

**COURSE CURRICULUM FOR THIRD PROFESSIONAL BAMS
(PRESCRIBED BY NCISM)**

शास्त्रं ज्योतिः प्रकाशार्थं दर्शनं बुद्धिरात्मनः।

**Shalakyā Tantra
(Ophthalmology, Oto-Rhino- Laryngology & Oro-Dentistry)**

(SUBJECT CODE : AyUG-SL)

(Applicable from 2021-22 batch, from the academic year 2024-25 onwards for 5 batches or until further notification by NCISM, whichever is earlier)



॥ आयुषे सर्वलोकानाम् ॥

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



NCISM
III Professional Ayurvedacharya
(BAMS)
Subject Code : AyUG-SL
 Shalaky Tantra
 (Ophthalmology, Oto-Rhino- Laryngology & Oro-Dentistry)

Summary

Total number of Teaching hours: 300			
Lecture (LH) - Theory		100	100(LH)
Paper I	50		
Paper II	50		
Non-Lecture (NLHT)		60	200(NLH)
Paper I	30		
Paper II	30		
Non-Lecture (NLHP)		140	
Paper I	70		
Paper II	70		

Examination (Papers & Mark Distribution)					
Item	Theory Component Marks	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100	100	70	-	30
Paper II	100				
Sub-Total	200	200			
Total marks	400				

Important Note :- The User Manual III BAMS 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 III before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. In case of difficulty and questions regarding curriculum write to syllabus24ayu@ncismindia.org

PREFACE

A dynamic and evolving curriculum is crucial in Ayurveda education to prepare future medical professionals who are adaptable, informed, and empathetic. The third professional year plays a pivotal role in bridging foundational knowledge with clinical application, shaping students into competent Vaidyas (physicians). This phase of education must be a living entity, constantly adapting to advancements in healthcare, technology, and patient needs. Shalya Tantra, the Ayurvedic science of surgery, is a critical discipline that blends traditional surgical wisdom with modern innovations, ensuring a comprehensive and holistic approach to surgical education.

This curriculum serves as more than just a framework for knowledge dissemination—it is a structured roadmap designed to foster critical thinking, ethical integrity, and a commitment to lifelong learning. By integrating traditional pedagogical methods with innovative teaching-learning strategies, including case-based learning, hands-on training on simulators, and research-oriented clinical exposure, we aim to redefine surgical education in Ayurveda. It is designed to strengthen diagnostic abilities, enhance surgical skills, and introduce students to evidence-based practice through practical demonstrations, case discussions, and group interactions.

To ensure the global relevance and applicability of Shalya Tantra, the Expert Committee on Competency-Based Dynamic Curriculum has introduced enhancements such as the integration of modern surgical techniques, clinical research updates, and evidence-based practice. This curriculum not only delves into the strengths of Ayurveda in managing lifestyle disorders and non-communicable diseases but also equips students with the necessary skills to navigate an evolving healthcare system. We hope that this curriculum serves as a strong foundation for students, enabling them to achieve clinical excellence and uphold the highest ethical standards in their surgical practice.

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Course Code and Name of Course

Course code	Name of Course
AyUG-SL	Shalaky Tantra

Table 1 : Course learning outcomes and mapped PO

SR1 CO No	A1 Course learning Outcomes (CO) AyUG-SL At the end of the course AyUG-SL, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Demonstrate clinical application of anatomy and physiology of the Netra, Karna, Nasa, Mukha, Shiras.	PO1
CO2	Identify and understand Nidana-panchaka of diseases in Shalakyatantra according to Ayurveda and contemporary medical science. (Rogapareeksha)	PO1,PO2,PO3
CO3	Conduct appropriate clinical examinations using various diagnostic and imaging techniques, along with appropriate instrument usage and interpretation, as per Ayurveda and contemporary medical sciences.	PO2,PO3
CO4	Present the cases related to Shalakyatantra with clinical reasoning (Naidanika Tarka) along with prognosis (Sadhya-asadhyata) in clinical practice.	PO2,PO5
CO5	Acquire a knowledge of principles of treatment and various therapeutic measures related to Shalakyatantra, according to Samhitas and contemporary medical science.	PO2,PO3,PO4,PO7
CO6	Perform appropriate therapeutic measures related to Shalakyatantra and seek or refer for expert opinion whenever needed.	PO4,PO7
CO7	Communicate effectively with the patient, relatives and other stakeholders.	PO7,PO8
CO8	Demonstrate ethics (Sadvritha), compassion (Karuna) and possess qualities of a clinician (Vaidyaguna).	PO6,PO7,PO9

Table 2 : Contents of Course

Paper 1 (Netraroga (Ophthalmology))						
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours Theory	E2 Non-Lecture hours Practica I
1	Shareera, Nidaana Panchaka of Netraroga. A) Paribhasha of Shalaky Tantra. B) Netra Rachanashareera (Anatomy of Eye). C) Netra Kriyashareera (Physiology of Eye). D) Samanya Hetu (Nija and Agantuja) of Netraroga. E) Purvarupa of Netraroga. F) Samprapti of Netraroga. G) Saama and Niraama Lakshanas of Netraroga. H) Classification of Netraroga.	1	30	2	2	6
2	Samanya Chikitsa and Kriyakalpa. A) Samanya Chikitsa of Netraroga. B) Enumeration of Kriyakalpa. C) Seka. D) Pindi. E) Vidalaka. F) Aschyotana. G) Tarpana H) Putapaka. I) Anjana.	1		3	3	8
3	Panchakarma and Netraroga.	1		0	1	0

	Arhata and Importance of Panchakarma in Netraroga Chikitsa.					
4	Sanjnaharana in Netraroga. Types and drugs used in Sanjnaharana in Netraroga (Anesthesia in Ophthalmology).	1		0	1	0
5	Sandhigata Roga -1 A) Applied anatomy of Lacrimal apparatus. B) Pooyalasa, Upanaha (Acute and Chronic Dacryocystitis).	1		3	0	2
6	Sandhigata Roga -2 A) Netrasrava (Epiphora). B) Hyperlacrimation.	1		1	1	0
7	Sandhigata Roga -3 A) Krimigranthi (Blepharitis). B) Parvani, Alaji.	1		2	0	0
8	Vartmagata Roga-1 A) Anjananamika (Hordeolum). B) Utsangini, Lagana (Chalazion). C) Pakshmakopa (Trichiasis, Entropion). D) Pakshmeshata. E) Ectropion.	1	34	4	1	6
9	Vartmagata Roga-2 A) Pothaki (Trachoma). B) Sikatavartma.	2		1	0	0
10	Vartmagata Roga -3 A) Vatahatavartma (Ptosis). B) Nimesha. C) Klinnavartma.	2		2	0	4

	D) Utklishtavartma.	
11	Bhedana Karma Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Bhedana in Netraroga.	2
12	Lekhana Karma. Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Lekhana in Netraroga.	2
13	Shuklagata Roga -1 A) Arma (Pterygium). B) Arjuna (Sub-Conjunctival Haemorrhage). C) Shuktika. D) Pishtaka.	2
14	Shuklagata Roga -2 A) Applied Anatomy of Sclera. B) Sirajala, Sirajapidika (Episcleritis, Scleritis).	2
15	Chhedana Karma. Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Chhedana in Netraroga.	2
16	Agnikarma and Ksharakarma. Arhata, Purvakarma, Pradhanakarma, Pashchatkarma of Agnikarma and Ksharakarma in Netraroga.	2
17	Krishnagata Roga -1 A) Savrana Shukra/Shukla (Corneal Ulcer). B) Avrana Shukra/Shukla (Corneal Opacity). C) Ajakajata (Staphyloma). D) Sirashukla. E) Akshipakatyaya.	2
18	Krishnagata Roga -2	2

0	1	2
0	1	2
3	0	6
2	0	2
0	1	2
0	1	0
5	0	4
2	0	4

	A) Uveitis. B) Acute Iridocyclitis.(Tarakamandala-shotha.)					
19	Dravyas Used In Netrachikitsa-1 Dravyas used in Netrachikitsa [Anti-inflammatory drugs, Immunosuppressive drugs, Anti-infective drugs (Topical- Antibiotics/ Antiviral/ Antifungal agents), Lubricating agents and Artificial tears, Dyes used in Ophthalmology].	2		0	4	0
20	Eye Donation A) Basic knowledge of Eye bank. B) Eye Donation. C) Corneal Transplantation.	2		0	4	0
21	Sarvagata Roga -1 A) Abhishyanda (Conjunctivitis). B) Adhimantha. C) Hatadhimantha.	2	18	4	1	2
22	Sarvagata Roga -2 A) Shushkakshipaka (Dry Eye Syndrome, Computer Vision Syndrome). B) Sashophapaka. C) Ashophapaka. D) Amloshita. E) Sirotpaata. F) Siraharshha. G) Vaataparyaya. H) Pillaroga.	3		3	1	2
23	Glaucoma Dynamics of Aqueous Humour; Classification of Glaucoma and Description of Primary Open Angle	3		1	1	2

	Glaucoma and Primary Angle Closure Glaucoma.					
24	Drishtigata Roga-1 A) Timira (Errors of Refraction, Presbyopia). B) Amblyopia. C) Kacha. D) Linganasha. E) Kaphaja Linganasha Shastrakarma. F) Pitta-vidagdha Drishti. G) Kapha-vidagdha Drishti. H) Dhumadarshi. I) Ushna-vidagdha Drishti. J) Abhighataja Linganasha. K) Sanimittaja Linganasha. L) Animittaja Linganasha. M) Gambhirika . N) Hraswajadya. O) Nakulandhya.	3	18	7	1	4
25	Nayanabhighata A) Nayanabhighata (Ocular trauma and management). B) Agantuja Shalya (Foreign body in eye).	3		1	0	2
26	Drishtigata Roga-2 Classification of Cataract and description of Senle Cataract (Kaphaja Linganasha).	3		1	1	2
27	Drishtigata Roga- 3 A) Madhumehajanya Drishtiroga (Diabetic Retinopathy).	3		2	0	0

	B) Jarajanya Pitabindu Upaghata (Age related macular degeneration). C) Drishti-nadi Shosha (Optic atrophy).					
28	Dravyas used in Netra Chikitsa-2 Mydriatics, Cycloplegic agents.	3	0	1	0	
29	Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology. <ul style="list-style-type: none"> • A) Dravyas in Netrachikitsa. - Prayoga of Samanya Chakshushya Dravyas. - Prayoga of Samanya Chakshushya Yogas • B) Swasthavritta in Netraroga. - Netra and Chakshu Swasthyahitakara Dinacharya. - Netra and Chakshu Swasthyahitakara Aahara evam Vihara. • C) Kuposhanajanya Netravikara (Malnutritional Eye Disorders) - Naktandhya (Night Blindness). - Jeevanasatwa-kshayajanya Netra roga (Vitamin deficiency Eye disorders). - Xerophthalmia. - Xerosis. • D) Community and Preventive Ophthalmology. 	3	1	3	8	
Total Marks			100	50	30	70

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))						
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture	E2 Non-Lecture

					hours Theory	hours Practica I
30	Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga A) Enumeration, Samanya Nidana, Samprapti, Samanya Lakshanas, Sadhya-asadhyata of Shiroroga. B) Vataja, Pittaja, Kaphaja, Sannipataja Shirahshoola. C) Classification of Headache as per ICHD 3.	1	10	2	1	4
31	Samanya Chikitsa of Shiroroga A) Suryavarta, Anantavata, Ardhavabhedaka (Detailed study and differential diagnosis of Migraine headache). B) Shiraso Uttamangatwam, Pathyapathya and Samanya Chikitsa of Shiroroga.	1		0	2	4
32	Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga A) Rachana of Karna (Anatomy of Ear) B) Enumeration, Nidana Panchaka, Classification, Sadhya-asadhyata, Pathyapathya, Samanya Chikitsa of Karnaroga.	1	25	2	2	4
33	Karnaroga 1 A) Karnashoola (Otagia). B) Karna Shopha.	1		2	0	2
34	Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga A) Nasa and Ghranendriya Shareera(Anatomy of Nose & Paranasal sinuses and physiology of Olfaction). B) Enumeration, Samanya Hetu, Samanya Chikitsa, Pathya-apathya, Prognosis of Nasaroga.	1		2	1	2
35	Pratishyaya	1		3	1	0

	Pratishyaya, Dushtapratishyaya ,Puyarakta, Nasapaka, Nasashopha.					
36	Mukha Shareera and Nidana Panchaka of Mukharoga A) Paribhasha of Mukha. B) Mukha-Shareera. C) Nidana Panchaka,(Common etiological, pathological factors of diseases of Oral cavity as per Contemporary Medical Science); Enumeration, Classification, Sadhya-asadhyata, Pathya-apathya and Samanya Chikitsa of Mukharoga.	1		1	1	4
37	Oshtharoga A) Oshtharoga - Vataja, Pittaja, Kaphaja Oshtha Prakopa (Cheilitis, Herpes labialis). B) Khandoushtha (Cleft lip). C) Jalarbuda (Lip Mucocele).	1	10	1	0	0
38	Sarvasara Mukharoga Sarvasara Mukharoga (Stomatitis, Oral Submucous Fibrosis, Oral Candidiasis, Tumours of Oral cavity).	1		2	0	0
39	National Oral Health Programme National Oral Health Programme including prevention of malignancy of Oral cavity, Dantaraksha Vidhi.	1		0	1	0
40	Kapalagata Roga Enumeration, Samanya Nidana, Samprapti, Lakshana and Chikitsa of Kapalagata Roga - Arumshika, Darunaka, Indralupta, Khalitya, Palitya.	2	10	1	0	4
41	Karna Kriya Shareera and Shravanendriya Kriya Shareera of Karna and Shravanendriya (Physiology of Hearing and Equilibrium)	2		0	1	0
42	Karna Badhirya, Karna Naada and Kshweda A) Karna Badhirya (Hearing loss, Otosclerosis). B) National Programme for Prevention & Control	2		3	1	12

	of Deafness. C) Noise pollution. D) Karna Naada and Kshweda (Tinnitus).					
43	Karna Srava and Putikarna Karna Srava (Otorrhea). Putikarna (Otitis Media, Mastoiditis).	2	05	4	2	4
44	Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka. A) Karnakandu, Karnaguthaka (Ear wax), Karnapratinaha. B) Krumikarna (Maggots in Ear), Karnavidradhi, Karnapaka (Otitis Externa), Otomycosis.	2		2	0	4
45	Rhinitis Rhinitis.	2		1	2	0
46	Deeptadi Nasaroga. Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu, Peenasa, Apeenasa, Putinasa (Sinusitis).	2		3	1	2
47	Nasavamsha-kutilatwa (Deviated Nasal Septum). Nasavamsha-kutilatwa (Deviated Nasal Septum).	2	10	1	1	0
48	Dantamulgata roga A) Sheetada, Dantaveshtaka, Paridara, Upakusha (Gingivitis, Periodontitis). B) Adhimaamsa (Impacted wisdom tooth). C) Dantanaadi. D) Dantavidradhi (Apical abscess).	2		2	1	0
49	Jihvagata Roga A) Jihvakantaka (Glossitis).	2		1	1	0

	B) Alaasa. C) Ankyloglossia (Tongue tie).					
50	Krimidantaka and Dantaharsha A) Krimidantaka (Dental Caries). B) Dantaharsha (Dentin Hypersensitivity).	2		1	1	0
51	Dravyas used in Karna Nasa Mukha Roga Chikitsa-1 A) Common Pharmacological agents in Oto-Rhino-Laryngology (Antibiotics, Anti-histamines, PPIs, Steroids, Nasal Decongestants). B) Sammohan Dravyas in Karna Nasa Mukha Roga (Anaesthesia in Oto-Rhino-Laryngology).	2		1	0	2
52	Karnarsha and Karnarbuda Karnarsha (Aural Polyps). Karnarbuda.	3	10	1	0	0
53	Karnasandhana Karnasandhana (Auroplasty)	3		1	1	0
54	Bhraamara (Vertigo) Bhraamara (Vertigo- Benign Paroxysmal Positional Vertigo, Meniere's disease, Labyrinthitis).	3		1	1	2
55	Agantuja Shalya in Karna Agantuja Shalya in Karna (Foreign Body in Ear).	3	10	0	1	2
56	Nasarsha Nidan Panchaka and Chikitsa of Nasarsha (Nasal polyps).	3		1	1	2
57	Nasagata Raktasrava Nidana Panchaka and Chikitsa of Nasagata Raktasrava (Epistaxis).	3		1	1	2
58	Nasarbuda Nasarbuda (Tumors of nose and paranasal sinuses).	3		1	1	2

59	Agantuja Shalya in Nasa Agantuja Shalya in Nasa (Foreign Body In nose).	3	10	1	0	2
60	Nasa-abhighata, Nasasandhana Nasa-abhighata (Nasal trauma). Nasasandhana.	3		1	0	2
61	Talugata Roga A) Galashundika (Uvulitis) B) Tundikeri C) Kacchapa (Tumours of hard palate) D) Gilayushotha (Tonsillitis) E) Arbuda F) Talushosha G) Talupaaka	3		2	1	0
62	Kantharoga A) Rohini B) Kanthashaluka C) Ekavrunda, Vrunda (Pharyngitis) D) Svaraghna (Laryngitis, Ca Larynx) E) Maamsatana F) Vidaari G) Gilayu, Galavidradhi, (Peritonsillar abscess, Para & Retro-pharyngeal abscess) H) Parotitis I) Agantuja Shalya in Kantha (Foreign Body in throat)	3		4	2	6
63	Dravyas used in Karna Nasa Mukha Roga Chikitsa-2 Samanya Yogas used in Shiro, Karna, Nasa and Mukha Roga.	3		1	1	2

Total Marks	100	50	30	70
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Table 3 : Learning objectives of Course

Paper 1 (Netraroga (Ophthalmology))										
A3 Course outcome	B3 Learning Objective (At the end of the session, the students should be able to)	C3 Domain/sub	D3 MK / DK / NK	E3 Level	F3 T-L method	G3 Assessment	H3 Assessment Type	I3 Term	K3 Integration	L3 Type
Topic 1 Shareera, Nidaana Panchaka of Netraroga. (LH :2 NLHT: 2 NLHP: 6)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Paribhasha of Shalakya Tantra.Explain Netra Rachana Shareera (Anatomy of Eye).	CC	MK	KH	L	QZ ,VV-Viva,PUZ,M-POS	F&S	I	V-RS,V-RS	LH
CO1	Explain Kriya Shareera of Netra (Physiology of vision).	CC	MK	KH	D-M,PER,L&PPT,TPW	CL-PR,COM	F&S	I	V-KS	NLHT1.1
CO1, CO2	Explain Classification of Netraroga according to treatment principles, prognosis, and Doshadhikya and Explain Saama-Nirama Lakshana.	CC	MK	KH	L&GD,DIS	P-POS,QZ ,T-OBT,COM	F&S	I	V-RN	NLHT1.2
CO2	Describe Samanya Hetus (Nija and Agantuja), Purvarupa, and Samprapti of Netraroga.	CC	MK	KH	BS,L&PPT	M-CHT,VV-Viva,P-EXAM	F&S	I	-	LH
CO3, CO7	Perform History taking in cases of Netraroga.	CAN	MK	SH	PBL,EDU,PT,TUT,D-BED	Mini-CEX,P-PRF,P-EXAM,P-VIVA	F&S	I	-	NLHP1.1
CO3, CO7	Follow the steps in performing the structural examination of Netra.	PSY-GUD	MK	SH	TUT,PT,D-BED,D,CBL	Mini-CEX	F&S	I	-	NLHP1.2

CO3, CO7	Follow the steps in performing the visual acuity assessment for Distant vision, near vision, colour vision, field of vision, and ocular motility.	PSY- GUD	MK	SH	D,RP,P T,PBL	Mini-CEX, PP-Practica l,P-PRF	F&S	I	-	NLHP1.3
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Discussion on Netra Kriya Shareera in its Applied aspect.	<p>A) The teacher will provide the link of the material needed or the physical material. Ask the Students to study, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. Ask the student to connect the knowledge gained in previous classes into applicable clinical framework.</p> <p>B) Make small groups, subdivides subject into smaller topics and asks student to make power point presentations in the class. PowerPoint presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids.</p> <p>OR</p> <p>C) Learning on eye models can be done for better understanding. Ask the students to compile information and conclusion of discussions. Compilations can be assessed on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.</p> <p>D) Guidance from faculty of Kriya Shareera can be taken if needed.</p>
NLHT 1.2	Classification and Saama Nirama Lakshana of Netraroga.	<p>A) Make three groups for classification of Netraroga. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross-platform messaging services like Whatsapp or Telegram or Learning platforms like google classroom.</p> <p>They should be also instructed to go through the textbooks and read this topic.</p> <p>They should make posters and present in classroom, try to find Mnemonics to remember</p>

		<p>classifications.</p> <p>B) Make two groups to understand Saama Niraama Lakshanas. Ask the students to go to library and ask for Librarian's help. They should be asked to subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Ask the Students to have a group discussion on the topic and prepare a compilation. Encourage open sharing by stating that all ideas are welcome without judgment. Encourage participants to expand on each other's suggestions. Emphasize the importance of listening attentively to all contributions.</p> <p>C) Help from Faculty of Roga Nidana can be taken for better understanding of concepts.</p> <p>D) An open book test or quiz can be conducted to assess the students learning. Evaluation of compilation can be done on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 1.1	History taking in cases of Netraroga.	<p>A) Encourage students to teach each other history taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions Make Student introduce himself to patients. Ask Student to make patients comfortable. Ask Student to take general history and history related to eye diseases. Make student Understand Ocular diseases with diminution of vision and normal vision. OR B) Utilize advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills.</p>

		<p>OR</p> <p>C) Recommend apps like geekymedics, wikimed that offer virtual practice and conduct quizzes on history-taking skills.</p> <p>D) Conduct OSCEs where students rotate through stations to practice history taking and communication skills. The assessor should use checklists to evaluate students' performance in a reliable and consistent way.</p> <p>E) Communication skills can be assessed by Kalamazoo essential elements communication checklist.</p> <p>OR</p> <p>F) Use MINI-CEX As an evaluation method. The format can be downloaded from https://www.ranzcr.com/images/20211015_RO_Mini-CEX_Assessment_Form.pdf. A similar format can be developed.</p>
NLHP 1.2	Structural Examination of Netra.	<p>A) Prepare the students for examination of all Mandalas, Patalas and Sandhis. Explain parts of Mandalas, Patalas and Sandhis. Explain why examination is crucial for diagnosis.</p> <p>B) Conduct live demonstrations with real or simulated patients to model effective case taking.</p> <p>OR</p> <p>Use videos of experienced clinicians.</p> <p>OR</p> <p>C) Use standardised patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety and anatomical landmarks.</p> <p>D) Teach students the importance of building rapport and demonstrating empathy during patient interactions. Use Mini-CEX. for assessment</p> <ul style="list-style-type: none"> o Observe a Student's interaction with a patient in a real-world clinical setting o Rate the performance of student using a 9-point scale: 1 through 3 is unsatisfactory, 4 through 6 is satisfactory, 7 through 9 is superior. o The student receives immediate feedback from the expert <p>E) Provide constructive feedback on their performance, highlighting areas of improvement and</p>

		excellence.
NLHP 1.3	Functional examination of Netra.	<p>A) Present a clinical case of diminution of Vision and have students work in groups to gather history, discuss differential diagnosis, and plan management. Encourage the students for Assessment of visual acuity with the help of Snellen's chart, Assessment of colour vision with Ishihara's chart, Pin hole examination and Assessment of near vision, The finger tip method to assess intraocular pressure and Testing of Ocular motility.</p> <p>OR</p> <p>B) Assign roles to students, such as the patient, the primary care provider, and an observer. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios.</p> <p>C) Break students into small groups for more focused practice and individualised feedback. Highlight the role of active listening.</p> <p>D) Use Mini-CEX for assessment of students</p> <ul style="list-style-type: none"> o Observe a Student's interaction with a patient in a real-world clinical setting o Rate the performance in areas like history taking, physical examination, and counselling skills o The student receives immediate feedback regarding performance and suggestions for improvement

Topic 2 Samanya Chikitsa and Kriyakalpa. (LH :3 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO6	Enumerate Kriyakalpa, Define and Describe types and dose, Indications and contraindications, Poorva, Pradhana and Pashchat Karma, Kala, Ayoga, Samyak yoga and Atiyoga lakshanas of Seka. Define and Detail Indications and contraindications, Poorva, Pradhana and Pashchat Karma of Pindi and Vidalaka.	CC	MK	KH	L&PPT ,L	QZ ,T-OBT	F&S	I	-	LH
CO5	Define, Describe types and dose, Indications and contra indications, Poorva, Pradhana and Pashchat Karma, Kala, Ayoga,	CK	NK	KH	PER,FC ,L&GD	PA,CR-RE D,T-CS,PR	F	I	-	NLHT2.1

	Samyak and Atiyoga lakshanas of Aschyotana. List the key findings of current research on Aschyotana, Seka, Pindi and Vidalaka.					N,O-QZ				
CO6	Demonstrate Seka and Pindi. Take informed consent and counsel patients for Kriyakalpas in a simulated environment.	PSY-MEC	MK	SH	D,D-M, TUT,RP ,TBL	P-PRF,DO PS,DOPS,P -EXAM,D OAP	F&S	I	-	NLHP2.1
CO5	Define and Discuss Types and dose, indications and contra indications, Poorva, Pradhana and Pashchat karma, Kala, Ayoga, Samyakyoga and Atiyoga Lakshanas, complications and management of Tarpana and Putapaka.	CC	MK	KH	L&PPT ,L	PRN,M-CH T,COM,QZ ,VV-Viva	F&S	I	-	LH
CO5	List the key findings of current research on Tarpana and Putapaka.	CK	NK	K	DIS,TB L,LS	CR-RED,M- POS	F	I	-	NLHT2.2
CO6, CO7	Demonstrate Vidalaka and Aschyotana.	PSY-MEC	MK	SH	D-M,T UT,SIM ,D,PT	DOPS,P-P RF,DOPS,P P-Practical, Log book	F&S	I	-	NLHP2.2
CO5	Summarise the steps involved in Tarpana and Putapaka.	CC	MK	KH	D-M,SI M,TUT, PT,D	VV-Viva,P- VIVA,O- QZ	F&S	I	-	NLHP2.3
CO5	Define and Explain Types and Dosage, Indications and contraindications, Poorva- Pradhana and Paschat karma, Kala, Heena, Samyaka and Atiyoga lakshanas, Complications of Anjana. Describe Anjana Shalaka.	CC	MK	KH	L&PPT ,L	T-CS,M-P OS,PRN,V V-Viva,QZ	F&S	I	-	LH
CO5	List the key findings of current research on Anjana.	CK	NK	K	DIS,L& GD,LS	SA,CR- RED	F	I	-	NLHT2.3
CO5,	Summarise the steps involved in Anjana.	CC	MK	KH	ML,SI	VV-Viva,P	F&S	I	-	NLHP2.4

CO6, CO7					M,PT,D	P-Practical, Log book,P -VIVA,O- QZ				
Non Lecture Hour Theory										
S.No	Name of Activity		Description of Theory Activity							
NLHT 2.1	Details of Aschyotana and Researches studies on Aschyotana, Seka, Pindi and Vidalaka.		<p>A) Aschyotana (25 minutes) Teacher will form study groups to discuss and share information regarding Aschyotana. Ask the students to study themselves, discuss with peers, review each other's notes and finally make short notes and record what they have learnt. At the end of session, make students to have group discussions in the class, which will be summed up by the teacher. Utilize pre-class online quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, assessment of engagement can be done by criteria like student participation, level of curiosity, and willingness to ask questions.</p> <p>B) Researches on Aschyotana, Seka, Pindi and Vidalaka.(25 minutes) Ask the students to form four groups and collect relevant research papers and articles, on the topic. Ask them to go to library and ask for Librarian's help.(Pre-class) Make them subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Ask them to familiarise themselves with tools like EndNote, Zotero, or Mendeley to collect information about primary and secondary sources, such as journal articles,and books. At the end of session, have group discussions in the class, each group 04 minutes; which will be summed up by the teacher. To evaluate the performance, Peer assessment can be done.</p>							
NLHT 2.2	Review of Research studies on Tarpana and Putapaka.		<p>A)Teacher will form four study groups to discuss and share information- Two each for Tarpana and Putapaka. Teacher can subdivide subtopics amongst the students and split time between different activities like searching for articles, reading and taking notes. Students will study themselves, discuss with peers, review each other's notes.(Pre-class)</p> <p>OR</p> <p>B)Teacher will ask the students to go to library and ask for Librarian's help, Students can be asked to</p>							

		<p>familiarise themselves with tools like EndNote, Zotero, or Mendeley and collect information from primary and secondary sources, such as journal articles, books etc.(Pre-class)</p> <p>C) At the end of session students must be asked to summarize and record what they have learned.They should make posters and present in the class. A time of 10 minutes should be allotted to each group. Evaluation of posters- To evaluate Consider criteria like Overall impression, Blank Spaces, Balance, Relation between text and graphs, Text size, Structure and reading fluency, Contents.</p>
NLHT 2.3	Discussion on Research studies on Anjana.	<p>A) Teacher will form study groups to discuss and share information, Students will study themselves, discuss with peers, review each other's notes.(Pre-class)</p> <p>Students will be asked to go to library and ask Librarian's help, Teacher can subdivide subtopics amongst them and split time between different activities like searching for articles, reading and taking notes. Students will be asked to familiarise themselves with tools like Zotero, to collect information about primary and secondary sources, such as journal articles, books. (30 min. of the class time.)</p> <p>At the end of session, they should summarize what they have learned. Choose randomly two students from each group to present (05- 10 min. each)</p> <p>B) Students should be encouraged to reflect on their own performance and identify areas for improvement. Self-assessment can be done on parameters like:- Team work and collegiality, empathy and openness, ethical awareness, work planning, scientific method of working, structuring, coping with mistakes, and priorities.</p>
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 2.1	A) Procedures of Seka and Pindi. B) Method of taking Informed consent from patients.	<p>A) Ask the Students to observe and perform the procedures under supervision.</p> <p>OR</p> <p>B)Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action.</p> <p>OR</p>

		<p>C) Use anatomical models, diagrams, and 3D animations to illustrate.</p> <p>D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.</p> <p>E) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients.</p> <p>Evaluation can be done by Direct Observation of Procedural Skills (DOPS)</p> <ul style="list-style-type: none"> • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee. • Proforma for DOPS can be found at https://www.iscp.ac.uk/static/public/DOPSJul2015.pdf. <p>F) Ask the Students to learn to take informed consent for Kriyakalpas by role play.</p> <p>G) Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management.</p>
NLHP 2.2	Demonstration on Vidalaka and Aschyotana.	<p>A) Ask the students to observe and perform the procedures under supervision.</p> <p>B) Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action.</p> <p>OR</p> <p>C) Use anatomical models, diagrams, and 3D animations to illustrate.</p> <p>D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.</p> <p>E) Promote teamwork and collaboration among students, Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients. Ask the students to maintain log book.</p>

		<p>G)Evaluation can be done by Direct Observation of Procedural Skills (DOPS)</p> <ul style="list-style-type: none"> • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee.
NLHP 2.3	Discussion on Tarpana and Putapaka.	<p>A) Divide students into groups of 04-06 students. Ask the students to observe the technique of preparation of Mashapali, administration of Tarpana, preparation of Putapaka Rasa and administration of Putapaka and outcomes. Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action.</p> <p>OR</p> <p>Use anatomical models, diagrams, and 3D animations to illustrate.</p> <p>B)Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.</p> <p>C) Promote teamwork and collaboration among students, encouraging them to learn from each other’s experiences. Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients.</p> <p>D) Conduct online quiz to evaluate students.</p>
NLHP 2.4	Procedure of Anjana.	<p>A) Divide the students into groups of 04-06. Ask the Students to observe the procedures while being conducted in hospital, under supervision.</p> <p>OR</p>

B)Teacher may show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action.

