaulya -Karshya | 3 |
| 28.3 | Panchakarma procedures in Sthaulya -Karshya | 4 |
| 28.4 | Panchakarma in Sthaulya -Karshya | 5 |
| 28.5 | Panchakarma procedures in Prameha | 5 |
| 28.6 | Panchakarma procedures in Prameha | 5 |
| 28.7 | Panchakarma procedures in Hridroga | 1 |
| 29.1 | Assess and analysis of selected Panchakarma protocol in Maha Vatavyadhi Presentation in Journal Club | 5 |
| 29.2 | Development of customized Panchakarma procedures in Maha Vatavyadhi | 5 |
| 29.3 | Evaluatate customized Panchakarma procedures in Maha Vatavyadhi | 5 |
| 29.4 | Assessment and analysis of the efficacy of selected Panchakarma protocol in Samanya Vatavyadhi | 4 |
| 29.5 | Development of customized Panchakarma procedures in Samanya Vatavyadhi | 4 |
| 29.6 | Evaluate customized Panchakarma procedures in Samanya Vatavyadhi Presentation in Journal Club | 5 |
| 29.7 | Assessment and analysis of the efficacy of selected Panchakarma protocol in Apasmara | 1 |
| 29.8 | Development of customized Panchakarma procedures in Apasmara | 1 |
| 29.9 | Evaluate customized Panchakarma procedures in Apasmara Presentation in Journal Club | 2 |
| 29.10 | Develop customized Panchakarma procedures in Pain management | 7 |
| 30.1 | Assessment and analysis of the efficacy of selected Panchakarma protocol in Mutrakrichra | 2 |
| 30.2 | Development of customized Panchakarma procedures in Mutrakrichra | 2 |
| 30.3 | Evaluation of customized Panchakarma procedures in Mutrakrichra | 3 |
| 30.4 | Assess and analysis of the efficacy of selected Panchakarma protocol in Mootraghata Presentation in Journal Club | 2 |
| 30.5 | Develop customized Panchakarma procedures in Mootraghata | 2 |
| 30.6 | Evaluate customized Panchakarma procedures in Mootraghata | 2 |
| 31.1 | Assessment and analysis of the efficacy of selected Panchakarma protocol in Shotha | 5 |
| 31.2 | Development of customized Panchakarma procedures in Shotha | 5 |

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| 31.3 | Evaluate customized Panchakarma procedures in Shotha | 5 |
| 31.4 | Assessment and analysis of the efficacy of selected Panchakarma protocol in Amavata Presentation in journal club | 5 |
| 31.5 | Develop and evaluate of customized Panchakarma procedures in Amavata Presentation in journal club | 6 |
| 32.1 | Assessment and analysis of administration of Panchakarma in Cancer cases | 5 |
| 32.2 | Development of Panchakarma schedule for Cancer | 6 |
| 32.3 | Identification of role of panchakarma in Palliative Care | 5 |
| 32.4 | Creation of customized protocol of Panchakarma for Palliative care | 6 |
| 32.5 | Develop customized Panchakarma schedule for Sports injuries and rehabilitation | 4 |

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-PK | 4 | 100 x 4 Papers = 400 | 400 | 800 |

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

Credit frame work

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

Formative Assessment :Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment:Summative Assessment (University examination) will be carried out at the end of Semester VI.

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

| Module Number & Name (a) | Credits (b) | Actual No. of Notional Learning Hours (c) | Attended Number of notional Learning hours (d) | Maximum Marks of assessment of modules (e) | Obtained Marks per module (f) | MGP $=d*f/c*e*100$ |
|---|----------------|--|---|---|----------------------------------|-----------------------|
| Semester No : 3 | | | | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | | | | |
| M 1 Snehana karma, Dravya, Categorization along with related applied anatomy & physiology | 2 | 60 | | 50 | | |
| M 2 Application of Abhyantara Sneha | 2 | 60 | | 50 | | |
| Paper No : 2 (Shodhana Siddhi) | | | | | | |
| M 9 Shodhanartha Sneha before Vamana and Virechana Karma, Principles of Vamana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Vamana Dravya and Indications, Contra indications of Vamana Karma | 2 | 60 | | 50 | | |
| M 10 Vamana Karma-Standard Operative Procedure and Assessment, Mode of action and Recent advances | 2 | 60 | | 50 | | |
| Paper No : 3 (Basti Siddhi) | | | | | | |
| M 17 APPLIED ANATOMY, PHYSIOLOGY AND IMPORTANCE OF BASTI | 1 | 30 | | 25 | | |
| M 18 CLASSIFICATION OF BASTI AND SCREENING OF PATIENT AND DOSE SCHEDULE FOR BASTI | 3 | 90 | | 75 | | |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | | | | |
| M 25 Applied Panchakarma in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa | 2 | 60 | | 50 | | |
| M 26 Panchakarma treatment in Arsha,Amlapitta,Udawarta,Grahani and Udara | 2 | 60 | | 50 | | |
| | 16 | 480 | | 400 | | |
| Semester No : 4 | | | | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | | | | |
| M 3 Application of Sneha based on Mode of administration and action | 2 | 60 | | 50 | | |
| M 4 Bahya Snehana and their modes of Application | 2 | 60 | | 50 | | |
| Paper No : 2 (Shodhana Siddhi) | | | | | | |

