

**COURSE CURRICULUM FOR THIRD PROFESSIONAL B.S.M.S
(PRESCRIBED BY NCISM)**



**Aruvai including Kan, Kathu, Mookku, Thondai, Pal and Thol Maruthuvam
(Surgery including Ophthalmology, ENT, Dentistry and Dermatology)**

(SUBJECT CODE : SIDUG-AM)

(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 UNANI, SIDDHA AND SOWA-RIGPA
NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE
NEW DELHI-110026**



III Professional SIDDHA MARUTHUVA ARIGNAR (Bachelor of Siddha Medicine and Surgery (B.S.M.S))

Subject Code : SIDUG-AM

Aruvai including Kan, Kathu, Mookku, Thondai, Pal and Thol Maruthuvam
(Surgery including Ophthalmology, ENT, Dentistry and Dermatology)

Summary

Total number of Teaching hours: 410			
Lecture (LH) - Theory		140	140(LH)
Paper I	70		
Paper II	70		
Non-Lecture (NLHT)		80	270(NLH)
Paper I	40		
Paper II	40		
Non-Lecture (NLHP)		190	
Paper I	95		
Paper II	95		

Examination (Papers & Mark Distribution)					
Item	Theory Component Marks	Practical Component Marks			
		Practical	Viva	Elective	IA
Paper I	100	100	20	10 (Set-TC)*	20
Paper II	100				
Sub-Total	200	150			
Total marks	350				

Important Note :- The User Manual III B.S.M.S 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 syllabus24sid@ncismindia.org

PREFACE

Surgical management is essential for certain clinical conditions that cannot be effectively treated through medical interventions alone. Recognizing this need, Aruvai Maruthuvam (Siddha Surgery) is an integral part of the Siddha medical curriculum, ensuring that students develop the necessary skills to diagnose and manage surgical conditions accurately. The subject is rooted in classical Siddha texts, such as Agathiyar Nayana Vithi, Nagamuni Nayana Vithi, Agathiyar Rana Nool, Yugimuni Vaidhya Chinthamani, Theran Tharu, and Theran Karisal, which provide a detailed understanding of traditional surgical practices. With advancements in science and technology, Siddha medicos must not only master traditional surgical knowledge but also integrate modern surgical techniques and diagnostic methods. To facilitate this, each Siddha teaching hospital is equipped with an Outpatient Department (OPD) for Siddha surgery, Inpatient facilities, fully functional Operation Theatres (OTs), and experimental surgical labs to provide hands-on training.

Under the Competency-Based Dynamic Curriculum, Siddha classical surgical principles are integrated with modern advancements in surgery, such as radiation principles, ethics in surgery, organ donation guidelines, and advanced diagnostic techniques. The teaching methodology has been enhanced with expanded demonstration hours, interactive activities, and clinical discussions. Students actively participate in group discussions, seminars, presentations, and role-playing sessions to reinforce their clinical reasoning and surgical skills. The syllabus also extends beyond general surgery, covering ophthalmology (Kan Noikal), ENT, dermatology (Thol Noikal), and dental diseases (Pal Noikal), while also training students in Siddha surgical medicament preparation and large-scale production, fostering entrepreneurial opportunities in Siddha medicine.

This curriculum ensures that BSMS graduates develop comprehensive expertise in surgical diagnosis and treatment while maintaining a strong foundation in Siddha principles. It emphasizes humoral analysis, evidence-based Siddha surgical procedures, research orientation, critical thinking, and patient-centered care. The mission of this syllabus is to standardize Siddha surgical practice, ensure high-quality healthcare, and cultivate research-oriented practitioners. With its student-centric and patient-centric approach, this syllabus empowers Siddha graduates to excel as clinicians, educators, researchers, entrepreneurs, and healthcare leaders, enabling them to thrive in the evolving healthcare industry.

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Course Code and Name of Course

Course code	Name of Course
SIDUG-AM	Aruvai including Kan, Kathu, Mookku, Thondai, Pal and Thol Maruthuvam

Table 1 : Course learning outcomes and mapped PO

SRI CO No	A1 Course learning Outcomes (CO) SIDUG-AM At the end of the course SIDUG-AM, the students should be able to-	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Apply of classical Siddha surgical and Para surgical techniques in managing appropriate surgical conditions and adopt effective measures to manage and prevent complications.	PO1,PO2,PO5,PO6
CO2	Construct an integrated treatment plan based on Siddha's three humoral principles, ensuring ethical practice while determining suitability for Siddha or modern surgical management and referral.	PO1,PO3,PO4,PO6,PO9
CO3	Demonstrate the skills to maintain a sepsis-free hospital environment and implement effective measures to manage and prevent hospital-acquired infections and adopt Operation theatre maintenance measures.	PO7,PO8
CO4	Identify and assess circulatory insufficiencies, accurately evaluate blood loss and initiate appropriate first aid interventions.	PO4,PO9
CO5	Appraise explaining preventive measures and healthy lifestyle practices to minimize recurrence and complications of various surgical conditions with ethics. Cultivate the skills to organize effective counseling sessions, address the social stigma associated with certain surgical conditions, and promote holistic healing and patient well-being in a supportive environment.	PO7,PO8,PO10,PO11,PO12
CO6	Analyze the foundational principles of the Siddha system, bridging classical Siddha terminologies with modern scientific terms to facilitate interdisciplinary communication and enhance collaboration with experts from other healthcare systems.	PO10,PO11,PO12
CO7	Illustrate various specialized medicines and surgical instruments to develop innovative marketing techniques and build entrepreneurial skills to establish a Siddha career.	PO5,PO11,PO12
CO8	Demonstrate effective treatment measures and outcomes in Surgical conditions and to explore it to contribute evidence-based practices in Siddha through research publications and presentations.	PO10,PO11,PO12

Table 2 : Contents of Course

Paper 1 (ARUVAI MARUTHUVAM & KAN MARUTHUVAM (GENERAL SURGERY & OPHTHALMOLOGY))						
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non-Lecture hours Theory	F2 Non-Lecture hours Practica I
1	<p>Siddha Classical Surgical methods (Asurarurai)</p> <p>1.1 <i>Aruvai, Agni, Karam</i> and 25 sub divisions,</p> <p>Study on (1).<i>Aruvai</i> (Surgical excision), 2.<i>Keeral</i> (Incision) 3.<i>Kuruthi vangal</i> (Blood letting), 4.<i>Attai vidal</i> (Leech therapy), 5.<i>Salagai</i> (Probing), 6.<i>Varthi</i> (Medicated wick), 7.<i>Oodhal</i> (Blowing), (8).<i>Peechu</i> (enema/ douch) 9.<i>Urinchal</i> (Sucking), 10. <i>Kattudhal</i>(bandaging), 11. <i>Chuttigai</i> (cauterization), 12. <i>Vedhu</i> (Steam therapy), 13. <i>Pugai</i> (Fumigation), 14.<i>Karam</i> (caustic applications) (15). <i>Kombu kattal</i> (Splinting), 16. <i>Murichal</i> (Breaking bones artificially), 17. <i>Thokkanam</i> (Physical manipulations), 18.<i>Ottradam</i> (Fomentation) 19.<i>Pottanam</i> (Medicated bundle applications) (20).<i>Seelai</i> (Medicated wick), 21. <i>Kalimbu</i> (Ointment-Prepared with Cow's butter), 22. <i>Podi</i> (Dusting Powders), 23. <i>Neer</i> (Solutions), 24. <i>Kali</i> (Paste-Prepared with rice powder), 25. <i>Pasai</i> (Ointment-Prepared with bee wax)</p> <p>1.2. <i>Chathrayudangal</i> (Siddha classical surgical instruments)</p>	1	10	3	2	4
2	<p>Introduction to Eye diseases</p> <p>2.1 Definition of normal healthy eye</p> <p>2.2 Prophylactic measures for healthy vision</p> <p>2.3 Causes of eye diseases</p> <p>2.4 Hygiene of Eye.</p> <p>2.5 Classification of Eye Diseases according to <i>Agathiyar Nayana vithi & Nagamuni Nayana vithi</i></p>	1	05	2	1	3
3	<p>Inflammation and Ulcers</p>	1	10	7	4	9