OR

C)Use anatomical models, diagrams, and 3D animations to illustrate.

D) Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.

E) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients.

F) To assess, use online quiz or evaluate the log book.

Topic 3 Panchakarma and Netraroga. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enlist the diseases in which Poorvakarmas of Panchakarma (Snehana / Swedana) and Panchakarmas are indicated and contra-indicated in Netraroga.	CK	NK	K	L&GD, DIS,LS	M-POS	F&S	I	-	NLHT3.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Indications and contraindications of Poorvakarma and Vamana, Virechana, Basti, Nasya,Raktamokshana In Netraroga.	A) Teacher will divide the students into 06 groups. Ask the Students to visit the library and collect related references from Samhita and prepare posters on the indications and contraindications of Panchakarma related to Netraroga.(Pre-class) Make students present their work in the classroom (05 minutes to each group). Conduct a brief discussion, (15- 20 min.)encouraging students to come out with their views regarding the logic behind it. Evaluate them on criteria like Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.

B) A constructive feedback with guidelines for improvements can be given.
 C) Assess the posters on following points- Choosing the right type; Design for clarity and simplicity; and Use of proper and reliable Data-source.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
Topic 4 Sanjnaharana in Netraroga. (LH :0 NLHT: 1 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Define Sanjnaharana (Anesthesia).Enlist types and drugs used for Anesthesia in Ophthalmology.Describe dosage, indications, contraindications and untoward effects. (Topical/Surface anaesthesia - Lidocaine, Amethocaine, Proparacaine).	CC	DK	KH	FC	T-OBT,QZ	F&S	I	-	NLHT4.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Sanjnaharana in Netra (Anesthesia in Ophthalmology) -	<p>A)The topic is assigned to students using the flipped method. The students will be given a link to a PowerPoint presentation on Sanjnaharana. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or blended learning platforms like google Classroom. They should be also instructed to go through the textbooks and read this topic.(Pre-class) They should be given 1 week time before the scheduled Flipped Class Room for this topic.The class can be divided into 3 groups .one group can be given a job of enlisting the types of anaesthesia used in eye and names of the drugs.Second group can be given a topic- dosage and indications of anaesthetic drugs. Third group can be asked to prepare Indications and contraindications of anesthetic drugs. They would present in the class. (10 min. to each group.)</p>

		B)The students will be asked completion type, reason assertion type, and problem-based questions in the form of Quizzes or open book test for assessment.Students will be also encouraged to ask questions to clarify concepts. (20 min.)
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 5 Sandhigata Roga -1 (LH :3 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Pooyalasa.Define and describe types of Dacryocystitis.	CC	MK	KH	PBL,L, L&PPT	P- VIVA,QZ ,T-OBT	F&S	I	-	LH
CO2, CO5	Describe etiology, clinical features, complications and medical management of acute and chronic Dacryocystitis.	CC	DK	KH	L&PPT	T-OBT	F&S	I	-	LH
CO2, CO5	Describe surgical management of Chronic Dacryocystitis - Dacryocystorhinostomy (DCR), Dacryocystectomy (DCT):- (Their indications, contra indications, type of anaesthesia, major surgical steps, post-operative care, complications and their management in brief).	CC	DK	KH	L&PPT ,L	INT, C- VC,QZ ,P- POS,T- OBT	F&S	I	-	LH
CO3	Examine Netra-sandhi.Follow the steps in performing regurgitation test of the lacrimal sac and observe sac syringing.	PSY- GUD	DK	SH	D-BED, D-M,RP ,L_ VC, CBL	OSCE,DOP S,P-EXAM, DOPS,CH K	F&S	I	-	NLHP5.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 5.1	Evaluation of Netra-sandhi and Dacryocystitis.	<p>A) Examine Netra-sandhi.(60 min.) Make students examine all Sandhis in eye. They will check for any Redness, Growth, Deformity or Scarring. Explain why examination is crucial for diagnosis. Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use standardised patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment. Emphasize key points like technique, safety, anatomical landmarks Teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>B) OSCE stations -Each student should be given the same model or simulated patient for assessment. The assessor should use checklists to evaluate students' performance in a reliable and consistent way.</p> <p>C) Regurgitation test of the lacrimal sac (30 minutes) Make students demonstrate the technique for the regurgitation test of the Lacrimal sac. Emphasize key points like technique, safety, anatomical landmarks. Teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>C)Observation of Lacrimal sac syringing (30 minutes) Make Students observe the technique of Lacrimal sac syringing.They will be provided with a proper step wise checklist so they do not miss any step while observing the procedure. For assessment checklist can be used each step having specific marks.</p>

Topic 6 Sandhigata Roga -2 (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Describe samprapti of Netrasrava and Clinical features of Pooyasrava, Kaphaja Srava, Raktaja Srava and Pittaja Srava.Give an account of Clinical features and Chikitsasutra of Upanaha.	CC	MK	KH	L,L&PP T ,DIS	INT,O-QZ, T-OBT,VV- Viva	F&S	I	-	LH

CO2	Differentiate between Epiphora and Hyperlacrimation.	CC	MK	KH	LS,L&GD,DIS	T-OBT,INT,CL-PR,DEB,VV-Viva	S	I	-	NLHT6.1
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Differential Diagnosis and causes of Epiphora and Hyperlacrimation.	<p>A) Make atleast four study groups to discuss and share information, each for Differential Diagnosis and causes of Epiphora and Hyperlacrimation. Ask Students to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.</p> <p>OR</p> <p>B) Make students to visit library for library session (20 minutes). Divide subtopics amongst the students by making atleast 4 groups and ask them to read relevant literature about the differences between Epiphora and Hyperlacrimation, and have a group discussion, which will be followed by a presentation (30 minutes - 5 min for each presentation and 10 minutes for teacher for briefing.). During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions to assess their engagement. Presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves and effective use of visual aids. Last 10 minutes will be devoted for assessment. Ask the students to record all the discussion.</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
Topic 7 Sandhigata Roga -3 (LH :2 NLHT: 0 NLHP: 0)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Krimigranthi. Define and Enumerate types of Blepharitis.	CC	MK	KH	L&PPT	VV-Viva,T-OBT	F&S	I	-	LH
CO2, CO5	Explain etiology, clinical features, complications, and treatment of Ulcerative and Seborrhoeic blepharitis. Describe clinical features and Chikitsasutra of Parvani; and clinical features of Alaji.	CC	DK	KH	L&PPT ,L	T-OBT,QZ	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 8 Vartmagata Roga-1 (LH :4 NLHT: 1 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe clinical features and management of Anjananamika. Describe types of Hordeolum. Describe etiology, clinical features and management of External and Internal Hordeolum.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO2, CO5	Describe clinical features and management of Utsangini and Lagana. Describe the etiology, clinical features, and medical and surgical management of Chalazion.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	I	-	LH
CO2, CO5	Describe clinical features and management of Pakshmakopa. Describe etiology, clinical features, complications and principle of treatment in Trichiasis and Entropion.	CC	DK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH
CO2, CO5	Describe etiology, clinical features, complications and principle of treatment in Ectropion. Describe clinical features and	CC	NK	KH	L&PPT	T-CS,VV-Viva	F&S	I	-	LH

	management of Pakshmathata.									
CO3, CO5	Discuss and Diagnose, Ectropion and Entropion.	CAN	DK	KH	DIS,PB L,TBL	CL-PR,QZ	F	I	-	NLHT8.1
CO3	Examine of Bhru (eyebrow), Pakshma (eye lashes), Paksh mavartmasandhi (lid margin) and Vartma (eye lid).	PSY- MEC	MK	SH	TUT,PB L,L_VC ,D-BED	P-EXAM,P -VIVA,OS CE	F&S	I	-	NLHP8.1
CO5	Summarise the steps involved in the incision and curettage (I&C) for treating a Chalazion.	CC	DK	KH	D,CBL, L_VC	CHK,Log book,OSCE	F	I	-	NLHP8.2
CO3, CO4, CO7	Demonstrate assessment of Pakshmakopa (Trichiasis / Entropion) and Ectropion. Demonstrate misdirected eyelash removal by Epilation.	PSY- GUD	DK	SH	D-BED, L_VC,P BL,ML	SP,Mini- CEX,OSCE	F&S	I	-	NLHP8.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Diagnostic Approaches to Eyelid Malposition: Entropion and Ectropion.	<p>A) Share a link about explanation of subject by free messaging services or Google classroom.(Pre-class). Make four groups to discuss the subject. Encourage students to actively participate in interactive activities and apply their understanding of Entropion and Ectropion.</p> <p>OR</p> <p>B) Present cases of entropion and ectropion. Have students work in pairs or small groups to discuss symptoms and propose treatments, then share insights, focusing on key clinical signs and diagnostic approaches.</p> <p>C) Give 10 minutes to each group to present in the classroom.</p> <p>D) Assess students individually or in small groups using a quiz format, including multiple-choice and short-answer questions on the etiology, signs, symptoms, and management of entropion and ectropion.</p> <p>OR</p> <p>Assess presentation on its clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely,</p> <p>E) Briefly discuss the answers to reinforce understanding and address misconceptions.</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 8.1	Examination of Periocular Structures - Bhru (Eyebrow), Pakshma (Eyelash), Pakshmavartmasandhi (Lid Margin), and Vartma (Eyelid).	<p>A) Ask students to carefully inspect these areas/structures for any anomalies that may compromise ocular health, comfort, and vision.</p> <p>B) Integrate clinical scenarios at the patient's bedside/OPD, allowing students to apply learned skills in a real-world context.</p> <p>C) Encourage students to formulate diagnostic hypotheses based on patient history, guiding their physical examination to focus on relevant findings.</p> <p>Emphasize key points like technique, safety, anatomical landmarks.</p> <p>Teach students to carefully observe patient appearance, skin color, swellings, and any other visible abnormalities.</p> <p>Emphasize appropriate hand placement, pressure application, and how to differentiate textures, masses, and tenderness.</p> <p>D) Teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>E) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.</p> <p>F) Students can be assessed with the help of OSCE stations: They should be assessed on competency in communication, history taking, physical examination, clinical reasoning, and knowledge. OSCE stations may include:</p> <ul style="list-style-type: none"> • Clinical interactions (in-person or virtual) with standardized patients: counseling, examination, history taking • Examination of mannequins and interpretation of findings • Computerized cases • Test Interpretation.
NLHP 8.2	Incision and curettage (I&C) in Chalazion	A) Instruct students to observe and learn the incision and curettage (I&C) procedure for chalazion .

	surgery.	<p>B) Demonstrate surgical instruments and each phase of the procedure, instructing students to note the surgeon's techniques.</p> <p>C) Teach students about post-operative care, including monitoring for complications and managing patient recovery.</p> <p>OR</p> <p>D) Record surgeries (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve.</p> <p>OR</p> <p>E) Provide access to online surgical tutorials, webinars, and interactive platforms for additional learning.</p> <p>F) Students should be asked to make check lists and assess them. Alternatively, they can be asked to complete log books and they can be assessed.</p> <p>OR To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.</p>
NLHP 8.3	Cases of Eyelid Malposition: Pakshmakopa (Trichiasis, Entropion) and Ectropion; Trichiatic cilia removal by Epilation.	<p>A) Guide students to learn lid examination technique accurately and thoroughly, explaining rationale and key anatomical landmarks. Use a structured approach, breaking down complex examinations into smaller, manageable steps while making them aware of the Assessment of Pakshmakopa (Trichiasis/Entropion), and Ectropion.</p> <p>B) Emphasize proper patient positioning, communication skills, and ethical considerations.</p> <p>C) Students should Observe procedures under supervision.</p> <p>D) Select appropriate patients with relevant clinical presentations.</p> <p>OR</p> <p>E) Teacher can share a video clip of these condition and Epilation process and during practical hours may explain step by step through mobile or big screen.</p> <p>F) Demonstrate the procedure of removing misdirected eyelashes. Emphasize the importance of ethical conduct, patient-centered communication, and empathy throughout clinical teaching.</p> <p>G) Use Standardized assessments like Simulated Patients OR MINI-CEX to assess assessment skills objectively. Create realistic patient scenario with properly trained simulated patients. Assess teh</p>

		students on Communication skills, Physical examination skills, History taking, Developing treatment plans.
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Topic 9 Vartmagata Roga-2 (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and treatment of Pothaki and Sikatavartma. Describe etiology, clinical features and treatment of Trachoma.	CC	NK	KH	L&PPT, L	VV-Viva, T-CS	F&S	II	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 10 Vartmagata Roga -3 (LH :2 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features of Vatahatavartma and Nimesha. Describe etiology, clinical features and principle of treatment of Ptosis.	CC	NK	KH	L, L&PPT	VV-Viva, T-CS	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient with complaints of Abnormal Eyelid Mobility.	CAP	DK	KH	PBL	Mini-CEX	F&S	II	-	NLHP10.1
CO2, CO5	Describe clinical features and management of Klinnavartma and Utklishtavartma.	CC	NK	KH	L&PPT	VV-Viva, T-CS	F&S	II	-	LH

CO3, CO4, CO6, CO7	Present an appropriate history in a patient with complaints of Vartma-shoppha(lid edema).	CAP	DK	KH	CBL,PB L	Mini-CEX	F&S	II	-	NLHP10.2
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	History Taking and Case Presentation: Assessment of Patients with Abnormal Eyelid Mobility.	<p>A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various cases of abnormal eyelid mobility through real patient interactions or problem-based (PBL) methods, rather than focusing on a single case.</p> <p>When evaluating and demonstrating the assessment of a patient with abnormal lid mobility, the teacher should ask students to focus on a thorough history, a comprehensive examination, accurate documentation, and precise diagnosis and treatment tailored to the identified cause.</p> <p>Elicit: Gather focused information on eyelid mobility issues, including onset, duration, severity, associated symptoms (drooping, twitching, or difficulty closing/opening), medical history, surgeries, trauma, and contributing medications or conditions.</p> <p>Document: Record the gathered information accurately in the patient's medical record for diagnostic assessment, continuity of care, and future reference.</p> <p>Present: Clearly explain the patient's history, highlighting key points for diagnosis and management.</p> <p>B)While assessing with the help of MINI-CEX:-</p> <ul style="list-style-type: none"> • Select a suitable patient. • Actively observe the student's interaction with the patient, noting their performance on the different criteria like history taking, physical examination, and counselling skills. • Discuss the observations with the trainee, highlighting both positive aspects and areas for improvement,

		<ul style="list-style-type: none"> • Give a constructive feedback giving guidelines for various software and apps to improve skills.
NLHP 10.2	History Taking and Case Presentation: Assessment of Patients with Vartma-shopha(lid edema).	<p>A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various types of lid edema through real patient interactions or problem-based (PBL) method, rather than focusing on a single case.</p> <p>The teacher should guide students to focus on obtaining a detailed history, performing a comprehensive examination, ensuring accurate documentation, and providing a precise diagnosis and treatment based on the identified cause.</p> <p>Elicit: Gather relevant information through focused questioning, including onset, duration, severity, associated symptoms (pain, redness, itching), medical history, medications, and potential triggers.</p> <p>Document: Record the gathered information accurately in the patient's medical record for diagnostic assessment, continuity of care, and future reference.</p> <p>Present: Clearly present the patient's history, highlighting key points for diagnosis and management.</p> <p>B) Use MINI-CEX as an assessment tool. Identify strengths and weaknesses in students and discuss with them the ways to improve their clinical skills.</p>

Topic 11 Bhedana Karma (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Bhedana in Netraroga (Indications, Contraindications, Incision Techniques and Procedures; and to recognize and manage complications).	CC	MK	KH	BS,RP, TBL,L_V C	QZ ,VV- Viva	F&S	II	-	NLHT11.1
CO5, CO7	Participate in the team for Bhedana Karma in Netraroga.	PSY-PER	MK	SH	L_V C, BL,D,T UT	Log book,T R,CHK	F	II	-	NLHP11.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Discussion on Bhedana in Netraroga.	A) Present a short case of a condition requiring Bhedana (incision) in Netraroga. Ask students to

	<p>brainstorm and discuss indications and contraindications in pairs or groups. (10 minutes)</p> <p>B) Discuss preoperative steps like consent, anaesthesia. Use checklist or flowchart. Have students role-play as surgeons preparing a patient. (10 minutes)</p> <p>C) Demonstrate proper Bhedana technique using simulated skin pads, gel models, or fruits. (10 minutes)</p> <p>D) Cover key postoperative care steps, including wound dressing, pain management, and infection monitoring. (5 minutes)</p> <p>E) Students should be divided into small groups, and let them identify and discuss managing complications of Bhedana. (5 minutes)</p> <p>F) Summarize key points on indications, contraindications, procedure steps, postoperative care, and complications. (5 minutes)</p> <p>G) Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in a simple form, such as a quiz.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 11.1	Collaborative Observation of Bhedana Karma in Netraroga (Incision and Drainage/ Curettage).	<p>A) Students gain insight into the surgical techniques of Bhedana, aseptic practices, review relevant anatomy, basic steps of the Bhedana procedure (Incision and drainage / curettage), operating room etiquette, and understand a flow from preoperative counseling to discharge.</p> <p>OR</p> <p>B) A teacher may use recorded procedures, pausing to explain key steps and their rationale, or opt for live demonstrations.</p> <p>C) Focus on each step of the Bhedana karma (incision process), noting the surgeon's techniques for incision, tissue handling, and any instrument use.</p> <p>D) Encourage students to ask questions about the rationale for certain steps, techniques, or instruments, focusing on gaining insight into procedural reasoning.</p> <p>E) Observe and discuss post surgical procedures with peers.</p> <p>F) Assessment can be done by observing 360 degree behaviour of the student. The format can be based upon Feedback form like - https://abpn.org/wp-content/uploads/2024/04/ABPN-360-Degree-</p>

Topic 12 Lekhana Karma. (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Lekhana in Netraroga (Indications, Contraindications, Techniques and Procedures; and recognize and manage complications).	AFT-VAL	MK	KH	L_VC,D,RP,TB L	QZ ,VV-Viva	F&S	II	-	NLHT12.1
CO5, CO7	Participate in the team for Lekhana Karma in Netraroga.	PSY-PER	MK	SH	D,TUT, L_VC,P BL	CHK,TR,L og book	F	II	-	NLHP12.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Procedure of Lekhana in Netraroga.	<p>A) Integrate practical skill-building with theoretical knowledge, ensuring students develop expertise in both the technical and clinical aspects of Lekhana procedures in Netraroga, from preparation to postoperative care and complication management. (10 minutes)</p> <p>B) Begin with a brief case presentation of a condition requiring Lekhana in Netraroga. Have students work in pairs or groups to brainstorm and share insights. Summarize key indications and contraindications for Lekhana. (10 minutes)</p> <p>Discuss Preoperative Preparations like patient consent, site cleaning, and anaesthesia. Use models or peers to simulate aseptic preparation, marking, and positioning. Reinforce steps with a checklist. (10 minutes)</p> <p>C) Demonstrate how to create precise, uniform strokes or cuts for controlled Lekhana, using models like canvas ball (tennis ball). (5 minutes)</p> <p>Discuss Postoperative Care and Enlist complications and encourage groups of 4-6 students to analyze and discuss recognizing and managing potential complications of Lekhana among themselves. (5 minutes).</p> <p>D) Summarize and encourage questions and clarifications. (5 minutes)</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 12.1	Collaborative Observation of Lekhana Karma in Netraroga.	<p>A teacher may use recorded procedures, pausing to explain key steps and their rationale, or opt for live demonstrations.</p> <p>A) Review the purpose, indications, and expected outcomes of Lekhana Karma.</p> <p>B) Students should observe surgeon's techniques for making precise incisions, controlled handling of instruments (Yantra or Patra) and note strategies for patient comfort, like anesthesia/pain management, management of complications.</p> <p>C) They should make Focused Observations and take notes and prepare questions for discussion.</p> <p>D) Summarize and share Key Learnings connecting theory with practice, emphasizing precision and care in outcomes.</p> <p>E) Use log book or trainer's report to evaluate the students. OR Ask them to prepare the checklist and assess it on the thoroughness, completeness and comprehension.</p>

Topic 13 Shuklagata Roga -1 (LH :3 NLHT: 0 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Etiology, Types, Clinical features, Differentials of Arma(Pterygium).	CC	MK	KH	L,L&PP T	QZ ,T-CS, VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Medical management and Surgical excision of Arma (Pterygium).[Arma Chhedana, Conjunctival limbal autograft or amniotic membrane graft with Its indications, contra-indications, type of anaesthesia, major surgical steps and post-operative care.]	CC	MK	KH	L&PPT	VV-Viva,T- CS	F&S	II	-	LH
CO3, CO4	Examine Shuklamandala (Conjunctiva and Sclera), and learn the techniques, document findings, and understand Clinical relevance.	CAP	MK	KH	D,D- BED	OSCE,P-E XAM,P- VIVA	F&S	II	-	NLHP13.1
CO3,	Present an appropriate history in patients presenting with growth	AFT-	MK	SH	PBL,D-	Mini-CEX	F&S	II	-	NLHP13.2

CO4, CO6, CO7	(Arma/Pterygium or Pinguecula) or lesions (Bitot's spots) in Shuklamandala.	RES			BED,C BL					
CO2, CO5	Describe clinical features and management of Arjuna. Describe etiology, clinical features and management of Sub-Conjunctival Haemorrhage. Describe clinical features and management of Shuktika and Pishtaka.	CC	MK	KH	L&PPT	T-CS,VV- Viva	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient presenting with a Raktaakshi (Red Eye) - Arjuna (Sub-Conjunctival Haemorrhage).	AFT- RES	MK	SH	CBL,PB L,D- BED	Mini-CEX	F&S	II	-	NLHP13.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Examination of the Shuklamandala (Conjunctiva and Sclera).	<p>A) Instruct students to examine the Shuklamandala (Conjunctiva and Sclera) through inspection, eyelid eversion, and observation of vascular patterns.</p> <p>B) Use live or simulated patient demonstrations or video clips to emphasize technique, safety, and anatomical landmarks, aiding in the diagnosis of ocular conditions ranging from minor irritations to serious systemic diseases.</p> <p>C) Teach mnemonics like 'SHOR ya SHASTRA' (Shotha, Raktima, Shalya, Srava) to observe redness, edema, discharge, and foreign bodies.</p> <p>D) Introduce learning platforms like Picmonic for better understanding.</p> <p>E) Let them document and present.</p> <p>F) Assess them, provide them insights on importance of precision in clinical diagnosis.</p>

NLHP 13.2	Cases of Arma, Pishtaka, and growths or discolourations on Shuklamandala.	<p>A) To maximize exposure within the scheduled time, it is desirable to organize students into small groups to explore various cases with growth or lesion in Shuklamandala through real patient interactions or problem-based (PBL) method, rather than focusing on a single case.</p> <p>B) Encourage students to ask patients relevant questions to gather a detailed history of growths or lesions in the Shuklamandala (Conjunctiva).</p> <p>C) They should document the patient's medical history and findings, differentiate growth or lesion to support diagnostic evaluation, care continuity, and future consultations.</p> <p>D) They should summarize and present the patient's history and conjunctiva examination findings in a structured and clear manner.</p> <p>E) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills / Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))</p>
NLHP 13.3	Assessment of patients with Raktaakshi (Red Eye), focusing on Arjuna (Sub-Conjunctival Hemorrhage).	<p>A) Using real patient interactions or problem-based/case-based learning (PBL/CBL) methods, outline an approach for examining and evaluating a patient with Raktaakshi (Red Eye) due to Arjuna (Sub-Conjunctival Hemorrhage), focusing on history-taking, examination, documentation, and an effective diagnosis and management plan.</p> <p>B) Allow students to gather appropriate history to come to diagnosis, record the patient's responses which could assist in the evaluation.</p> <p>C) They should summarize the patient's history and conjunctiva findings in a clear, structured manner, focusing on key points for diagnosis and management and present.</p> <p>D) Identify clinical features that may need referral to a neurosurgeon, if necessary.</p> <p>E) Teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>F) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills / Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))</p>
Topic 14 Shuklagata Roga -2 (LH :2 NLHT: 0 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe clinical features and management of Sirajala and Sirajapidika.	CC	MK	KH	L&PPT	VV-Viva,T-CS	F&S	II	-	LH
CO2, CO5	Describe etiology, clinical features and treatment of Episcleritis and Scleritis.	CC	MK	KH	L&PPT	T-CS,VV-Viva	F&S	II	-	LH
CO3, CO4, CO6, CO7	Present an appropriate history in a patient presenting with Raktaakshi (Red Eye) - Sirajala / Sirajapidaka (Episcleritis and Scleritis - Diffuse / Nodular); differentiate nodule at limbus.	AFT-RES	MK	SH	CBL,D-BED	Mini-CEX	F&S	II	-	NLHP14.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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NLHP 14.1	Assessment of Patients with Raktaakshi (Red Eye) - Episcleritis / Scleritis: Differentiating Diffuse / Nodular Forms.	<p>A) To maximize exposure within the scheduled time, students can be organized into small groups to explore multiple cases of Raktaakshi (Red Eye) caused by Sirajala/Sirajapidaka (Episcleritis and Scleritis - Diffuse/Nodular) in the Shukla mandala through real patient interactions or problem-based/case-based learning (PBL/CBL) methods, rather than focusing on a single case.</p> <p>B) Students should gather detailed information from the patient's medical history, including symptoms, onset and duration, past ocular or medical history, family history, and potential triggers or systemic associations (e.g., autoimmune conditions). Identify and differentiate nodules at the limbus.</p> <p>C) They should record the patient's history and findings in a structured and clear manner, noting the presence of diffuse or nodular forms of episcleritis or scleritis.</p> <p>D) Encourage them to summarize and share key findings with peers or supervisors.</p> <p>E) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.</p> <p>F) Students should be assessed on parameters like Interview Skills, Examination, Interpersonal Skills /</p>
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Professionalism and Case Presentation using Mini-CEX - (Ophthalmic Clinical Evaluation Exercise (OCEX))

Topic 15 Chhedana Karma. (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Discuss Chhedana in Netraroga (Indications and Contraindications for Excision Techniques and Procedures; and to recognize and manage complications).	CC	MK	KH	D,L_VC ,TBL,SI M,BS	QZ ,VV-Viva	F&S	II	-	NLHT15.1
CO5	Participate in the team for Chhedana in Netraroga.	PSY-PER	MK	SH	CBL,L_VC,D	TR,Log book,CHK	F	II	-	NLHP15.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Comprehensive discussion on Chhedana in Netraroga.	<p>A) Begin with a brief case presentation of a condition requiring Chhedana (excision) in Netraroga. Encourage students to brainstorm and collaborate in pairs or groups to discuss the indications and contraindications for performing the procedure. (10 minutes)</p> <p>B) Discuss the steps for preoperative preparation, can use role-play as surgeons preparing a "patient," using another student or a mannequin. (10 minutes)</p> <p>C) Use simulated skin pads, gel models, fruits (like oranges), or a video of an actual or simulated procedure for demonstration of the procedure. (10 minutes)</p> <p>D) Divide students into small groups and encourage students to think critically about postoperative care, and managing complications of Chhedana. (10 minutes)</p> <p>E) Summarize the session's key points, covering the indications, contraindications, steps of the procedure, postoperative care, and complications. (5 minutes)</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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NLHP 15.1	Observation of Chhedana(Excision) in Netraroga.	<p>A) By following a teacher-led patient journey from preoperative counseling to discharge, students gain valuable insights into the surgical techniques of Chhedana (excision), aseptic practices, and procedural reasoning. Teachers can enhance learning through recorded procedures, pausing to explain critical steps and their rationale, or by conducting live demonstrations.</p> <p>B) Prepare students with Background Knowledge and goals of the Chhedana (Excision). Familiarize them with its basic steps.</p> <p>C) They should observe key surgical steps noting techniques for incision, tissue handling, excision, hemostasis, and closure.</p> <p>D) Encourage them to make Mental or Written Notes</p> <p>E) Allow them to ask questions and strengthen comprehension of surgical concepts.</p> <p>F) Assess them through OSCE, Checklists.</p>
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Topic 16 Agnikarma and Ksharakarma. (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Narrate Agnikarma and Ksharakarma in Netraroga (Indications, Contraindications, Techniques and Procedures; and recognize and manage complications).	CC	DK	KH	L_VC,D ,CBL	VV- Viva,QZ ,COM	F&S	II	-	NLHT16.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Discussion on Agnikarma and Ksharakarma in Netraroga.	<p>A) Compile, discuss, brainstorm relevance of Agnikarma and Ksharakarma in Netraroga with its Indications and Contra-indications, Poorvakarma, Pradhanakarma, Pashchatkarma, Upadrava and management of Upadrava in brief. (10 minutes)</p> <p>B) The teacher may Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures.</p> <p>OR</p> <p>Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each</p>

action. (20 minutes)
 Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.
 C) Provide access to reputable online resources and journals for further reading and research. (10 minutes)
 D) Use quizzes, written exams, and practical assessments to evaluate students' understanding and skills. (5 minutes)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
Topic 17 Krishnagata Roga -1 (LH :5 NLHT: 0 NLHP: 4)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Enumerate Krishnagata Rogas. Describe clinical features, management & Sadhya-asadhyata of Savrana Shukra (Corneal Ulcer).	CC	MK	KH	L&PPT, L	T-CS, P-VIVA, QZ	F&S	II	-	LH
CO2, CO5	Classify Corneal Ulcers. Describe etiology, clinical features, management and complications of Bacterial, Viral and Fungal Corneal Ulcers.	CC	MK	KH	L, L&PPT	T-OBT, QZ, VV-Viva	F&S	II	-	LH
CO2, CO5	Describe etiology, clinical features, types, prognosis and management of Avrana Shukra (Corneal Opacity)..	CC	MK	KH	L, L&PPT	T-OBT, VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Etiology, Clinical features and Treatment of Ajakajata. (Anterior Staphyloma)	CAN	MK	KH	L&PPT	VV-Viva, T-OBT	F&S	II	-	LH
CO2, CO5	Explain clinical features and treatment of Sirashukla and clinical features of Akshipakatyaya.	CC	DK	KH	L&PPT, L	T-OBT, VV-Viva, QZ	F&S	II	-	LH
CO3,	Present the method of examination of a Sashula	AFT-	MK	SH	SIM, D-	P-EXAM, O	F&S	II	-	NLHP17.1

CO4, CO7	Raktaakshi.(Painful red eye)(Savrana Shukla/Corneal ulcer).	RES			BED,PB L	SCE,Mini- CEX				
CO3, CO7	Summarise the steps involved in the technique of Slit lamp examination.	CC	MK	KH	ML,TU T,D,PB L,SIM	PP- Practical,SP	F&S	II	-	NLHP17.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Evaluation of Savrana Shukra (Corneal Ulcer).	<p>A) Present a clinical case of Sashula Raktakshi and have students work in groups to gather history, discuss differential diagnoses, and plan management. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.</p> <p>OR</p> <p>B) Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills.</p> <p>OR</p> <p>Use standardized patients(actors or fellow students)to role-play patients with Savrana Shukla.</p> <p>C) Break students into small groups for more focused practice and individualised feedback. D) Recommend apps like Geekymedics, wikimed, that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Assess the students with the help of MINI-CEX or OSCE. Mini-CEX.</p>

		<ul style="list-style-type: none"> ◦ Observe Student’s interaction with a patient in a real-world clinical setting. ◦ Rate the performance in areas like history taking, physical examination, and counselling skills. performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations. ◦ The student receives immediate feedback from the teacher. <p>F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement.</p>
NLHP 17.2	Slit lamp examination.	<p>A) Explain why this examination is crucial for diagnosis. Conduct live demonstrations with real or simulated patients to model effective case taking. OR Use videos of experienced clinicians. OR Use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment.</p> <p>B) Introduce different parts of slit lamp, instructions, indications, contra-indications.</p> <p>C) Stress importance of Ensuring patient's comfort, his position, and proper alignment; setting up of Slitlamp ensuring hygiene.</p> <p>D) Ask them to record any findings, such as abnormalities in the cornea, lens, iris, or anterior chamber; any lesions, pigmentation, or signs of disease.</p> <p>E) A simulated patient (SP) can be used as an examination tool by acting as a standardized "patient" with a specific medical scenario, allowing students to demonstrate their clinical skills like history taking, physical examination, communication, and decision-making in a controlled environment, where they can be assessed on their ability to interact with the patient and manage the presented case, providing a consistent and reliable evaluation across different students.</p>

Topic 18 Krishnagata Roga -2 (LH :2 NLHT: 0 NLHP: 4)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO4, CO7	Present the case of Uveitis.	AFT-RES	MK	SH	D-BED, PBL,CD	P-CASE,O SCE,SA	F&S	II	-	NLHP18.1
CO2, CO5	Expound Tarakamandala-shotha (Acute Iridocyclitis.)- investigations, differential diagnosis,clinical features,treatment and complications.	CC	MK	KH	L,L&PP T	VV-Viva,QZ ,T-CS	F&S	II	-	LH
CO1, CO2	Recap Applied anatomy of Uvea.Define and narrate (Anatomical and Etiological) classification of Uveitis.	CAP	MK	KH	L&PPT ,L	VV-Viva,T -OBT,M-POS	F&S	II	-	LH
CO3, CO6, CO7	Examine the Taraka (Iris), Drishtimandala (Pupil), and Anterior chamber.	PSY-GUD	MK	KH	PBL,RP ,TUT,D -BED,M L	360D,P-EXAM	F&S	II	-	NLHP18.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 18.1	Evaluation of Uveitis.	<p>A)Present different cases of uveitis, discussing the clinical features, differential diagnosis, and treatment options.</p> <p>Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence.</p> <p>Have students shadow experienced clinicians during patient history taking to observe best practices</p>

		<p>and techniques and facilitate post-shadowing discussions.</p> <p>OR</p> <p>B) Use standardized patients(actors or fellow students)to role-play patients with uveitis.</p> <p>C) Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills.</p> <p>D) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.</p> <p>F) Discuss indications for referral to a Kayachikitsaka (rheumatologist or infectious disease specialist if systemic causes are suspected).</p> <p>G) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Rate the performance in areas like history taking, physical examination, and counselling skills. Performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations.</p> <p>OR</p> <p>Encourage students to assess their own performance and identify areas for improvement. Self-assessment can be done on following parameters:- Empathy and openness, Ethical awareness, Workplanning, Scientific method of working, Coping with mistakes, and Priorities.</p>
NLHP 18.2	Assessment of Anterior chamber.	<p>A) Divide the students into small groups and direct them to do role play. One student may act as examiner, the other as the patient and ask them to :</p> <p>Assess Drishtimandala (Pupil). Note Findings Record pupil size, shape, and any abnormal reactivity.</p> <p>Assess Taraka (Iris) and note Pathologies.</p> <p>Evaluate Depth Of Anterior Chamber.</p> <p>Evaluate contents of the Anterior chamber.</p> <p>Encourage students to rotate through each station, practicing with the slit lamp and torchlight.</p> <p>OR</p> <p>Provide a link for examination of anterior chamber through Google classroom or free messaging platforms and describe each and every step with necessary pause for detailed explanations while</p>

students are accessing the link through smart gadgets.
 B) Demonstrate the use of instruments and explain what to look for at each step.
 C) Supervisors should verify techniques and provide feedback.
 D) Teach students how to record findings systematically, including pupil size, iris abnormalities, and anterior chamber status.
 E) Clarify doubts and review the steps.
 F) Maintain standards of Safety and Ethics.
 G) Use 360 degree assessment where the peers, paramedical staff and the assessor assess the students with the help of pre-provided standard checklist.