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| M 11 Principles of Virechana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Virechana Dravya, Indications and Contra indications of Virechana Karma | 2 | 60 | | 50 | | |
| M 12 Standard Operative Procedure of Virechana | 2 | 60 | | 50 | | |
| Paper No : 3 (Basti Siddhi) | | | | | | |
| M 19 PHARMAKOKINETICS AND PHARMACODYNAMICS OF BASTI DRAVYAS | 1 | 30 | | 25 | | |
| M 20 METHODOLOGY FOR NIRUHA BASTI, ANUVASANA BASTI AND UTTAR BASTI | 3 | 90 | | 75 | | |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | | | | |
| M 27 Applied Panchakarma in selected diseases of Raktadushti | 2 | 60 | | 50 | | |
| M 28 Applied Panchakarma in Sthaulya, Karshya, Prameha & Hridroga | 2 | 60 | | 50 | | |
| | 16 | 480 | | 400 | | |
| Semester No : 5 | | | | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | | | | |
| M 5 Principles of Sagni and Niragni Sweda Practice | 2 | 60 | | 50 | | |
| M 6 Various Modalities, assessment and mode of action of swedana Karma | 2 | 60 | | 50 | | |
| Paper No : 2 (Shodhana Siddhi) | | | | | | |
| M 13 Principles of Nasya Karma, Critical Analysis of Nasya Dravya and Indications, Contra indications of Nasya Karma | 2 | 60 | | 50 | | |
| M 14 Standard Operative Procedure of Nasya karma, NasyaVyapat, Mode of action of Nasya Karma and Recent advances in Nasya Karma | 2 | 60 | | 50 | | |
| Paper No : 3 (Basti Siddhi) | | | | | | |
| M 21 Contents of Niruha Basti, method of mixing and analysis of prepared Basti | 1 | 30 | | 25 | | |
| M 22 BASTI FORMULATIONS | 3 | 90 | | 75 | | |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | | | | |
| M 29 Applied Panchakarma in selected Vatavyadhi | 3 | 90 | | 75 | | |
| M 30 Applied Panchakarma in Mutrakrichra & Mutraghata | 1 | 30 | | 25 | | |

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| | 16 | 480 | | 400 | | |
| Semester No : 6 | | | | | | |
| Paper No : 1 (Upakalpaniya Siddhi) | | | | | | |
| M 7 Principles and Practice of MarmaChikitsa | 2 | 60 | | 50 | | |
| M 8 Principles and application of Physiotherapy in association with Panchakarma | 2 | 60 | | 50 | | |
| Paper No : 2 (Shodhana Siddhi) | | | | | | |
| M 15 Principles of Raktamokshana,Critical Analysis of Instruments and Dravya used in Raktamokshana | 2 | 60 | | 50 | | |
| M 16 Standard Operative Procedure and Assessment of Raktamokshana Procedure and Recent advances | 2 | 60 | | 50 | | |
| Paper No : 3 (Basti Siddhi) | | | | | | |
| M 23 Handling Emergencies in Panchakarama | 2 | 60 | | 50 | | |
| M 24 Recent Advances in Basti | 2 | 60 | | 50 | | |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | | | | |
| M 31 Applied Panchakarma in Sotha & Amavata | 2 | 60 | | 50 | | |
| M 32 Applied Panchakarma in supportive management of diseases | 2 | 60 | | 50 | | |
| | 16 | 480 | | 400 | | |
| $\text{MGP} = \frac{(\text{Number of Notional learning hours attended in a module}) \times (\text{Marks obtained in the modular assessment})}{(\text{Total number of Notional learning hours in the module}) \times (\text{Maximum marks of the module})} \times 100$ | | | | | | |