	<p>3.1. <i>Veekam</i> — (Inflammation)</p> <p>3.2. <i>Kattikal</i> - (Abscesses)</p> <p>3.3. <i>Punkal</i> (Ulcers)</p> <p>3.3.1 Treatment for <i>Punkal</i> (Ulcers)</p> <p>3.4. <i>Silaippun</i> (Sinus ulcers & its treatment)</p> <p>3.5. <i>Kiranthi noi</i> (Chronic ulcers)</p> <p>3.6 <i>Mega kattikal</i> (Diabetic skin lesions)</p>					
4	<p>Karuvizhi Noikal (Diseases of Cornea)</p> <p>4.1. <i>Kasam-8, Padalam-7, Kumudam-3, Vizhi undal-3, Thimiram-7</i></p> <p>4.2 <i>Vari-3, Sukkiran-5, Nerisal-3, Kuntham-3, Poo-3</i></p>	1	05	2	1	3
5	<p>Basic principles of Surgery and infectious diseases</p> <p>5.1 Basic principles of surgery</p> <p>5.1.1. Communication and Counselling</p> <p>5.1.2. Ethics in General surgery</p> <p>5.1.3. Perioperative care</p> <p>5.1.4. Pain Management</p> <p>5.1.5. Biomedical waste management</p> <p>5.1.6. Metabolic response to Injury.</p> <p>5.2 Acute specific infections</p> <p>5.2.1. Tetanus,</p> <p>5.2.2. Gas gangrene</p> <p>5.3 Non Specific infections & Chronic infection</p> <p>5.3.1. Cellulitis</p> <p>5.3.2. Gangrene.</p>	1	05	5	3	7

	5.3.3 Actinomycosis					
6	Burns, Hemorrhage and Shock 6.1 Burns & Haemorrhage 6.2 Types of Shock 6.2.1.Hypovolaemic shock 6.2.2.Cardiogenic shock 6.2.3. Septic shock 6.2.4.Anaphylactic shock 6.2.5.Neurogenic shock	1	05	2	1	3
7	Anorectal diseases 7.1 <i>Moola noikal</i> (Ano rectal diseases) 7.2 <i>Vireki thapitham</i> (Proctitis), 7.3 <i>Asana vai vedippu</i> (Fissure in ano) 7.4 <i>Pavuthiram</i> (Fistula in ano)	2	10	4	2	6
8	Study on the following Surgical conditions 8.1 <i>Yanaikkaal</i> (Filariasis) 8.2 <i>Kalladaippu noi</i> (Renal calculi) 8.3 <i>Kandamalai</i> (Cervical adenitis) 8.4. Gall stones (Cholelithiasis) 8.5. Acute & Chronic Pancreatitis 8.6. Appendicitis 8.7. Paralytic ileus	2	10	7	6	7
9	Velvizhi Noikal(Diseases of Sclera) 9.1. <i>Ezhuchi-5, Padarthi-3, Nerisal-3</i> 9.2 <i>Putru-3, Kumulam-3, Vari-3, Ratchai</i> treatment for <i>Ezhuchi noi</i>	2	05	2	1	3

10	Imai Noikal(Diseases of Eyelids) 10.1 <i>Pillam- 3, Imai thadippu-1, Mudamayir, Ezhichakan -1, Parparoham- 3</i> 10.2 <i>Kazhalai- 3, Imai naar paichal-1, Suttrukulaivu-1, Puzhukkadi-1, Imaiuyarchi-1, Surgical treatment for Mudamayir.</i>	2		2	1	3
11	Kadaikkan Noikal (Diseases of Canthus) 11.1 <i>Kannokkadu, Poochathiram, Neerpadarathi, Raktha padarathi, Thasai padarathi, Neerkuvai, Rakthakuvai, Mangisakuvai, Vizhi vatham, Viranappar</i> 11.2 <i>Vippuruthi, Imaikurudu, Imaikkumizh, Nethiravayu, Kanno, Other clinical conditions of Eye as mentioned in Agathiyar Nayana Vithi</i>	2		2	1	3
12	Tumors and Cysts 12.1 Benign tumours 12.1.1 Myoma 12.1.2 Lipoma 12.1.3 Neurofibroma 12.2 Malignant Tumours 12.2.1 Carcinoma 12.2.2 Sarcoma 12.2.3 Melanoma 12.3 Carcinoma of Penis 12.4 Carcinoma of Rectum 12.5 Cysts 12.5.1 Dermoid cyst 12.5.2 Sebaceous cyst 12.5.3 Baker's cyst	2	10	6	3	8

13	Diseases of Blood and Lymphatic Vessels 13.1 Diseases of arteries 13.1.1 Haemangioma 13.1.2 Aneurysm 13.2. Embolism & Thrombosis 13.3 Diseases of veins 13.3.1 Thrombosis of vein 13.3.2 Varicose vein 13.4 Venous ulcer & Thrombophlebitis 13.5 Diseases of lymphatic vessels and lymph nodes 13.5.1 Lymphangioma 13.5.2 Lymphadenoma (Hodgkin's disease)	2	05	5	2	8
14	Comparison with Modern diagnosis 14.1 <i>Suzhal vanderithal</i> - Vitreous opacities, <i>Naga padalam</i> - Pterygium, <i>Mayir puzhuvettu</i> - Ulcerative blepharitis 14.2 <i>Amaram</i> - Ophthalmia neonatorum, <i>Kuvalai vippuruthi</i> - Dacryocystitis 14.3 <i>Vellezhuthu</i> - Presbyopia, <i>Thurmamisa valarchi</i> — Episcleritis, <i>Mudamayir</i> – Trichiasis	3	05	3	1	5
15	Medicines commonly used for Eye Diseases 15.1 <i>Padalathi mathirai</i> , <i>Kankasa mathirai</i> , <i>Matcha Rethinadhi mathirai</i> , <i>Ilaneer kuzhambu</i> 15.2 <i>Chandrodhaya mathirai</i> , <i>Narikelanjanam</i> , <i>Pazha kirambu pakuva vennai</i> , <i>Kandu Parpam</i> , <i>Anda neer</i> .	3		2	1	3
16	Diseases of Male Genital organs 16.1 <i>Aankuri noikal</i> (Diseases of Male Genitalia)	3	10	7	4	9

	16.2 Diseases of Urethra, Phymosis, Paraphymosis, Testicular tumours 16.3 <i>Vithai Noi</i> (Diseases of Testis & Scrotum) 16.4 Orchitis, Hydrocele, Haematocele, Varicocele, 16.5 Herniae 16.6 Prostatism- Acute & Chronic Prostatitis, Benign Prostatic Hypertrophy, 16.7 Carcinoma Prostate.					
17	Study of most prevalent Eye Diseases Study of causes, clinical features, classification, diagnosis and treatment (medical & surgical) with scientific correlations for the following Eye diseases. 17.1 Conjunctivitis (other than Viral) and its treatment 17.2 Glaucoma and its treatment 17.3 Presbyopia 17.4 Myopia 17.5 Astigmatism 17.6 Nystagmus 17.7 The causes and prevention of blindness 17.8 Viral Infections of Eye	3	05	9	6	11
Total Marks			100	70	40	95

Paper 2 (THOAL MARUTHUVAM, KATHU, MOOKKU, THONDAI & PAL MARUTHUVAM (DERMATOLOGY, ENT AND DENTISTRY))						
Sr. No	A2 List of Topics	B2 Term	C2 Marks	D2 Lecture hours	E2 Non- Lecture hours Theory	F2 Non- Lecture hours Practica I