Topic 19 Dravyas Used In Netrachikitsa-1 (LH :0 NLHT: 4 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3	Explain the indications, contraindications, dosage and untoward effects of Dyes used in Ophthalmology (Flourescien and Rose bengal stain).	CC	NK	KH	BL,FC	QZ ,VV-Vi va,CL-PR	F&S	II	-	NLHT19.1
CO5	Explain the indications, contraindications, dosage and untoward effects of Anti-inflammatory agents (Ketorolac,Flurbiprofen), and Steroids (Dexamethasone and Prednisolone) used in Ophthalmology.	CC	NK	KH	RP,ML, PBL,BL ,FC	VV- Viva,QZ	F&S	II	-	NLHT19.2
CO5	Explain the indications, contraindications, dosage and untoward effects of Antibiotics (Bacitracin, Moxifloxacin, Tobramycin, Gentamycin), antifungal agents (Amphoterecin,Natamycin,Fluconazole), and antiviral agents (Trifluridine, Acyclovir).	CC	NK	KH	RP,DIS, LS,ML, PER	PA,VV- Viva,QZ	F&S	II	-	NLHT19.3
CO2, CO5	Explain the indications, contra indications, dosage and untoward effects of lubricating agents and artificial tears (CMC,HPMC, Carbomers, Poly-vinyl Alcohol and Acetylcysteine).	CC	DK	KH	FC	P-EXAM,C L-PR,QZ	F&S	II	-	NLHT19.4

Non Lecture Hour Theory		
S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Comprehension on uses of Dyes in Ophthalmology.	<p>A) The topic may be assigned using the flipped method. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram. The students will be given a link to a PowerPoint presentation. They should be also instructed to go through the textbooks and read this topic. Sub-divide them into four groups:- one each for indications and contraindications for Fluorescein, dosage and untoward effects of Fluorescein ; and Indications and contraindications for Bengal stain, dosage and untoward effects of Bengal stain. They should be given 1 week time before the scheduled Flipped Class room for this topic. After 1 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will be also encouraged to ask questions to clarify concepts. Each group will be given 12 min. to present. PowerPoint presentations (Each group 10 minutes) should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids.</p>
NLHT 19.2	Discussion on Anti inflammatory agents and steroids used in ophthalmology.	<p>The students will be explained role of anti-inflammatory agents and steroids essential in Netra Chikitsa ,and the risks involved by a link provided or a physical literature provided a week before.</p> <p>A) Problem-Based Learning Present real-life clinical scenarios and discuss them in groups: Example 1: A patient with anterior uveitis—which drug to prescribe; dosage, and precautions? (10 min) Example 2: A glaucoma patient with conjunctivitis—should steroids be used? Why or why not?(10 min) Groups present findings, followed by class discussion and instructor feedback.(10 min.) OR B) Role-Play Activity- (20 min.) Students act as doctors explaining drug use to a patient:</p>

		<p>Indication for the prescribed drug. Dosage schedule (e.g., tapering for steroids). Possible side effects and their prevention. Rotate roles to ensure participation. Recap and Reflection. C) Use a quiz or rapid-fire questions to recap key points:(10 min.) Dosage and tapering for steroids. Contraindications for NSAIDs (e.g., corneal ulcers). Side effects like increased IOP or delayed healing. Facilitate a reflective discussion on the importance of proper drug use in Netra Chikitsa.</p>
NLHT 19.3	Comprehension on Antibiotics ,antifungal agents, and antiviral agents used in ophthalmology.	<p>A) Divide the class into groups to encourage teamwork during activities. Share information on topic through link a week before the class by Google classroom or free messaging services like Telegram. B) Group Discussion and Role Play- Assign each group a specific category (antibiotic, antifungal, or antiviral) and a corresponding ocular condition. Groups prepare on: Appropriate drug choices. Dosage forms specific to ophthalmology (e.g., eye drops, ointments, injections). Contraindications in ocular and systemic contexts. Common adverse effects and how to manage them. C) Role Play: Groups present their findings as if explaining to a patient or conducting a team discussion in a hospital setting. D) Each group shares its solution and reasoning, leading to peer feedback and a guided discussion by the instructor. Each group will be given 10-12 min. for discussion and role play.</p>
NLHT 19.4	Presentation on Lubricating agents and Artificial tears.	<p>A) The topic may be assigned using the flipped method. The presentation on the topic 'Lubricants and artificial tears in Ophthalmology' should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or blended learning platforms like Google classroom.</p>

The students are divided into five groups- one each for each drug and will be given a link to a PowerPoint presentation.

They should be also instructed to go through the textbooks and read this topic.

They should be given 1 week time before the scheduled Flipped Class Room for this topic.

B)After 1 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will present in class and duration of 10-12 min. is allotted to each group. Students will be also encouraged to ask questions to clarify concepts.

PowerPoint presentations should be assessed on following criteria- content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids.

C) Constructive feedback should be given in the form of summary and take home message.(05-10 min.)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
Topic 20 Eye Donation (LH :0 NLHT: 4 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Describe organizational structure, purpose and need of growth of Eye Banks.	CC	DK	KH	RLE,FV ,ML,L& GD	VV-Viva,C L-PR,QZ ,INT,M- POS	F&S	II	-	NLHT20.1
CO5	Explain the Objectives, Awareness & Significance of Eye donation.	CC	NK	KH	L&GD, BS	VV-Viva,M- POS,CL- PR	F&S	II	-	NLHT20.2
CO5	Enlist types; describe indications, techniques, risks and complications of corneal transplantation.	CC	NK	KH	DIS,L& PPT ,L_VC	QZ ,M-POS ,VV-Viva	F&S	II	-	NLHT20.3

CO2, CO5	Explain National Programme for Control of Blindness.	CC	DK	KH	FC,PER	QZ ,CL-PR ,PRN,M- POS	F&S	II	-	NLHT20.4
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	Eye banking- its organization, relevance and purpose.	<p>A) Give a brief introduction of Eye banking ,explaining its relevance and purpose.</p> <p>B) Divide the students into six groups. Each group could focus on a specific aspect of eye banking, such as its services, benefits, technology, legal considerations, ethical implications, or case studies.</p> <p>C) Allow each group to either visit an actual eye Bank or view videos that demonstrate the setup, operation, and impact of an Eye Bank.</p> <p>After the visit or video session, each group should gather detailed information based on their focus area. They can conduct research, discuss among themselves, and prepare to present their findings.</p> <p>D) Host a group discussion in the classroom where each team presents findings. Encourage students to compare and contrast different aspects of eye banking and address any questions or insights that arise. Each group will be given 06-08 minutes each to present.</p> <p>E) Conclude the session (15 min.) by summarizing the key takeaways, and if applicable, encourage students to reflect on how eye banking might evolve in the future. You could also have a Q&A session or brief evaluations of the visit or video experience.</p> <p>F) Group Discussion should be assessed on - Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.</p>
NLHT 20.2	Discussion on Eye donation.	<p>A) Clearly present the scenario of Eye donation that the group will brainstorm around.</p> <p>OR</p> <p>Host a group discussion in the classroom where each team presents their aspects of eye donation, and address any questions or insights that arise.</p> <p>B) Encourage open sharing by stating that all ideas are welcome without judgment. Encourage participants to expand on each other's suggestions. Emphasize the importance of listening attentively to all contributions.</p>

		<p>C) Divide students into groups of 5-8 for optimal interaction and participation. Consider assigning roles like facilitator (to guide discussion), timekeeper (to manage time), and notetaker (to record key points). Clearly introduce the topic, providing necessary background information and key questions to guide the discussion. Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak. Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully.</p> <p>C) Give 08-10 minutes for each group to discuss about Objectives, Awareness and Significance of Eye donation. Evaluate them on Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills.</p> <p>D) Ask students to make posters. Judge the posters on clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements like Objectives, Awareness and Significance of Eye donation are presented clearly and concisely, while also considering the visual design and readability from a distance.</p>
NLHT 20.3	Discussion on Keratoplasty.	<p>A) Begin with a brief case presentation of a condition requiring corneal transplantation. Encourage students to brainstorm and collaborate in pairs or groups to discuss:- (10 min.) Clinical indications for corneal transplantation. Types of corneal transplantation. Correlation of indications with the appropriate transplantation techniques. Risks and complications involved.</p> <p>B) Show recorded surgical procedures (40 min.)to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action; emphasizing the importance of patient selection, proper surgical technique, and managing potential complications like rejection and infection.</p> <p>C) Use quizzes, Making of Posters to evaluate students' understanding and skills. Assess its clarity of information, logical organization, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, while also considering the visual design and readability from a distance.</p>

NLHT 20.4	Objectives, Organizational structure and New initiatives under National programme for Control of Blindness and Visual Impairment.	<p>Use Flipped Classroom method:</p> <p>A) Pre-Class Preparation- Share a concise video (10 minutes) covering the NPCB, its objectives, strategies, and key statistics. Include a short article or infographic for reference through Google Classroom or Whatsapp or telegram. (Pre-class). Ask students to watch the video and read the materials. Provide a quick online quiz (5 minutes) to ensure they understand the basics.</p> <p>B) In-Class Activities (45 minutes)</p> <ol style="list-style-type: none"> 1. Interactive Discussion (15 minutes)-Start with a quick discussion based on the pre-class materials. Ask students to share key points they found interesting or any questions they have. 2. Case Studies (15 minutes)- Present a brief case study of a community affected by blindness. Have students work in pairs to discuss and propose strategies based on NPCB initiatives. 3. Role-Playing (10 minutes)- Organize a role-playing activity where students act out scenarios involving healthcare providers and patients. Focus on communication and community engagement strategies. <p>C) Post-Class Follow-Up (15 minutes)</p> <ol style="list-style-type: none"> 1. Reflection (5 minutes)- Ask students to write a short reflection on what they learned and how they can apply it in their future practice. 2. Group Presentation (10 minutes)- Have students present their case study strategies to the class. Assess their understanding and provide feedback. <p>D) Assessment Methods-</p> <ol style="list-style-type: none"> 1. Pre-Class Quiz- Evaluate students' understanding of the basic concepts before the class. 2. In-Class Participation- Assess students based on their engagement and contributions during discussions and activities. 3. Group Presentation: Evaluate the quality and depth of their proposed strategies.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
Topic 21 Sarvagata Roga -1 (LH :4 NLHT: 1 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enumerate Sarvagata Rogas; Describe Lakshana, Chikitsa and Complications of different types of Abhishyanda.	CC	MK	KH	L,L&PPT	QZ ,VV-Viva,T-OBT, T-CS,M-POS	F&S	II	-	LH
CO2	Give Etiological and Clinical Classification, Clinical features (Bacterial, Viral &Allergic) and differential Diagnosis of Conjunctivitis.	CC	MK	KH	L,L&PPT	T-CS,T-OBT,VV-Viva	F&S	II	-	LH
CO2, CO5	Describe Management and complications of Conjunctivitis.	CC	MK	KH	PBL,LS,FC,BL	CL-PR,T-OBT,QZ	F&S	II	-	NLHT21.1
CO2, CO5	Explain Hetu, Lakshana, Chikitsa and Upadrava of different types of Adhimantha and Hatadhimantha.	CC	MK	KH	L&PPT	T-OBT,VV-Viva,QZ ,T-CS	F&S	II	-	LH
CO3, CO4, CO7, CO8	Present a case of Raktaakshi (red eye) presenting with Srava (discharge).	AFT-RES	MK	SH	D,PBL,TUT,RP	P-PRF,Mini-CEX,P-VIVA,OSCE	F&S	II	-	NLHP21.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 21.1	Management of Conjunctivitis.	<p>A) Divide the students into five groups, each assigned a different aspect of Conjunctivitis. Provide a link/ power point presentation/ document with brief overview of Conjunctivitis, explaining the causes, types (viral, bacterial, allergic), symptoms, general management principles, Hygiene measures, and complications.</p> <p>Encourage them to use textbooks, reputable websites, and journal articles.</p> <p>B) Group Assignment: Group 1: Viral Conjunctivitis</p>

	<p>Group 2: Bacterial Conjunctivitis</p> <p>Group 3: Allergic Conjunctivitis</p> <p>Group 4: General Management and Prevention</p> <p>Group 5: Complications of Conjunctivitis</p> <p>C) Each group should create a PowerPoint presentation (10 min.) summarizing their findings.</p> <p>D) After the presentations, facilitate a classroom discussion. Ask questions to encourage critical thinking.</p> <p>Address the role of healthcare providers in preventing spread, particularly in school and daycare settings.</p> <p>Review patient follow-up protocols and when to refer to a specialist</p> <p>E) Conclude by summarizing the key points from each group's presentation.</p> <p>Provide feedback on the students' understanding of the topic.</p> <p>Assess each group's presentation and ability to discuss and answer questions.</p> <p>OR use pre and post quiz method to assess.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 21.1	Evaluation of Raktaakshi (Red eye) with Srava (Discharge).	<p>A) Present a clinical case of Conjunctivitis and have students work in groups to gather history, discuss differential diagnoses, and plan management.</p> <p>OR</p> <p>Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence.</p> <p>OR</p> <p>B) Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.</p> <p>Examine Conjunctiva and Cornea thoroughly.</p> <p>C) Document the detailed history (symptom onset, type of discharge, associated symptoms).</p> <p>Record physical examination findings (conjunctival reaction, corneal status, lymphadenopathy,</p>

anterior chamber clarity).

D) One group will present the patient's history, examination findings, and differential diagnosis to the class.

The instructor and peers will discuss possible diagnoses (bacterial vs viral vs allergic conjunctivitis, for example), and the rationale behind them.

Discuss management options and treatment approaches based on the clinical findings.

Allow time for students to ask questions or clarify doubts.

E) Recap of the key learning points from the session.

Encourage students to continue practicing the systematic approach to examining red eye conditions.

F) Use MINI-CEX or OSCE to evaluate students.

- OSCE stations to have signs of local examination, psychomotor skills, communication skills and history taking of a particular examination. Each student is exposed to the same stations and assessment. The assessor should use checklists to evaluate students' performance in a reliable and consistent way.
- Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 22 Sarvagata Roga -2 (LH :3 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Describe Lakshanas and Chikitsa of Shushkashipaka.Explain Structure of Tear Film: Etiology, Clinical Features, and Management of Dry Eye Syndrome and Computer vision	CC	MK	KH	L,L&PP T	T-OBT,T-C S,VV- Viva,QZ	F&S	III	-	LH

	syndrome.									
CO2, CO5	Construe Lakshanas and Chikitsa of Sashophapaka, Ashophapaka, Amloshita, Sirotpata, Siraharsha, and Vataparyaya.	CC	DK	KH	L,L&PP T	QZ ,T-OBT ,T-CS,PUZ, VV-Viva	F&S	III	-	LH
CO2, CO5	Enlist the diseases mentioned in Pillaroga, And describe Nidana and Chikitsa of Pillaroga.	CC	NK	KH	PL,DIS, BL,TBL ,TPW	VV-Viva,C L-PR,QZ	F&S	III	-	NLHT22.1
CO3, CO4, CO7, CO8	Present a case presenting with Shushkakshi (dry eyes).	AFT- RES	MK	SH	SIM,TU T,ML,P BL,CD	OSCE,Mini -CEX,P-EX AM,P-VIV A,P-CASE	F&S	III	-	NLHP22.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Nidana and Chikitsa of Pillaroga.	<p>A) Split the class into 03 groups, ensuring each group has an equal number of students. Assign a group leader for each group to help coordinate the work.</p> <p>Each group will focus on a specific aspect of Pillaroga. Below are some potential topics each group can research:</p> <p>Group 1: Definition and enumeration of Pillarogas (understanding what makes a disease, a Pillaroga).</p> <p>Group 2: Symptoms and causes of different Pillarogas.</p> <p>Group 3: Treatment methods for Pillarogas.</p> <p>C) Ask each group to visit the library and refer to various texts, including classical medical texts, contemporary studies, and academic journals.(pre class: 30 min.)</p> <p>Each group should take detailed notes on their assigned topic and focus on finding credible sources.</p> <p>D) Let them organize their findings into a presentation format (like PowerPoint slides, a report, or posters).</p> <p>Ensure each member of the group understands the topic thoroughly and can contribute to the group discussion.</p>

		<p>E) Arrange a class-wide group discussion, where each group presents their findings to the rest of the class. Group 1: 05 min. Group 2: 05 min. Group 3: 15 min. F) After each presentation, allow time for questions and feedback from other groups. After all presentations, facilitate an open discussion, encouraging students to explore how the information from different groups overlaps and what new insights they have gained. Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully. (25 min.) Teacher may share his real-life experiences. Judge them on Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. or Take a quiz.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 22.1	Evaluation of Shushkakshi (Dry eye evaluation).	<p>A) Present a clinical case of Shushkakshi and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. Perform the Schirmer test to measure tear production . Conduct the tear breakup time (TBUT) test. Use ocular surface staining with dyes like fluorescein. OR B) Utilize advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills. C) Break students into small groups for more focused practice and individualized feedback.</p>

- D) Recommend apps like Geekymedics, wikimeds, etc that offer virtual practice and quizzes on history-taking skills.
- E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.
- F) Conduct MINI-CEX or OSCEs where students rotate through stations to practice history taking and receive immediate feedback.
- Observe a Student’s interaction with a patient in a real-world clinical setting.
 - Rate the performance in areas like history taking, physical examination, and counselling skills. Performance is recorded on a 4 point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations.
 - The student receives immediate feedback from the teacher. Encourage students to assess their own performance and identify areas for improvement.
- G) Distribute patient questionnaires to gather more detailed information on symptoms and environmental factors affecting eye moisture.

Topic 23 Glaucoma (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Define Glaucoma.Explain Clinical & etiological Classification, Clinical Features,Investigative procedures and Complications of Glaucoma (Primary Open Angle Glaucoma,Primary Angle Closure Glaucoma); and various Medical Regimes for Management of Glaucoma. [Topical Beta Blockers, Carbonic Anhydrase inhibitors, Prostaglandin analogues, Adrenergic Drugs Miotics (Pilocarpine)].	CC	MK	KH	L&PPT ,L	T-CS,VV-Viva,QZ ,T-OBT	F&S	III	-	LH
CO5	Describe fundamentals of surgical techniques for Management of	CC	NK	KH	BL,L_V	QZ ,M-	F&S	III	-	NLHT23.1

	Glaucoma (Peripheral Iridectomy, Trabeculectomy, and cyclodestructive procedures).				C,ML	POS,CHK				
CO3, CO7	Summarize the steps involved in the technique of Tonometry and Perimetry.	CC	MK	KH	D-BED, PBL,TU T,D-M	QZ ,P- EXAM,SP	F&S	III	-	NLHP23.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Surgical Procedures for Glaucoma.	<p>A) Introduce students to the surgical techniques used in the management of Glaucoma, namely, peripheral iridectomy, trabeculectomy, and cyclodestructive procedures, and to understand the complications associated with glaucoma surgery.</p> <p>Introduce the students to various Surgical instruments; Post-operative monitoring tools.</p> <p>B) Show recorded surgical procedures to give students a realistic view of the process. (45 min.) Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action.</p> <p>Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.</p> <p>C) Summarize key concepts, and complications.(05 min.)</p> <p>D) Allow students to ask questions and clarify doubts regarding the procedures and their indications.(10 min.)</p> <p>E) Reinforce the importance of sterile techniques during all procedures to minimize infection risk.</p> <p>F) Encourage students to think critically about when each surgical technique is appropriate based on the glaucoma type and severity.</p> <p>G) By the end of the activity, students should have a solid understanding of the different surgical methods used to manage glaucoma, their indications, potential complications, and the post-operative care required to ensure successful outcomes.</p> <p>H) Use quizzes, written exams, and poster making to evaluate students' understanding and skills. Assess poster by its clarity of information, logical organization, visual appeal, scientific soundness, relevance, and whether key elements like the pre-operative, operative and post-operative procedures are presented clearly and concisely, while also considering the visual design and readability from a</p>

distance.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 23.1	Discussion on Tonometry and Perimetry.	<p>A) Divide Students in small groups of 4 to 6. Tonometry Practical:(45 min.)</p> <ul style="list-style-type: none">• Introduction: Explain different types of tonometer, the purpose of measuring IOP ,its importance in diagnosing glaucoma.• Demonstrate the procedure.• Perform the digital tonometry on different patients or among themselves• Discussion: Review normal IOP ranges (10-21 mmHg) and their clinical significance. <p>Perimetry Practical:(45 min.)</p> <ul style="list-style-type: none">• Introduction: Explain the concept of visual fields and conditions affecting them (e.g., glaucoma, optic neuropathy).• Result Interpretation: Teach students how to analyze printouts (e.g., blind spots, scotomas).• Key Points to Emphasize- Importance of patient cooperation and fixation; Proper alignment of instruments for accurate readings; Identification of normal vs. abnormal findings in both tests. <p>B) Summarize findings and their clinical implications. Answer student queries and clarify doubts.Encourage students to reflect on challenges faced during the practical.(10 min.)</p> <p>C) Evaluate the students by conducting quiz or demonstrating on model as a simulated patient focusing on student's understanding of anatomy, techniques, decision-making, and appropriate response to complications.</p>

Topic 24 Drishtigata Roga-1 (LH :7 NLHT: 1 NLHP: 4)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe in brief Drishti Vichara as per Susruta Samhita.Expound the clinical features of Patalagata Timira.	CC	MK	KH	L&PPT ,L	VV- Viva,QZ ,PUZ	F&S	III	-	LH
CO2, CO5	Elaborate clinical features and management of Doshaja Timira.	CC	MK	KH	L,L&PP T	T-OBT,VV- Viva	F&S	III	-	LH
CO2, CO5	Explain Clinical features and Treatment of Kacha and Linganasha.	CC	MK	KH	L&PPT ,L	T-OBT,M- POS,CL- PR	F&S	III	-	LH
CO5	Narrate Kaphaja Linganasha Shastrakarma- Poorva , Pradhana, Pashchat karma; Vedhana Shalaka; Upadravas.	CC	MK	KH	L&PPT ,FC,DIS	CL-PR,QZ	F&S	III	-	NLHT24.1
CO2, CO5	Define and expound etiological and clinical classification, clinical features, complications and treatment of errors of refraction - (Myopia, Hypermetropia, Astigmatism).	CC	MK	KH	L&PPT ,L	VV-Viva,T- OBT	F&S	III	-	LH
CO2, CO5	Define, Describe etiology, clinical features and treatment of Presbyopia and Amblyopia.	CC	DK	KH	L,L&PP T	T-OBT,QZ ,VV-Viva	F&S	III	-	LH
CO2, CO5	Detail Clinical features and Treatment of Pitta-vidagdha Drishti, Kapha-vidagdha Drishti, Dhumadarshi and Ushna-vidhagdha Drishti.	CC	DK	KH	L,L&PP T	T-OBT,VV- Viva	F&S	III	-	LH
CO2, CO5	Describe the clinical features of Abhighataja Linganasha, Sanimittaja Linganasha, Animitta Linganasha, Gambhirika and Hraswajadya.Explain the clinical features and treatment of Nakulandhya.	CC	DK	KH	L,L&PP T	QZ ,VV-Vi va,T-OBT	F&S	III	-	LH
CO3,	Demonstrate the technique of Fundus examination.	PSY-	MK	SH	ML,D,P	QZ ,SA	F&S	III	-	NLHP24.1

CO7		GUD			T,PBL, D-BED					
CO3, CO4, CO6, CO7	Present an appropriate history in a patient with Timira (Dimness of vision).	AFT- RES	MK	SH	PBL,CD ,RP,D,S IM	P-EXAM,O SCE,P- VIVA	F&S	III	-	NLHP24.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	Kaphaja Linganasha Shastrakarma.	<p>A)The teacher will form five study groups to discuss and share information, each for Purva, Pradhana, Pashchat karma; Vedhana Shalaka and Upadravas of Kaphaja Linganasha. Teacher will instruct students to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. The topics should be presented by power point presentations. Each group should be given a time of 05-08 minutes.</p> <p>OR</p> <p>A)Teachers may use Flipped Classroom technique.The importance as world's first cataract removal technique should be stressed.</p> <p>B) Analyse the students on following criteria- Student participation, Level of curiosity, and Willingness to ask questions; Judge the presentation on following criteria- Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms.Provide constructive feedback on their performance, highlighting areas of improvement and excellence.</p> <p>OR</p> <p>B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong.</p>

Non Lecture Hour Practical

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S.No	Name of Practical	Description of Practical Activity
NLHP 24.1	Fundus evaluation (ophthalmoscopy).	<p>A) Students will be demonstrated the parts of the ophthalmoscope and the correct technique for using the ophthalmoscope. Describe and distinguish the fundoscopic features in a normal condition and in abnormal retinal conditions.</p> <p>OR</p> <p>A) They will be shown pictures and videos of normal fundus and abnormal retinal conditions. B) Teach students the importance of building rapport and demonstrating empathy during patient interactions. Provide constructive feedback on their performance, highlighting areas of improvement and excellence.</p> <p>OR</p> <p>C) Recommend apps and online resources that offer virtual practice scenarios. D) It is preferable to provide self-evaluation in a simple form, such as a quiz.</p> <p>OR</p> <p>Self-assessment can be done on following parameters:- Ethical awareness, workplanning, scientific method of working, coping with mistakes.</p>
NLHP 24.2	History taking in a patient with Timira (Dimness of vision).	<p>A) Present a clinical case of Timira (Dimness of vision) and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions</p> <p>OR</p> <p>A) Utilise advanced simulation technology to create realistic patient scenarios. Engage students with virtual patient software that simulates real-life scenarios, helping them practice history taking and clinical reasoning skills.</p> <p>OR</p> <p>A) Use standardized patients (actors or fellow students) to role-play patients with Timira (Dimness of</p>

vision).

OR

A) Recommend apps like Geekymedics, wikimedias that offer virtual practice and quizzes on history-taking skills.

B) Break students into small groups for more focused practice and individualised feedback.

C) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.

OR

C) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.

Encourage students to assess their own performance and identify areas for improvement.

OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use checklists to evaluate students' performance in a reliable and consistent way.

Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 25 Nayanabhighata (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5, CO6	Describe causes, prognosis, clinical features and treatment of Nayanabhighata. Explain types, clinical features and management of Ocular trauma. Narrate clinical features, methods of removal, and treatment of Agantuja Akshi Shalya (Foreign body in eyes) and when to seek an expert opinion from Netra Shalaki/ Ophthalmologist.	CC	MK	KH	L,L&PP T	C-VC,T-O BT,DEB,Q Z ,VV-Viva	F&S	III	-	LH
CO5, CO6, CO7, CO8	Summarize the steps involved in the technique of removal of Agantuja Shalya from the eye.	CC	MK	KH	BS,ML, SIM,D- M,DIS	P-MOD,D OPS,DOPS	F&S	III	-	NLHP25.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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NLHP 25.1	Evaluation of Agantuja Shalya (Foreign body in eyes).	<p>A) Start with a short case presentation of a condition of Agantuja Shalya (Foreign body in eyes). Ask students to brainstorm and to work in pairs or groups to discuss various types of foreign body in eyes.</p> <p>OR</p> <p>A) Demonstrate the correct technique of removal of foreign body from conjunctiva using suitable instruments; or a video of a real or simulated foreign body removal, along with topical anesthetic use.</p> <p>B) Discuss the key steps in Pashchatkarma, such as pain management, and infection monitoring.</p> <p>C) Teacher should educate the students when and how to refer a patient with a foreign body in the eye other than the conjunctiva, to a Netra Shalaki (ophthalmologist).</p> <p>D) Summarize the session's key points.</p> <p>E) Determine the level of understanding by Direct Observation of Procedure Skills or Demonstration on Models:</p> <ul style="list-style-type: none"> • An assessor observes a trainee performing a procedure. • The assessor records their observations on a structured form. • The assessor provides immediate feedback to the trainee. • The trainee receives constructive feedback that focuses on essential skills.
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Topic 26 Drishtigata Roga-2 (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Define and enlist classification of Cataract.Discuss the etiology,	CC	MK	KH	L&PPT	T-OBT,QZ	F&S	III	-	LH

CO5	clinical features, investigations, and medical management of Senile Cataract.						,VV-Viva				
CO2, CO5	Enlist procedures for surgical management of Senile Cataract. Expound Small Incision Cataract Surgery (SICS) and Phacoemulsification (Their indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications, and their management in brief). Summarise current research studies on Kaphaja Linganasha/Timira (Cataract).	CC	NK	K	L_VC,D IS,L&G D,ML	OSCE,QZ, VV- Viva,COM	F&S	III	-	NLHT26.1	
CO3, CO7	Demonstrate the technique of ocular examination in a patient with Cataract.	AFT- RES	MK	SH	D,D-BE D,ML,P BL,CD	P-VIVA,O SCE,360D, PP- Practical	F&S	III	-	NLHP26.1	

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 26.1	Surgical management of Senile Cataract and current research studies on Kaphaja Linganasha/Timira (Cataract).	<p>Surgical Management of Senile Cataract (40 min.) The teacher may-</p> <p>A) Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR A) Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR A) The teacher may use Video Recordings or surgical simulators to provide hands-on practice in a controlled, risk-free environment.</p> <p>B) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative</p>

		<p>learning environment. The teacher should Include scenarios where complications arise and teach students how to manage these situations. C) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. OR A) Provide access to reputable online resources and journals for further reading and research. B) To evaluate, use quizzes, written exams, and practical assessments through OSCE to evaluate students' understanding and skills.</p> <p>Provide constructive feedback on their performance, highlighting areas of improvement and excellence. C) Instruct students to go through various research works published in peer-reviewed journals, compile and present the data followed by a discussion. Assess them on Content , Focus, Clarity and coherence, In-depth analysis, Grammar and spelling,Effective use of visual aids.(15 min.)</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 26.1	Examination of Cataract.	<p>A) Break students into small groups for more focused practice and individualized feedback.Present a clinical case of cataract, including examination of visual acuity and iris shadow. And have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices</p>

and techniques and facilitate post-shadowing discussions.
 OR
 Use standardized patients(actors or fellow students)to role-play patients with cataract.
 The student will take informed consent, counsel, examine, and explain surgical steps to a patient /volunteer in a simulated environment.Break students into small groups for more focused practice and individualized feedback.
 OR
 Recommend apps like Geekymedics and wikimedics that offer virtual practice and quizzes on history-taking skills.
 OR
 Make them a part of surgical team for Cataract.
 B) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.
 OR
 Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.
 Encourage students to assess their own performance and identify areas for improvement.
 OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination.
 OR
 The students can be assessed through 360 degree assessment wherein the student himself, the peers, the nursing staff and the assessor do the evaluation with a pre-given standard format.

Topic 27 Drishtigata Roga- 3 (LH :2 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Define and describe etiopathology, classification, clinical features, complications, and treatment of Madhumehajanya Drishtiroga (Diabetic Retinopathy).	CC	DK	KH	L&PPT ,L	T-OBT,CO M,VV-Viva	F&S	III	-	LH
CO2,	Define, describe etiopathology, clinical features, complications	CC	DK	KH	L&PPT	VV-Viva,T-	F&S	III	-	LH

CO5	and treatment of -Jarajanya Pitabindu Upaghata (Age-related macular degeneration) and Drishti-nadi Shosha (Optic Atrophy).				,L	OBT				
CO2, CO5, CO7	Present a case of Madhumehajanya Drishtiroga (Diabetic Retinopathy).	AFT-RES	MK	KH	ML,PB L,D- BED	VV- Viva,OSCE	F&S	III	-	NLHP27.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 27.1	Case discussion on Madhumehajanya Drishtiroga (Diabetic Retinopathy).	<p>A) Introduction (10 min.)</p> <ul style="list-style-type: none"> - Briefly introduce the topic and outline the objectives of the practical session. - Explain the importance of understanding diabetic retinopathy for future healthcare professionals. - Provide a concise overview of Madhumehajanya Drishtiroga (Diabetic Retinopathy), including its definition, prevalence, and significance. <p>B) Interactive Lecture (20 minutes)</p> <ul style="list-style-type: none"> - Explain the pathophysiology of diabetic retinopathy using diagrams and images. - Discuss the stages of diabetic retinopathy and its progression. - Describe common symptoms and diagnostic methods, including funduscopy and imaging techniques like OCT (Optical Coherence Tomography). <p>C) Hands on activity-(70 min.)</p> <ul style="list-style-type: none"> - Provide students with access to retinal images. - Guide them through the process of examining retinal images and identifying key features of diabetic retinopathy. - Present real or simulated case studies of patients with diabetic retinopathy. - Encourage students to analyze the cases, identify the stage of retinopathy, and suggest possible treatment options. - Divide students into small groups to discuss the case studies and share their findings.

- Facilitate a discussion on the challenges and management strategies for diabetic retinopathy.
 - Encourage them to discuss the relative Arhata-anarhata of Kriyakalpa.
- D) Assessment and Wrap-Up (10 minutes)
- Administer a short quiz to assess students' understanding of the topic.
 - Review the answers and provide feedback.
 - Summarize the key takeaways from the session.
 - Encourage students to continue their learning and stay updated on advancements in diabetic retinopathy.

Topic 28 Dravyas used in Netra Chikitsa-2 (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Define Mydriatics, Describe Phenylephrine 5% and Tropicamide 0.5%. Define Cycloplegic agents, Explain Atropine 1%, Homatropine 2%, and Cyclopentolate 1%.	CAP	DK	KH	L&GD	CL-PR, VV- Viva	F&S	III	-	NLHT28.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Mydriatics and Cycloplegic agents.	<p>A) Teacher will form five study groups to discuss and share information, through link circulated through messaging platforms or google classroom; each for phenylephrine 5% Tropicamide 0.5%, Atropine 1%, Homatropine 2%, Cyclopentolate 1%.</p> <p>Teacher will instruct students to study their dosage, indications, contraindications, untoward effects; discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.</p> <p>B) Each group will be given a duration of 10 minutes to present in Classroom. During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions assess their engagement. assess the presentations on content , focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, effective use of visual aids.</p> <p>At the end of session, summarize what they have learned.</p>

Non Lecture Hour Practical										
S.No	Name of Practical	Description of Practical Activity								
Topic 29 Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology. (LH :1 NLHT: 3 NLHP: 8)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5, CO6	Identify and describe Guna,Karma and Matra of Samanya Chakshushya Dravyas.	CC	MK	KH	D,DG	P-EXAM,P-ID	F&S	III	-	NLHP29.1
CO5	Observe the communication between physician and patient regarding prescription (Matra, Anupana, Route of administration, Untoward effects) of Samanya Chakshushya Yoga.	CC	DK	KH		Log book	F	III	-	NLHP29.2
CO5	Describe Netra Swasthyahitakara Dinacharya.	CC	MK	KH	DIS,LS, BL	VV-Viva,C OM,CL-PR	F&S	III	-	NLHT29.1
CO5	Describe Netra Swasthyahitakara Aahara Evam Vihara.	CC	DK	KH	LS,DIS, PER	CL-PR,VV-Viva,QZ	F&S	III	-	NLHT29.2
CO5	Describe causes, clinical features, prevention and treatment of Naktandhya (Night Blindness); and Jeevanasatwa-Kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders)- (Deficiency of Vitamin-A, Vitamin-B1, Vitamin- B2, Vitamin C, Vitamin-D).	CC	DK	KH	FC,DIS	QZ ,VV-Viva,PRN	F&S	III	-	NLHT29.3
CO4, CO7	Present an appropriate history in a patient presenting with Naktandhya (night blindness).	AFT-RES	MK	KH	SIM,RP ,PBL	OSCE,Log book,QZ	F&S	III	-	NLHP29.3
CO2, CO5	Describe the etiology, clinical features, WHO Classification, management and prophylaxis of Xerophthalmia. Describe clinical	CC	NK	KH	L&PPT ,L	VV-Viva,T-OBT	F&S	III	-	LH

features and management of Xerosis.

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 29.1	Netra Swasthyahitakara Dinacharya.	<p>A) Teacher forms groups to compile information from classics. These groups can form subgroups to divide chapters from classics. (30 min.) Librarians can collaborate with teacher to incorporate medical informatics into medical education. Librarians can help students evaluate and synthesize information.</p> <p>OR</p> <p>Digital libraries can create a medical informatics program that complements this activity. After this Library session, they should come back to classroom and present information from the library and classroom lecture. (25 min.) Debriefing can help maximize learning by summarizing and clarifying what was learned.</p> <p>B) Provide feedback to help students identify areas for improvement. (05 min.) Impress upon them that presentation and contents are equally important in this topic and evaluate them accordingly. After class, ask these groups to compile the information. Each group will submit separate compilation.</p> <p>C) Evaluation of compilation can be done on criteria like Content Accuracy, Completeness, Organization, Clarity of language and explanation of technical terms, Consistency, Uniform presentation of citations and references.</p>
NLHT 29.2	Netra Swasthyahitakara Aahara Evam Vihara.	<p>A) The teacher will form two study groups to discuss and share information, each for Netra Swasthyahitakara Aahara Evam Vihara. (pre class) Teacher will form sub groups to discuss and share information, each for Various eye exercises like Sunning, Palming, Ball exercise, Bar exercise, candle light reading, pencil push-ups, and figure of eight. (Pre-class)</p>

		<p>Teacher will Instruct the students to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness.</p> <p>Teacher will ask the groups to present information about Aahara in the classroom. (20 min.) Sub groups can be made according to Aahara-varga. And 30 minutes will be given to present Eye exercises.</p> <p>B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills to assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong.</p> <p>C) At the end of session, summarize what they have learned.</p>
NLHT 29.3	Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders).	<p>A) Teacher will form six study groups to discuss and share information, each for Naktandhya (Night Blindness), Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders)- (Deficiency of Vitamin-A, Vitamin-B1, Vitamin- B2, Vitamin C, Vitamin-D) (causes, clinical features, prevention and treatment)</p> <p>Teacher will instruct students to study themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness.(pre-class)</p> <p>The groups will present in the classroom. (06-08 min. for each group)</p> <p>B)Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in flipped classroom in a simple form, such as a quiz. At the end of session, summarize what they have learned and plan what to do next.(10-15 min.)</p>
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 29.1	Use of Samanya Chakshushya Dravyas in Eye diseases..	<p>The drugs to be studied are :- Amalaki, Vibheetaki, Hareetaki, Draksha, Yashtimadhu, Punarnava, Saindhava, Shigru, Lodhra, Nimba, Manjistha, Daruharidra, Gairika.</p> <p>A) Prepare handouts of the pictures of the drugs and handover to students. Teacher will instruct students to learn to identify common chakshushya dravyas by specimens and pictures.</p> <p>OR</p> <p>Use knowledge of Dravyaguna (pharmacology) to provoke pharmacotherapeutic thinking and reasoning. Explain students the indications of these drugs in Netraroga..</p> <p>OR</p> <p>Ask them to go through various databases like https://bsi.gov.in/page/en/medicinal-plant-database.</p> <p>B) Questionnaires can be used to assess a student's knowledge of drugs. The questionnaire can include questions about the drug's name, dosage, analyzing the drug's active ingredients, side effects, precautions, and more.</p>
NLHP 29.2	Prescription of Samanya Chakshushya Yoga.	<p>A) Students will observe the communication between physician and patient regarding prescription (Dose, anupana, route of administration, anticipation of effects) of Samanya Chakshushya Yogas like - Triphala Ghrita, Jeevantyadi Ghrita, Patoladi Ghrita, Saptamruta Louha, Triphala Guggulu, Chandrodaya Varti, Ilaneer Kuzhampu and Triphala Churna. They will journal these points.</p> <p>B) They are encouraged to ask questions.</p> <p>C) They should be able to identify these drugs.</p> <p>D) Action of these Yogas in diseases described in Shalakyatantra is explained by the teacher.</p> <p>E) Evaluate their log books on clarity, completeness, comprehensive information. OR Students can review each other's logbooks to provide additional feedback and perspective.</p>

NLHP 29.3	Evaluation of Naktandhya (night blindness).	<p>A) Present a clinical case of night blindness and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence.</p> <p>OR</p> <p>Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills.</p> <p>OR</p> <p>Use standardized patients(actors or fellow students) to role-play patients with night blindness Break students into small groups for more focused practice and individualized feedback.</p> <p>OR</p> <p>Recommend apps like Geekymedics, Wikimed's that offer virtual practice and quizzes on history-taking skills.</p> <p>B) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.</p> <p>OR</p> <p>Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.</p> <p>Encourage students to assess their own performance and identify areas for improvement.</p> <p>OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Communication skills to be assessed by Kalamazoo essential elements communication checklist.</p>

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
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Course outcome	Learning Objective (At the end of the session, the students should be able to)	Domain/sub	MK / DK / NK	Level	T-L method	Assessment	Assessment Type	Term	Integration	Type
Topic 30 Enumeration, Nidana Panchaka and Sadhya-asadyata of Shiroroga (LH :2 NLHT: 1 NLHP: 4)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2, CO5	Classify Shiroroga according to Sushruta and Vagbhata. Enlist Sadhya-asadyatwa of Shiroroga. Explain the Samanya Nidana and Samprapti of Shiroroga. Explain Hetus, Lakshana, Chikitsa of Vataja Shiroroga, Pittaja Shiroroga, Kaphaja Shiroroga and Sannipataja Shiroroga.	CC	MK	KH	L&PPT, L	QZ, P-VIVA, T-OBT, M-POS, S-LAQ	F&S	I	-	LH
CO2, CO5, CO7	Present an appropriate history in a patient presenting with Shirahshoola. Learn Differential diagnosis of Shirorogas -Vataja, Pittaja, Kaphaja, Sannipataja, Suryavartha, Anantavata, Ardhavabhedhaka.	AFT-RES	MK	SH	CD, D, TUT, PBL, RP	P-EXAM, P-VIVA, SA, OSCE	F&S	I	-	NLHP30.1
CO2, CO5	Understand the International Classification of Headache ICHD-3 and discuss Samanya Yogas used in Shiroroga.	CC	DK	KH	LS, L&PPT, DIS, SY	M-POS, CL-PR	F&S	I	-	NLHT30.1
CO2, CO7	Perform History taking and give outline of case sheet (Shira Karna Nasa Mukha roga).	CAP	MK	SH	BL, RP, D, TUT, PBL	SP	F&S	I	-	NLHP30.2
Non Lecture Hour Theory										
S.No	Name of Activity	Description of Theory Activity								
NLHT 30.1	Poster presentation on ICHD-3 Classification. Compiled presentation on Common Yogas used in Shiroroga.	A) The teacher will form five different study groups to discuss and share information. One group for Classification of ICHD-3 and 04 for Samanya Yogas. Students will study themselves, discuss with peers, and review each other's notes and findings to ensure accuracy and comprehensiveness.								

They would make a Poster as per ICHD-3. The presentation time will be 10 minutes. Assess on criteria like clarity of information, visual appeal, scientific soundness, and readability from a distance.

B) To study Yogas, the students are divided into 04 groups; they can go to the library (Pre-class), ask Librarian's help, they can subdivide subtopics -usage, dosage, and outcomes. Compile the Yogas.

- Varunadi Kashaya
- Mahalakshmi Vilasa Rasa
- Laghusutashekhara Rasa
- Varanadi ksheera Ghrita.

They can split time between different activities like searching for articles, reading, and taking notes. They should familiarise themselves with tools like Zotero, to collect information about primary and secondary sources, such as journal articles, and books.

C) At the end of the session, the teacher should ask them to summarize what they have learned and present in class. Each group is given 05 minutes to present. Judge the compiled presentation on-

- Content Accuracy.
- Completeness.
- Presentation in a logical and coherent structure.
- Clarity of language and explanation of technical terms.
- Uniform presentation of citations and references.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 30.1	Evaluation of Shirahshoola.	A) Present a clinical case of Shirorogas (Headaches) -Any Type of Headache (such as Suryavarta,

		<p>Ardhavabhedhaka, Anathavata) and have students work in groups to gather history, discuss differential diagnoses, and plan management.</p> <p>Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence.</p> <p>Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.</p> <p>Encourage students to present a case in a scientific format.</p> <p>OR</p> <p>Use standardized patients(actors or fellow students)to role-play patients with Shirahshoola.</p> <p>C) Break students into small groups for more focused practice and individualized feedback.</p> <p>D) Recommend apps like Geekymedics, Wikimeds that offer virtual practice and quizzes on history-taking skills.</p> <p>E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.</p> <p>F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.</p> <p>G) Encourage students to assess their own performance and identify areas for improvement.</p>
NLHP 30.2	Introduction of case sheet for Shiro Karna Nasa Mukha roga.	<p>A)Get familiar with the Case sheet.</p> <p>Form groups of 5-7 students each. Facilitate discussion amongst themselves regarding the topic and observe.</p> <p>The student tries to connect the knowledge gained in previous classes to applicable clinical framework.</p> <p>The teacher shows the student how to see the case sheet, the way he sees it.</p> <p>The teacher helps to bring things together in the context of Shiro-karna nasa mukha roga.</p> <p>Teacher and student come to a point of new understanding after discussion.</p> <p>B) Explain why case-taking is crucial for diagnosis and treatment planning.</p> <p>Conduct live demonstrations with real or simulated patients to model effective case-taking.</p> <p>C)Use videos of experienced clinicians.</p> <p>D)Provide a structured framework for students to follow during case taking.</p> <p>E) Teach Mnemonics like OLD CARTS (Onset, Location, duration, Character, Aggravating/relieving</p>

factors, timing, severity)
 F)Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills.
 G)Use standardized patients (actors or fellow students)to role-play patients.
 H)Teach students the importance of building rapport and demonstrating empathy during patient interactions.
 Highlight the role of active listening.
 Integrate case-taking with physical examination skills, teaching students correlations between them.
 I)Use Simulated patients as an evaluation method.

- Create realistic patient scenarios with detailed medical histories, presenting complaints, and desired outcomes.
- Thoroughly train Simulated Patients to accurately portray patient behaviors, emotions, and physical presentations.
- Assess on criteria like Communication skills, Physical examination skills, History taking, and developing treatment plans.
- Provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 31 Samanya Chikitsa of Shiroroga (LH :0 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Shiraso Uttamangatwam.	CC	DK	KH	BL,DIS,BS	DEB,CL-PR	F&S	I	-	NLHT31.1
CO5, CO6, CO7	Demonstrate under supervision Moordhni Taila.	PSY-GUD	MK	SH	RP,D,D-M	DOPS,DOP S	F&S	I	-	NLHP31.1
CO2, CO3,	Present an appropriate history in a patient presenting with Ardhavabhedaka.	AFT-RES	MK	SH	CD,RP,PBL,D-	SA,PP-Practical,OSCE	F&S	I	-	NLHP31.2

CO7					BED					
CO3, CO5	Discuss Ardhabhedaka, Anantavata and Suryavarta.	CC	MK	KH	DIS,PE R	PP-Practica 1,INT,CL- PR	F&S	I	-	NLHT31.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 31.1	Discussion on Shiraso Uttamangatwam.	<p>A)Teacher will share information through cross-platform messaging services like Signal, WhatsApp etc., or google classroom, a week before.</p> <p>Teacher will form different study groups to discuss and share this information, each for Rachana, Kriya related to Shiras; Nidanatmaka involvement of Shiras in Indriya-vikaras; and Shiras as Chikitsa-marga.</p> <p>B)Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness. They can Brainstorm their sub-topic Pre-class and come to inferences.</p> <p>They can go to library, ask Librarian's help, they can subdivide subtopics such as Rachana Shareera of Shiras,Marma,Nervous System,etc amongst themselves and split time between different activities like searching for articles, reading and taking notes.</p> <p>C) Each group would be given 10 minute to present in the classroom in the form of Powerpoint presentation and then they can have a debate on the scientific nature, objectivity and applicability of the topic for 10 minutes. At the end of session, summarize and give feedback based on their participation levels, clarity of knowledge, visual appeal and organisation of thoughts.</p>
NLHT 31.2	Etiology, Clinical Features,and Management of Ardhabhedaka, Anantavata and Suryavarta.	<p>A) The teacher will form three study groups to discuss and share information, each for Ardhababhedaka, Anantavata, and Suryavarta.</p> <p>Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.</p> <p>Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring</p>

	<p>everyone has a chance to speak.</p> <p>Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning.</p> <p>Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully.</p> <p>B) Provide feedback: Assessment of -Communication skills, Teamwork, Critical thinking, Body language, Interpersonal skills. At the end of the session, summarize what they have learned.</p> <p>C) Discuss the similarities and usefulness in current practice.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 31.1	Application of Shirolepa, Shiro-abhyanga, Shiroseka, and Shirobasti.	<p>A) Discuss the patient's history, diagnosis, and therapy plan in detail before entering the Therapy Hall. Emphasize the importance of hygienic techniques and the steps to maintain a hygienic environment. Ensure students understand the correct use of PPE whenever necessary. Walk students through the Murdhni Taila procedure step-by-step, explaining the purpose and technique of each step.</p> <p>OR</p> <p>Demonstrate on model.</p> <p>Foster an environment where students feel comfortable asking questions and seeking clarification. Teach students about care for Pashchat-Karma, including monitoring for complications and managing patient recovery.</p> <p>B) Record Methodologies (with patient's consent) for educational purposes. Reviewing these videos can help students learn and improve.</p> <p>C) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.</p> <p>Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients.</p> <p>D) Emphasis role of Informed consent. Use role play as an instruction method.</p> <p>E) Use Direct Observation of Procedural Skills (DOPS) as an assessment method.</p>

		<ul style="list-style-type: none"> • The trainee receives constructive feedback that focuses on essential skills. • An assessor observes a trainee performing a procedure. • The assessor records their observations in a structured form. • The assessor provides immediate feedback to the trainee. • The format for DOPS can be found at https://www.iscp.ac.uk/static/public/DOPSTul2015.pdf.
NLHP 31.2	Evaluation of Ardhavabhedaka.	<p>A) Present a clinical case of Ardhavabhedhaka, and have students work in groups to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.</p> <p>OR</p> <p>B) Use standardized patients(actors or fellow students)to role-play patients with Ardhavabhedaka. C) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. D) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. Encourage students to assess their own performance and identify areas for improvement. Self-assessment can be done on following parameters:- Team work , empathy and openness, ethical awareness, work planning, scientific method of working, structuring, and coping with mistakes.</p>

Topic 32 Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga (LH :2 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1, CO2	Define Karna Nirukti, Karna Shareera (Asthi, Sandhi, Peshi, Sira, Marma) and Shravanendriya, Enlist Karna Rogas, Explain	CK	MK	K	L,L&PP T	M-POS,DE B,PRN,T-O	F&S	I	-	LH

	Samanya Nidana, Samanya Samprapti and Describe Samanya Chikitsa of Karna Roga.					BT,S-LAQ				
CO1	Describe the anatomy of different structures of Karna - Ear (External, Middle, and Internal) and clinical application.	CC	MK	KH	L&PPT,PER,M L,L_VC,DIS	P-VIVA,P UZ,PRN,S-LAQ,VV-Viva	F&S	I	V-RS,V-RS	NLHT32.1
CO1, CO2, CO4, CO5	Elaborate Karna Roga- Samanya Nidana, Samanya Samprapti and Sadhya-asadhyata.	CC	MK	K	L&PPT,LS,L&GD,DIS,SDL	P-REC,VV-Viva,M-POS,T-OBT,C L-PR	F&S	I	V-RN	NLHT32.2
CO3, CO7	Examination of Karna.Demonstrate the use of a headlamp and otoscopy in the examination of Karna, Nasa and Mukha (Ear, Nose and Throat).	PSY-GUD	MK	SH	PT,TUT,TBL,RP,ML	P-ID,Log book,P-PRF	F&S	I	-	NLHP32.1
CO5, CO6, CO7	Present cases of Karnarogas.	AFT-RES	MK	SH	D-BED,PBL,TU T,SIM,RP	DOAP,OSCE	F&S	I	-	NLHP32.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 32.1	Presentation on Anatomy of Ear.	<p>A) The teacher should provide the link for audio-visual/animation presentations a week before the actual class through various messaging services or Google Classroom. The students can then be divided into three groups, each for External, middle, and internal ear; and they will go through those videos and present in front of the entire class. The time duration for each group will be 15 minutes.</p> <p>B) PowerPoint presentations should be assessed on the following criteria- content, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids.</p> <p>OR</p>

		<p>Models can be used to assess the ability to show important landmarks of the external, middle, and internal ear on.</p> <p>C)The teacher should use puzzles to identify the point/s, and knowledge they have learnt during the session.</p>
NLHT 32.2	Samanya Nidana,Samanya Samprapti,Sadhya-asadhyata of Karna Rogas.	<p>A) The teacher provides link of powerpoint presentation about the common Samanya Nidana, Samprapti and Sadhya-asadhyata of Karna Rogas. Teacher will then form three study groups to discuss and share information, each for Samanya Nidana, Samprapti and Sadhya-asadhyata. Students will be directed to compile Nidana, Samprapti, and Sadhya-asadhyata from various Ayurveda Classics. Teacher should encourage them to study by themselves, discuss with peers, review each other’s notes and findings to ensure accuracy and comprehensiveness. They can be advised by the teacher to go to the library and ask Librarian's help.</p> <p>B) At the end of session, the students should summarize what they have learned and present it in front of the teacher. Each group will be given 10 minutes.</p> <p>C) A discussion will take place about mechanism of each nidana to karnaroga and logic behind their prognosis. (15 min.)</p> <p>D) Evaluation to be done on the basis of :</p> <ul style="list-style-type: none"> • Content Accuracy, any factual errors or inconsistencies. • Completeness. • Organization- presented in logical and coherent structure. • Clarity of language and explanation of technical terms. • Consistency, uniform presentation of citations and references. <p>OR Open book test can be used for assessment. OR Posters made by students are assessed. OR Recitation competition of Shlokas can be arranged.</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 32.1	Identification and use of basic Ear OPD Instruments.	<p>A)The teacher should explain to students why examination is crucial for diagnosis.</p> <p>B) The teacher should conduct live demonstrations with real or simulated patients to model effective case-taking.</p> <p>OR</p> <p>The Teacher can make use of videos of experienced clinicians to make students understand the correct use of OPD Instruments.</p> <p>The teacher should then explain parts of instruments, instructions, indications, and contraindications. The teacher can use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment.</p> <p>Emphasize key points like technique, safety, and anatomical landmarks should be done.</p> <p>OR</p> <p>C) The Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>D) Students should be provided constructive feedback on their performance, highlighting areas of improvement and excellence.</p> <p>E) The teacher should see to it that the student is able to identify instruments used in Karna, Nasa, Mukha OPD.</p> <p>The teacher should observe if the student is able to use a headlamp and do otoscopy with the help of otoscope/endoscope.</p> <p>The teacher should ensure that the student is able to use other OPD-based Ear instruments effectively on patients under the guidance of the Consultant and examine Karna.</p>
NLHP 32.2	Case taking in Karnaroga.	<p>A) The teacher should elaborate on the key points needed to keep in mind while taking a clinical case of Karnaroga. The teacher should then have students work in groups to gather history, discuss differential diagnoses, and plan management.</p> <p>After analyzing the information that the students have gathered while working in groups, the teacher should then teach students other history-taking techniques, which reinforce their learning and builds</p>

confidence.

OR

B) The teacher should utilize advanced simulation technology to create realistic patient scenarios. The students should then be engaged with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills.

OR

The Teacher can use standardized patients(actors or fellow students)to role-play patients with Karnaroga.

B) The teacher should teach students the importance of making patients comfortable and should later help the student to understand the importance of informing the patient what he/she is going to do for case-taking purposes.

The teacher should then observe the student while he/she takes generalized history, and see to it if the student understands the relation between systemic and neighboring diseases and karnarogas.

C) The teacher should evaluate on the basis of OSCE. The teacher at the end should provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 33 Karnaroga 1 (LH :2 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO4, CO5, CO6	Describe Samprapti and Lakshanas of Karnashoola as per Acharya Sushruta.Enlist types and lakshanas of Karnashoola as per Acharya Vagbhata.Describe Chikitsa of Karnashoola.Describe Samprapti,Lakshanas and Chikitsa of Karna Shopha.	CC	MK	KH	L,L&G D	CL-PR,QZ ,T-OBT	F&S	I	-	LH
CO2, CO3, CO4, CO5, CO7	Present an appropriate history in a patient presenting with Karnashoola (Otagia).	AFT- RES	MK	SH	X-Ray,P BL,CD, RP,PT	PP- Practical, C -VC,OSCE, P-RP,P- EXAM	F&S	I	-	NLHP33.1

Non Lecture Hour Theory		
S.No	Name of Activity	Description of Theory Activity
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 33.1	Evaluation of Karnashoola (Otagia).	<p>A)The teacher should explain to the students why case-taking is crucial for diagnosis and treatment planning. The teacher can later conduct live demonstrations with real or simulated patients to model effective case-taking. Videos of experienced clinicians can also be shown to the students to understand Karnashoola (Otagia). The teacher should provide a structured framework for students to follow during case-taking.</p> <p>B)The teacher should teach Mnemonics like OLD CARTS (Onset, Location, duration, Character, Aggravating/relieving factors, timing, severity) The students can also be engaged with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. The teacher can use standardized patients (actors or fellow students)to role-play patients with Karnashoola (Otagia). The teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should also know the role and importance of active listening. The teacher can Integrate case-taking with physical examination skills, teaching students correlations between them.</p> <p>C) MINI-CEX or OSCE can be used to assess. Students should be provided constructive feedback on their performance, highlighting areas of improvement and excellence. The format can be downloaded from https://www.ranzcr.com/images/20211015_RO_Mini-CEX_Assessment_Form.pdf. A similar format can be developed.</p>
Topic 34 Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga (LH :2 NLHT: 1 NLHP: 2)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Explain Nasashareera (Applied Rachana and Kriyashareera of Nasa and Nasagandakutalalatasthi-kuhara). Explain Kriya of Ghranendriya and physiology of olfaction.	CC	MK	KH	L&PPT ,L	T-OBT,VV -Viva,COM ,QZ	F&S	I	V-RS,V -KS,V- RS	LH
CO2, CO5	Enumerate Nasarogas. Describe etiological factors of Nasarogas. Enlist Pathya-apathya and Sadhya-asadhyatwa of Nasarogas; indications and contra-indications for Dhumapana specific to Shalakyatantra. Discuss Poorva-Pradhana-Pashchat Karma and complications of Dhumapana and its management.	CC	MK	KH	L&PPT ,L	T-OBT,VV- Viva,QZ ,P UZ,M-POS	F&S	I	-	LH
CO3, CO5	Describe Nasya in Diseases described in Shalakyatantra. Summarise current research studies on Nasya and Dhumapana in the diseases of Shira, Karna, Nasa, and Mukha.	CC	DK	KH	DIS,FC, TBL,LS	M-CHT,CL -PR,M- POS,QZ ,VV-Viva	F&S	I	H-PK	NLHT34.1
CO2, CO5, CO7	Present cases of Nasaroga.	AFT- RES	MK	SH	CD,PBL ,D-BED	OSCE,P-C ASE,VV- Viva,SP	F&S	I	-	NLHP34.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 34.1	Discussion on Nasya. Current research studies on Nasya and Dhumapana in diseases in Shalakyatantra.	A) The teacher makes four groups of students. Each group is given a subtopic as - a) Enlist indications and contra-indications for Nasya, in conditions in Shalakyatantra. b) Describe complications of Nasya and its management. c) Summarise current research on Nasya in diseases described in Shalakyatantra. d) Summarise current research on Dhumapana related to Shalakyatantra. Students may compile the information about the topics (Pre-class) and one, two or three students from each group present in class. Other groups may critically discuss the topics, by asking questions, in the classroom. Each group will be given 10-15 minutes to present.