6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)

| <p>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</p> <p>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</p> | | |
|---|--|----------|
| Semester No : 3 | | |
| Paper No : 1 Upakalpaniya Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 1 | M1.Snehana karma, Dravya, Categorization along with related applied anatomy & physiology | C 1 |
| 2 | M2.Application of Abhyantara Sneha | C 2 |
| Paper No : 2 Shodhana Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 3 | M9.Shodhanartha Sneha before Vamana and Virechana Karma, Principles of Vamana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Vamana Dravya and Indications, Contra indications of Vamana Karma | C 3 |
| 4 | M10.Vamana Karma-Standard Operative Procedure and Assessment, Mode of action and Recent advances | C 4 |
| Paper No : 3 Basti Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 5 | M17.APPLIED ANATOMY, PHYSIOLOGY AND IMPORTANCE OF BASTI | C 5 |
| 6 | M18.CLASSIFICATION OF BASTI AND SCREENING OF PATIENT AND DOSE SCHEDULE FOR BASTI | C 6 |
| Paper No : 4 Naimittika Panchakarma Siddhi | | |
| A S.No | B Module number and Name | C MGP |

| | | |
|---|--|--|
| 7 | M25.Applied Panchakarma in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa | C 7 |
| 8 | M26.Panchakarma treatment in Arsha,Amlapitta,Udawarta,Grahani and Udara | C 8 |
| | Semester Grade point Average (SGPA) | (C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8) |

Semester No : 4

Paper No : 1 Upakalpaniya Siddhi

| A S.No | B Module number and Name | C MGP |
|-------------------|--|------------------|
| 1 | M3.Application of Sneha based on Mode of administration and action | C 1 |
| 2 | M4.Bahya Snehana and their modes of Application | C 2 |

Paper No : 2 Shodhana Siddhi

| A S.No | B Module number and Name | C MGP |
|-------------------|--|------------------|
| 3 | M11.Principles of Virechana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Virechana Dravya, Indications and Contra indications of Virechana Karma | C 3 |
| 4 | M12.Standard Operative Procedure of Virechana | C 4 |

Paper No : 3 Basti Siddhi

| A S.No | B Module number and Name | C MGP |
|-------------------|---|------------------|
| 5 | M19.PHARMAKOKINETICS AND PHARMACODYNAMICS OF BASTI DRAVYAS | C 5 |
| 6 | M20.METHODOLOGY FOR NIRUHA BASTI, ANUVASANA BASTI AND UTTAR BASTI | C 6 |

Paper No : 4 Naimittika Panchakarma Siddhi

| A S.No | B Module number and Name | C MGP |
|-------------------|--|------------------|
| 7 | M27.Applied Panchakarma in selected diseases of Raktadushti | C 7 |
| 8 | M28.Applied Panchakarma in Sthaulya, Karshya, Prameha & Hridroga | C 8 |

| | | |
|--|--|---|
| | Semester Grade point Average (SGPA) | $(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$ |
| Semester No : 5 | | |
| Paper No : 1 Upakalpaniya Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 1 | M5.Principles of Sagni and Niragni Sweda Practice | C 1 |
| 2 | M6.Various Modalities, assessment and mode of action of swedana Karma | C 2 |
| Paper No : 2 Shodhana Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 3 | M13.Principles of Nasya Karma, Critical Analysis of Nasya Dravya and Indications, Contra indications of Nasya Karma | C 3 |
| 4 | M14.Standard Operative Procedure of Nasya karma, NasyaVyapat, Mode of action of Nasya Karma and Recent advances in Nasya Karma | C 4 |
| Paper No : 3 Basti Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 5 | M21.Contents of Niruha Basti, method of mixing and analysis of prepared Basti | C 5 |
| 6 | M22.BASTI FORMULATIONS | C 6 |
| Paper No : 4 Naimittika Panchakarma Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 7 | M29.Applied Panchakarma in selected Vatavyadhi | C 7 |
| 8 | M30.Applied Panchakarma in Mutrakrichra & Mutraghata | C 8 |
| | Semester Grade point Average (SGPA) | $(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$ |
| Semester No : 6 | | |
| Paper No : 1 Upakalpaniya Siddhi | | |

| A S.No | B Module number and Name | C MGP |
|--|---|---|
| 1 | M7.Principles and Practice of MarmaChikitsa | C 1 |
| 2 | M8.Principles and application of Physiotherapy in association with Panchakarma | C 2 |
| Paper No : 2 Shodhana Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 3 | M15.Principles of Raktamokshana,Critical Analysis of Instruments and Dravya used in Raktamokshana | C 3 |
| 4 | M16.Standard Operative Procedure and Assessment of Raktamokshana Procedure and Recent advances | C 4 |
| Paper No : 3 Basti Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 5 | M23.Handling Emergencies in Panchakarama | C 5 |
| 6 | M24.Recent Advances in Basti | C 6 |
| Paper No : 4 Naimittika Panchakarma Siddhi | | |
| A S.No | B Module number and Name | C MGP |
| 7 | M31.Applied Panchakarma in Sotha & Amavata | C 7 |
| 8 | M32.Applied Panchakarma in supportive management of diseases | C 8 |
| | Semester Grade point Average (SGPA) | $(C1+C2+C3+C4+C5+C6+C7+C8) / \text{Number of modules}(8)$ |
| S. No | Evaluation Methods | |
| 1. | Method explained in the Assessment of the module or similar to the objectives of the module. | |