18	Aids to healthy Skin 1. Principles of Skin, Dietary advices & Medicines for bath (<i>Kuliyal podi, Nalankuma & Panchakarpam</i>).	1	15	1	2	0
19	Ovammai Noikal (Allergic skin diseases) 2.1 <i>Karappan</i> - Dermatitis / Eczema (<i>Yugi Chinthamani Classifications of Karappan</i>) 2.2 Eczematous diathesis, Atopic Eczema 2.3 Contact dermatitis & Air Borne Contact Dermatitis 2.4 Neuro Dermatitis, Infectious Eczematoid Dermatitis , Dyshidrotic Eczema 2.5 <i>Kaanakadi, Silvidathadippu</i> - Urticaria 2.6 Papular Urticaria, Angioneurotic oedema, Purpura, Anaphylaxis	1		6	3	9
20	Noi Ethirppu Mandala Kolaral Varum Thol Noikal (Auto Immune related skin Disorders) & Thol Nirami Kuraipattu Noigal(Hypopigmentory diseases of the skin) 3.1. <i>Kalanjagapadai</i> (Psoriasis- Various types) 3.2 <i>Puzhuvettu</i> (Alopecia – Various types) 3.3 <i>Thol nirami kuraipattu Noikal</i> (Hypopigmentations of skin) 3.3.1 <i>Venpadai</i> (Vitiligo/ Leucoderma) 3.3.2 Achromia 3.3.3 Albinism and Naevus depigmentosus	1	10	8	4	11
21	Diseases of the Ear 4.1 Perichondritis, Hematoma of the oricle , Otomycosis 4.2 Otitis externa, Impacted wax, Bullous myringitis, Diseases of eustachian tube	1	10	6	3	9

	4.3 Acute & Chronic Suppurative Otitis Media					
	4.4 Vertigo, Vestibulitis					
	4.5 Tinnitus					
	4.6 Deafness, Otological aspect of facial paralysis					
22	Infectious conditions of the skin	2	10	11	8	13
	5.1 <i>Peru Noi</i> -(Leprosy)					
	5.2 <i>Sirangu</i> (Scabies)					
	5.3 Bacterial infections					
	5.3.1 Sycosis Barbae (Pseudofolliculitis barbae)					
	5.3.2 AKN Acne Keloides Nuchae (Sycosis Nuchae)					
	5.3.3 Follicular Infective Eczema					
	5.4 Trichomycosis Axillaris (Trichobacteriosis), Erythrasma					
	5.5 Viral Infections- <i>Palunni</i> (Molluscum contagiosum)					
	5.6 <i>Maru</i> (Verrucae/Warts), Genital Warts (Condiloma acuminatum)					
	5.7 Herpes Simplex Virus 1 &2					
	5.8 <i>Akki noi</i> – (Herpes Zoster Virus)					
	5.9 HIV- Skin Rash, ORF (Ecthyma contagiosum), Millers nodes					
	5.10 Hand- Foot Mouth Disease (HFMD)					
	5.11 Fungal Infections					
	5.11.1 <i>Padarthamarai</i> (Tinea infections)					
	5.11.2 Rhinosporidiosis					
	5.11.3 Chromoblastomycosis					

23	Diseases of Hair, Nail and Foot 6.1 Diseases of Hair 6.1.1 Podugu (Pityriasis capitis) 6.1.2 Hypertrichosis 6.1.3 Greying Hair (Canities) 6.2 Diseases of Nails 6.2.1 Dystrophy of nails 6.3 Koilanychia, Pachyonychia, Paronychia 6.4 Pterygium of the nails, Onycholysis, Subungual Hyperkeratosis 6.5 Diseases of the Sebaceous gland 6.5.1 <i>Mugaparu</i> (Acne Vulgaris) 6.5.2 Sebaceous cyst 6.5.3 Cradle cap (Milk crusts) 6.6 Diseases of the Sweat Gland 6.6.1 Miliaria and types 6.6.2 Anhidrosis 6.7 Bromhidrosis, Hyper Hidrosis 6.8 Diseases of the Foot 6.8.1 <i>Kaal ani</i> (Corn) 6.8..2 Callus	2	10	8	4	12
24	Mooku Noigal (Diseases of the Nose) 7.1. <i>Peenism</i> (Sinusitis) 7.2. <i>Nasigapedam, Karapan, kazhalai, Paru, Pilavai</i>	2	10	7	3	10

	<p>7.3 Disease of external nasal</p> <p>7.3.1. Furunculosis</p> <p>7.3.2. Cavernous sinus thrombosis</p> <p>7.4. Erysipelas, Lupus erythematosus , Rhinophyma</p> <p>7.5 <i>Raktha peenisam</i> (Epistaxis)</p> <p>7.6 Disease of internal nasal</p> <p>7.6.1 Nasal septal disease</p> <p>7.7.1 Different types of rhinitis</p> <p>7.7.2 Nasal polyposis</p>					
25	<p>Arpaviranam (Minor Skin diseases)</p> <p>8.1 <i>Viyarkuru</i> (Prickly heat), <i>Koppulam</i> (Vesicles / Bullae), <i>Thavalai chori</i> (Phrynoderma)</p> <p>8.2 <i>Akkul Koppulam / Akul katti</i> (Hidradenitis suppurativa), <i>Setrupun</i>(Tinea pedis), <i>Varagu koppulam</i></p>	2	05	2	1	3
26	<p>Special medicines in Siddha for Skin diseases</p> <p>9.1 <i>Rasa Chendurum, Kanthaga Sudar thailam, Parangipattai Rasayanam</i></p> <p>9.2 <i>Sivanarvembu Chooranam, Karunkozhi Chooranam, Sarvanga Rasayanam</i></p>	3		2	1	3
27	<p>Vaai Noikal (Diseases of Oral Cavity)</p> <p>10.1 <i>Naaku Noikal</i></p> <p>10.2 <i>Ulnakku noikal</i></p> <p>10.3 Stomatitis, Cyst of mouth, Pemphigus, Common symptoms oro pharynx</p> <p>10.4 Carcinoma of Tongue</p> <p>10.5 Carcinoma of cheek</p> <p>10.6 Diseases of salivary gland</p> <p>10.6.1 Carcinoma of Parotid gland</p>	3	10	6	3	8

	10.6.2 Sialolithiasis					
28	Thondai Noikal (Diseases of Throat) 11.1 Disease of Pharynx 11.1.1. Tonsilitis 11.1.2. Types of Pharyngitis 11.2 Tumours, Pharyngeal paralysis 11.3 Trismus 11.4 Cleft palate 11.5 Disease of larynx 11.5.1. Common symptoms of laryngeal disease 11.5.2. Types of laryngitis 11.5.3. Laryndeal paralysis 11.6 Disorders of voice	3	10	6	4	7
29	Pal Noikal (Dental Diseases) 12.1 .Types of <i>Pal Noigal</i> 12.2. <i>Palladi Noigal</i> 12.3 Disease of Tooth and Tooth structures 12.3.1 Attrition, Abrasion, Erosion 12.3.2 Resorption of Teeth 12.4. Diseases of Gingiva 12.4.1. Hereditary gingival fibromatosis 1.2.4.2 Gingivitis 12.4.3. Gingivual abscess 12.4.3.Gingival recession 12.5 Cancer of Gingiva	3	10	7	4	10