		<p>Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak.</p> <p>Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning.</p> <p>Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully.</p> <p>Provide feedback: Assessment can be done on the following criteria:- Communication skills, Teamwork, Critical thinking, Body language, and Interpersonal skills.</p> <p>OR</p> <p>The teacher asks students to prepare Posters. Each group is given 10-12 minutes to present in the classroom.</p> <p>Assessment is made on the basis of clarity of information, visual appeal, scientific soundness, and whether key elements are presented clearly and concisely, while also considering the visual design and readability from a distance.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 34.1	General history taking, Specific history taking in the cases of Nasaroga.	<p>A) The teacher makes groups of 03 students and asks them to check patients in Nasaroga opd. After initial introduction and demographic history taking they learn to gather comprehensive and relative information from the patients specific to Nasaroga. Students may practice taking histories with each other or with simulated patients.</p> <p>OR</p> <p>B) The teacher may choose four students to volunteer as patients, they are given a standard set of symptomatology, preferably written, about a nasal disease, which they would answer to their enquiring peers.</p> <p>Introduce mnemonics like OPQRST: Onset, Provocation / Palliation, Quality, Region/Radiation, Severity, Timing; to guide.</p> <p>Learn to understand the relation of diseases' neighboring structures and systemic diseases with nasarogas.</p>

Learn to Document in proper format.

Encourage interactive sessions where students can discuss their experiences, challenges, and strategies.

C)Use Observed Structured Clinical Examination OR Simulated Patients to assess.

- OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a case of Nasaroga. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. Performance can be recorded on a 4-point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations.
- Communication skills to be assessed by Kalamazoo essential elements communication checklist.
- Each student is exposed to the same stations and assessment Give constructive feedback on their skills.
- Simulated patients can be as a part of OSCE or a separate assessment. Students or actors are provided with written, specific, clear-cut instructions and clinical features of a nasaroga and the students are rotated through this setup. They are assessed in the areas like history taking, physical examination, and counseling skills.

Topic 35 Pratishyaya (LH :3 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Define Paribhashha of Pratishyaya. Describe the Hetus, Samprapti, Purvarupa, Lakshana, and the Importance (Significance in relation to overall health) of Pratishyaya. (Vataja, Pittaja, Kaphaja, Saanipataja, Raktaja, Ama, Pakva).	CC	MK	KH	L&PPT, L	QZ, T-OBT	F&S	I	-	LH
CO2, CO5	Explain Upadrava, Sadhyasadyata and Chikitsa of Pratishyaya. Elaborate Nidana, Samprapti, Lakshanas and Chikitsa of Dushtapratishyaya.	CC	MK	KH	L, L&PP, T	VV-Viva, T-OBT, QZ	F&S	I	-	LH
CO2,	Discuss Nidana, Samprapti, Lakshanas and Chikitsa of Puyarakta,	CC	MK	KH	DIS, PL,	T-OBT, P-P	F&S	I	-	NLHT35.1

CO5	Nasapaka, and Nasashopha.				L&PPT	OS,VV-Viva,CL-PR				
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 35.1	Discussion on Puyarakta, Nasapaka, Nasashopha.	<p>A) The teacher will form three study groups to discuss and share information, each for Puyarakta, Nasapaka, and Nasashopha. (Pre-class)</p> <p>They can go to the library, ask the Librarian's help, they can subdivide subtopics amongst themselves, and split time between different activities like searching for articles, reading, and taking notes. Students will study themselves, discuss with peers, and review each other's notes and findings to ensure accuracy and comprehensiveness.</p> <p>They will present the information with a PowerPoint presentation in the classroom. (15 min. each)OR they can present posters in the classroom.</p> <p>PowerPoint presentations should be assessed on the following criteria- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids. OR They can be subjected to an Open-book test.</p> <p>B) At the end of the session, the teacher should summarize what they have learned and plan what to do next. (05 min.)</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 36 Mukha Shareera and Nidana Panchaka of Mukharoga (LH :1 NLHT: 1 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Define Paribhasha of Mukha, Describe the anatomy of Ostha (lips), Mukha-kuhara (oral cavity), Jivha(tongue), Danta (teeth), Gala- Talu (Pharynx), Lalagranthi -Salivary glands (parotid, submandibular) and Swarayantra (larynx).	CC	MK	KH	LS,DIS,FC,ML	CL-PR,QZ	F	I	V-RS,V-RS	NLHT36.1

CO3, CO7, CO8	Present an appropriate history in a patient presenting with an Oro – dental complaint.	AFT-RES	MK	SH	PBL,D-BED,RP ,TUT	P-EXAM,P-CASE,OS CE,SP,C-INT	F	I	-	NLHP36.1
CO3, CO7, CO8	Demonstrate Kavala , Gandusha, Pratisarana.	PSY-MEC	MK	D	RP,D-BED,TU T,PBL	DOAP	F	I	-	NLHP36.2
CO2, CO5	Describe Classification (based on Adhishthana and Sadhya-asadhyata), Samanya Chikitsa (Kavala, Gandusha and Pratisarana – Their indications, contraindications, types and procedure) and Pathya-apathya of Mukha Roga along with Nidana Panchaka.	CC	MK	KH	L	PRN,P-VIV A,SP,T-CS,T-OBT	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 36.1	Elaboration on Mukha- Shareera.	<p>A) Make 08 teams and give them subtopics as Paribhasha of Mukha, Anatomy of Oshtha (lips), Mukha-kuhara (oral cavity), Jivha(tongue), Danta (teeth), Gala- Talu (Pharynx), Lalagranthi -Salivary glands (parotid, submandibular) and Swarayantra (larynx).</p> <p>The students will be given a link to a PowerPoint presentation on these topics. The presentation on the topic should be prepared and uploaded on a website created for the students or free cross-platform messaging services like WhatsApp, Telegram or learning platforms like Google Classroom.</p> <p>They should be also instructed to go through the textbooks and read this topic. They should be given 01 week time before the scheduled Flipped Classroom for this topic. After 01 week of self-learning, problem-based questions related to the topics may be asked and discussed with the students. Students will be also encouraged to ask questions to clarify concepts. Present in the classroom.</p> <p>B) Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions and assess their engagement; Encourage students to reflect</p>

on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in the flipped classroom in a simple form, such as a quiz. Give constructive feedback.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 36.1	Oro - Dental case taking and examination.	<p>A) Conduct live demonstrations with real or simulated patients to model effective case-taking. Use videos of experienced clinicians. Provide a structured framework for students to follow during case taking. Preparation and Review of Available Records</p> <p>B) Self-Introduction and Rapport Building Recording the Chief Complaint Collecting Past Medical History, Medications, Allergies, and Family History Gathering Social History Review of Systems (ROS)</p> <p>C) Patient Positioning and Instructions Inspection of the Lips and Perioral Area Examination of the Buccal Mucosa and Gingiva Examination of the Hard and Soft Palate Inspection of the Tongue Examination of the Floor of the Mouth and Sublingual Area Examination of the Oropharynx Pay special attention to changes in color, ulcers, bleeding, growths and other variations in concerned areas. Differentiate Leucoplakia, and Erythroplakia. Palpation of the Oral Cavity.</p> <p>D) Closing (Thanking the patient).</p> <p>E) Use the Simulated Patient technique or OSCE to evaluate the students.</p>

NLHP 36.2	Poorva, Pradhana and Pashchat Karma of Kavala, Gandusha and Mukhapratisarana.	<p>A) Discuss the patient's history, diagnosis, and therapy plan, its preparation, Sambhara-samgraha, preparation of the patient, Pradhanakarma, and Pashchat karma, in detail before entering the therapy room.</p> <p>B) Emphasize the importance of a hygienic environment. Ensure students understand the correct use of PPE if needed.</p> <p>C) Walk students through the procedure step-by-step, explaining the purpose and technique of each step.</p> <p>D) Foster an environment where students feel comfortable asking questions and seeking clarification.</p> <p>E) Teach students about post-operative care, including monitoring for complications and managing patient recovery.</p> <p>F) Record procedures (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve.</p> <p>G) Promote teamwork and collaboration among students, encouraging them to learn from each other's experiences.</p> <p>Stress the importance of maintaining professionalism, confidentiality, and empathy towards patients.</p> <p>H) Assess the students on the basis of DOAP.</p>
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Topic 37 Oshtharoga (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Elaborate clinical features and treatment of Vataja, Pittaja, Kaphaja Oshthakopa (Chelitis) Khandoushtha (Cleft lip), Jalarbuda, Herpes labialis and Lip Mucocele.	CC	MK	KH	L,L&PP T	T-OBT,QZ ,T-CS	F&S	I	-	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 38 Sarvasara Mukharoga (LH :2 NLHT: 0 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the clinical features and treatment of Vatika, Pittaja, Kaphaja, Raktaja, Sannipatika Sarvasara along with Stomatitis, and Oral candidiasis.	CC	MK	KH	L&PPT	T-CS,VV-Viva,P-VIV A,T-OBT,QZ	F&S	I	-	LH
CO2, CO5	Explain the etiology, clinical features and treatment of Oral submucous fibrosis, and Tumours of the oral cavity, (Pleomorphic adenoma, Malignancies of tongue, palate and oral mucosa).	CC	NK	KH	L&PPT	T-OBT,QZ ,T-CS,INT, M-CHT	F&S	I	-	LH
Non Lecture Hour Theory										
S.No	Name of Activity	Description of Theory Activity								
Non Lecture Hour Practical										
S.No	Name of Practical	Description of Practical Activity								
Topic 39 National Oral Health Programme (LH :0 NLHT: 1 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe National Oral Health Programme.Explain methods for the prevention of oral malignancy.Present methods of prevention of oral diseases mentioned in Ayurvedic classics.	CC	DK	KH	ML,PS M,BL,B S,DIS	P-RP,DEB, QZ ,PRN, M-POS	F	I	-	NLHT39.1
Non Lecture Hour Theory										
S.No	Name of Activity	Description of Theory Activity								
NLHT 39.1	Brainstorming session on National Oral Health Programme and Dantarakshavidhi.	1. Introduction & Group Allocation (5 minutes)								

- Briefly explain the session's structure and learning outcomes.
- Divide students into three groups:
 - Group 1: National Oral Health Programme (NOHP)
 - Group 2: Prevention of Oral Malignancy
 - Group 3: Prevention According to Ayurveda Classics

2. Group Discussions & Brainstorming (15 minutes)

- Group 1 (NOHP):
 - Presentation on key components of the National Oral Health Programme (prepared in advance).
 - Stress the scientific nature of Dantaraksha Vidhi and its role in modern dentistry.
 - Identify gaps in implementation and suggest improvements.
- Groups 2 & 3:
 - Prevention of Oral Malignancy:
 - Brainstorm common etiologies (tobacco, betel nut, alcohol, infections).
 - Discuss public awareness strategies for prevention.
 - Ayurveda-Based Prevention:
 - Discuss Ayurveda's perspective on oral health maintenance (Dantaraksha Vidhi, Dinacharya, Rasayana therapy, dietary habits, and herbal formulations).
- Encourage open sharing with no judgment.
- Utilize whiteboards/digital tools to map ideas visually.

3. Group Presentations (15 minutes)

		<ul style="list-style-type: none"> • Each group gets 5 minutes to present key takeaways. • Others can ask questions and add inputs. <p>4. Idea Refinement & Action Plan (10 minutes)</p> <ul style="list-style-type: none"> • Evaluate the strengths and weaknesses of each group's ideas. • Develop an action plan: <ul style="list-style-type: none"> ◦ Steps for public awareness campaigns. ◦ Community-based interventions. ◦ Ayurveda-based preventive strategies in clinical practice. <p>5. Conclusion & Takeaways (5 minutes)</p> <ul style="list-style-type: none"> • Reinforce the importance of public awareness in preventing oral malignancies. • Summarize key learnings. • Encourage students to implement their ideas in clinical practice and community health initiatives.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
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Topic 40 Kapalagata Roga (LH :1 NLHT: 0 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Explain Samprapti, Lakshana, Chikitsa of Darunaka, Indraluptha, Khalitya and Palitya.	CC	DK	KH	L&PPT, L	CL-PR, PRN, T-CS, P-ID	F&S	II	-	LH
CO3, CO7	Decipher the steps involved in Prachchhana, and Jalaukavacharana.	CC	DK	KH	D,PT	CHK, VV-Viva, M-POS	F&S	II	-	NLHP40.1

CO3, CO7	Summarise the steps involved in performing Agnikarma in Shiroroga/Kapalagata Roga.	CC	DK	KH	PT,D,PER	DOPS,P-VI VA,DOPS, CL-PR	F&S	II	-	NLHP40.2
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 40.1	Purva- Pradhana and Pashchat Karma related to the procedures of Prachchhanna and Jalaukavacharana.	<p>A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate the procedures. OR Show recorded these procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.</p> <p>B) The student may be a part of a team that does these procedures.</p> <p>C) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.</p> <p>D) Discuss ethical issues related to surgical or Para surgical aspects, including informed consent, patient confidentiality, and decision-making</p> <p>E) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment.</p> <p>F) The teacher should Include scenarios where complications arise and teach students how to manage these situations.</p> <p>G) Use Poster making and checklists to evaluate students' understanding and skills.</p> <p>H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.</p>
NLHP 40.2	Discussion on Agnikarma in Shiroroga.	A) The teacher may-

Use anatomical models, diagrams, and 3D animations to illustrate the procedures.

OR

Show recorded these procedure to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed.

OR

B) The student may be a part of a team that does these procedures.

C) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.

D) Discuss ethical issues including informed consent, patient confidentiality, and decision-making

E) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment.

F) The teacher should Include scenarios where complications arise and teach students how to manage these situations.

G) Use quizzes, written exams, and practical assessments to evaluate students' understanding and skills.

J) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.

Topic 41 Karna Kriya Shareera and Shravanendriya (LH :0 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO1	Describe Kriya Shareera of Karna and Shravanendriya.Explain the Physiology of Equilibrium.	CC	MK	KH	L&GD, FC,RP, DIS,D-M	QZ ,S-LAQ ,PA,T-OBT ,CL-PR	F&S	II	-	NLHT41.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity

NLHT 41.1	Discussion on Shareer Kriya of Karna and Shravanendriya, and Physiology of Equilibrium.	<p>A) The teacher can divide students into groups and conduct a group discussion on Jnana of Srotra-Pratyaksha, Conductive Apparatus, Perceiving Apparatus and Auditory Pathway; balance mechanism and importance of the inner ear in maintaining balance of human body.</p> <p>Divide students into groups of 5-8 for optimal interaction and participation.</p> <p>Consider assigning roles like facilitator (to guide discussion), timekeeper (to manage time), and notetaker (to record key points).</p> <p>Clearly introduce the topic, providing necessary background information and key questions to guide the discussion.</p> <p>Encourage all students to contribute their thoughts, opinions, and evidence-based reasoning, ensuring everyone has a chance to speak.</p> <p>Ask probing questions to challenge assumptions, evaluate different perspectives, and encourage students to justify their reasoning.</p> <p>Emphasize the importance of listening attentively to others' viewpoints and building on ideas respectfully.</p> <p>B) Provide feedback: evaluate on the criteria like Communication skills, Teamwork, Critical thinking, Body language, and Interpersonal skills and give constructive feedback.</p> <p>OR</p> <p>Use poster presentations or theory open-book test as assessment methods.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 42 Karna Badhirya, Karna Naada and Kshweda (LH :3 NLHT: 1 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Describe Hetu, Samprapti, Lakshanas and Chikitsa of Karna Badhirya. Explain types of Hearing Loss (Conductive, Sensorineural and Mixed) and its investigations (Tuning Fork Test, Audiometry, Impedance Audiometry). Summarise Etiology, Pathology, Differential Diagnosis of Otosclerosis, Medical and	CC	MK	KH	BL,L&P PT ,L,PER	T-OBT,CL- PR,DEB,P- EXAM,PP- Practical	F&S	II	-	LH

	Surgical Management of Otosclerosis.									
CO2, CO3, CO5	Explain Hetus, Lakshanas, Samprapti and Chikitsa of Karna Naada, Karna Kshweda. Describe types and Causes, Investigation and Treatment of Tinnitus.	CC	MK	KH	L,L&PP T	QZ ,S-LAQ ,PP-Practical,CL-PR,P-VIVA	F&S	II	-	LH
CO7	Describe the National Program for Prevention and Control of Deafness. Elaborate Causes and ill effects of Noise Pollution.	CC	DK	K	RP,BL	P-RP,M-POS,VV-Viva	F&S	II	-	NLHT42.1
CO2, CO3, CO4	Present an appropriate history in a patient presenting with Badhirya (Deafness).	AFT-RES	MK	SH	L_VC,R P,PBL, D-BED, TUT	P-CASE,V V-Viva,OS CE,Mini- CEX	F&S	II	-	NLHP42.1
CO3, CO4, CO5	Demonstrate the technique of Tuning fork Tests.	PSY-MEC	MK	SH	TUT,C D,RP,D, PBL	DOPS,VV- Viva,CL-P R,PP-Practical,DOPS	F&S	II	-	NLHP42.2
CO3, CO5	Summarise the technique of Audiometry and interpret reports of Audiogram.	CC	DK	SH	D-M,PT ,D,RP, ML	Log book,P -RP,OSPE, P-EXAM,P- PRF	F&S	II	-	NLHP42.3
CO2, CO3, CO4	Present an appropriate history in a patient presenting with Karna Kshweda- Naada (Tinnitus)-	AFT-RES	MK	SH	PT,D-B ED,CD, PBL,TU T	QZ ,P-CAS E,P-PRF,P- VIVA,S- LAQ	F&S	II	-	NLHP42.4
CO5, CO6, CO7	Perform a procedure of Karnapoorana.	PSY-GUD	MK	SH	PT,PBL ,D-BED ,SDL	VV-Viva,P- PRF,SA,D OPS,P- EXAM	F&S	II	-	NLHP42.5

CO5, CO6	Summarise the steps involved in performing Karna Pramarjana, Karna Prakshalana and Karna Dhoopana.	CC	MK	KH	L_VC,D -BED,P BL	P-EXAM,P -MOD,CH K,Log book	F&S	II	-	NLHP42.6
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 42.1	Group discussion on National Programme for Prevention and Control of Deafness and Noise Pollution.	<p>A) Divide the class into small groups and provide each group with printed brochures and posters about NPPCD. Ask each group to discuss the key messages and strategies presented in the materials. (Pre-class)</p> <p>Show a short video or presentation highlighting key points about hearing health and the National Program for Prevention and Control of Deafness(NPPCD).(05-08 minutes).</p> <p>B)Role-Playing (30 minutes):</p> <ul style="list-style-type: none"> - Assign roles to students (e.g., healthcare providers, community members, patients) and provide them with role-play scripts. - Have students act out scenarios where they educate community members about hearing health and the NPPCD initiatives. <p>Role Play Scenarios:</p> <p>Scenario 1: A festival</p> <p>Scenario 2: Emergency room with case of sudden hearing loss</p> <p>Scenario 3: Care and Follow-Up education to society.</p> <p>Encourage students to act out their roles as realistically as possible, using appropriate terminology and interactions.</p> <ul style="list-style-type: none"> - Encourage students to use the brochures and posters to support their role-play. - Encourage students to share their thoughts on how they can contribute to hearing health awareness in their communities. <p>Rotate roles to ensure each student gets to practice different aspects of management.</p> <p>Give clear instructions and guidelines for the role-play scenarios, including the causes and control of noise pollution; hierarchical arrangements of National Program for Prevention and Control of Deafness</p> <ul style="list-style-type: none"> - Allow students to ask questions and discuss their actions during the role play. - Ask students to write a short reflection on what they learned from the activity and how they can

	<p>apply this knowledge in real-life situations.</p> <p>B) Provide feedback on their participation and understanding of the NPPCD.(10 min.)</p> <ul style="list-style-type: none"> - Assess students based on their engagement and contributions during the group discussion and role-play. - Evaluate the quality and clarity of their role-play presentations. - Review their written reflections to gauge their understanding and personal takeaways from the activity. - Group Discussion- After each scenario, conduct a debriefing session where students can discuss their experiences, challenges, and what they learned.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 42.1	Case Taking and Differential Diagnosis of Badhirya.	<p>A)Teacher should teach students the basic way of case taking which starts with the student introducing himself/herself to patient. Student should then make patients comfortable and then inform patient what he/she is going to do for case-taking purpose. Student should take proper history of the patient and present differential diagnosis of Karna Badhirya (Deafness) in front of the class. Student should then be encouraged to come to proper diagnosis by performing various tuning fork tests.</p> <p>B) Teacher should see that students conduct live demonstrations with real or simulated patients to model effective case-taking.</p> <p>OR</p> <p>Use videos of experienced clinicians can be done by the teacher to demonstrate ways of diagnosing Karna Badhirya.</p> <p>C) Students should be provided a structured framework to follow during case taking. Integrate case-taking with physical examination skills, teaching students correlations between them.</p> <p>E) Observed Structured Clinical Examination:</p>

		<ul style="list-style-type: none"> • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use checklists to evaluate students' performance in a reliable and consistent way. • Communication skills to be assessed by Kalamazoo essential elements communication checklist. <p>Each student is exposed to the same stations and assessment. Teacher should discuss the areas for improvement with students.</p>
NLHP 42.2	Tuning Fork Test (Rinne's, Weber) and their interpretation.	<p>Teacher should teach students various frequencies of Tuning forks used in OPD. Students should be taught basics of tuning fork tests.</p> <p>A) Students will be divided in various groups and demonstrate on patients basic tuning fork tests under the Guidance of the Consultant.</p> <p>OR</p> <p>A)Teacher should assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice. Teacher should give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient.</p> <p>C) Students should be encouraged to reflect on their own performance and identify areas for improvement. Self-assessment can be done on the following parameters:- Teamwork and collegiality, empathy and openness, ethical awareness, scientific method of working, coping with mistakes, and priorities.</p>
NLHP 42.3	Audiometry and its interpretation.	<p>A) The teacher should teach students the basic concepts of Audiometry. The student will observe the correct way of positioning the patient while doing Audiometry in a soundproof room. Students will learn how to use an Audiometry machine and the basics of how to switch between Air and Bone conduction in the Audiometry Machine. Student should be taught basics of masking and how it is shown on Audiogram.</p>

		<p>Student should also be taught the technique of reading audiogram.</p> <p>B)The teacher should conduct live demonstrations with real or simulated patients to model effective performance.</p> <p>OR</p> <p>C)The teacher can show videos of experienced clinicians demonstrating the correct technique of doing Audiometry.</p> <p>Student should be able to explain parts of instruments, instructions, indications, and contraindications.</p> <p>OR</p> <p>D)Teacher can use standardized patients (actors trained to simulate real patient cases) to perform a step-by-step demonstration in a controlled environment.</p> <p>E)Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>F)Evaluate students by Objective Structured Practical Examination. Analyse student's performance on criteria like knowledge of parts of instruments, indications, contra-indications, reading and analysing audiometry reports, building rapport and demonstrating empathy during patient interactions.</p> <p>Provide constructive feedback on their performance.</p>
NLHP 42.4	Assessment of Karna Kshweda-Naada (Tinnitus).	<p>A) The teacher should teach students about Tinnitus, its types and various etiological factors and causes associated with it.</p> <p>1. Introduction (15 minutes)</p> <ul style="list-style-type: none"> - Welcome and Introduction (5 minutes): Briefly introduce yourself and the topic. - Objective of the Session (5 minutes): Explain the importance of case-taking in diagnosing and managing tinnitus. - Overview of Tinnitus (5 minutes): Provide a brief overview of what tinnitus is, its prevalence, and its impact on patients. <p>2. Case History Taking (45 minutes)</p> <ul style="list-style-type: none"> - Introduction to Case History (10 minutes): Explain the components of a comprehensive case history for tinnitus patients. - Interactive Case Study (30 minutes): Present a sample case study and guide students through the process of taking a detailed case history. Encourage students to ask questions and participate in the

		<p>discussion.</p> <ul style="list-style-type: none"> - Review and Discussion (5 minutes): Review the case study and discuss the key points that were covered. <p>3. Diagnostic Tools and Assessments (30 minutes)</p> <ul style="list-style-type: none"> - Introduction to Diagnostic Tools (10 minutes): Explain the various diagnostic tools and assessments used in evaluating tinnitus (e.g., audiometry, tinnitus matching, questionnaires). - Hands-On Demonstration (15 minutes): Demonstrate how to use these tools and assessments on a volunteer or simulated patient. - Q&A Session (5 minutes): Allow students to ask questions and clarify any doubts. <p>4. Management and Treatment Options (30 minutes)</p> <ul style="list-style-type: none"> - Overview of Management Options (10 minutes): Discuss the different management and treatment options available for tinnitus (e.g., hearing aids, sound therapy, cognitive-behavioral therapy). - Case-Based Discussion (15 minutes): Present another case study and discuss the appropriate management and treatment options for the patient. - Q&A Session (5 minutes): Allow students to ask questions and share their thoughts. <p>5. Conclusion and Wrap-Up (10 minutes)**</p> <ul style="list-style-type: none"> - Summary of Key Points (5 minutes): Summarize the key points covered in the session. - Feedback and Evaluation (5 minutes): Collect feedback from students and evaluate the effectiveness of the session.
NLHP 42.5	Procedure of Karnapoorana.	<p>A) Students should be taught about Karnapoorana. Students should also be taught about the Indications, Contraindications, Vyapadas and their Management. Student will observe the correct positioning of the patient, materials used and technique of Karnapoorana.</p> <p>B) The student will observe the process of Karnapoorana. After observing everything, students should be divided in groups and should be able to demonstrate Poorvakarma, Pradhanakarma and Pashchatkarma of Karnapoorana under the Guidance of the physician. Teacher should teach students about post-operative care, including monitoring for complications.</p>

		<p>C)- Direct Observation of Procedural Skills- The assessor actively watches the student perform the procedure, noting their technique, decision-making, communication with the patient, and adherence to safety protocols.</p> <p>Students should be provided constructive feedback on their performance.</p> <p>Teacher should encourage students to reflect on their own performance and identify areas for improvement.</p>
NLHP 42.6	Procedures of Karna Pramajana, Karna Prakshalana, and Karna Dhoopana.	<p>A)The students should be taught Karna Pramajana, Karna Prakshalana and Karna Dhoopana procedures.</p> <p>The teacher should teach students Indications, Contraindications and Vyapadas along with its management related to these procedures.</p> <p>The teacher should observe students do pre-procedural examinations and take care of post-therapy management.</p> <p>B) The student should observe the main process of Karna Pramajana, Karna prakshalana and Karna Dhoopana under the supervision of the Consultant.</p> <p>OR</p> <p>C) The teacher should show recorded procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action.</p> <p>D) Students should be provided with procedural checklists to help them remember the steps and ensure nothing is missed.</p> <p>E)Teacher should emphasize on patient safety, aseptic techniques, and hygiene to students.</p> <p>F) The teacher should assess students' log books OR the students can be assessed by the checklist method.</p>

Topic 43 Karna Srava and Putikarna (LH :4 NLHT: 2 NLHP: 4)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2,	Describe Hetu, Lakshana, Samprapti and Chikitsa of Karna Srava.	CC	MK	KH	L,L&PP	P-VIVA,PP	F&S	II	-	LH

CO3, CO4, CO5					T	-Practical,T -CS,P-CAS E,P-EXAM				
CO2, CO3, CO4, CO5	Present appropriate history in a patient presenting with Karna Srava (Otorrhoea)	AFT- RES	MK	SH	RP,D-B ED,ML, LS,CD	Log book,P -RP,P-VIV A,P-EXAM ,VV-Viva	F&S	II	-	NLHP43.1
CO2, CO3, CO5	Explain Samprapti, Lakshanas and Chikitsa of Putikarna.	CC	MK	KH	LS,PBL ,ML,L& GD	T-OBT,P-E XAM,CL-P R,P-VIVA, VV-Viva	F&S	II	-	NLHT43.1
CO1, CO2, CO3, CO4, CO5, CO6	Elucidate Etiology, Pathology, Clinical Features and Management of Acute Suppurative Otitis Media (ASOM)Expound Etiology, Pathology, Clinical Features and Medical Management of Safe Chronic Suppurative Otitis Media (Safe CSOM), Unsafe Chronic Suppurative Otitis Media (Unsafe CSOM) and Serous Otitis Media (SOM).Enumerate Complications of Otitis Media.Summarise the Etiology, Pathology, Clinical Features, and Medical Management of Mastoiditis.	CC	MK	KH	L,L&PP T	COM,P-EX AM,CL-PR ,S-LAQ,T- CS	F&S	II	-	LH
CO2, CO3, CO4, CO5	Summarise types and Surgical Steps in Mastoidectomy.Explain Indication, Contra-Indication and Surgical Steps in Myringotomy.	CC	DK	SH	D-BED, PBL,L_ VC,ML, X-Ray	P-EXAM,O SCE,P- VIVA	F&S	II	-	NLHP43.2
CO1, CO2, CO3, CO4, CO5	Explain Indications, Contra-Indications, Types and Basic Surgical Steps in Tympanoplasty.	CC	MK	KH	L_VC,D -M,BL, RP,PBL	P- EXAM,QZ ,VV- Viva,OSCE	F&S	II	-	NLHT43.2

Non Lecture Hour Theory		
S.No	Name of Activity	Description of Theory Activity
NLHT 43.1	Presentation on Putikarna.	<p>Putikarna (60 mins)</p> <p>A) Students should be encouraged to compile Samprapti, Lakshsanas and Chikitsa of Putikarna from Ayurveda Classics and Present.</p> <p>Students should then be directed to study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.</p> <p>Students can be guided to go to the library (pre-class), and ask Librarian's help. They can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading, and taking notes. The students will then be divided into groups and will present their findings in front of the class (7-8 mins per group). The teacher at the end of the session will summarise everything and explain to the class. The students will be assessed by the teacher based on the detailed contents of the topic, presentation skills and answering to questions asked in the class.</p> <p>B)At the end of the session, the teacher should see to it that students should summarize what they have learned and plan what to do next.</p>
NLHT 43.2	Surgical steps in Tympanoplasty.	<p>Tympanoplasty (60 mins)</p> <p>A) The teacher may-</p> <p>Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures (5mins).</p> <p>OR</p> <p>Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (20 mins)</p> <p>Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. (5 mins)</p> <p>OR</p> <p>B) The teacher may use Virtual Reality or surgical simulators to provide hands-on practice in a controlled, risk-free environment.</p> <p>C) Have students role-play as surgeons, assistants, or scrub nurses to practice different aspects of the</p>

	<p>procedure. (10 mins)</p> <p>D) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment.</p> <p>E) The teacher should Include scenarios where complications arise and teach students how to manage these situations.</p> <p>F) Provide access to reputable online resources and journals for further reading and research.</p> <p>G) Use quizzes, written exams, OSCE,and practical assessments to evaluate students' understanding and skills. (10 mins)</p> <p>H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.</p> <p>I) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.(5mins)</p> <p>J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. (5mins)</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 43.1	Etiology, Clinical Features and Medical Management of Karna Srava (Otorrhea).	<p>A)Student should be taught to find out the etiology, clinical features of Karna Srava (Otorrhea)</p> <p>B) For Case taking, the teacher should teach students the basics of case taking which starts with the student introducing himself/herself to patients. Students should then make patients comfortable and inform patient what he/she is going to do for case-taking purposes. The student should then be able to take generalized history of Karna Srava (Otorrhea). Students should also be able to do differential diagnosis, document the case in proper format, present the case and describe the Medical management of Karna Srava (Otorrhea). OR C) Teacher should engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills. OR D) The teacher can use standardized patients (actors or fellow students)to role-play patients with</p>

		<p>Karna Srava. Teachers should teach students the importance of building rapport and demonstrating empathy during patient interactions. Students should highlight the role of active listening. E) The teacher should assess students and provide constructive feedback.</p>
NLHP 43.2	Surgical procedures of Mastoidectomy and Myringotomy.	<p>A)Teacher should teach students indications and contra-indications of Mastoidectomy and Myringotomy. Students, with the help of various audio-visual aids and observation under the guidance of consultants, must be able to explain pre-operative and post-operative management and basic surgical steps involved in the surgery. OR B)Student can be encouraged by the teacher to be a part of the surgical team. C)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. D)Teachers/consultants can record surgeries (with patient consent) for educational purposes. Reviewing these videos can help students learn and improve. E)Teachers should provide access to online surgical tutorials, webinars, and interactive platforms for additional learning. F) Teacher should explain the roles and responsibilities of each member of the surgical team. Teacher should promote teamwork and collaboration among students, encouraging them to learn from each other’s experiences. Teacher should stress the importance of maintaining professionalism, confidentiality, and empathy towards patients to students. G) To Assess students' progress OSCE can be adopted which will cover: a. Understanding Surgical Anatomy b. Surgical Steps and its technique c. Patient Management d. Complications of Surgery and its Management.</p>

Topic 44 Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka. (LH :2 NLHT: 0 NLHP: 4)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Samprapti Lakshanas and Chikitsa of Karna Kandu. Describe the Etiology, Pathology, Clinical Features and Management of Otomycosis.	CC	MK	KH	L&PPT, L	DEB, T-OBT, QZ	F&S	II	-	LH
CO2, CO3, CO4, CO5	Present an appropriate history in a patient presenting with Karna Kandu.	AFT-RES	MK	KH	PBL, TUT, ML, D-BED	P-CASE, P-EXAM, P-P-RF, Mini-CEX	F&S	II	-	NLHP44.1
CO1, CO2, CO3, CO4, CO5, CO6	Describe Samprapti, Lakshanas, Upadravas and Chikitsa of Karna Guthaka (Ear Wax). Explain Samprapti, Lakshanas and Chikitsa of Karna Pratinaha and Krimikarna (Maggots in Ear). Decipher Hetu, Lakshanas, Samprapti and Chikitsa of Karna Vidradhi, Karnapaaka (Otitis Externa).	CC	MK	KH	L&PPT, L	PP-Practical, T-OBT, V-Viva, CL-PR, QZ	F&S	II	-	LH
CO1, CO3, CO5, CO6	Summarise the technique for removal of Karnaguthaka (ear wax) from the ear.	CC	MK	KH	TUT, PBL, D-BED	Log book, P-CASE, P-VIVA	F&S	II	-	NLHP44.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 44.1	Assessment of Karna Kandu.	A) Teacher should teach students the proper way of case taking which starts with students introducing himself/herself to patient.