6 E : Question Paper Pattern

**MD/MS Ayurveda Examination
AYPG-PK
Sem VI**

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

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

6 F : Distribution for summative assessment (University examination)

| S.No | List of Module/Unit | ABQ | SAQ | LAQ |
|--|---|-----|-----|-----|
| Paper No : 1 (Upakalpaniya Siddhi) | | | | |
| (M-1) Snehana karma, Dravya, Categorization along with related applied anatomy & physiology (Marks: Range 5-20) | | | | |
| 1 | (U-1) Comprehension of Snehana Upakrama, Snehadravya and Snehopaga Dravya | Yes | Yes | Yes |
| 2 | (U-2) Interpretation of categorization of Sneha | Yes | Yes | Yes |
| 3 | (U-3) Applied Anatomy and Physiology of Skin and Integumentary System, Veins, Arteries, Lymphatic Vessels along with Tvacha Sharira, Sira Shareeram, Dhamani Shareeram, Srotasa Shareeram in Snehana and Swedana | Yes | Yes | Yes |
| 4 | (U-4) Applied Anatomy and physiology of musculoskeletal system, spine, along with Sandhi sharira, Peshisharira, Snayusharira, Kandarasharira, Kalaasharira in snehana and Swedana | Yes | Yes | Yes |
| 5 | (U-5) Applied Anatomy and Physiology of Cerebrum, Cerebellum, Spinal Cord and Nervous System. | Yes | Yes | Yes |
| (M-2) Application of Abhyantara Sneha (Marks: Range 5-20) | | | | |
| 1 | (U-1) Evaluation of types of Sneha based on dosages | Yes | Yes | Yes |
| 2 | (U-2) Division of Snehana based on Karmukata | Yes | Yes | Yes |
| 3 | (U-3) Usage of commonly used Ghritas | Yes | Yes | Yes |
| 4 | (U-4) Applied aspect of Rukshana Upakrama Prior to Snehana. | Yes | Yes | Yes |
| (M-3) Application of Sneha based on Mode of administration and action (Marks: Range 5-20) | | | | |
| 1 | (U-1) Administration of Accha Sneha and Pravicharana | Yes | Yes | Yes |
| 2 | (U-2) Administration of Sadya Sneha, Avapeedaka Sneha, Auttara Bhaktika Sneha | Yes | Yes | Yes |
| 3 | (U-3) Applied physiology and biochemistry of lipids and fatty acids related to Abhyantara Sneha | Yes | Yes | Yes |
| 4 | (U-4) Mode of action of Abhyantara Sneha | Yes | Yes | Yes |
| (M-4) Bahya Snehana and their modes of Application (Marks: Range 5-20) | | | | |
| 1 | (U-1) Application of Bahyasnehana and Massage techniques | Yes | Yes | Yes |
| 2 | (U-2) Moordhni Tailam and other Bahya Snehana modalities | Yes | Yes | Yes |

| | | | | |
|--|--|------------|------------|------------|
| 3 | (U-3) Application of Lepa, Pralepa, Pradeha, Alepa, Kavala, Gandusha, Takradhara | No | Yes | Yes |
| 4 | (U-4) Applications of commonly used Tailas | Yes | Yes | Yes |
| 5 | (U-5) Applied part of Chemical penetration enhancers (CPEs), commonly used fatty esters, fatty acids from dermatological formulations in connection with mode of action of Bahya Snehana. | Yes | Yes | Yes |
| (M-5) Principles of Sagni and Niragni Sweda Practice (Marks: Range 5-20) | | | | |
| 1 | (U-1) Essentialsof Swedana Upakrama | Yes | Yes | Yes |
| 2 | (U-2) Categorisation of Swedana | Yes | Yes | Yes |
| 3 | (U-3) Exploration of types of Classical Swedana | Yes | Yes | Yes |
| 4 | (U-4) Analysis of Swedopaga dravya and Swedana drugs | Yes | Yes | Yes |
| 5 | (U-5) Advancement in Instruments used for heating in current era | No | Yes | Yes |
| (M-6) Various Modalitites, assessment and mode of action of swedana Karma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Methodology of different modalities of Swedana Karma | Yes | Yes | Yes |
| 2 | (U-2) Assessment of Swedana Karma | Yes | Yes | Yes |
| 3 | (U-3) Understanding of Swedana from modern perspective | Yes | Yes | Yes |
| (M-7) Principles and Practice of MarmaChikitsa (Marks: Range 5-20) | | | | |
| 1 | (U-1) Marmasharira and fundamentals of Marma Chikitsa. | Yes | Yes | Yes |
| 2 | (U-2) Abhyangam/ Mardhana vidhi, Massage techniques used in Marma Chikitsa | Yes | Yes | Yes |
| 3 | (U-3) Management of various disease by Varmam/ Marma Chikitsa, utility of Marma Chikitsa and Sports medicine | Yes | Yes | Yes |
| 4 | (U-4) Pharmacodynamics and pharmacokinetics of drugs and formulations used in Marma Chikitsa | Yes | Yes | Yes |
| (M-8) Principles and application of Physiotherapy in association with Panchakarma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Principles of Physiotherapy practice | Yes | Yes | Yes |
| 2 | (U-2) Applied Science of Exercise and Technique | Yes | Yes | Yes |
| 3 | (U-3) Clinical Application of various modalities of physiotherapy | Yes | Yes | Yes |
| 4 | (U-4) Rehabilitation and its principles | Yes | Yes | Yes |
| S.No | List of Module/Unit | ABQ | SAQ | LAQ |