	12.6 Aids to healthy teeth, Oral hygiene, Fluorosis 12.7 Dental caries					
Total Marks		100	70	40	95	

Table 3 : Learning objectives of Course

Paper 1 (ARUVAI MARUTHUVAM & KAN MARUTHUVAM (GENERAL SURGERY & OPTHOLMOLOGY))										
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	J3 Integration	K3 Type
Topic 1 Siddha Classical Surgical methods (Asurarurai) (LH :3 NLHT: 2 NLHP: 4)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO5	Classify the major and minor sub divisions of Siddha classical surgical methods (<i>Asurarurai</i>), and explain <i>Chatrayuthangal</i> (Ancient classical surgical instruments), <i>Aruvai</i> (Surgical excision) and <i>Keeral</i> (Incision).	CC	MK	KH	L,L_VC,REC	QZ ,DEB	F&S		-	LH
CO1, CO2	Explain <i>Urinchal</i> (Sucking), <i>Kattudhal</i> (Bandaging), <i>Chuttigai</i> (Cauterization), <i>Vedhu</i> (Steam therapy), <i>Pugai</i> (Fumigation) and <i>Karam</i> (Caustic applications)	CC	MK	KH	L,L_VC	O-GAME, M-CHT	F&S		-	LH
CO1, CO2	Define <i>Kuruthi vangal</i> (Blood letting), <i>Attai vidal</i> (Leech therapy), <i>Salagai</i> (Probing), <i>Varthi</i> (Medicated wick), <i>Oodhal</i> (Blowing) and <i>Peechu</i> (Enema/ Douch)	CK	MK	K	L_VC,L	M-POS,PUZ	F&S		-	LH
CO1, CO5, CO6	Demonstrate Preparation of the <i>Peechu</i> (Enema) & <i>Varthi</i> (Medicated wicks)	PSY-GUD	MK	SH	KL,D	P-POS,M-CHT,P-PRF	F		H-VPS	NLHT1.1
CO1, CO5, CO6	Describe SoP for <i>Attai vidal</i> (Leech Therapy), <i>Chuttigai</i> (Cauterization), <i>Varthi</i> (medicated wick), <i>Pugai</i> (Fumigation), <i>Karam</i> (Caustic applications), <i>Vedhu</i> (Steam therapy).	CC	DK	KH	KL,L&GD	M-CHT,P-PRF	F		-	NLHT1.2
CO1	Explain and describe the criteria to write the Complaints and duration, History of Present illness, Past illness, Personal history	CAP	MK	SH	CBL,D-BED	P-CASE,CH	F&S		-	NLHP1.1

	and Family History, Local and Systemic examination, and Express Differential diagnosis, Diagnosis, Line of Treatment.					K				
CO1, CO2, CO5	Demonstrate various Siddha and Modern Surgical instruments, Various surgical procedures by using Siddha and Modern Surgical instruments	PSY-GUD	MK	SH	SDL,D-M	P-PRF,P-ID	F&S		-	NLHP1.2
CO1, CO2, CO5	Demonstrate selection criteria and Procedure for <i>Attai vidal</i> (Leech application) in the suitable location of the given patient.	PSY-GUD	MK	SH	CBL,D-BED	P-PS,P-EN	F&S		-	NLHP1.3
CO1, CO2, CO5	Perform <i>Chuttigai</i> (Cauterization), <i>Varthi</i> (medicated wick), <i>Vedhu</i> (Steam therapy), <i>Pugai</i> (Fumigation), <i>Karam</i> (Caustic applications) in a given patient.	PSY-GUD	MK	SH	KL,D-BED	DOAP,P-PS	F&S		-	NLHP1.4

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 1.1	Preparation of <i>Peechu</i> (Enema) & <i>Varthi</i> (Medicated wicks)	Begin with demonstration of preparation methods for <i>Peechu</i> (Enema) & <i>Varthi</i> (Medicated wicks) provided by the teacher. Students are divided into 3-5 teams to engage them in team based activities to teach and learn from each other. For each group given topic like collection of the necessary raw drugs for the preparation, purification of the raw drugs(If necessary) ,preparation of <i>varthi</i> and <i>peecheu</i> as per the procedure mentioned in the text and also the procedure which already demonstrated by the teacher. At the end,Students from each team are encouraged to contribute their insights for the future practice. Duration: 1Hour
NLHT 1.2	SoP for <i>Attai vidal</i> (Leech Therapy, <i>Chuttigai</i> (Cauterization), <i>Varthi</i> (medicated wick), <i>Pugai</i> (Fumigation), <i>Karam</i> (Caustic	Students divided into 5-6 small groups to engage in group based activities to teach and learn from each other . Each group is assigned topic (such as Siddha surgical procedure methods, preparation of the necessary

	applications), <i>Vedhu</i> (Steam therapy).	instruments for performing the procedures , history taking , necessary investigations, vital signs, consent, performing the concerned procedure ,monitoring the patient after completion of procedure) Explore with the members contributing their unique insights crucial for the practice. Duration: 1Hour
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 1.1	Criteria to write the case sheets.	Students divided into 5 groups . For each group, teacher should elaborate the importance of patient details ,criteria to write complaints and duration ,history of present illness,Past illness, personal history and Family history. Method to express local and systemic examination, differential diagnosis,diagnosis,line of treatment. At the end groups present their findings and the activity concludes with the reflection on the learning process emphasizing a systematic approach of how to write case sheets. Duration: 1Hour
NLHP 1.2	Various Siddha and Modern Surgical instruments, Various surgical procedures by using Siddha and Modern Surgical instruments.	Identification and explanation about the uses of Siddha and modern surgical instrument to be taught by the teacher and also explore the uses of Siddha and modern surgical instruments for the appropriate procedure . Now the students divided into sub groups Identification and Performance of the specific surgical Procedures for the given condition using suitable siddha and modern surgical instruments to be done by students from each group . Duration: 1Hour
NLHP 1.3	Selection criteria and Procedure for <i>Attai vidal</i> (Leech application) in the suitable location of the given patient.	The teacher should demonstrate the selection criteria and Procedure for <i>Attai vidal</i> (Leech application) as follows,

		<ul style="list-style-type: none"> • Preparation of the necessary instruments for performing the procedures • Ascertaining any chronic illness through history taking. • Necessary investigations carried out to rule out contagious diseases, Haemophilia & etc. • Patient centric activities like consent,counselling and vital signs etc to be done. • Performing the procedure as per the SoP.. • Monitoring the patient after completion of procedure. <p>After the demonstration, form small groups and have students share their observations focusing on key findings and their significance for performing the procedure.</p> <p>Duration: 1Hour</p>
NLHP 1.4	Procedure for <i>Chuttigai</i> (Cauterization), <i>Varthi</i> (medicated wick), <i>Vedhu</i> (Steam therapy), <i>Pugai</i> (Fumigation), <i>Karam</i> (Caustic applications) in a given patient.	<p>Performing the stepwise procedure as per the SoP by the students</p> <ol style="list-style-type: none"> 1. Preparation of the necessary instruments for performing the procedures 2. Ascertaining chronic illness through history taking 3. Necessary investigations to be carried out to rule out contagious diseases, Haemophilia & etc 4. Patient centric activities like consent,counselling and vital signs etc.to be done. 5. Performing the concerned procedure as per the SoP. 6. Monitoring the patient after completion of procedure. <p>Duration: 1Hour</p>

Topic 2 Introduction to Eye diseases (LH :2 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5	Define healthy Eye and describe causes of eye diseases and Classification of Eye Diseases according to <i>Agathiyar Nayanavithi & Nagamuni Nayanavithi</i> ,	CK	MK	K	L_VC,L ,L&PPT ,L&GD	M-CHT,QZ ,T- OBT,INT	F&S		-	LH