		<p>Student should then make patients comfortable and inform patient what he/she is going to do for case-taking purpose.</p> <p>Student should then take proper history of patient and present differential diagnosis of Karna Kandu in front of the class.</p> <p>Student should finally come to proper diagnosis and should be able to describe its Management and prognosis.</p> <p>B) Teacher should teach students the importance of building rapport and demonstrating empathy during patient interactions.</p> <p>Students should be highlighted the role of active listening.</p> <p>C) Students should Integrate case-taking with physical examination skills, teaching students correlations between them.</p> <p>D) Evaluate their performance with Mini-CEX.</p> <ul style="list-style-type: none"> ◦ Observe a Student’s interaction with a patient in a real-world clinical setting ◦ Rate the performance in areas like history taking, physical examination, and counseling skills ◦ Teacher should provide constructive feedback on their performance, highlighting areas of improvement and excellence. ◦ performance is recorded on a 4-point scale where 1 is unacceptable, 2 is below expectation, 3 is met expectations, and 4 is exceeded expectations.
NLHP 44.2	Removal of Ear Wax.	<p>A) Teacher should teach student the signs and symptoms of Karnaguthaka (Ear Wax).</p> <p>B) Teacher should emphasize students the importance of aseptic techniques and the steps to maintain a sterile environment.</p> <p>C) Teacher should walk students through the procedure step-by-step, explaining the purpose and technique of each step.</p>

D)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery.
E) Students should be provided access to online surgical tutorials, webinars, and interactive platforms for additional learning.

Topic 45 Rhinitis (LH :1 NLHT: 2 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2	Define and Enlist types of Rhinitis.Describe Etiology, Pathology and Clinical Features of Acute Non-specific Rhinitis (The common cold), Allergic Rhinitis, Chronic Hypertrophic Rhinitis and Atrophic Rhinitis.	CC	MK	KH	L,L&PP T	T-OBT,VV- Viva,QZ	F&S	II	-	LH
CO2, CO5	Describe Differential Diagnosis, Investigations, Complications, and Treatment of Acute Non-specific Rhinitis (The common cold).Explain Differential Diagnosis and Treatment of Chronic Hypertrophic Rhinitis.	CC	MK	KH	LS,L& GD,DIS ,FC	QZ ,INT,V V- Viva,PRN	F&S	II	-	NLHT45.1
CO2, CO5	Describe Differential Diagnosis, investigations, complications, and medical treatment of Atrophic rhinitis and Allergic rhinitis.Summarize current research studies on Allergic rhinitis.	CC	MK	KH	L&PPT ,FC,DIS	CL-PR,PR N,Mini- CEX	F&S	II	-	NLHT45.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 45.1	Diagnosis and Treatment of Rhinitis.	A) Teacher will form six study groups to discuss and share information, each for Differential Diagnosis, Investigations, Complications, and Treatment of Acute Non-specific rhinitis (The common cold).; and Differential Diagnosis and Treatment of Chronic Hypertrophic Rhinitis. They should be given 1 week time before the scheduled presentation for this topic. Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.

		<p>OR</p> <p>They can go to library, ask Librarian's help, they can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Let them summarize what they have learned and present in the classroom. Each group will be given a time of 06-08 minutes.</p> <p>OR</p> <p>B) They can use Flipped Classroom to illustrate different types of rhinitis and their management. Each group will be given a time of 06-08 minutes. Utilize pre-class quizzes or short assignments to gauge students' prior knowledge and preparation for the in-class activities; During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions to assess their engagement; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide self-evaluation in flipped classroom in a simple form, such as a quiz.</p> <p>C) Assessing presentations involves evaluating a speaker's performance, clarity of voice, communication skills, content, time management, use of visual aids, and spelling and grammar.</p>
NLHT 45.2	Diagnosis and treatment of Atrophic and Allergic Rhinitis; Summary of Research studies on Allergic Rhinitis.	<p>Teacher will form Ten study groups to discuss and share information, each for</p> <p>A) Differential Diagnosis, B) Investigations, C) Complications, and D) Medical Treatment of Atrophic Rhinitis;</p> <p>E) Differential Diagnosis, F) Investigations, G) Complications, H) Prevention and I) Medical Treatment of Allergic Rhinitis;</p> <p>J) Current Research studies on Allergic Rhinitis.</p> <p>Teacher sends them to the Library, they can subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes. Students will study themselves, discuss with peers, review each others notes and findings to ensure accuracy and comprehensiveness.</p> <p>Librarian can familiarise them with tools like Zotero, to organise and present the research works. Powerpoint presentation or Flipped classroom method will be used to discuss in class.</p>

Each group will be given 05 minutes to present their topic.
At the end of the session, the teacher will summarize what they have learned.
Assessment should be done on the following points- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, handling nerves, and effective use of visual aids.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
Topic 46 Deeptadi Nasaroga. (LH :3 NLHT: 1 NLHP: 2)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5, CO6	Describe Samprapti, Lakshana and Chikitsa of Peenasa, Apeenasa, Putinasa (Sinusitis). Define Sinusitis and its types. Describe etiology, pathology, clinical features, differential diagnosis, radiological and laboratory investigations, complications and medical treatment of Sinusitis (Frontal and Maxillary). Describe Surgical Treatment of Sinusitis- Functional endoscopic sinus surgery. (Its indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief). Describe when to seek an expert opinion, and when to refer for surgery.	CC	MK	KH	L&PPT, L	QZ, VV-Viva, CL-PR, S-LAQ	F&S	II	-	LH
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Nasasrava (Rhinorrhoea), Sinusitis.	AFT-RES	MK	SH	D-BED, CD, PBL	OSCE, Mini-CEX, P-VIVA, CBA	F&S	II	-	NLHP46.1
CO2, CO5	Describe Samprapti, Lakshana and Chikitsa of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.	CC	MK	KH	L&PPT, RP, FC, ML, DIS	COM, PRN, SA, P-VIVA, VV-Viva	F&S	II	-	NLHT46.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 46.1	Diagnosis and treatment of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.	<p>A) Teacher will form six study groups to discuss and share information, each for Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, and Kshavathu (Samprapti, Lakshana and Chikitsa). Use platforms like Google Classroom or messaging services like WhatsApp and telegram to share information on these topics.</p> <p>Students will study themselves, discuss with peers, review each other's notes and findings to ensure accuracy and comprehensiveness.</p> <p>They will do PowerPoint presentation in class.</p> <p>OR</p> <p>The teacher will assign roles to the students such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management. Give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient.</p> <p>B) At the end of the session, summarize what they have learned and plan what to do next.</p> <p>C) Encourage students to reflect on their own performance and identify areas for improvement. Self-assessment can be done on the following parameters:- Teamwork and collegiality, empathy and openness, ethical awareness, work planning, scientific method of working, structuring, coping with mistakes, and priorities. Presentations can be assessed with the following parameters:- content, focus, clarity and coherence, in-depth analysis, grammar and spelling, delivery of the material, audience engagement, effective use of visual aids.</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 46.1	Examination of Nasa and Nasagandakutalalatasthi-kuhara (Nose and Paranasal sinuses). Evaluation of Nasa srava (Rhinorrhoea).	<p>A)Sub-divide students in groups of 4-6.</p> <p>Use problem based learning method. (PBL).</p> <p>Use one patient each for teaching Nasasrava and Sinusitis and as the case unfolds, the teacher should</p>

Evaluation of Sinusitis.

show how to examine Nasavamsha (Septum), Nasasrotas (Nasal Cavity), Nasagandakutalalatasthi-kuhara.(Paranasal sinuses).

Show how to perform Anterior and Posterior rhinoscopy.

Discuss Differential Diagnosis of Nasasrava.

Later , The student will take a history, examine with proper instruments, document and present the case of patients presenting with Nasa Srava and Sinusitis.

Assess the performance of students by MINI-CEX method:-

- Observe a Student's interaction with a patient.
- Rate the performance in areas like history taking, physical examination, and counselling skills.
- The student receives immediate feedback from the teacher.

OR

It can be assessed by Observed Structural Clinical Examination (OSCE).

- OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination . The assessor should use checklists to evaluate students' performance in a reliable and consistent way.
- Communication skills to be assessed by Kalamazoo essential elements communication checklist.

Topic 47 Nasavamsha-kutilatwa (Deviated Nasal Septum). (LH :1 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Define and Enlist types of Nasavamsha-kutilatwa (Deviated Nasal Septum). Explain Etio-pathology, Clinical Features, Differential Diagnosis, investigations, complications, and medical manangement of Nasavamsha-kutilatwa (Deviated Nasal	CC	MK	KH	L,L&PP T	QZ ,CL-PR ,T-OBT,VV- Viva	F&S	II	-	LH

	Septum).									
CO5, CO6	Describe surgical Management of Nasavamsha-kutilatwa (Deviated Nasal Septum).-- Sub mucous resection (SMR), Septoplasty. (Their indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief).Describe when to seek an expert opinion, and when to refer for surgery.	CC	DK	K	PER,M L,L_VC ,DIS	T-OBT,CH K,VV-Viva ,P- EXAM,QZ	F&S	II	-	NLHT47.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 47.1	Surgical management of Nasavamsha-kutilatwa (Deviated Nasal Septum).	<p>A) The teacher may- Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. OR B)He may show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. OR C) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. D) Time Duration- SMR- 40 min. Septoplasty- 15 min. E) The teacher should Include scenarios where complications arise and teach students how to manage these situations. F) Provide access to reputable online resources and journals for further reading and research. G) Use Quizzes, Open book theory tests, Checklists and Class presentations to evaluate students' understanding and skills. Use platforms like Kahoot!, Mentimeter to generate quizzes. H) Stress the importance of patient safety, aseptic techniques, and surgical hygiene. J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and</p>

		decision-making. H) Describe when to seek an expert opinion, and when to refer for surgery.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 48 Dantamulagata roga (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the aetiopathogenesis, clinical features, prevention and treatment of Gingivitis and Periodontitis.Explain the indications for referral in Dantamoolagata Roga	CC	MK	KH	L,L&PP T	T-OBT,QZ ,PUZ	F&S	II	-	LH
CO2, CO5	Describe the clinical features and treatment of Paridara, Adhimamsa (Impacted wisdom tooth), and Describe the Nidana, Samprapti, clinical features, classification and treatment of DantaNaadi.	CC	MK	KH	L&PPT	T-OBT,PU Z,M- POS,QZ	F&S	II	-	LH
CO2, CO5	Describe the clinical features and treatment of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi(Apical abscess).	CC	MK	KH	ML,FC, PBL,L& GD,PL	P-VIVA,M- POS,CL- PR,QZ	F&S	II	-	NLHT48.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 48.1	Laxanas and Chikitsa of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi.	Pre-Class (Online Learning) – Before the Session <ul style="list-style-type: none"> • Students access digital resources (videos, articles, or PDFs) shared by the teacher on: <ul style="list-style-type: none"> ◦ Etiology, Clinical Features, Differential Diagnosis, Complications, and Treatment of: <ol style="list-style-type: none"> 1. Sheetada

2. Upakusha
3. Dantaveshtaka
4. Dantavidradhi (Apical Abscess)

- They study at their own pace, take notes, and prepare for classroom discussions.

In-Class (Face-to-Face Learning) – 55 Minutes

1. Introduction & Group Formation (5 minutes)

- Teacher gives a brief overview and clarifies learning objectives.
- Students are divided into four groups, each assigned one disease.

2. Group Discussions & Peer Learning (15 minutes)

- Each group collaborates, discussing key aspects from their pre-class study.
- They refine their understanding, compare notes, and identify key points for presentation.
- The teacher acts as a facilitator, clarifying doubts and ensuring accuracy.

3. Group Presentations (20 minutes) – 5 minutes per group

- Each group presents their findings in 5 minutes using:
 - Whiteboards
 - Digital slides
 - Charts or models
- Other students ask questions, ensuring peer engagement.

4. Interactive Q&A & Teacher's Summary (10 minutes)

		<ul style="list-style-type: none"> • The teacher provides feedback on presentations, corrects misconceptions, and highlights key learning points. • Class discussion on Ayurvedic relevance and modern perspectives. <p>5. Assessment & Reflection (5 minutes)</p> <ul style="list-style-type: none"> • Students are evaluated on presentation skills based on: <ul style="list-style-type: none"> ◦ Content accuracy and depth ◦ Clarity and coherence ◦ Audience engagement ◦ Delivery and confidence ◦ Use of visual aids • The session concludes with a brief reflection and discussion on next steps for learning.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
Topic 49 Jihvagata Roga (LH :1 NLHT: 1 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the clinical features and treatment of Vatika, Paittika and Kaphaja Jihvakantaka and Alasa.	CC	MK	KH	L,L&PP T	QZ ,PUZ,S P,T-CS,VV- Viva	F&S	II	-	LH
CO2, CO5	Describe the clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).	CC	MK	KH	FC,PL, ML,DIS ,LS	VV-Viva,P- VIVA,QZ , M-POS,CL- PR	F&S	II	-	NLHT49.1

Non Lecture Hour Theory		
S.No	Name of Activity	Description of Theory Activity
NLHT 49.1	Clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).	<p>Symposium Structure & Time Distribution:</p> <p>1. Introduction & Overview by the Moderator (5 minutes)</p> <ul style="list-style-type: none"> • The teacher (or a designated student) introduces the theme of the symposium. • Brief explanation of importance, etiology, and general approach to tongue disorders. • Groups are introduced, and the session format is explained. <p>2. Group Presentations (30 minutes) – 10 minutes per group Each group presents a specific topic, covering:</p> <ul style="list-style-type: none"> • Definition & Etiology • Clinical Features • Complications • Management & Treatment (Modern & Ayurvedic Approaches) <p>Group 1: Ankyloglossia (Tongue-Tie) Group 2: Hairy Tongue (Lingua Villosa) Group 3: Geographic Tongue (Benign Migratory Glossitis) and Migratory Glossitis</p> <p>3. Open Discussion & Q&A (10 minutes)</p> <ul style="list-style-type: none"> • Each group asks questions to other groups, fostering peer learning. • The teacher clarifies doubts and emphasizes key differentiating features. <p>4. Summary & Takeaways (5 minutes)</p>

- The teacher or moderator summarizes the main points.
- Discuss the clinical relevance and importance in Ayurveda and modern medicine.
- Assign follow-up tasks like writing a short reflective report on what they learned.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity								
Topic 50 Krimidantaka and Dantaharsha (LH :1 NLHT: 1 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the Samprapti, clinical features and treatment of Krimidantaka (Dental carries), and Dantaharsha (Dentin hypersensitivity).	CC	MK	KH	L&PPT	QZ ,VV-Viva,M-POS, SP,T-OBT	F&S	II	-	LH
CO2, CO5	Explain root canal treatment.	CC	DK	KH	L_VC, ML,FC, BL	QZ ,CL-PR,M-POS	F	II	-	NLHT50.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 50.1	Explanation of Root Canal Treatment.	<p>1. Introduction & Visual Learning (10 min) Method: Flipped Classroom</p> <ul style="list-style-type: none"> • Share pre-session materials (videos, diagrams, articles) on RCT before class. • In-class: Use 3D animations, models, or a video demonstration of the RCT procedure. • Discuss the importance of RCT, indications, and contraindications. <p>2. Case-Based Discussion (15 min)</p>

Method: Problem-Based Learning (PBL)

- Present a realistic clinical case:
"A patient complains of severe pain in a molar with deep caries. The tooth is tender on percussion, and X-ray shows periapical pathology."
- Divide students into three groups to discuss:
 - Group 1: Diagnosis (Symptoms, Pulp Testing, X-ray interpretation).
 - Group 2: Step-by-Step RCT Procedure (Access, Cleaning, Shaping, Obturation).
 - Group 3: Post-Treatment Care & Ayurveda-Based Healing Approaches.
- Each group presents findings, followed by discussion.

3. Simulation & Demonstration (15 min)

Method: DIY Simulation

- Use readily available models to simulate RCT steps:
 - Soap Carving Method: Students carve access cavities on soap bars or wax blocks to understand instrument handling.
 - Clay Model Demonstration: Representing root canal anatomy.
 - Use tooth models with X-ray images for visualization.
- If possible, invite a guest dentist or use a virtual demonstration.

4. Interactive Q&A & Quiz (10 min)

Method: Peer Teaching & Gamification

- Conduct a quiz (MCQs or case-based questions).
- Encourage students to explain concepts to peers.
- Address common doubts.

		<p>5. Conclusion & Reflection (5 min) Method: Summary Discussion</p> <ul style="list-style-type: none"> • Teacher reinforces key concepts. • Ask students: “How will you explain RCT to a patient?”
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 51 Dravyas used in Karna Nasa Mukha Roga Chikitsa-1 (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Elucidate Common Dravyas used in Karna Nasa Mukha Roga- Antibiotics, PPIs, Steroids, Antihistamines, Nasal Decongestants, and Anesthetic drugs.	CC	DK	KH	L	INT,O-QZ, P-EXAM,V V- Viva,PUZ	F&S	II	-	LH
CO5, CO7	Describe Samanya Yoga (Drugs) used in Karna Nasa Mukha Roga.	CC	DK	KH	D,DA,L &GD,D IS,CBL	COM,CBA, Log book,I NT,P-ID	F&S	II	V-DG	NLHP51.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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NLHP 51.1

Contemporary Pharmaceutical Agents Used in Karna Nasa Mukha Roga.

1. Introduction (10 min)

- Brief overview of pharmacological agents used in Karna Nasa Mukha Roga (ENT disorders).
- Explain classification & mode of action of:
 - Antibiotics (Amoxicillin, Cephalosporins, Macrolides, Fluoroquinolones, Aminoglycosides).
 - PPIs (Rabeprazole, Esomeprazole, Omeprazole).
 - Steroids (Fluticasone, Glucocorticoids).
 - Antihistamines (Cetirizine, Bilastine, Fexofenadine).
 - Nasal Decongestants (Ephedrine, Oxymetazoline).

2. Group Activity - Case-Based Discussion (20 min)

Method: Problem-Based Learning (PBL)

- Divide students into 5 groups, each assigned a case involving drug use in ENT disorders.
- Cases provided:
 - Group 1: Bacterial sinusitis – Choice of antibiotics, dosage, resistance issues.
 - Group 2: GERD-associated chronic cough – Role of PPIs, adverse effects.
 - Group 3: Allergic rhinitis – Use of steroids & antihistamines, comparison of nasal sprays.
 - Group 4: Acute otitis media – Indications for antibiotics vs. observation.
 - Group 5: Nasal congestion – Benefits & risks of decongestants.
- Each group discusses their case and presents findings.

3. Practical Demonstration (15 min)

Method: Hands-on Drug Identification & Prescription Writing

- Display different drug formulations (tablets, syrups, nasal sprays).

- Teach students how to read labels, identify active ingredients, and understand dosing instructions.
- Practice prescription writing for each drug category based on case discussions.

4. Q&A and Conclusion (10 min)

- Interactive Q&A session to clarify doubts.
- Recap of key learning points.
- Discuss Ayurvedic alternatives for symptom relief

5. Recording the Activity in the Journal or Clinical Record

- Each student must document the session in their journal or clinical record, including:
 - Summary of case discussions and key takeaways.
 - Drugs discussed, their indications, dosages, and possible side effects.
 - Observations from practical demonstrations (drug identification, prescription writing, etc.).
 - Personal reflections on learning outcomes and areas for improvement.
- The journal entry should be reviewed and signed by the faculty as part of assessment.

Topic 52 Karnarsha and Karnarbuda (LH :1 NLHT: 0 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5, CO6	Describe Samprapti, Lakshanas, and Chikitsa of Karnarsha and Karnarbuda. Discuss the Etiology, Pathology, Clinical features, and Medical and Surgical management of Aural Polyp. Enlist indications for referral in these conditions.	CC	MK	KH	L&PPT, L	DEB, T-OBT, QZ	F&S	III	H-SH	LH

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity								
Non Lecture Hour Practical										
S.No	Name of Practical	Description of Practical Activity								
Topic 53 Karnasandhana (LH :1 NLHT: 1 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO3, CO5	Describe Karnasandhana; its Indications, Contraindications, Types, Purva-Pradhana-Pashchat Karma and Complications.	CC	MK	KH	L&PPT	T-CS,M-C HT,T-OBT	F&S	III	-	LH
CO3, CO4, CO5	Elaborate on Indications, Contraindications, and Surgical procedures of Auroplasty.	CC	DK	KH	SIM,FC ,D-M,P BL,L_V C	C-VC,OSC E,CL- PR,QZ ,M- POS	F&S	III	-	NLHT53.1
Non Lecture Hour Theory										
S.No	Name of Activity	Description of Theory Activity								
NLHT 53.1	Purva-Pradhana-Pashchat Karma for Karnasandhana (Auroplasty).	<p>Karnasandhana (60 mins)</p> <p>A) The teacher may-</p> <p>Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. (10 mins)</p> <p>Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (15 mins)</p> <p>Provide students with procedural checklists to help them remember the steps and ensure nothing is missed. (10 mins)</p> <p>OR</p> <p>B) The teacher may use Virtual Reality or surgical simulators to provide hands-on practice in a controlled, risk-free environment.</p> <p>OR</p>								

- C) Have students role-play as surgeons, assistants, or scrub nurses to practice different aspects of the procedure.(10mins)
- D) Encourage students to ask questions and discuss the procedure as it unfolds. Foster a collaborative learning environment. (5mins)
- E) The teacher should Include scenarios where complications arise and teach students how to manage these situations.
- F) Provide access to reputable online resources and journals for further reading and research.
- G) Use quizzes, written exams, and OSCEs to evaluate students' understanding and skills. (5 mins)
- H) Provide constructive feedback on their performance, highlighting areas of improvement and excellence.
- I) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.
- J) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making. (5 mins)

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 54 Bhraamara (Vertigo) (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Etiology, Pathology, Clinical Features and Management of Labyrinthitis.Describe the Etiology, Pathology, Clinical Features, and Medical and Surgical Management of Meniere's Disease.	CC	DK	KH	L&PPT ,L	CL-PR,QZ ,T-OBT	F&S	III	-	LH
CO1, CO2, CO3, CO4, CO5,	Describe Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)	CC	DK	KH	L&GD, ML,FC, L&PPT ,PER	M-POS,DO AP,CL-PR,QZ ,T-OBT	F&S	III	-	NLHT54.1

CO6										
CO2, CO3, CO4, CO5, CO7	Present an appropriate history in a patient presenting with Bhraamara (Vertigo).	AFT-RES	DK	SH	PER,PB L,PT,T UT,D- BED	P-EXAM,D EB,PP-Prac tical,M-CH T,VV-Viva	F&S	III	-	NLHP54.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 54.1	Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)	<p>Benign Paroxysmal Positional Vertigo (BPPV) (60 mins)</p> <p>A) Teacher will form four study groups to discuss and share information, each for Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV). Students will be encouraged to go to the library (pre-class) and ask Librarian's help. Each group will then present in front of the entire classroom (10 mins each group)</p> <p>Teacher should discuss the relation between Bhraamara and BPPV. (5mins)</p> <p>Teacher should Brainstorm the reasons and treatment modalities. (5mins)</p> <p>B) Student should be able to diagnose and perform various clinical maneuvers like Epley maneuver under the guidance of the Clinician using Roleplay. (10mins)</p> <p>C) Evaluate the student's performance on the basis of their presentations, quizzes, and practical demonstration, observation, assistance and performance.</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 54.1	Case discussion on Bhraamara (Vertigo).	<p>A) Teacher should teach students the proper way of case taking which starts with students introducing himself/herself to the patient.</p> <p>Student should then make patients comfortable and inform patient what he/she is going to do for case-taking purpose.</p> <p>Student should then take proper history of the patient and present a differential diagnosis of Vertigo in</p>

front of the class.

Student should finally come to proper diagnosis and should be able to describe its Management and prognosis.

OR

B)Teacher should have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.

OR

C) Students should utilize advanced simulation technology to create realistic patient scenarios. Teacher should engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills.

OR

Teacher can use standardized patients(actors or fellow students)to role-play patients

D) Students can be recommended apps like Geekymedics that offer virtual practice and quizzes on history-taking skills.

E) Students should be able to demonstrate different Tests for Equilibrium.

F) The students must be assessed based on their anatomical knowledge, clinical findings, and understanding of the underlying pathology and its management.

Topic 55 Agantuja Shalya in Karna (LH :0 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5, CO7	Present a case with Agantuja Shalya in Karna (Foreign Body in Ear) and its management.	AFT-RES	DK	SH	PBL,DI S,CD,D-M,TBL	DOPS,P-EXAM,P-CASE,DOPS,P-PRF	F&S	III	-	NLHP55.1
CO2, CO5	Describe Types, Clinical features and method of removal of Agantuja Shalya (Foreign Body) in Ear.	CC	DK	KH	TUT,L &PPT , PT,L_V C,TBL	P-CASE,C L-PR	F&S	III	-	NLHT55.1

Non Lecture Hour Theory		
S.No	Name of Activity	Description of Theory Activity
NLHT 55.1	Techniques for removal of Agantuja Shalya (Foreign Body) from Ear..	<p>Foreign Body in Ear (60 mins)</p> <p>Teacher should teach students different types of Foreign Bodies in ear. (10 mins)</p> <p>Teacher can show various Videos related to various techniques related to the removal of Foreign Bodies (10 mins)</p> <p>Teacher should demonstrate proper technique of removal of Foreign Body to students. (15 mins)</p> <p>Students will be divided into four groups and different foreign bodies like hygroscopic, non-hygroscopic, living and non-living will be allotted to them. Students will be given 5 minutes to prepare and will be directed to present their findings in front of the entire class (5 minutes for each group)</p> <p>Assessment of students will be done on presentation.</p>
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 55.1	Case discussion on Agantuja Shalya in Karna (Foreign Body in Ear).	<p>A)Teacher should present a clinical case of Agantuja Shalya in Karna (Foreign Body in Ear). and have students work in groups to gather history, discuss differential diagnoses, and plan management..</p> <p>Teacher should have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.</p> <p>Student should be able to elicit differences between living/non-living, Hygroscopic/ Non Hygroscopic foreign bodies and ways to deal with them.</p> <p>OR</p> <p>B) Teacher can utilize advanced simulation technology to create realistic patient scenarios. Helping them practice history-taking and clinical reasoning skills.</p> <p>C) Teacher can break students into small groups for more focused practice and individualized feedback.</p> <p>D) Teacher should walk students through the removal procedure step-by-step, explaining the purpose and technique of each step.</p>

	E)Teacher should teach students about post-operative care, including monitoring for complications and managing patient recovery. F) Students can be assessed by DOPS.
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Topic 56 Nasarsha (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Describe types, etiology, clinical features, differential diagnosis, investigations, and medical treatment of Nasarsha (Nasal Polyps).	CC	MK	KH	TUT,BL ,L&PPT	T-OBT,VV -Viva,CL-PR,QZ	F&S	III	-	LH
CO5	Expound surgical treatment of Nasal Polyps. (FESS surgery- indications, contraindications, type of anesthesia, major surgical steps, post-operative care, complications and their management in brief)	CC	DK	KH	L_VC, ML	CHK,VV- Viva,QZ	F&S	III	-	NLHT56.1
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Nasarsha.	AFT-RES	MK	KH	CD,PBL ,RP	Mini-CEX, P-VIVA,P-EXAM,OS PE,OSCE	F&S	III	-	NLHP56.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 56.1	Surgical treatment of Nasarsha (Nasal Polyps).	The teacher may- A) Use anatomical models, diagrams, and 3D animations to illustrate surgical procedures. (35 min.) OR A) Show recorded surgical procedures to give students a realistic view of the process. Pause at key moments to explain important steps. Explain each step thoroughly, including the rationale behind each action. (35 min.) Provide students with procedural checklists to help them remember the steps and ensure nothing is

	<p>missed. (05 min.)</p> <p>B) Encourage students to ask questions and discuss the procedure as it unfolds. (05 min.)</p> <p>C) The teacher should Include scenarios where complications arise and teach students how to manage these situations.</p> <p>D) Stress the importance of patient safety, aseptic techniques, and surgical hygiene.</p> <p>E) Discuss ethical issues related to surgery, including informed consent, patient confidentiality, and decision-making.</p> <p>F) Describe when to seek an expert opinion, and when to refer for surgery.</p> <p>G) Provide access to reputable online resources and journals for further reading and research.</p> <p>H) Use quizzes, and open-book texts to evaluate students’ understanding and skills. (10 min.)</p> <p>I) Provide constructive feedback on their performance, highlighting areas of improvement and excellence. (03-05 min.)</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 56.1	Evaluation of Nasa-avarodha. Evaluation of Nasarsha (Nasal polyp).	<p>Evaluation of Nasa-avarodha-(50 min.)</p> <p>A)Present a clinical case of nasal obstruction and have students work in groups to gather history, discuss differential diagnoses, and plan management.</p> <p>Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence.</p> <p>Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions.</p> <p>OR</p> <p>B) Use standardized patients(actors or fellow students)to role-play patients with nasal obstruction.</p> <p>C) Break students into small groups for more focused practice and individualized feedback.</p> <p>D) Recommend apps like Geekymedics that offer virtual practice and quizzes on history-taking skills.</p> <p>E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.</p> <p>F) To assess the performance, use Mini-CEX (Mini Clinical Evaluation Excercise).</p>

- Observe a Student's interaction with a patient in a real-world clinical setting.
- Rate the performance in areas like history taking, physical examination, and counseling skills.