| | | | | |
|--|---|-----|-----|-----|
| Paper No : 2 (Shodhana Siddhi) | | | | |
| (M-9) Shodhanartha Sneha before Vamana and Virechana Karma, Principles of Vamana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Vamana Dravya and Indications, Contra indications of Vamana Karma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Snehapana Procedure before Vamana Karma | Yes | Yes | Yes |
| 2 | (U-2) Introduction to Vamana Karma | Yes | Yes | Yes |
| 3 | (U-3) Applied Anatomy and Physiology of Gastro Intestinal System in relation to Vamana Karma | Yes | Yes | Yes |
| 4 | (U-4) Analysis of Vamaka, Vamanopaga Dravya Guna Karma and its clinical application | Yes | Yes | Yes |
| 5 | (U-5) Indications and Contraindications of Vamana karma with rationale | Yes | Yes | Yes |
| 6 | (U-6) Assessment of Kaphotklesha Lakshana and Clinical Interpretation of Concept of Sadhyo Vamana, Ghreya Vamana and Practice of Vasantika Vamana | Yes | Yes | Yes |
| (M-10) Vamana Karma-Standard Operative Procedure and Assessment, Mode of action and Recent advances (Marks: Range 5-20) | | | | |
| 1 | (U-1) Protocol of Vamana Procedure, Assessment of Vamana Vega and Upavega in Dosha Nirharana | Yes | Yes | Yes |
| 2 | (U-2) Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga of Vamana Karma | No | Yes | Yes |
| 3 | (U-3) Scientific explanation of Samsarjana Krama, Tarpana Vidhi, Rasa Samsarjana Krama | Yes | Yes | Yes |
| 4 | (U-4) Analysis of Complications of Vamana Karma and their management | Yes | Yes | Yes |
| 5 | (U-5) Mode of Action of Vamana Karma with its Pharmacodynamics, Physiology of Vomitting | Yes | Yes | Yes |
| 6 | (U-6) Recent advancement and research work | Yes | Yes | Yes |
| (M-11) Principles of Virechana Karma, Applied Anatomy and Physiology of Gastro Intestinal System, Analysis of Virechana Dravya, Indications and Contra indications of Virechana Karma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Concept and treatment principles of Virechana Karma with relation to preventive, promotive and curative aspect Clinical importance of Different Classifications of Virechana and Laxatives | Yes | Yes | Yes |
| 2 | (U-2) Applied Anatomy and Physiology of Gastro Intestinal System in relation to Virechana Karma | Yes | Yes | Yes |

| | | | | |
|--|--|-----|-----|-----|
| 3 | (U-3) Analysis of Virechana, Virechanopaga Dravya Guna Karma Virechana yogas and its clinical application | Yes | Yes | Yes |
| 4 | (U-4) Indications and Contraindications of Virechana karma with rationale | Yes | Yes | Yes |
| 5 | (U-5) clinical application of Koshta Shodhana, Nitya Virechana and Importance of Sharad Virechana | Yes | Yes | Yes |
| (M-12) Standard Operative Procedure of Virechana (Marks: Range 5-20) | | | | |
| 1 | (U-1) Protocol of Virechana Procedure, Assessment of Virechana Vega and Upavega in dosha nirharana | Yes | Yes | Yes |
| 2 | (U-2) Clinical Assessment of Samyak Yoga, Ayoga and Atiyoga of Virechana Karma | Yes | Yes | Yes |
| 3 | (U-3) Assessment of Laingiki, Vaigiki, Manaki and Antiki Shuddhi of Virechana Karma | Yes | Yes | Yes |
| 4 | (U-4) Analysis of Complications of Virechana Karma and their management | Yes | Yes | Yes |
| 5 | (U-5) Mode of Action of Virechana Karma with its Pharmacodynamics, Physiology of Defecation | Yes | Yes | Yes |
| 6 | (U-6) Recent advancement and research work | No | Yes | Yes |
| (M-13) Principles of Nasya Karma, Critical Analysis of Nasya Dravya and Indications, Contra indications of Nasya Karma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Concept and treatment principles of Nasya Karma and Classifications of Nasya | Yes | Yes | Yes |
| 2 | (U-2) Applied Anatomy and Physiology Head and Neck relevant to Nasya Karma | No | Yes | Yes |
| 3 | (U-3) Nasya Dravya and Clinical Interpretation | Yes | Yes | Yes |
| 4 | (U-4) Nasya Yoga and their clinical utility | Yes | Yes | Yes |
| 5 | (U-5) Indications of Nasya Karma based on Avastha of Dosha and Roga | Yes | Yes | Yes |
| (M-14) Standard Operative Procedure of Nasya karma, NasyaVyapat, Mode of action of Nasya Karma and Recent advances in Nasya Karma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Protocol of Nasya Procedure Preoperative, Operative & Postoperative Procedure | Yes | Yes | Yes |
| 2 | (U-2) Assessment of of Samyak Yoga, Ayoga and Atiyoga of Nasya | Yes | Yes | Yes |
| 3 | (U-3) Complications of Nasya and Management | Yes | Yes | Yes |
| 4 | (U-4) Mode of Actions of Nasya | Yes | Yes | Yes |
| 5 | (U-5) Recent advancement and research in Nasya | Yes | Yes | Yes |