CO2, CO5	Explain prophylactic measures for healthy vision and Hygiene of Eye.	CC	MK	K	L&PPT, L, L&G, D, L_VC	T-OBT, M-CHT, QZ	F&S		-	LH
CO2, CO5	Observe visual acuity by using the SNELLEN'S DISTANT VISION CHART.	PSY-GUD	DK	D	D, SIM	SP, PP-Practical	F		-	NLHT2.1
CO2, CO5	Demonstrate accurate observation of physical examination techniques of an eye to support diagnosis and treatment.	PSY-GUD	NK	KH	FV, D	DEB, PRN, P-CASE	F&S		-	NLHP2.1
CO2, CO5	Demonstrate the evidence-based treatment options for various eye diseases, including Siddha pharmacological and surgical interventions.	PSY-GUD	MK	SH	FV, D	INT, PRN	F&S		-	NLHP2.2
CO1, CO2	Demonstrate the instruments used in Ophthalmology	CAP	MK	SH	D, D-M	P-VIVA, P-REC	F		-	NLHP2.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 2.1	Visual acuity by using SNELLEN'S DISTANT VISION CHART.	<p>A specific straight area of 6 mtr is to be selected for conducting this examination procedure. SNELLEN'S DISTANT VISION CHART (Bilingual) is to be fixed in one end with adequate illumination.</p> <p>On the opposite end at the specific distance of 6 meter, patient's seat is to be fixed.</p> <p>On the lateral aspect the physician can be seated with necessary supporting tools for examination. The patient is to be educated with the SNELLEN'S DISTANT VISION CHART.</p> <p>Ask the patient to remove the contact lens or glass</p> <p>Wear a dummy frame with one side of vision is blocked and ask the patient to read out the letters through the open side.- Observe the results.</p> <p>The same procedure is to be repeated to the opposite eye and observe results.</p> <p>Duration :One Hour</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 2.1	Physical examination techniques of an eye to support diagnosis and treatment.	<p>Demonstrating the eye on inspection- Size, shape, colour, injuries, visible pulsation, Oedema, abnormal growth in sclera, eyelids, canthus are to be discussed.</p> <p>Demonstrating the eye on Palpation- Size, shape, colour, injuries, visible pulsation, Oedema, abnormal growth in sclera, eyelids, canthus are to be discussed.</p> <p>Suitable investigations are to be correlated.</p> <p>In correlation with the physical findings and investigations diagnosis is to be derived.</p> <p>Suitable treatment according to the cause is to be taught.</p> <p>Duration: One Hour</p>
NLHP 2.2	Presenting evidence-based treatment options for various eye diseases, including Siddha pharmacological and surgical interventions.	<p>There are many number of home remedies commonly used for eye diseases.</p> <p>Their safety and efficacy is to be assessed.</p> <p>The standard way of production and storage, advisable way of eye application are to be educated by the Teacher.</p> <p>Literary resources of eye applications are also to be evaluated. The knowledge should be shared to the students.</p> <p>Duration : One Hour</p> <p>Literature review from standard research publications are to be made available to the students.</p> <p>The teacher can also write case studies as research papers.</p> <p>Duration: 1Hour</p>
NLHP 2.3	The instruments used in Ophthalmology.	<p>List out the common equipments used in Ophthalmology</p> <p>Show them to the students and explain their usage.</p> <p>Demonstrate the procedure to handle each instrument.</p>

The methodology to preserve each instrument is also to be taught.
Duration : One Hour

Topic 3 Inflammation and Ulcers (LH :7 NLHT: 4 NLHP: 9)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO5	Describe the definition, Cause, Classification with clinical features, Complications and differential diagnosis of <i>Veekam</i> (Inflammation)	CK	MK	K	L&PPT, L	O-QZ, M-POS	F&S		-	LH
CO1, CO2, CO5	Define and describe cause, and classification with clinical features, complications, and differential diagnosis of <i>Kattikal</i> (Abscesses).	CC	MK	K	L, L&PPT	T-OBT, M-CHT	F&S		-	LH
CO1, CO2	Explain the definition, cause, classification with clinical features, Complications and differential diagnosis of <i>Punkal</i> (Ulcers)	CC	MK	K	L, L&PPT	S-LAQ, M-MOD	F&S		-	LH
CO1, CO2, CO5	Discuss the line of treatment of <i>Punkal</i> (Ulcers) on the basis of Three humours.	CAN	MK	KH	L, L&GD	P-PS, O-QZ	F		-	LH
CO1, CO2, CO5	Define and describe cause, classification with clinical features, Complications and differential diagnosis of <i>Silaippun</i> (Sinus ulcers)	CC	MK	K	L, L&PPT	M-MOD, WP	F&S		-	LH
CO1, CO2, CO5	Describe the definition, cause, classification with clinical features, Complications and differential diagnosis of <i>Kiranthi noi</i> (Chronic ulcers)	CC	MK	K	L, L&PPT	O-GAME, C-INT	F&S		-	LH
CO1, CO2, CO5	Explain the definition, cause, classification with clinical features, Complications and differential diagnosis of <i>Mega kattikal</i> (Diabetic skin lesions)	CC	MK	K	L&PPT, L	CL-PR, PUZ	F&S		-	LH

CO1, CO2, CO5	Demonstrate the treatment for <i>Veekam</i> (Inflammation).	CE	MK	KH	L&GD, BS,PER	Log book,SBA	F&S		-	NLHT3.1
CO1, CO2, CO5	Illustrate the treatment for <i>Kattikal</i> (Abscesses).	CAP	MK	KH	L_VC,L RI	DOPS,DOP S,P-ID	F&S		-	NLHT3.2
CO1, CO2, CO5	Illustrate the treatment for <i>Punkal</i> (Ulcers).	CAP	MK	KH	BS,IBL	T- CS,DOAP	F&S		-	NLHT3.3
CO1, CO2, CO5	Describe the treatment for <i>Kiranthi noi</i> (Chronic ulcers).	CAP	MK	KH	BS,DA	P- PS,DOAP	F&S		-	NLHT3.4
CO1, CO2, CO5	Demonstrate the Size, Shape, Location, Edges, Discharge and Surrounding skin of the Ulcer.	PSY- GUD	MK	SH	CBL,SI M	Mini- CEX,OSCE	F&S		-	NLHP3.1
CO1, CO2, CO5	Perform the examination of <i>Punkal</i> (Ulcer) to assess the Differential Diagnosis and Complications.	PSY- GUD	MK	SH	LRI,X- Ray,CB L	P-CASE,D OAP	F&S		-	NLHP3.2
CO1, CO2, CO5	Discuss the diagnosis and Line of treatment for each type of Ulcer.	CAN	MK	KH	DA,CB L,LRI	DOPS,Mini- CEX,DOPS	F&S		-	NLHP3.3
CO1, CO2, CO5	Interprets the methods of incision and drainage of abscess, excision of cysts and <i>kattuthal</i> (bandaging).	CC	MK	KH	D,CBL, D-BED, LRI	Mini- CEX,SP	F&S		-	NLHP3.4
CO1, CO2,	Perform incision and drainage of abscess, excision of cysts and various types of <i>kattuthal</i> (bandaging) in a given patient	PSY- GUD	MK	D	CBL,SI M	OSPE,SBA	F&S		-	NLHP3.5

CO5										
CO1, CO2, CO5	Interpret the physical examination including location, length, course and discharge of a Sinus or Fistula.	PSY- GUD	MK	SH	D-BED, SIM	OSPE,Mini- CEX	F&S		-	NLHP3.6
CO1, CO2, CO5	Discuss the diagnosis and Line of treatment for Sinus or Fistula.	CAN	MK	KH	X-Ray	Mini- CEX,CHK	F&S		-	NLHP3.7
CO1, CO2, CO5	Perform suturing on the skin of an Orange	PSY- GUD	MK	D	D- M,SIM	OSPE,SP	F&S		-	NLHP3.8
CO1, CO2, CO5	Perform sutures on the fresh injuries of a patient	PSY- GUD	MK	D	D,D- BED	OSPE,DOP S,DOPS	F&S		-	NLHP3.9

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 3.1	Management of <i>Veekam</i> (Inflammation).	<p>Begin with teacher's demonstration of</p> <ul style="list-style-type: none"> • Usage of <i>Vellai mezhugu</i>/ heated <i>Aloe vera</i> pulp/ <i>Aazhi vidhai kali</i> / boiled <i>Thuththi</i> leaves. • The preparation of the affected area and application on the affected site. • Making bandages. • Follow up examination and Observation of the improvements. . <p>Students divided into 5 groups . Explore with group members contributing their unique insights necessary for the practice. Duration: 1Hour</p>