- The student receives immediate feedback from the teacher.

OR

Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback. (10 min.)

OR

G) Encourage students to assess their own performance and identify areas for improvement.

Surgical and/or para surgical procedures for Nasarsha (50 min.):-

1. Introduction (5 minutes)- Explain the importance of understanding nasal polyp surgery and its impact on patient care.
2. Overview of Nasal Polyps (10 minutes) - Definition and Symptoms, Diagnosis -the diagnostic tools and methods used to identify nasal polyps.
3. Surgical Procedure (20 minutes)
 - Preoperative Preparation (5 minutes): Describe the steps taken before surgery, including patient preparation and anesthesia.
 - Surgical Technique (10 minutes): Explain the surgical technique, including the use of endoscopes, micro-debriders, and other instruments.
 - Postoperative Care (5 minutes): Discuss the immediate postoperative care, including monitoring and managing potential complications.
4. Interactive Demonstration (10 minutes)
 - Live Demonstration or Video (5 minutes): Show a live demonstration or a video of the surgical procedure.
 - Hands-On Practice (5 minutes): Allow students to practice on models or simulators, if available.
5. Q&A and Discussion (5 minutes)
 - Q&A Session (3 minutes): Allow students to ask questions and clarify any doubts.

- Discussion (2 minutes): Summarize key points and encourage students to share their thoughts and experiences.
6. To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.

Topic 57 Nasagata Raktasrava (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Enlist the causes of Nasagata Raktasrava. Describe Hetus, Samprapti, Lakshanas and Chikitsa of Urdhwaga (Nasagata) Raktapitta. Describe Etiology, Types, Clinical Features, Differential Diagnosis, and Investigations of Epistaxis.	CC	MK	KH	L&PPT	T-OBT,S-L AQ,VV- Viva	F&S	III	-	LH
CO5	Describe Management of Nasagata Raktasrava (Epistaxis).	CC	MK	KH	L_VC,D- M,RP	P-MOD,V V-Viva,T- OBT	F&S	III	-	NLHT57.1
CO3, CO5, CO6	Present cases with Nasagata Raktasrava. Summarise the steps involved in the Atyayika Chikitsa in Nasagata Raktasrava (Anterior epistaxis).	AFT- RES	MK	SH	D-M,D- BED,PB L	360D,P-VI VA,OSCE	F&S	III	-	NLHP57.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 57.1	Management of Nasagata Raktasrava (Epistaxis).	The student will learn management, including basic first aid, through interaction and role play. (30 min.) (A)The students will be divided into four groups. Each group will be given a topic as - a) Ayurvediya management,b) Basic first aid. c) Anterior nasal packing. d) Posterior nasal packing. Assign roles to students, such as the patient, the primary care provider, a nurse, and an observer. Rotate roles to ensure each student gets to practice different aspects of management.

		<p>Give clear instructions and guidelines for the role-play scenarios, including the symptoms and history of the patient with epistaxis.</p> <p>Role Play Scenarios:</p> <p>Scenario 1: Initial Assessment and First Aid</p> <p>Scenario 2: Persistent Bleeding and Nasal Packing</p> <p>Scenario 3: Post-Procedure Care and Follow-Up</p> <p>Encourage students to act out their roles as realistically as possible, using appropriate medical terminology and patient interactions.</p> <p>Allow students to ask questions and discuss their actions during the role play.</p> <p>Group Discussion- (20 min.)After each scenario, conduct a debriefing session where students can discuss their experiences, challenges, and what they learned.</p> <p>Provide constructive feedback on their performance.</p> <p>Encourage students to reflect on their own performance and identify areas for improvement.</p> <p>(B) Use video demonstrations of epistaxis management to complement role-playing and provide visual aids for students.</p> <p>(C) Use open book test to assess. OR ask students to demonstrate on model to evaluate the understanding of students in the following manner:-</p> <ul style="list-style-type: none"> ◦ Observe a Student’s interaction with a virtual patient in the form of model. ◦ Rate the performance in areas like physical examination, counseling skills, and procedural skills. ◦ The student receives immediate feedback from the teacher.
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Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 57.1	Evaluation of Nasagata raktasrava (Anterior epistaxis).	<p>A)Present a clinical case of Nasagata Raktasrava and have students work in groups to gather history, discuss differential diagnoses, and plan management.</p> <p>Have students shadow experienced clinicians during patient history taking to observe best practices</p>

and techniques and facilitate post-shadowing discussions.

Allow them to observe the correct technique of emergency management of anterior epistaxis including anterior nasal packing.

Allow students to practice the procedure on simulation models or cadavers under supervision.

Provide access to instructional videos for further learning.

Understand the referral indications and procedure.

OR

B) Utilise advanced simulation technology to create realistic patient scenarios.

Engage students with virtual patient software that simulates real-life scenarios, helping them practice history-taking and clinical reasoning skills.

C) Break students into small groups for more focused practice and individualized feedback.

D) Recommend apps like Geekymedics and Wikimeds that offer virtual practice and quizzes on history-taking skills.

E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories.

F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.

- OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking. The assessor should use checklists to evaluate students' performance in a reliable and consistent way.

OR

G) 360-degree assessment can be used for evaluating, it includes responses from assessor and peers, obtained through standard checklists, throughout the process of case taking. The format can be modified from:- <https://abpn.org/wp-content/uploads/2024/04/ABPN-360-Degree-Evaluation-Feedback-Form.pdf>

Topic 58 Nasarbuda (LH :1 NLHT: 1 NLHP: 2)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe Lakshanas and Chikitsa of Nasarbuda. Describe Etiological classification and Clinical Features of Tumors of the nose and paranasal sinuses. (Rhinophyma and Squamous cell Ca)	CC	DK	KH	L,L&PP T	VV- Viva,QZ ,C L-PR,T- OBT	F&S	III	-	LH
CO2, CO5	Describe investigations and treatment for Nasarbuda- Tumors of nose and paranasal sinuses. (Rhinophyma and Squamous cell Ca).	CC	DK	KH	FC,DIS, PER	M-POS,CL- PR	F&S	III	-	NLHT58.1
CO3, CO4, CO7	Present an appropriate history in a patient presenting with Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).	AFT- RES	MK	KH	RP,D-B ED,PBL	OSCE,VV- Viva,Mini- CEX	F&S	III	-	NLHP58.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 58.1	Nasarbuda- Tumors of nose and paranasal sinuses.	<p>(A) Teacher will form four study groups to discuss and share information, each for investigations and treatment of Rhinophyma and investigations and treatment of Squamous cell Ca. Encourage students to discuss with peers, subdivide subtopics amongst themselves and split time between different activities like searching for articles, reading and taking notes, review each other's notes and findings to ensure accuracy and comprehensiveness. Let them present in classrrom. (10- 12 min.for each group) Make them specify indications and procedure for referral.</p> <p>OR</p> <p>(A)Use the method of Flipped Classroom.The students will be given a link to a PowerPoint presentation on Nasarbuda.The presentation on the topic should be prepared and uploaded on a website created for the students or free cross -platform messaging services like Whatsapp or Telegram or google clasroom.They should be given 1 week time before the scheduled FCR for this topic. Let them present in classrrom. (10- 12 min.for each group).</p>

		<p>At the end of session, summarize what they have learned and plan what to do next. (10 min.) (B) Evaluate the student's performance during class presentation or asking them to make posters. During class discussions, pay attention to student participation, level of curiosity, and willingness to ask questions; Encourage students to reflect on their learning process and identify areas where they need further support; Review and re-solve the problems they get wrong. It is preferable to provide a self-evaluation quiz.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 58.1	Evaluation of Gandhajnana Vikruthi (Anosmia, Hyposmia, Parosmia).	<p>A) Present a clinical case of Gandhajnana Vikruthi and have students work in groups (4 to 6 students in each group) to gather history, discuss differential diagnoses, and plan management. Encourage students to teach each other history-taking techniques, which reinforces their learning and builds confidence. Have students shadow experienced clinicians during patient history taking to observe best practices and techniques and facilitate post-shadowing discussions. OR B) Use standardized patients(actors or fellow students)to role-play patients with Gandhajnana Vikruthi. C) Break students into small groups for more focused practice and individualized feedback. D) Recommend apps like Geekymedics and Wikimed that offer virtual practice and quizzes on history-taking skills. E) Have students keep reflective journals where they document their experiences, challenges, and learning points from taking patient histories. F) Conduct OSCEs where students rotate through stations to practice history taking and receive immediate feedback.</p> <ul style="list-style-type: none"> • OSCE stations to have signs of General examination, local examination, psychomotor skills, communication skills and history taking of a particular examination. The assessor should use

checklists to evaluate students' performance in a reliable and consistent way.

- Communication skills to be assessed by Kalamazoo essential elements communication checklist.

OR

F) Use Mini-CEX.

- Observe a Student's interaction with a patient in a real-world clinical setting.
- Rate the performance in areas like history taking, physical examination, and counseling skills.
- The student receives immediate feedback from the teacher.

G) Encourage students to assess their own performance and identify areas for improvement.

Topic 59 Agantuja Shalya in Nasa (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe aetiology and types ,Clinical Features, Common locations ,Complications, Radiological investigations and Treatment for Foreign Body in nose.	CC	MK	KH	L,L&PP T	P-POS,QZ ,T-OBT	F&S	III	-	LH
CO3, CO5, CO7	Describe the etiology and types of Agantuja Shalya (Foreign Body) in Nasa (nose), and their Clinical Features, Common locations and complications, investigations, and treatment.	CC	MK	KH	TUT,X- Ray,CD ,SIM	P-EXAM,P P-Practical, P-VIVA	F&S	III	-	NLHP59.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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NLHP 59.1	Case discussion on Agantuja Shalya in Nasa(nose).	<p>To examine the foreign bodies in the nose and their removal, in Yogya Lab or in the OPD under supervision.</p> <p>(A) Present a real-life clinical scenario of the nasal foreign body to the students; or use a model in Yogya lab.</p> <p>Students discuss the problem in small groups, identifying what they know and what they need to learn. Encourage students to identify Foreign bodies in X-rays.</p> <p>Walk students through the removal procedure step-by-step, explaining the purpose and technique. Foster an environment where students feel comfortable asking questions and seeking clarification. Teach students about post-procedure care, including monitoring for complications and managing patient recovery.</p> <p>Record procedure(with patient consent) for educational purposes. Reviewing these videos can help students learn and improve.</p> <p>Provide continuous feedback to students on their performance, encouraging reflection and improvement.</p> <p>OR</p> <p>B) Use a low-tech simulator model like a cardboard box or SOSO-NOSO simulator.</p> <p>Conduct a debriefing session to discuss challenges and areas for improvement.</p> <p>C) Use quizzers or 360 d direct observations to assess.</p>
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Topic 60 Nasa-abhighata, Nasasandhana (LH :1 NLHT: 0 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO3, CO5	Narrate Etiology, Types, Clinical Features, Complications, Investigations, and Treatment of Nasal Trauma including Fracture Nasal Bone.	CAP	MK	KH	L,L&PP T	P-VIVA,T- CS	F&S	III	H-SH	LH

CO5, CO6	Summarise the steps involved in Nasasandhana Vidhi as explained by Sushruta.	CC	MK	KH	SIM,TU T,D-M	CHK,P-EX AM,M-CH T,DOPS,D OPS	F&S	III	-	NLHP60.1
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 60.1	Details in Nasasandhana Vidhi.	<p>A) Observe the Nasasandhana Vidhi on models or patients. To do the Nasasandhana Vidhi on models use simple materials like Foam, Rubber or silicon models. Define clear objectives of the procedure. Break down the surgical procedure into manageable smaller steps.</p> <p>B) Record videos and play it to revise.</p> <p>C) Emphasize ethical and professional considerations.</p> <p>D) To assess, use OSCE covering steps of procedures, focusing on evaluating student's understanding of anatomy, surgical techniques, decision-making, patient management, and appropriate response to complications.</p>

Topic 61 Talugata Roga (LH :2 NLHT: 1 NLHP: 0)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO5	Describe the Aetiology, Clinical features, and treatment of Galashundika, Tundikeri, Kacchapa (Tumours of the palate), Uvulitis, and Gilayushotha (Tonsillitis).	CC	DK	KH	L&PPT ,L	CL-PR,QZ ,COM,M- POS	F&S	III	-	LH
CO2, CO5	Describe the Clinical features of Talu-Arbuda. Describe the Clinical Features and Treatment of Talushosha and Talupaaka.	CC	DK	KH	DIS,L& PPT ,PL	QZ ,M- POS,PRN	F&S	III	-	NLHT61.1

Non Lecture Hour Theory		
S.No	Name of Activity	Description of Theory Activity
NLHT 61.1	Discussion on Talu-Arbuda, Talushosha, Talupaka.	<p>1. Pre-Class Activity (Preparation) – (Before the Session)</p> <ul style="list-style-type: none"> • Students are provided with reading materials or video links on: <ul style="list-style-type: none"> ◦ Arbuda (Tumors) – Types, characteristics, clinical features. ◦ Talushosha & Talupaaka – Definitions, pathophysiology, symptoms, Ayurvedic and contemporary management. • Students review the materials at home and prepare notes. <p>2. In-Class Activity – 55 Minutes</p> <p>A) Group-Based Learning (20 min)</p> <ul style="list-style-type: none"> • Divide students into 3 groups to discuss: <ol style="list-style-type: none"> 1. Arbuda – Clinical features, types (Vataja, Pittaja, Kaphaja, Mamsaja, etc.), differential diagnosis. 2. Talushosha – Symptoms, causes, risk factors, correlation with modern conditions (Palatal atrophy, Sjögren's syndrome). 3. Talupaaka – Clinical features, inflammation process, management strategies. • Each group presents their findings (5 min per group). • Teacher moderates, corrects misconceptions, and highlights key points. <p>B) Case-Based Discussion (15 min)</p>

		<ul style="list-style-type: none"> • Teacher presents clinical case scenarios: <ul style="list-style-type: none"> ◦ A patient with a hard, immobile swelling (Arbuda) – Students analyze possible diagnosis & discuss management. ◦ A patient with palatal dryness & ulceration (Talushosha & Talupaaka) – Students suggest Ayurvedic and contemporary treatment approaches. <p>C) Concept Reinforcement (10 min)</p> <ul style="list-style-type: none"> • Comparative discussion of Ayurveda and modern medical perspectives. • Quick Quiz – Rapid-fire Q&A to assess understanding. <p>3. Post-Class Activity (Journal Entry & Reflection) – (After the Session)</p> <ul style="list-style-type: none"> • Students document key takeaways in their journal/clinical record, including: <ul style="list-style-type: none"> ◦ Clinical features & treatment approaches discussed. ◦ Case discussions & differential diagnoses. ◦ Personal reflections on how Ayurveda can address these conditions. • Faculty reviews and provides feedback.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 62 Kantharoga (LH :4 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO2, CO4	Define Kantharoga and explain the Etiology, Clinical features and treatment of Vataja Rohini, Pittaja Rohini, Kaphaja Rohini, Sannipataja Rohini, and Raktaja Rohini.	CC	DK	KH	L&PPT, L	OSCE, VV- Viva, S-LAQ	F&S	III	-	LH
CO2,	Describe Etiology, Clinical Features and Treatments of	CC	DK	KH	L&PPT	OSCE, PRN	F&S	III	-	LH

CO5	Ekavrunda, Vrunda, Gilayu, Galavidradhi (peritonsillar abscess), Mamsatana and Vidari.				,L					
CO2, CO3, CO5, CO7	Present the case of a patient presenting with Geelana-Shoola (Odynophagia), Geelana-kashta (Dysphagia), and Mukha Dourgandhya (Halitosis).	AFT-RES	DK	SH	D,L&G D,CBL	P-EXAM,P-VIVA,CB A,OSCE	F&S	III	-	NLHP62.1
CO2, CO3, CO5, CO7	Present cases of Ekavrunda, Vrunda (Pharyngitis), Gilayu, Galavidradhi, Rohini and Kanthashalooka.	AFT-RES	DK	SH	TUT,PB L,D-BED	OSCE,P-ID,CL-PR, C-VC,P-CASE	F&S	III	-	NLHP62.2
CO2, CO3, CO5, CO7	Present an appropriate history in patients presenting with Swarabheda (Hoarseness of voice) and Kantha Koojana (Stridor).	AFT-RES	DK	SH	D-BED, TBL,CBL,TUT, CD	P-RP,P-EXAM,Mini-CEX,OSCE	F&S	III	-	NLHP62.3
CO2, CO3, CO5	Explain Parotitis.	CC	NK	KH	PBL,L&GD	CL-PR,QZ ,VV-Viva	F&S	III	-	NLHT62.1
CO2, CO5	Explain the etiology, clinical features, and treatment of Galavidradhi. (Peritonsillar abscess, Paratonsillar abscess, Para and Retropharyngeal abscess)	CC	DK	KH	L&GD, FC	P-EXAM,QZ ,PRN	F	III	-	NLHT62.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 62.1	Etiology, clinical features and treatment of Parotitis.	<p>1. Introduction (5 min)</p> <ul style="list-style-type: none"> Briefly introduce Parotitis as inflammation of the parotid gland and its classification

		<p>2. Case-Based Group Discussion (25 min) Divide students into 3 groups, each discussing a different clinical presentation of parotitis: Each group presents their discussion (3-5 min each), while faculty guides clinical reasoning.</p> <p>3. Concept Mapping Activity (15 min)</p> <ul style="list-style-type: none"> • Students create a visual concept map linking causes, symptoms, diagnosis, and management of parotitis. • Faculty adds Ayurvedic correlations, <p>4. Summary & Documentation (10 min)</p> <ul style="list-style-type: none"> • Summarize key learning points and integrate Ayurvedic vs. modern approaches. <p>Students document findings in a clinical journal, including:</p> <ul style="list-style-type: none"> • Differential diagnosis • Modern & Ayurvedic treatment plans • Preventive aspects (oral hygiene, hydration, immunity-boosting drugs like Guduchi, Yashtimadhu, etc.)
NLHT 62.2	Group Discussion on Galavidradhi.	<p>A) Pre-Class Activities (Self-Learning Phase) – 1 Week Before</p> <ul style="list-style-type: none"> • Provide Learning Materials: <ul style="list-style-type: none"> ◦ Share a PowerPoint presentation on Galavidradhi (Google Classroom/WhatsApp/Telegram). ◦ Recommend textbook readings for deeper understanding.

- Encourage self-study before the session.
- Preparation for Discussion:
 - Students form small groups and discuss the topic among themselves.
 - Clarification of doubts via messaging platforms before the class.

B) In-Class Activities (55 Minutes Flipped Classroom Session)

1. Introduction & Quiz (10 min)

- Quick recap of Galavidradhi (Peritonsillar, Paratonsillar, Para- & Retropharyngeal Abscess).
- Conduct a short quiz (MCQs or case-based) to assess prior learning.

2. Student Presentations (45 min)

Each group presents for 15 minutes:

- Group 1: Peritonsillar abscess (15 min)
- Group 2: Paratonsillar abscess (15 min)
- Group 3: Para- & Retropharyngeal abscess (15 min)

During each presentation:

- Encourage peer discussion and critical thinking.
- Facilitate Q&A to clarify concepts.

C) Assessment & Feedback

- Evaluate students' performance based on:

- Presentation skills (clarity, organization, engagement).
- Depth of knowledge (clinical features, diagnosis, treatment).
- Response to Q&A and quiz results.
- Provide constructive feedback for improvement.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 62.1	Cases of Geelana-Shoola (Odynophagia), Geelana-Kashta (Dysphagia), and Mukha Dourgandhya (Halitosis).	<p>1. Introduction (5 min)</p> <ul style="list-style-type: none"> • Brief explanation of the conditions: <ul style="list-style-type: none"> ◦ Geelana-Shoola (Odynophagia) – Pain while swallowing. ◦ Geelana-Kashta (Dysphagia) – Difficulty in swallowing. ◦ Mukha Dourgandhya (Halitosis) – Bad breath, its causes & impact. • Clinical relevance – Correlation with modern conditions (Tonsillitis, GERD, Oral infections, etc.). <p>2. Case-Based Group Activity (30 min)</p> <ul style="list-style-type: none"> • Divide students into 3 groups, each assigned one condition. • Each group is given a case scenario to discuss and analyze: <ul style="list-style-type: none"> ◦ Case 1 (Odynophagia): A patient with throat pain while swallowing, fever, and inflamed tonsils. ◦ Case 2 (Dysphagia): A patient with difficulty swallowing, weight loss, and long-term acid reflux history. ◦ Case 3 (Halitosis): A patient with persistent bad breath despite regular oral hygiene. • Tasks for each group: <ol style="list-style-type: none"> 1. Identify probable causes (Ayurvedic & modern perspectives).

		<p>2. Discuss pathophysiology and Samprapti. 3. Suggest diagnostic approaches and treatment options (Ayurvedic & contemporary).</p> <p>3. Practical Demonstration (15 min)</p> <ul style="list-style-type: none"> • Examination techniques: <ul style="list-style-type: none"> ◦ Inspection of oral cavity & throat using a torch and tongue depressor. ◦ Palpation of lymph nodes for signs of infection. ◦ Assessment of swallowing difficulty using simple bedside tests. • Discussion on treatment strategies: <ul style="list-style-type: none"> ◦ Ayurvedic Kavala, Gandusha, and Pratisarana. ◦ Importance of dietary & lifestyle modifications. ◦ Herbal formulations & modern pharmacology. <p>4. Recording in Clinical Journal (5 min)</p> <ul style="list-style-type: none"> • Each student documents key learnings in their clinical record, including: <ul style="list-style-type: none"> ◦ Summary of cases discussed. ◦ Examination findings & differential diagnosis. ◦ Ayurvedic & modern treatment approaches. ◦ Reflections on clinical relevance and learning experience. • Faculty reviews & provides feedback.
NLHP 62.2	Case-based discussion on Kantharoga.	<p>1. Introduction (5 min)</p> <ul style="list-style-type: none"> • Brief overview of the conditions: <ul style="list-style-type: none"> ◦ Ekavrunda & Vrunda (Pharyngitis) – Inflammation of the pharynx, causes, and symptoms. ◦ Gilayu – Swelling of the tonsils, correlation with tonsillitis.

- Galavidradhi – Deep-seated abscess in the throat region, correlation with retropharyngeal abscess.
- Rohini – Ulcerative lesions in the throat, possible correlation with diphtheria or severe aphthous ulcers.
- Kanthashalooka – Foreign body sensation in the throat, possible correlations with GERD or globus pharyngeus.

2. Case-Based Group Activity (30 min)

- Divide students into 3 groups, each assigned two conditions.
- Provide clinical case scenarios for discussion:
 - Case 1 (Pharyngitis & Gilayu): A patient presents with sore throat, fever, and difficulty swallowing.
 - Case 2 (Galavidradhi & Rohini): A patient with throat swelling, pus discharge, and severe difficulty in speaking/swallowing.
 - Case 3 (Kanthashalooka & Differential Diagnoses): A patient complains of a persistent foreign body sensation in the throat.
- Tasks for each group:
 1. Discuss possible etiologies (Ayurvedic & modern).
 2. Identify pathophysiology & Samprapti.
 3. Suggest examination methods and treatment approaches (Ayurvedic & contemporary).

3. Clinical Examination & Demonstration (15 min)

- Practical demonstration of examination techniques:
 - Inspection of the throat, tonsils, and oral cavity using a torch and tongue depressor.
 - Palpation of cervical lymph nodes for signs of infection.
 - Demonstration of simple bedside swallowing tests.
- Discussion on treatment approaches:

		<ul style="list-style-type: none"> ◦ Ayurvedic Kavala, Gandusha, Pratisarana, and Lepa. ◦ Importance of diet & lifestyle modifications. ◦ Use of Ayurvedic and modern medications for infection and inflammation. <p>4. Recording in Clinical Journal (5 min)</p> <ul style="list-style-type: none"> • Students document the session in their clinical record, including: <ul style="list-style-type: none"> ◦ Summary of cases discussed. ◦ Clinical features & differential diagnosis. ◦ Examination findings & practical learnings. ◦ Ayurvedic & modern treatment approaches. ◦ Reflections on clinical relevance and observations. • Faculty reviews and provides feedback.
NLHP 62.3	Case Discussion on Swarabheda and Kantha Koojana.	<p>1. Introduction (5 min)</p> <ul style="list-style-type: none"> • Brief overview of Swarabheda (Hoarseness) and Kantha Koojana (Stridor): <ul style="list-style-type: none"> ◦ Swarabheda: Altered voice quality due to laryngeal pathology (e.g., laryngitis, vocal cord nodules, neurological causes). ◦ Kantha Koojana (Stridor): High-pitched breathing sound due to airway obstruction (e.g., laryngeal edema, foreign body, tumors). • Importance of history-taking in differentiating benign vs. serious conditions. <p>2. Case-Based Role-Play Activity (20 min)</p> <p>Students are divided into pairs (Doctor & Patient) and given case scenarios:</p> <ul style="list-style-type: none"> • Case 1: Hoarseness due to Chronic Laryngitis <ul style="list-style-type: none"> ◦ Patient: A teacher with a history of voice strain, dry cough, and mild throat pain for 2

- weeks.
- Doctor: Ask relevant questions about duration, voice usage, and associated symptoms.
- Case 2: Hoarseness due to Vocal Cord Nodules
 - Patient: A singer with progressive hoarseness over months.
 - Doctor: Ask about professional voice use, lifestyle factors, and past medical history.
- Case 3: Acute Stridor Due to Laryngeal Edema
 - Patient: A child with sudden breathing difficulty and noisy breathing.
 - Doctor: Ask about recent infections, allergies, or possible foreign body aspiration.
- Case 4: Chronic Stridor Due to Laryngeal Tumor
 - Patient: A middle-aged smoker with progressive stridor and weight loss.
 - Doctor: Focus on risk factors, duration, and associated symptoms.

Each pair performs history-taking in front of the class while others observe and provide feedback.

3. Group Discussion & Analysis (20 min)

Faculty guides students to identify key aspects of history-taking:

- Onset & duration (Acute vs. chronic)
- Voice changes (Hoarseness, breathy, strained)
- Associated symptoms (Cough, pain, dysphagia, fever, weight loss)
- Risk factors (Smoking, allergies, vocal strain)
- History of infections, trauma, or systemic diseases
- Comparison of Ayurvedic and modern perspectives on causation and diagnosis.

4. Clinical Journal Documentation (10 min)

- Students record their findings from the role-play cases, including:

- Chief complaints and history format.
- Differential diagnosis based on history clues.
- Ayurvedic Samprapti of Swarabheda and Kantha Koojana.
- Treatment approach – Ayurvedic & contemporary.
- Faculty reviews entries and gives constructive feedback.

Topic 63 Dravyas used in Karna Nasa Mukha Roga Chikitsa-2 (LH :1 NLHT: 1 NLHP: 2)

A3	B3	C3	D3	E3	F3	G3	H3	I3	K3	L3
CO5	Describe the Use of the following drugs in Shiro Karna Nasa Mukha Roga:- <ul style="list-style-type: none"> • Laxmivilasa Rasa • Shirashuladi Vajra Rasa. • Tribhuvanakirti Rasa. • Guda Shunthi Nasyayoga. • Rasa Manikya. • Kshaara Taila • Discuss Research publications on recently proven drugs used in Shiro Karna Nasa Mukha Roga. 	CC	DK	KH	L&PPT ,L,REC	P-EXAM, M-POS,VV -Viva,S- LAQ,COM	F&S	III	-	LH
CO5	Discuss Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	REC,L &GD,B L,PL	QZ ,P-VIV A,COM	F&S	III	-	NLHT63.1
CO5, CO7	Discuss prescription of Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	CC	DK	KH	DIS	P-EXAM,P -CASE,SP, VV-Viva	F&S	III	V-RS,V- RS	NLHP63.1

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 63.1	Discussion on Samanya Yogas used in Shiro Karna Nasa Mukha Roga.	<p>A) Pre-Class Activities (Self-Learning & Group Collaboration)</p> <ul style="list-style-type: none"> • Sloka-Based Study: <ul style="list-style-type: none"> ◦ Students will be provided with relevant slokas from classical texts covering: <ul style="list-style-type: none"> ▪ Ingredients ▪ Pharmacological actions ▪ Indications and contraindications ◦ Each group will analyze one or more slokas related to their assigned yoga. • Familiarization with Easily Available Ingredients: <ul style="list-style-type: none"> ◦ Students will identify and collect samples of commonly available ingredients (e.g., Haritaki, Bibhitaki, Amalaki, Bilwa, Khadira, Vyosha, Tila Taila, etc.). ◦ They will observe, smell, and describe the characteristics of these ingredients. • Group Discussion & Compilation: <ul style="list-style-type: none"> ◦ Students work in groups (5–8 members) to: <ul style="list-style-type: none"> ▪ Translate and interpret the slokas. ▪ Extract therapeutic relevance in Shalakyatantra. ▪ Compare with contemporary formulations if applicable. ◦ Findings are compiled in notebooks or digital documents for in-class discussion. <p>B) In-Class Activities (55 Minutes - Active Learning Session)</p> <p>1. Group Presentation of Yogas (15 min)</p> <ul style="list-style-type: none"> • Each group presents the sloka meaning, ingredient actions, and clinical relevance. • Faculty moderates and provides additional insights.

2. Ingredient Demonstration & Discussion (10 min)

- Groups will display and describe the ingredients they collected.
- Faculty will highlight key identification features and therapeutic properties.

3. Clinical Case Discussion (15 min)

- Present hypothetical or real cases where these yogas are applicable.
- Groups discuss dosage, administration method, and expected outcomes.

4. Critical Analysis & Debate (10 min)

- Debate on choosing specific yogas for similar conditions.
- Comparison with other Ayurvedic or modern interventions.

5. Summary & Takeaways (5 min)

- Teacher consolidates key points and assigns follow-up reading.

C) Evaluation of Student Compilation

Assessment Criteria

1. Interpretation Accuracy:

- Correct translation and explanation of slokas.

2. Clinical Correlation:

- Application of the yoga in Shalakyatantra.