| | | | | |
|--|---|------------|------------|------------|
| (M-15)Principles of Raktamokshana,Critical Analysis of Instruments and Dravya used in Raktamokshana (Marks: Range 5-20) | | | | |
| 1 | (U-1) Principles of Raktamokshana | Yes | Yes | Yes |
| 2 | (U-2) Indications and Contraindications of Raktamokshana | Yes | Yes | Yes |
| 3 | (U-3) Instruments and Dravya for different types of Panchakarma | Yes | Yes | Yes |
| 4 | (U-4) Study of Jalauka (Leeches) | Yes | Yes | Yes |
| (M-16)Standard Operative Procedure and Assessment of Raktamokshana Procedure and Recent advances (Marks: Range 5-20) | | | | |
| 1 | (U-1) Protocol of Raktamokshana | Yes | Yes | Yes |
| 2 | (U-2) Assessment of Siravedha and Prachhan procedure | Yes | Yes | Yes |
| 3 | (U-3) Assessment of Jaloukavacharana, Shringa, Alabu and Ghatyantra | Yes | Yes | Yes |
| 4 | (U-4) Complications of Raktamokshana and management | No | Yes | Yes |
| 5 | (U-5) Mode of Action of different types of Raktamokshana with their Pharmacodynamics | Yes | Yes | Yes |
| 6 | (U-6) Recent advancements and researches in Rakatamokshan | Yes | Yes | Yes |
| S.No | List of Module/Unit | ABQ | SAQ | LAQ |
| Paper No : 3 (Basti Siddhi) | | | | |
| (M-17)APPLIED ANATOMY, PHYSIOLOGY AND IMPORTANCE OF BASTI (Marks: Range 5-20) | | | | |
| 1 | (U-1) Applied anatomy, applied physiology, significance of Basti and application of modern technique for Basti Karma | Yes | Yes | No |
| (M-18)CLASSIFICATION OF BASTI AND SCREENING OF PATIENT AND DOSE SCHEDULE FOR BASTI (Marks: Range 5-20) | | | | |
| 1 | (U-1) Classification and utility | No | Yes | Yes |
| 2 | (U-2) Screening of the patient, dosages and schedules of different type of Basti | Yes | Yes | Yes |
| (M-19)PHARMAKOKINETICS AND PHARMACODYNAMICS OF BASTI DRAVYAS (Marks: Range 5-10) | | | | |
| 1 | (U-1) Pharmacokinetics and Pharmacodynamics of Basti Dravya, Shada Skandha,Asthapanopaga and Anuvasanopaga Mahakashaya | No | Yes | No |
| (M-20)METHODOLOGY FOR NIRUHA BASTI, ANUVASANA BASTI AND UTTAR BASTI (Marks: Range 5-20) | | | | |