NLHT 3.2	Management of <i>Kattikal</i> (Abscesses).	<p>Incision and drainage of pus is to be demonstrated by the teacher as follows,</p> <ol style="list-style-type: none"> 1. To determine that the abscess is suitable for incision or not. 2. If suitable, exact site for incision is to be selected. 3. The procedure of incision, appropriate depth and extension is to be decided. 4. Making incision 5. Letting out pus. 6. Observe the floor 7. Clean the floor and dress the ulcer with suitable medicines. <p>Students divided into 5-6 small groups to engage in group based activities to teach and learn from each other .Explore with group members contributing their unique insights necessary for the practice. Duration: 1Hour</p>
NLHT 3.3	Management of <i>Punkal</i> (Ulcers).	<p>Students divided into subgroups. For each group teacher should assign topics like, Application of three humoral principles to differentiate the ulcer. After achieving a decision, selection of suitable decoction/ medicated solutions to wash the ulcer. Selection of suitable oils / ointment/ powder according to the nature of ulcer. Application of the medicine and making bandage . Analyze with group members about their understanding which is crucial for the practice. Duration: 1Hour</p>
NLHT 3.4	Management of <i>Kiranthi noi</i> (Chronic ulcers).	<p>Teacher should provide students with details of,</p> <ul style="list-style-type: none"> • Application of three humoral principles to differentiate the manifestation of Kiranthi • Examination to assess whether the condition is suitable for incision.

		<ul style="list-style-type: none"> • If not, usage of external medicines/ therapy • Incision and drain the pus. • Insertion of wicks or application of suitable ulcer healing agent and making bandage. • Selection of appropriate medicine to nourish and rejuvenate concerned physical constituent . <p>Then form small groups and students have to share their observations and contribute their understanding.</p> <p>Explore with team members for their insights for better treatment of chronic ulcer.</p> <p>Duration: 1Hour</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 3.1	Physical Examination of an Ulcer.	<p>Teacher should demonstrate the physical examination of an Ulcer stepwise as, Assessment of</p> <ul style="list-style-type: none"> • The cause of an ulcer through history taking • The location and number of ulcers • The nature of Pain • The edges, floor, Margin and base of an ulcer. <p>Discussion of</p> <ul style="list-style-type: none"> • Appropriate investigation procedures for achieving diagnosis • Application method of three humoural principles. <p>Following this ,students share and reflect key points on the physical examination of ulcer,emphasizing</p>

		<p>the systematic procedural skill .</p> <p>Duration: 1Hour.</p>
NLHP 3.2	Examination of <i>Punkal</i> (Ulcer).	<p>Teacher should provide students with detailed case examination that includes,</p> <ul style="list-style-type: none"> • Finding out the cause of an ulcer through history taking • Identification of the location and number of ulcers • Assessment of the nature of pain • Assessment of the edges, floor, margin and base of an ulcer. <p>Then discussion about the appropriate investigation procedures to rule out and achieving the diagnosis & also discussion about some possible complications of ulcer.</p> <p>After that students divided into subgroups.</p> <p>Students from each group allowed to perform the examination procedures and have to share their analyses, interpret the investigations, discuss the possible complications and consider the differential diagnosis</p> <p>The activity concludes with reflections on the learning procedural skills, emphasizing a systematic approach to diagnosis and assess complications.</p> <p>Duration: 1Hour</p>
NLHP 3.3	Diagnosis and Line of treatment for each type of Ulcer.	<p>Teacher should provide students with detailed patient case studies that include patient history, symptoms, and physical examination, investigation findings used for the diagnosis of ulcer.</p> <p>Finalise Line of treatment and treatment for Ulcer.</p> <p>Students divided into subgroups.</p> <p>Students from each group,</p> <p>Discuss about physical examination, assessment of the three humoral vitiations and necessary</p>

		<p>investigatory procedures, Integration of the results of observations. Discuss differential diagnosis and achieve a diagnosis Draw the line of treatment and have to arrive the treatment. The activity concludes with reflections on the learning process, emphasizing a systematic approach to diagnosis and treatment. Duration: 1Hour</p>
NLHP 3.4	<p>Incision and drainage of abscess, excision of cysts and demonstration of <i>kattuthal</i> (bandaging).</p>	<p>Students divided into 5 groups,. For each group teacher should demonstrate Incision and drainage of pus (using Incision and Drainage trainer) by the steps as follows,</p> <ol style="list-style-type: none"> 1. It is to determine that the abcess is suitable for incision or not. 2. If suitable, exact site for incision is to be selected. 3. The procedure of incision, appropriate depth and extension is to be decided. 4. Making incision 5. Letting out pus. 6. Observe the floor 7. Clean the floor and dress the ulcer with suitable medicines. <p>Each group will present their observations, including the rationale behind the procedures and any different treatment methods considered. The activity concludes with reflections on the learning procedural skill, emphasizing a systematic approach to the surgical treatment methods crucial for the practice. Duration: 1Hour Additional activity: Demonstration of bandage technique by the teacher using Basic bandaging simulator</p>

		<ol style="list-style-type: none"> 1. Preparation (washing hands, gather materials for bandaging, assessing the wound) 2. Cleaning and dressing the ulcer (cleaning of ulcer, pat drying, applying ointments, covering with gauze) 3. Applying the bandage (selection of correct size bandage, unrolling of bandage, wrapping, securing with medical tape) 4. Final check (check for not too loose or too tight, monitor for bleeding, adjustment if needed). <p>Following this, students should record, share and reflect key points on the basic bandaging technique, emphasizing the systematic procedural skill.</p> <p>The activity concludes with a post-class reflection procedure where students do the procedure, and the teacher provides feedback, emphasizing systematic approaches to procedural skill necessary for the treatment.</p>
NLHP 3.5	The incision and drainage of abscess, excision of cysts and various types of <i>kattuthal</i> (bandaging)	<p>Students divided into subgroups</p> <p>Student from each group should perform the incision and drainage of abscess, excision of cysts and <i>kattuthal</i> (bandaging) as demonstrated by the teacher by stepwise procedure,</p> <ol style="list-style-type: none"> 1. Determination of the abscess/cyst is suitable for incision or not. 2. If suitable, selection of exact site for incision. 3. Incising appropriately & letting out pus in case of Abscess /in the case of cyst complete excision to be done. 4. Then observation of the floor 5. Cleaning the floor and dressing the ulcer with suitable medicines. <p>The activity concludes with a post-class reflection procedure where students do the surgical procedure, and the teacher provides feedback, emphasizing systematic approaches to procedural skill necessary for the treatment.</p> <p>Duration: 1 Hour</p>

NLHP 3.6	Physical examination of a Sinus or Fistula.	<p>Students will begin with a demonstration done by the teacher ,</p> <ul style="list-style-type: none"> • To observe the external opening, surrounding skin and discharge from the Sinus/ Fistula. • Sterile techniques which are essential for probing. • Gentle insertion of probe into sinus or fistula to determine the depth and direction . • Identify the branching or connections. • Check for pain sensation and mobility. <p>Sonography, Endoscopy and other imaging studies may also be used for the diagnosis. At the end, students present their findings of the demonstration followed by an open floor for questions and feedback. The activity concludes with a reflection session where students summarize key insights and emphasize the systematic approach to the diagnose Sinus or Fistula.</p> <p>Duration: 1Hour Additional activity: Demonstration of Basic wound care by the teacher using simulator as follows,</p> <ol style="list-style-type: none"> 1. Wound Care Principles (Assessment, cleaning, debridement, dressing, monitoring) 2. Wound care interventions (Topical treatments, compression therapy, wound debridement, biological therapies, hyperbaric oxygen therapy) 3. Wound care goals (promote healing, prevent infection, manage pain, improve quality of life) <p>At the end, students present their findings of the demonstration followed by an open floor for questions and feedback. The activity concludes with a post-class reflection procedure where students do the procedure, and the teacher provides feedback, emphasizing systematic approaches to procedural skill necessary for the treatment.</p>
NLHP 3.7	Diagnosis and Line of treatment for Sinus or	Teacher should provide students with detailed patient case studies that include patient history,