		<p>3. Ingredient Familiarization:</p> <ul style="list-style-type: none"> ◦ Proper identification and description of easily available ingredients. <p>4. Completeness & Organization:</p> <ul style="list-style-type: none"> ◦ Well-structured and comprehensive presentation. <p>5. Presentation & Engagement:</p> <ul style="list-style-type: none"> ◦ Clarity in explaining concepts and interacting with peers.
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 63.1	Common Yogas used in Shiro Karna Nasa Mukha Roga- their usage, indications, outcomes.	<p>1. Ingredient Familiarization & Pharmacological Understanding (20 min)</p> <ul style="list-style-type: none"> • Discuss the key ingredients of each Yoga. • Explain their mechanism of action in diseases of Shalakyatantra. • Compare their formulations with contemporary pharmacology where relevant. • Highlight any known pharmacological studies supporting their efficacy. <p>2. Prescription Analysis & Clinical Application (15 min)</p> <ul style="list-style-type: none"> • Provide sample prescriptions containing these Yogas. • Students analyze the prescriptions, identify the ingredients, and justify their therapeutic use. • Discuss variations in dosage, anupana, administration route, and contraindications. <p>3. Group Discussion & Case-Based Learning (15 min)</p> <ul style="list-style-type: none"> • Present real or hypothetical cases where these Yogas are used. • Students discuss and justify their choice of Yoga for each case. • Consider patient-specific factors (age, Dosha, severity, comorbidities) while selecting

formulations.

4. Summary & Q&A Session (5 min)

- Recap the key learnings of the session.
- Allow students to clarify doubts and ask relevant questions.

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1	Discussion on Netra Kriya Shareera in its Applied aspect.
1.2	CO1,CO2	Classification and Saama Nirama Lakshana of Netraroga.
2.1	CO5	Details of Aschyotana and Researches studies on Aschyotana, Seka, Pindi and Vidalaka.
2.2	CO5	Review of Research studies on Tarpana and Putapaka.
2.3	CO5	Discussion on Research studies on Anjana.
3.1	CO2,CO5	Indications and contraindications of Poorvakarma and Vamana, Virechana, Basti, Nasya,Raktamokshana In Netraroga.
4.1	CO5	Sanjnaharana in Netra (Anesthesia in Ophthalmology) -
6.1	CO2	Differential Diagnosis and causes of Epiphora and Hyperlacrimation.
8.1	CO3,CO5	Diagnostic Approaches to Eyelid Malposition: Entropion and Ectropion.
11.1	CO2,CO5	Discussion on Bhedana in Netraroga.
12.1	CO2,CO5	Procedure of Lekhana in Netraroga.
15.1	CO2,CO5	Comprehnsive discussion on Chhedana in Netraroga.
16.1	CO5	Discussion on Agnikarma and Ksharakarma in Netraroga.
19.1	CO3	Comprehension on uses of Dyes in Ophthalmology.
19.2	CO5	Discussion on Anti inflammatory agents and steroids used in ophthalmology.
19.3	CO5	Comprehension on Antibiotics ,antifungal agents, and antiviral agents used in ophthalmology.

19.4	CO2,CO5	Presentation on Lubricating agents and Artificial tears.
20.1	CO5	Eye banking- its organization, relevance and purpose.
20.2	CO5	Discussion on Eye donation.
20.3	CO5	Discussion on Keratoplasty.
20.4	CO2,CO5	Objectives, Organizational structure and New initiatives under National programme for Control of Blindness and Visual Impairment.
21.1	CO2,CO5	Management of Conjunctivitis.
22.1	CO2,CO5	Nidana and Chikitsa of Pillaroga.
23.1	CO5	Surgical Procedures for Glaucoma.
24.1	CO5	Kaphaja Linganasha Shastrakarma.
26.1	CO2,CO5	Surgical management of Senile Cataract and current research studies on Kaphaja Linganasha/Timira (Cataract).
28.1	CO5	Mydriatics and Cycloplegic agents.
29.1	CO5	Netra Swasthyahitakara Dinacharya.
29.2	CO5	Netra Swasthyahitakara Aahara Evam Vihara.
29.3	CO5	Jeevanasatwa-kshayajanya Netraroga (Vitamin deficiency disorders)(Malnutritional Eye disorders).
30.1	CO2,CO5	Poster presentation on ICHD-3 Classification. Compiled presentation on Common Yogas used in Shiroroga.
31.1	CO1	Discussion on Shiraso Uttamangatwam.
31.2	CO3,CO5	Etiology, Clinical Features,and Management of Ardhahedaka, Anantavata and

		Suryavarta.
32.1	CO1	Presentation on Anatomy of Ear.
32.2	CO1,CO2,CO4,CO5	Samanya Nidana,Samanya Samprapti,Sadhya-asadhyata of Karna Rogas.
34.1	CO3,CO5	Discussion on Nasya. Current research studies on Nasya and Dhumapana in diseases in Shalakyatantra.
35.1	CO2,CO5	Discussion on Puyarakta, Nasapaka, Nasashopha.
36.1	CO1	Elaboration on Mukha- Shareera.
39.1	CO2,CO5	Brainstorming session on National Oral Health Programme and Dantarakshavidhi.
41.1	CO1	Discussion on Shareer Kriya of Karna and Shraavanendriya, and Physiology of Equilibrium.
42.1	CO7	Group discussion on National Programme for Prevention and Control of Deafness and Noise Pollution.
43.1	CO2,CO3,CO5	Presentation on Putikarna.
43.2	CO1,CO2,CO3,CO4,CO5	Surgical steps in Tympanoplasty.
45.1	CO2,CO5	Diagnosis and Treatment of Rhinitis.
45.2	CO2,CO5	Diagnosis and treatment of Atrophic and Allergic Rhinitis; Summary of Research studies on Allergic Rhinitis.
46.1	CO2,CO5	Diagnosis and treatment of Deepta, Putaka, Nasaparishosha, Bhramshathu, Nasanaha, Kshavathu.
47.1	CO5,CO6	Surgical management of Nasavamsha-kutilatwa (Deviated Nasal Septum).
48.1	CO2,CO5	Laxanas and Chikitsa of Sheetada, Upakusha, Dantaveshtaka and Dantavidradhi.

49.1	CO2,CO5	Clinical features and management of ankyloglossia and glossitis (Hairy tongue, Geographic tongue, Migratory Glossitis).
50.1	CO2,CO5	Explanation of Root Canal Treatment.
53.1	CO3,CO4,CO5	Purva-Pradhana-Pashchat Karma for Karnasandhana (Auroplasty).
54.1	CO1,CO2,CO3,CO4,CO5,CO6	Etiology, Pathology, Clinical Features and Management of Benign Paroxysmal Positional Vertigo (BPPV)
55.1	CO2,CO5	Techniques for removal of Agantuja Shalya (Foreign Body) from Ear..
56.1	CO5	Surgical treatment of Nasarsha (Nasal Polyps).
57.1	CO5	Management of Nasagata Raktasrava (Epistaxis).
58.1	CO2,CO5	Nasarbuda- Tumors of nose and paranasal sinuses.
61.1	CO2,CO5	Discussion on Talu-Arbuda, Talushosha, Talupaka.
62.1	CO2,CO3,CO5	Etiology, clinical features and treatment of Parotitis.
62.2	CO2,CO5	Group Discussion on Galavidradhi.
63.1	CO5	Discussion on Samanya Yogas used in Shiro Karna Nasa Mukha Roga.

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO3,CO7	History taking in cases of Netraroga.
1.2	CO3,CO7	Structural Examination of Netra.
1.3	CO3,CO7	Functional examination of Netra.
2.1	CO6	A) Procedures of Seka and Pindi. B) Method of taking Informed consent from patients.
2.2	CO6,CO7	Demonstration on Vidalaka and Aschyotana.
2.3	CO5	Discussion on Tarpana and Putapaka.
2.4	CO5,CO6,CO7	Procedure of Anjana.
5.1	CO3	Evaluation of Netra-sandhi and Dacryocystitis.
8.1	CO3	Examination of Periocular Structures - Bhru (Eyebrow), Pakshma (Eyelash), Paksh mavartmasandhi (Lid Margin), and Vartma (Eyelid).
8.2	CO5	Incision and curettage (I&C) in Chalazion surgery.
8.3	CO3,CO4,CO7	Cases of Eyelid Malposition: Pakshmakopa (Trichiasis, Entropion)and Ectropion; Trichiatic cilia removal by Epilation.
10.1	CO3,CO4,CO6,CO7	History Taking and Case Presentation: Assessment of Patients with Abnormal Eyelid Mobility.
10.2	CO3,CO4,CO6,CO7	History Taking and Case Presentation: Assessment of Patients with Vartma-shopha(lid edema).
11.1	CO5,CO7	Collaborative Observation of Bhedana Karma in Netraroga (Incision and Drainage/ Curettage).
12.1	CO5,CO7	Collaborative Observation of Lekhana Karma in Netraroga.

13.1	CO3,CO4	Examination of the Shuklamandala (Conjunctiva and Sclera).
13.2	CO3,CO4,CO6,CO7	Cases of Arma, Pishtaka, and growths or discolourations on Shuklamandala.
13.3	CO3,CO4,CO6,CO7	Assessment of patients with Raktaakshi (Red Eye), focusing on Arjuna (Sub-Conjunctival Hemorrhage).
14.1	CO3,CO4,CO6,CO7	Assessment of Patients with Raktaakshi (Red Eye) - Episcleritis / Scleritis: Differentiating Diffuse / Nodular Forms.
15.1	CO5	Observation of Chhedana(Excision) in Netraroga.
17.1	CO3,CO4,CO7	Evaluation of Savrana Shukra (Corneal Ulcer).
17.2	CO3,CO7	Slit lamp examination.
18.1	CO2,CO3,CO4,CO7	Evaluation of Uveitis.
18.2	CO3,CO6,CO7	Assessment of Anterior chamber.
21.1	CO3,CO4,CO7,CO8	Evaluation of Raktaakshi (Red eye) with Srava (Discharge).
22.1	CO3,CO4,CO7,CO8	Evaluation of Shushkakshi (Dry eye evaluation).
23.1	CO3,CO7	Discussion on Tonometry and Perimetry.
24.1	CO3,CO7	Fundus evaluation (ophthalmoscopy).
24.2	CO3,CO4,CO6,CO7	History taking in a patient with Timira (Dimness of vision).
25.1	CO5,CO6,CO7,CO8	Evaluation of Agantuja Shalya (Foreign body in eyes).
26.1	CO3,CO7	Examination of Cataract.
27.1	CO2,CO5,CO7	Case discussion on Madhumehajanya Drishtiroga (Diabetic Retinopathy).
29.1	CO5,CO6	Use of Samanya Chakshushya Dravyas in Eye diseases..
29.2	CO5	Prescription of Samanya Chakshushya Yoga.

29.3	CO4,CO7	Evaluation of Naktandhya (night blindness).
30.1	CO2,CO5,CO7	Evaluation of Shirahshoola.
30.2	CO2,CO7	Introduction of case sheet for Shiro Karna Nasa Mukha roga.
31.1	CO5,CO6,CO7	Application of Shirolepa, Shiro-abhyanga, Shiroseka, and Shirobasti.
31.2	CO2,CO3,CO7	Evaluation of Ardhavabhedaka.
32.1	CO3,CO7	Identification and use of basic Ear OPD Instruments.
32.2	CO5,CO6,CO7	Case taking in Karnaroga.
33.1	CO2,CO3,CO4,CO5, CO7	Evaluation of Karnashoola (Otagia).
34.1	CO2,CO5,CO7	General history taking, Specific history taking in the cases of Nasaroga.
36.1	CO3,CO7,CO8	Oro - Dental case taking and examination.
36.2	CO3,CO7,CO8	Poorva, Pradhana and Pashchat Karma of Kavala, Gandusha and Mukhapratisarana.
40.1	CO3,CO7	Purva- Pradhana and Pashchat Karma related to the procedures of Prachchhanna and Jalaukavacharana.
40.2	CO3,CO7	Discussion on Agnikarma in Shiroroga.
42.1	CO2,CO3,CO4	Case Taking and Differential Diagnosis of Badhirya.
42.2	CO3,CO4,CO5	Tuning Fork Test (Rinne's, Weber) and their interpretation.
42.3	CO3,CO5	Audiometry and its interpretation.
42.4	CO2,CO3,CO4	Assessment of Karna Kshweda-Naada (Tinnitus).

42.5	CO5,CO6,CO7	Procedure of Karnapoorana.
42.6	CO5,CO6	Procedures of Karna Pramajana, Karna Prakshalana, and Karna Dhoopana.
43.1	CO2,CO3,CO4,CO5	Etiology, Clinical Features and Medical Management of Karna Srava (Otorrhea).
43.2	CO2,CO3,CO4,CO5	Surgical procedures of Mastoidectomy and Myringotomy.
44.1	CO2,CO3,CO4,CO5	Assessment of Karna Kandu.
44.2	CO1,CO3,CO5,CO6	Removal of Ear Wax.
46.1	CO3,CO4,CO7	Examination of Nasa and Nasagandakutalalatasthi-kuhara (Nose and Paranasal sinuses). Evaluation of Nasa srava (Rhinorrhoea). Evaluation of Sinusitis.
51.1	CO5,CO7	Contemporary Pharmaceutical Agents Used in Karna Nasa Mukha Roga.
54.1	CO2,CO3,CO4,CO5, CO7	Case discussion on Bhraamara (Vertigo).
55.1	CO5,CO7	Case discussion on Agantuja Shalya in Karna (Foreign Body in Ear).
56.1	CO3,CO4,CO7	Evaluation of Nasa-avarodha. Evaluation of Nasarsha (Nasal polyp).
57.1	CO3,CO5,CO6	Evaluation of Nasagata raktasrava (Anterior epistaxis).
58.1	CO3,CO4,CO7	Evaluation of Gandhajana Vikruthi (Anosmia, Hyposmia, Parosmia).
59.1	CO3,CO5,CO7	Case discussion on Agantuja Shalya in Nasa(nose).
60.1	CO5,CO6	Details in Nasasandhana Vidhi.
62.1	CO2,CO3,CO5,CO7	Cases of Geelana-Shoola (Odynophagia), Geelana-Kashta (Dysphagia), and Mukha Dourgandhya (Hallitosis).
62.2	CO2,CO3,CO5,CO7	Case-based discussion on Kantharoga.
62.3	CO2,CO3,CO5,CO7	Case Discussion on Swarabheda and Kantha Koojana.

63.1	CO5,CO7	Common Yogas used in Shiro Karna Nasa Mukha Roga- their usage, indications, outcomes.
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Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Papers	Theory	Practical/Clinical Assessment (200)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
AyUG-SL	2	200	100	70	-	30	200	400

6 B : Scheme of Assessment (Formative and Summative)

PROFESSIONAL COURSE	FORMATIVE ASSESSMENT			SUMMATIVE ASSESSMENT
	First Term (1-6 Months)	Second Term (7-12 Months)	Third Term (13-18 Months)	
Third	3 PA & First TT	3 PA & Second TT	3 PA	UE**

PA: Periodical Assessment; **TT:** Term Test; **UE:** University Examinations; **NA:** Not Applicable.

**University Examination shall be on entire syllabus

6 C : Calculation Method for Internal assessment Marks

TERM	PERIODICAL ASSESSMENT*					TERM TEST**	TERM ASSESSMENT	
	A 4	B	C	D	E	F	G	H
	1 (15 Marks)	2 (15 Marks)	3 (15 Marks)	Average (A+B+C/3)	Converted to 30 Marks (D/15*30)	Term Test (Marks converted to 30)	Sub Total /60 Marks	Term Assessment (.../30)
FIRST							E+F	(E+F)/2
SECOND							E+F	(E+F)/2
THIRD						NIL		E
Final IA	Average of Three Term Assessment Marks as Shown in 'H' Column.							
	Maximum Marks in Parentheses *Select an Evaluation Method which is appropriate for the objectives of Topics from the Table 6 D for Periodic assessment. Conduct 15 marks assessment and enter marks in A, B, and C. ** Conduct Theory (100 Marks)(MCQ(20*1 Marks), SAQ(8*5), LAQ(4*10)) and Practical (100 Marks) Then convert to 30 marks.							

6 D : Evaluation Methods for Periodical Assessment

S. No.	Evaluation Methods
1.	Practical / Clinical Performance
2.	Viva Voce, MCQs, MEQ (Modified Essay Questions/Structured Questions)
3.	Open Book Test (Problem Based)
4.	Summary Writing (Research Papers/ Samhitas)
5.	Class Presentations; Work Book Maintenance
6.	Problem Based Assignment
7.	Objective Structured Clinical Examination (OSCE), Objective Structured Practical Examination (OPSE), Mini Clinical Evaluation Exercise (Mini-CEX), Direct Observation of Procedures (DOP), Case Based Discussion (CBD)
8.	Extra-curricular Activities, (Social Work, Public Awareness, Surveillance Activities, Sports or Other Activities which may be decided by the department).
9.	Small Project
10.	Activities Indicated in Table 3 - Column G3 as per Indicated I, II or III term in column I3.

Topics for Periodic Assessments

PA	PAPER ONE(topic no.)	PAPER TWO (topic no.)
PA-1	Topic 01	Topic 30,31.
PA-2	Topic 02,03,04,05.	Topic 32,33,34,35.
PA-3	Topic 06,07	Topic 36,37,38.
Term Test – 1	Entire Syllabus of Term 1 of 2 papers	
PA-4	Topic 09,10,11,12.	Topic 40,41,42.
PA-5	Topic 13,14,15,16.	Topic 43,44,45.
PA-6	Topic 17,18,19,20.	Topic 46,47,48,49,50.
Term Test 2	Entire Syllabus of Term 2 of 2 papers	
PA-7	Topic 22,23.	Topic 52,53,54,55.
PA-8	Topic 24,25,26.	Topic 56,57,58,59.
PA-9	Topic 27,28,29.	Topic 60,61,62,63.

6 E : Question Paper Pattern

III PROFESSIONAL BAMS EXAMINATIONS

AyUG-SL

PAPER-I

Time: 3 Hours Maximum Marks: 100

INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	MULTIPLE CHOICE QUESTIONS (MCQ)	20	1	20
Q 2	SHORT ANSWER QUESTIONS (SAQ)	8	5	40
Q 3	LONG ANSWER QUESTIONS (LAQ)	4	10	40
				100

Similar for Paper II.

6 F : Distribution of theory examination

Paper 1 (Netraroga (Ophthalmology))					
Sr. No	A List of Topics	B Marks	MCQ	SAQ	LAQ
1	Shareera, Nidaana Panchaka of Netraroga.	30	Yes	Yes	No
2	Samanya Chikitsa and Kriyakalpa.		Yes	Yes	Yes
3	Panchakarma and Netraroga.		No	Yes	No
4	Sanjnaharana in Netraroga.		Yes	No	No
5	Sandhigata Roga -1		Yes	Yes	Yes
6	Sandhigata Roga -2		Yes	Yes	No
7	Sandhigata Roga -3		Yes	Yes	No
8	Vartmagata Roga-1	34	Yes	Yes	No
9	Vartmagata Roga-2		Yes	No	No
10	Vartmagata Roga -3		Yes	Yes	No
11	Bhedana Karma		Yes	Yes	No
12	Lekhana Karma.		Yes	Yes	No
13	Shuklagata Roga -1		Yes	Yes	Yes
14	Shuklagata Roga -2		Yes	Yes	No
15	Chhedana Karma.		Yes	Yes	No
16	Agnikarma and Ksharakarma.		Yes	Yes	No
17	Krishnagata Roga -1		Yes	Yes	Yes
18	Krishnagata Roga -2		Yes	Yes	Yes
19	Dravyas Used In Netrachikitsa-1		Yes	Yes	No
20	Eye Donation	No	Yes	No	
21	Sarvagata Roga -1	18	Yes	Yes	Yes
22	Sarvagata Roga -2		Yes	Yes	No
23	Glaucoma		Yes	Yes	Yes
24	Drishtigata Roga-1	18	Yes	Yes	Yes
25	Nayanabhighata		Yes	Yes	No
26	Drishtigata Roga-2		Yes	Yes	Yes
27	Drishtigata Roga- 3		Yes	Yes	No

28	Dravyas used in Netra Chikitsa-2		Yes	No	No
29	Dravyas used in Netra Chikitsa-3, Swasthavritta, Kuposhanajanya Netravikara (Malnutritional Eye Disorders), Community Ophthalmology.		Yes	Yes	No
Total Marks		100			

Paper 2 (Shiro-Karna-Nasa-Mukharoga (Oto-rhino-laryngology and Oro-dentistry))					
Sr. No	A List of Topics	B Marks	MCQ	SAQ	LAQ
30	Enumeration, Nidana Panchaka and Sadhya-asadhyata of Shiroroga	10	Yes	Yes	No
31	Samanya Chikitsa of Shiroroga		Yes	Yes	Yes
32	Karna Rachana Shareera, Nidana Panchaka and Samanya Chikitsa of Karnaroga	25	Yes	Yes	No
33	Karnaroga 1		Yes	Yes	Yes
34	Nasa Shareera, Ghranendriya and Nidana Panchaka of Nasaroga		Yes	Yes	No
35	Pratishyaya		Yes	Yes	Yes
36	Mukha Shareera and Nidana Panchaka of Mukharoga		Yes	Yes	No
37	Oshtharoga	10	Yes	Yes	No
38	Sarvasara Mukharoga		Yes	Yes	No
39	National Oral Health Programme		Yes	Yes	No
40	Kapalagata Roga	10	Yes	Yes	No
41	Karna Kriya Shareera and Shravanendriya		Yes	Yes	No
42	Karna Badhirya, Karna Naada and Kshweda		Yes	Yes	Yes
43	Karna Srava and Putikarna	05	Yes	Yes	No
44	Karnakandu, Karnaguthaka, Karnapratinaha, Krumikarna, Karnavidradhi, Karnapaka.		Yes	Yes	No
45	Rhinitis		Yes	Yes	No
46	Deeptadi Nasaroga.		Yes	Yes	No
47	Nasavamsha-kutilatwa (Deviated Nasal Septum).	10	Yes	Yes	Yes
48	Dantamulagata roga		Yes	Yes	No
49	Jihvagata Roga		Yes	Yes	No

50	Krimidantaka and Dantaharsha		Yes	Yes	Yes
51	Dravyas used in Karna Nasa Mukha Roga Chikitsa-1		Yes	No	No
52	Karnarsha and Karnarbuda	10	Yes	Yes	No
53	Karnasandhana		Yes	Yes	No
54	Bhraamara (Vertigo)		Yes	Yes	No
55	Agantuja Shalya in Karna	10	Yes	Yes	No
56	Nasarsha		Yes	Yes	Yes
57	Nasagata Raktasrava		Yes	Yes	Yes
58	Nasarbuda		Yes	Yes	No
59	Agantuja Shalya in Nasa	10	Yes	Yes	No
60	Nasa-abhighata, Nasasandhana		Yes	Yes	No
61	Talugata Roga		Yes	Yes	Yes
62	Kantharoga		Yes	Yes	Yes
63	Dravyas used in Karna Nasa Mukha Roga Chikitsa-2		Yes	Yes	No
Total Marks		100			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. Questions shall be drawn based on Table 6F, which provides the topic name, types of questions (MCQ(Multiple Choice Question), SAQ(Short Answer Question), LAQ(Long Answer Question)).
3. The marks assigned in Table 6F for each topic/group of topics shall be considered as the maximum allowable marks for that topic/group of topics.
4. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
5. Refer to Table 6F before setting the questions. Questions shall be framed only from topics where the type is marked as “YES”, and avoided if marked as “NO”.
6. Each 100-mark question paper shall contain:
 - 20 MCQs
 - 8 SAQs
 - 4 LAQs
7. MCQs:
 - Majority shall be drawn from the Must to Know part of the syllabus.
 - Questions from the Desirable to Know part of syllabus shall not exceed 3.
 - Questions from the Nice to Know part of syllabus shall not exceed 2.
8. SAQs:
 - Majority shall be drawn from the Must to Know part of the syllabus.
 - Questions from the Desirable to Know part of syllabus shall not exceed 1.
 - No questions shall be drawn from the Nice to Know part of syllabus.
 - SAQs shall assess understanding, application, and analysis, rather than simple recall.
9. LAQs:
 - All LAQs shall be drawn exclusively from the Must to Know part of the syllabus.
 - No questions shall be taken from the Desirable to Know or Nice to Know part of the syllabus.
 - Number of LAQs should not exceed one per topic unless maximum marks exceed 20 for the topic.
10. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
11. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	<p>Long case assessment</p> <ul style="list-style-type: none"> • Assess ability to gather and interpret patient information accurately. • Gauge the ability to organise the data into a coherent case presentation. • Appraise the clarity of thought process showing how student narrowed down the possibilities to formulate a differential diagnosis. • Examine the ability to develop a comprehensive management plan, including immediate treatment for acute issues and ongoing management for chronic conditions. This should cover investigations, treatment options, and any necessary referrals. • Judge communication skills and preparation to answer questions and discuss rationale for the decisions student has made. 	30
2	<p>Short case assessment (One case)</p> <p>A Short Case,featuring either a simulated or a real patient is used to assess a student’s ability to quickly approach a case and highlight and interpret different key clinical signs before offering a differential diagnosis.</p> <p>* The candidate is given approximately 8-12 mins to examine a part or anatomical area.</p> <p>* No history is taken.</p> <p>* Verbal communication is only allowed to get the patient to follow a set of instructions or if the patient's speech is being formally tested.</p> <p>* Following the examination the candidate must give a 3-5 minute summary of</p> <ol style="list-style-type: none"> 1. The examination findings 2. The likely differential diagnosis based on the finding 3. The probable causes and severity of the condition 4. General discussion related to the above <p>* A smooth and confident technique and a gentle, kind and friendly manner indicate professionalism.</p>	10

3	<p>Spotters 5 spotters of 2 marks each . Spotter 1) Any Ayurvedic drug described in Paper one. Spotter 2) Any Ayurvedic drug described in Pape two. Spotter 3) Any drug from contemporary medical science described in Papers one and two. Spotter 4) Clear picture of any of Anatomical part, pathological condition,and investigations described in paper one. Spotter 5) Clear picture of any of Anatomical part, pathological condition,and investigations described in paper two.</p>	10
4	Skill Based Clinical Assessment	40
5	<p>Journal or Case Record Viva</p> <p>Ask students to provide a concise summary of the case, including chief complaints, diagnosis, and treatment plan.</p> <p>Question the relevance of history, investigation findings, and clinical examination to the diagnosis.</p> <p>Probe the reasoning behind the chosen treatment and its expected outcomes.</p> <p>Present alternative scenarios and ask students how they would adapt their diagnosis or management plan.</p> <p>Assess the accuracy, clarity, and completeness of the journal or case record.</p> <p>Ask students how they would approach a similar case in a practical setting.</p> <p>Inquire about adherence to guidelines or protocols relevant to the case.</p> <p>Marks Distribution-</p> <ol style="list-style-type: none"> 1. Accuracy, Neatness and completeness of Journal- 03 marks. 2. Adaptation to alternative scenarios and differential diagnosis- 02 marks. 3. Clarity about the investigations,treatment plan, follow ups and outcomes- 05 marks. 	10

<p>6</p>	<p>Viva-</p> <p>Instruments in an oral examination: (20 marks)</p> <ol style="list-style-type: none"> 1. Pose direct questions about different instruments, their uses, and maintenance. 2. Ask students to identify instruments from a set. This can be done visually or through touch if the exam format allows. 3. Have students explain or demonstrate the function of each instrument, detailing their specific uses during procedures. 4. Inquire about the proper sterilization, maintenance, and storage of instruments to ensure they understand these crucial aspects. 5. Present clinical scenarios where students must select the appropriate instruments and explain their choice based on the scenario. 6. Select minimum two instruments each from Ear examination and surgery, Nose Examination and surgery, Throat(pharynx and larynx) examination and surgery. 7. Select minimum four instruments from Eye examination and surgery. <p>Xray examination (10 marks)</p> <ol style="list-style-type: none"> 1. Test their ability to identify anatomical structures on X-rays relevant to ENT. For example, they should be able to distinguish between different sinuses, the structures of the ear, and the anatomy of the throat and neck. 2. Present clinical scenarios relevant to ENT and ask the student which X-ray views or types would be most appropriate for diagnosis. Assess their ability to justify their choices based on the clinical context. 3. Provide students with sample X-rays to interpret. Evaluate their ability to detect common ENT conditions such as sinusitis, laryngeal masses, mastoiditis, foreign bodies, and fractures of the nasal bones. 4. Provide minimum one Xray each for Ear and Mastoid; Nose; Paranasal Sinuses; Pharynx and Larynx. <p>Oral Examination -(30 marks.)</p> <p>Ask core questions on the anatomy and physiology of Netra, Karna, Nasa, Mukha</p>	<p>70</p>
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	<p>and Shiras.</p> <p>Discuss Nidana, Samprapti, and Lakshana of common Shalakya disorders.</p> <p>Inquire about treatment protocols such as Panchakarma and Kriyakalpa</p> <p>Question the use and maintenance of Shalakya instruments.</p> <p>Present clinical scenarios to assess diagnostic and treatment planning skills.</p> <p>Include questions on advancements such as OCT or endoscopic techniques in Shalakyatantra.</p> <p>Mark Distribution-</p> <p>A) Netraroga- 10 marks.</p> <p>B) Karnaroga- 05 marks.</p> <p>C) Nasaroga- 05 marks.</p> <p>D) Mukharoga- 05 marks.</p> <p>E) Shiroroga- 05 marks.</p> <p>Communication Skill (10 Marks)</p>	
7	Internal assessment.	30
Total Marks		200

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Abbreviations

Domain		T L Method		Level		Assessment		Integration	
CK	Cognitive/Knowledge	L	Lecture	K	Know	T-CS	Theory case study	V-RS	V RS
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-KS	V KS
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	H-KC	H KC
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	H-SH	H SH
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	H-PK	H PK
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	H-SHL	H SHL
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	H-SP	H SP
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	H-KB	H-KB
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	H-Samhita	H-Samhita
PSY-ADT	Psychomotor/Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-DG	V DG
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-RN	V RN
AFT-REC	Affective/Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-RS	V RS
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	V-AT	V AT
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	V-SW	V SW
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving		
AFT-CHR	Affective/characterization	FC	Flipped Classroom			QZ	Quiz		
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles		
PSY-COR	Psychomotor/Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation		
		ML	Mobile Learning			DEB	Debate		
		ECE	Early Clinical Exposure			WP	Word puzzle		
		SIM	Simulation			O-QZ	Online quiz		
		RP	Role Plays			O-GAME	Online game-based assessment		
		SDL	Self-directed learning			M-MOD	Making of Model		
		PSM	Problem-Solving Method			M-CHT	Making of Charts		
		KL	Kinaesthetic Learning			M-POS	Making of Posters		

		W	Workshops			C-INT	Conducting interview		
		GBL	Game-Based Learning			INT	Interactions		
		LS	Library Session			CR-RED	Critical reading papers		
		PL	Peer Learning			CR-W	Creativity Writing		
		RLE	Real-Life Experience			C-VC	Clinical video cases		
		PER	Presentations			SP	Simulated patients		
		D-M	Demonstration on Model			PM	Patient management problems		
		PT	Practical			CHK	Checklists		
		X-Ray	X-ray Identification			Mini-CEX	Mini-CEX		
		CD	Case Diagnosis			DOPS	DOPS		
		LRI	Lab Report Interpretation			CWS	CWS		
		DA	Drug Analysis			RS	Rating scales		
		D	Demonstration			RK	Record keeping		
		D-BED	Demonstration Bedside			COM	Compilations		
		DL	Demonstration Lab			Portfolios	Portfolios		
		DG	Demonstration Garden			Log book	Log book		
		FV	Field Visit			TR	Trainers report		
						SA	Self-assessment		
						PA	Peer assessment		
						360D	360-degree evaluation		
						PP-Practical	Practical		
						VV-Viva	Viva		
						DOAP	Demonstration Observation Assistance Performance		
						SBA	Scenario Based Assessment		
						CBA	Case based Assessment		
						S-LAQ	Structured LAQ		
						OSCE	Observed Structured Clinical Examination		
						OSPE	Observed Structured Practical Examination		
						DOPS	Direct observation of procedural skills		