| | | | | |
|--|--|------------|------------|------------|
| 1 | (U-1) Purvakarma, administration and observation of Niruha Basti, Anuvasana Basti, and Uttar Basti. | Yes | Yes | Yes |
| 2 | (U-2) Samyakyoga, Ayoga and Atiyoga Lakshana and management of Vyapata | Yes | Yes | Yes |
| 3 | (U-3) Reporting of adverse drug reactions and medicolegal cases | Yes | Yes | Yes |
| (M-21) Contents of Niruha Basti, method of mixing and analysis of prepared Basti (Marks: Range 5-20) | | | | |
| 1 | (U-1) Contents of Niruha Basti, method of mixing and analysis of prepared Basti | Yes | Yes | Yes |
| (M-22) BASTI FORMULATIONS (Marks: Range 5-20) | | | | |
| 1 | (U-1) Various Basti formulations | Yes | Yes | Yes |
| 2 | (U-2) Basti in emerging lifestyle diseases | Yes | Yes | Yes |
| (M-23) Handling Emergencies in Panchakarma (Marks: Range 5-20) | | | | |
| 1 | (U-1) Emergency conditions in Panchkarma with their management | Yes | Yes | No |
| (M-24) Recent Advances in Basti (Marks: Range 5-20) | | | | |
| 1 | (U-1) Immunological, metabolic response and standardization | Yes | Yes | No |
| 2 | (U-2) Gut microbiome, molecular biology, drug administration through anal route | Yes | Yes | No |
| 3 | (U-3) Advancement in Basti | Yes | Yes | No |
| S.No | List of Module/Unit | ABQ | SAQ | LAQ |
| Paper No : 4 (Naimittika Panchakarma Siddhi) | | | | |
| (M-25) Applied Panchakarma in Dhatusravan Sansthan, Chittavikara, Kasa and Shwasa (Marks: Range 5-15) | | | | |
| 1 | (U-1) Dhatusravan sansthan | No | Yes | Yes |
| 2 | (U-2) Chittavikara | No | Yes | Yes |
| 3 | (U-3) Kasa | No | Yes | Yes |
| 4 | (U-4) Shwasa | No | Yes | Yes |
| (M-26) Panchakarma treatment in Arsha,Amlapitta,Udawarta,Grahani and Udara (Marks: Range 5-15) | | | | |
| 1 | (U-1) Arsha | No | Yes | Yes |
| 2 | (U-2) Amlapitta | No | Yes | Yes |
| 3 | (U-3) Udawarta | No | Yes | Yes |

| | | | | |
|--|---|-----|-----|-----|
| 4 | (U-4) Grahani | No | Yes | Yes |
| 5 | (U-5) Udara | No | Yes | Yes |
| (M-27) Applied Panchakarma in selected diseases of Raktadushti (Marks: Range 5-15) | | | | |
| 1 | (U-1) Kustha (Mandala, Ekakustha, Vicharchika, Vipadika, Kitibha, Sidhma), Shwitra, Sheetapitta | No | Yes | Yes |
| 2 | (U-2) Vatashonita | No | Yes | Yes |
| 3 | (U-3) Visarpa | No | Yes | Yes |
| 4 | (U-4) Pandu-kamala | No | Yes | Yes |
| (M-28) Applied Panchakarma in Sthaulya, Karshya, Prameha & Hridroga (Marks: Range 5-15) | | | | |
| 1 | (U-1) Sthaulya-Karshya | No | Yes | Yes |
| 2 | (U-2) Prameha | No | Yes | Yes |
| 3 | (U-3) Hridroga | No | Yes | Yes |
| (M-29) Applied Panchakarma in selected Vatavyadhi (Marks: Range 5-20) | | | | |
| 1 | (U-1) Maha VataVyadhi | Yes | Yes | Yes |
| 2 | (U-2) Samanya Vatavyadhi | Yes | Yes | Yes |
| 3 | (U-3) Apasmara | Yes | Yes | Yes |
| 4 | (U-4) Pain management | Yes | Yes | Yes |
| (M-30) Applied Panchakarma in Mutrakrichra & Mutraghata (Marks: Range 5-15) | | | | |
| 1 | (U-1) Mootrakrichra | No | Yes | No |
| 2 | (U-2) Mootraghata | No | Yes | No |
| (M-31) Applied Panchakarma in Sotha & Amavata (Marks: Range 5-15) | | | | |
| 1 | (U-1) Shotha | No | Yes | Yes |
| 2 | (U-2) Amavata | No | Yes | Yes |
| (M-32) Applied Panchakarma in supportive management of diseases (Marks: Range 5-15) | | | | |
| 1 | (U-1) Planning of Panchakarma in Malignancy | No | Yes | Yes |
| 2 | (U-2) Panchakarma in palliative medicine | No | Yes | Yes |
| 3 | (U-3) Panchakarma in Sports Medicine | No | Yes | Yes |

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

Instructions for the paper setting.

1. University examination shall have 4 papers of 100 marks.

Each 100 marks question paper shall contain:-

- Application Based Question: 1 No (carries 20 marks)
- Short Answer Questions: 8 Nos (each question carries 05 marks)
- Long Answer Questions: 4 Nos (each question carries 10 marks)

2. Questions should be drawn based on the table 6F.

3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.

4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated "NO".

5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.

6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.

7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.