	Fistula.	<p>symptoms, and physical examination findings, Sonography, Endoscopy and other imaging studies may also be used for the diagnosis of Sinus or Fistula.</p> <p>Ask students to individually analyze the case studies and document their observations and initial diagnoses</p> <p>Finalise Line of treatment and treatment for sinus or fistula</p> <p>Students are divided into groups, Groups present their findings and receive feedback, followed by discussion on diagnostic reasoning and best practices. The activity concludes with reflections on the learning process, emphasizing a systematic approach to diagnosis and treatment.</p> <p>Duration: 1Hour</p>
NLHP 3.8	Suture on the skin of an Orange.	<p>Students divided into sub groups,.</p> <p>For each group, teacher should perform suturing technique stepwise as follow,</p> <ul style="list-style-type: none"> • How to clean and prepare the wound area that is going to suture(orange) with antiseptic solution. • Administration of local anaesthesia if necessary • Usage of sterile gloves and instruments • Assessment of wound depth and length to determine the number of sutures are to be taught. • Appropriate suture material and size should be choosed. • Insert the needle into the skin on one side of orange, about 1/8 inch from the edge • Pass the needle through the skin of an orange and out through the skin on other side. • Pull the skin tight to close and make a knot. • Repeat the procedure, spacing sutures 1/4 inch apart, tie knots to secure the sutures. <p>Students pair up to practice these techniques, observe each other, and provide feedback. Groups discuss common mistakes and best practices, sharing tips to reinforce each procedure's importance.</p> <p>Duration: 1Hour</p> <p>Additional activity:</p> <p>Demonstration of suturing technique by the teacher using Basic incision and suture trainer</p>

		Steps same as the above .
NLHP 3.9	Suturing of fresh injuries.	<p>Students divided into 5 groups,.</p> <p>For each group teacher should demonstrate and students should follow how to clean and prepare the wound with antiseptic solution.</p> <p>Administration of local anaesthesia if necessary</p> <p>Sterile gloves and instruments should be used .</p> <p>Assessment of wound depth and length to determine the number of sutures.</p> <p>Appropriate suture material and size should be chosen.</p> <p>Insert the needle into the skin on one side of wound, about 1/8 inch from the edge</p> <p>Pass the needle through the underlying tissue and out through the skin on other side.</p> <p>Pull the suture tight to close the wound</p> <p>Repeat the procedure, spacing sutures 1/4 inch apart, tie knots to secure the sutures.</p> <p>Apply antibiotic ointment or mathan thylam and cover with dressing.</p> <p>. Students pair up to practice these techniques, observe each other, and provide feedback. Groups discuss common mistakes and best practices, sharing tips to reinforce each procedure's importance.</p> <p>Duration: 1Hour</p>

Topic 4 Karuvizhi Noikal (Diseases of Cornea) (LH :2 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO6	Describe the definition, Cause, Classification with clinical features and treatment of the following <i>Karuvizhi noikal</i> (Diseases of Cornea) <i>Kasam, Padalam, Kumudam, Vizhi undal, Thimiram.</i>	CC	MK	K	L,REC	O-QZ,T-OBT	F&S		-	LH
CO1, CO2	Describe the definition, Cause, Classification with clinical features and treatment of the following <i>Karuvizhi noikal</i> (Diseases of Cornea) <i>Vari, Sukkiran, Nerisal, Kuntham and Poo.</i>	CC	MK	K	L	O-QZ,WP	F&S		-	LH

CO1, CO2	Demonstrate surgical technique for Cataract and Pterygium through video presentation	CAP	MK	KH	DIS,L_ VC	INT,DEB	F&S		-	NLHT4.1
CO2, CO5	Demonstrate the importance of Organ Donation in saving life, common fears and misconceptions about organ donation,ethical and legal frameworks governing Organ Donation through Guest or Video lecture.	AFT-REC	NK	SH	PER,L& PPT	O-QZ,INT	F		-	NLHP4.1
CO2, CO5	Demonstrate the importance of Organ Donation in saving life, common fears and misconceptions about organ donation,ethical and legal frameworks governingOrgan Donation.	AFT-REC	NK	SH	DIS,L& PPT ,D	QZ ,DEB	F&S		-	NLHP4.2
CO2, CO5	Demonstrate the importance of Organ Donation in saving life, common fears and misconceptions about organ donation,ethical and legal frameworks governing Organ Donation through Guest or Video lecture.	AFT-REC	NK	SH	BS,DIS, D	M-POS,TR	F&S		-	NLHP4.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 4.1	Video presentation on surgery of Cataract and Pterygium.	<p>Students are divided into sub groups to engage them in group based activities to teach and learn from each other.</p> <p>Students are assigned to download the videos of Cataract surgery or Pterygium surgery shared by the teacher.</p> <p>Display that video in the class room</p> <p>Provide necessary explanation by the teacher in between the presentation.</p> <p>Ask students to individually analyze about the surgical procedures and document their observations</p> <p>The activity concludes with a reflection session where groups summarize key insights and emphasize the important surgical techniques for Cataract and Pterygium.</p> <p>Duration: 1Hour</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 4.1	Guest lecture or Video lecture on Organ Donation	Eminent surgeon /HoD of Surgery department in the nearest Medical college or from a reputed organisation can be invited to deliver guest lecture or video lecture on the given topic. Duration:1 hour.
NLHP 4.2	Guest lecture on Organ Donation.	Eminent surgeon /HoD of Surgery department in nearest Medical college or from a reputed organisation can be invited to deliver guest lecture on the given topic. Duration: 1 hour.
NLHP 4.3	Guest or Video lecture on Organ Donation	Eminent surgeon /HoD of Surgery department in nearest Medical college or from a reputed organisation can be invited to deliver Guest or Video lecture on the given topic. Duration: 1 Hour

Topic 5 Basic principles of Surgery and infectious diseases (LH :5 NLHT: 3 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO3, CO5	Describe the Basic Principles of Surgery, Communication and Counselling, Ethics in General Surgery, Perioperative care.	CC	DK	K	L,L&PPT	O-GAME, CL-PR	F&S		-	LH
CO3, CO5	Explain the Pain Management, Biomedical waste management, Metabolic response to Injury.	CK	DK	K	L&PPT	WP,M-CHT	F&S		-	LH
CO3, CO5	Define the Cause, Classification with Clinical Features, Investigations, Prophylaxis and Treatment of the Tetanus & Gas gangrene.	CC	MK	K	L&PPT	WP,Log book	F&S		-	LH
CO3, CO5	Describe the Cause, Classification with clinical features, investigations, prophylaxis and treatment of the Cellulitis,Gangrene.	CC	MK	K	L&PPT	O-QZ,WP	F&S		-	LH