8. Create Blueprint based on instructions 1 to 7

6 H : Distribution of Practical Exam (University Examination)

| S.No | Heads | Marks |
|------|---|-------|
| 1 | <p>1 Long case/Procedure/Major practical-100 marks</p> <p>Patient profile,chief complaint,Associated complaint,History of present illness,Past medical/surgical history Family and Personal history. Detailed systemic examination and roga-rogi pareeksha, Interpretation of various laboratory investigations, Final daignosis and prognosis. concomitant medications Panchakarma treatment protocol, fitness for a treatment with justification for selecting various procedureds in terms of various Panchakarma treatment.</p> | 400 |
| 2 | <p>A) Short case or Procedure/minor practical-50 marks</p> <p>Patient profile,chief complaint,associated complaint,History of present illness,Past medical/surgical history Family and Personal history Systemic examination and roga-rogi pareeksha Interpretation of various laboratory investigations Final daignosis Panchakarma fitness for treatment, pre and post assessement and Panchakarma treatment</p> <p>B) Practical: Preapration of Snehana,swedana and Shodhana (Vamana,Virechana,Basti,Nasya and Raktamokshana) related preparation.</p> | |
| 3 | <p>Spotters- 10 (5 marks each)-50 marks</p> <p>X-ray film interpretation</p> <p>ECG interpretation</p> <p>CT, MRI scanfilm interpretation</p> <p>Panchakarma Instruments</p> <p>spot diagnosis of cases/images/instruments and its utility in treatment aspect</p> | |
| 4 | <p>Assessing teaching ability:20 Marks</p> <p>Assessing teaching methadology and evaluating the effectiveness instructional strategies and techniques used in the classroom.</p> | |
| 5 | <p>Assessing presenation skills-20 marks</p> <p>Assessing preseentation skills involves evaluating an individual's ability to communications,Understading and applicabilty of concept.</p> | |
| 6 | Viva-voce (4 Examiners 20 Marks Each) 80 marks | |

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| 7 | Dissertation viva-40 marks | |
| 8 | Logbook (Activity record) 20 marks | |
| 9 | Practical/Clinical Record-20 marks Record book -minimum of 40 Procedures/cases Procedure/ cases should be related to all the modules i e. atleast one to two from each module. | |
| Total Marks | | 400 |

Reference Books/ Resources

| S.No | References |
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Abbreviations

| Domain | | T L Method | | Level | |
|---------|-----------------------------|------------|--------------------------------------|-------|-----------|
| CK | Cognitive/Knowledge | L | Lecture | K | Know |
| CC | Cognitive/Comprehension | L&PPT | Lecture with PowerPoint presentation | KH | Knows how |
| CAP | Cognitive/Application | L&GD | Lecture & Group Discussion | SH | Shows how |
| CAN | Cognitive/Analysis | L_VC | Lecture with Video clips | D | Does |
| CS | Cognitive/Synthesis | REC | Recitation | | |
| CE | Cognitive/Evaluation | SY | Symposium | | |
| PSY-SET | Psychomotor/Set | TUT | Tutorial | | |
| PSY-GUD | Psychomotor/Guided response | DIS | Discussions | | |
| PSY-MEC | Psychomotor/Mechanism | BS | Brainstorming | | |
| PSY-ADT | Psychomotor Adaptation | IBL | Inquiry-Based Learning | | |
| PSY-ORG | Psychomotor/Origination | PBL | Problem-Based Learning | | |
| AFT-REC | Affective/ Receiving | CBL | Case-Based Learning | | |
| AFT-RES | Affective/Responding | PrBL | Project-Based Learning | | |
| AFT-VAL | Affective/Valuing | TBL | Team-Based Learning | | |
| AFT-SET | Affective/Organization | TPW | Team Project Work | | |
| AFT-CHR | Affective/ characterization | FC | Flipped Classroom | | |
| | | BL | Blended Learning | | |
| | | EDU | Edutainment | | |
| | | ML | Mobile Learning | | |
| | | ECE | Early Clinical Exposure | | |
| | | SIM | Simulation | | |
| | | RP | Role Plays | | |
| | | SDL | Self-directed learning | | |

| | | | | | |
|--|--|-------|---------------------------|--|--|
| | | PSM | Problem-Solving Method | | |
| | | KL | Kinaesthetic Learning | | |
| | | W | Workshops | | |
| | | GBL | Game-Based Learning | | |
| | | LS | Library Session | | |
| | | PL | Peer Learning | | |
| | | RLE | Real-Life Experience | | |
| | | PER | Presentations | | |
| | | D-M | Demonstration on Model | | |
| | | PT | Practical | | |
| | | X-Ray | X-ray Identification | | |
| | | CD | Case Diagnosis | | |
| | | LRI | Lab Report Interpretation | | |
| | | DA | Drug Analysis | | |
| | | D | Demonstration | | |
| | | D-BED | Demonstration Bedside | | |
| | | DL | Demonstration Lab | | |
| | | DG | Demonstration Garden | | |
| | | FV | Field Visit | | |
| | | JC | Journal Club | | |
| | | Mnt | Mentoring | | |
| | | PAL | Peer Assisted Learning | | |
| | | C_L | Co Learning | | |
| | | DSN | Dissection | | |
| | | PSN | Prosection | | |

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