CO3, CO5	Define the Cause, Clinical Features, Investigations, Prophylaxis and Treatment of the Chronic infectious disease - Actinomycosis	CC	DK	K	L&PPT ,DIS	O-GAME, M-CHT,V V-Viva	F&S		-	LH
CO3, CO5	Demonstrate Segregation, Disposal and Record maintenance of Bio Medical Waste.	CAP	MK	SH	FC,KL, PER	M- CHT,WP	F		-	NLHT5.1
CO3, CO5	Demonstrate the Procedure of infection control in a hospital	CAP	DK	SH	EDU,K L	WP,CHK	F		-	NLHT5.2
CO3, CO5	Maintain the Infection control register's records per the hospital protocols.	CAP	MK	SH	FC,TBL	C- INT,COM	F		-	NLHT5.3
CO3, CO5	Demonstrate the structured steps to be taken for aseptic or antiseptic procedures & sterilization of surgical instruments and Operation theater maintenance measures.	PSY- GUD	MK	SH	D	DOAP,P- PRF	F&S		-	NLHP5.1
CO2, CO5	Demonstrate the local anesthetic techniques in minor surgical procedures	PSY- GUD	MK	SH	D-M	DOAP,SP	F&S		-	NLHP5.2
CO3, CO5	Perform the structured techniques of aseptic, antiseptic & sterilization procedures of surgical instruments.	PSY- GUD	MK	D	RP,D	DOAP,CH K	F&S		-	NLHP5.3
CO3, CO5	Demonstrate measures for preventing hospital infections.	PSY- GUD	MK	SH	D,PL	DOAP,CH K	F&S		-	NLHP5.4
CO3, CO5	Demonstrate measures for isolating the infected patient in a hospital.	PSY- GUD	MK	SH	D,PL	CHK,PA	F&S		-	NLHP5.5
CO3, CO5	Discuss documentation procedures of different types of hospital records by manual work and software skills.	CC	DK	KH	PL,D	COM,PA	F&S		-	NLHP5.6
CO3, CO5	Maintain the different types of hospital records through manual works and software skills.	AFT- RES	DK	SH	PL,KL	CHK,COM	F&S		-	NLHP5.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 5.1	Segregation, Disposal and Record maintenance of Bio Medical Waste.	<p>Students divided into subgroups For each group teacher should assign topics on previous day, Under Segregation- details of color code system and segregation of waste according to categories Under Disposal - various methods like incineration, autoclaving, landfill, recycling and chemical treatment according to the waste categories Under Record maintenance - maintenance of various records like waste generation records, waste disposal records, training and inspection records and their importance. Groups present their findings and receive feedback, followed by discussion on various disposal methods and best record keeping. Explore with group members contributing their unique insights for the better Biomedical Waste Management crucial for sepsis free hospital. Duration: 1Hour.</p>
NLHT 5.2	Procedures of infection control in a hospital	<p>Students divided into 5-6 small groups to engage in group based activities to teach and learn from each other . Students from each group are given topics ,</p> <ul style="list-style-type: none">• In Infection control protocol like hand hygiene, personal protective equipment (PPE), sterilization & disinfection, linen & laundry, waste management, environmental cleaning, surveillance & monitoring, staff education & training, vaccination & immunization• Specific infection control procedures for blood borne pathogens, Airborne pathogens and contact precautions . <p>Groups present their findings and receive feedback, followed by discussion on infection control protocol and best practices</p>

		<p>Explore with group members contributing their insights for prevention and control the spread of infections in hospitals and the comprehensive procedures crucial for maintaining sepsis free hospital. Duration: 1Hour.</p>
NLHT 5.3	<p>Documentation and Maintenance of records in the Infection control registers.</p>	<p>Students are divided into 5 teams to engage them in team based activities to teach and learn from each other. Each team members are assigned topics like, In Infection Control Register Documentation: 1. Date and time of incident/report 2. Patient ID and name (if applicable) 3. Type of infection/control issue 4. Location of incident (ward/department) 5. Description of incident/control issue 6. Actions taken (e.g., isolation, cleaning, disinfection) 7. Follow-up actions (e.g., testing, treatment) 8. Outcome/Resolution Maintenance of Infection Control Registers: 1. Ensure timely and accurate documentation 2. Review and update records regularly 3. File records in chronological order 4. Maintain confidentiality and secure storage 5. Provide access to authorized personnel only 6. Conduct regular audits for accuracy and completeness Teams present their findings and receive feedback, followed by discussion on documentation and record keeping in infection control. Explore with team members contributing their insights for the maintenance of essential registers. Duration: 1Hour.</p>
<p>Non Lecture Hour Practical</p>		

S.No	Name of Practical	Description of Practical Activity
NLHP 5.1	Aseptic or antiseptic procedures & sterilization of surgical instruments and Operation theater maintenance measures.	<p>Students divided into subgroups,for each group teacher should Demonstrate the techniques of</p> <ol style="list-style-type: none"> 1. Aseptic Technique: Demonstrate proper hand hygiene (washing and using hand sanitizers). Show how to put on sterile gloves, masks, and gowns. Demonstrate preparing a sterile field (unwrapping sterile packs, arranging sterile instruments). 2. Antiseptic Technique: Show the use of antiseptics (alcohol or iodine) for cleaning the skin before a procedure. Demonstrate wiping instruments with alcohol pads to clean them before use. 3. Sterilization: Demonstrate how to clean surgical instruments first (removing any blood or tissue residues using brushes and disinfectants). Show how to load instruments into an autoclave for sterilization. Explain how to check if the instruments are sterile after the process (e.g., use of autoclave indicators, and packaging). <p>. Each group presents their findings followed by an open floor for questions and feedback. The activity concludes with a reflection session where groups summarize key insights and emphasize the importance of aseptic procedures in maintaining the sterilization of surgical instruments.</p> <p>Additional activity: Demonstration of Operation theater maintenance measures by the teacher as follow</p> <p>Pre-Operative Measures:</p> <ol style="list-style-type: none"> 1. Cleaning and Disinfection*: Clean and disinfect all surfaces, equipment, and furniture in the OT. 2. Sterilization: Sterilize all surgical instruments and equipment. 3. Ventilation: Ensure proper ventilation and air filtration in the OT. 4. Temperature Control: Maintain a consistent temperature between 68°F and 73°F (20°C and 23°C). 5. Humidity Control: Maintain a relative humidity of 50-60%. <p>Intra-Operative Measures:</p> <ol style="list-style-type: none"> 1. Surgical Site Preparation: Prepare the surgical site according to established protocols.

2. Surgical Team Preparation: Ensure the surgical team follows proper hand hygiene and attire protocols.

3. Equipment Maintenance: Regularly inspect and maintain surgical equipment.

4. Anesthesia Equipment Maintenance: Regularly inspect and maintain anesthesia equipment.

Post-Operative Measures:

1. Cleaning and Disinfection: Clean and disinfect the OT after each procedure.

2. Waste Disposal: Properly dispose of biohazardous waste.

3. Sterilization: Sterilize all surgical instruments and equipment after each use.

4. Equipment Maintenance: Regularly inspect and maintain surgical equipment.

Daily Maintenance Measures:

1. Cleaning Schedules: Establish and follow regular cleaning schedules.

2. Equipment Inspection: Regularly inspect all equipment and report any issues.

3. Supply Management: Manage supplies and ensure adequate stock levels.

Weekly Maintenance Measures:

1. Deep Cleaning: Perform deep cleaning of the OT, including floors, walls, and ceilings.

2. Equipment Calibration: Calibrate all equipment according to manufacturer instructions.

Monthly Maintenance Measures:

1. Air Quality Testing: Test the air quality in the OT to ensure proper ventilation.

2. Equipment Maintenance: Perform routine maintenance on all equipment.

Quarterly Maintenance Measures:

1. OT Inspection: Conduct a thorough inspection of the OT to identify any maintenance or repair needs.

2. Staff Training: Provide training to staff on OT maintenance and infection control protocols.

Annual Maintenance Measures:

1. OT Renovation: Plan and execute any necessary renovations or upgrades to the OT.

2. Equipment Replacement: Replace any equipment that is no longer functional or is outdated.

Duration: 1Hour.

NLHP 5.2	Local anesthetic techniques in minor surgical procedures	<p>Students divided into small groups,for each group teacher should demonstrate local anesthetic technique steps:</p> <ol style="list-style-type: none"> 1. Prepare patient and surgical site. 2. Choose appropriate local anesthetic agent and technique. 3. Administer local anesthetic. 4. Wait for onset of anesthesia (varies by agent and technique). 5. Perform surgical procedure. 6. Monitor patient for anesthesia efficacy and potential complications. <p>Precautions and Contraindications:</p> <ol style="list-style-type: none"> 1. Allergic reactions to local anesthetics. 2. Bleeding disorders or anticoagulation therapy. 3. Liver or kidney disease. 4. Heart conditions (e.g., arrhythmias). 5. Pregnancy or breast feeding. <p>Complications Management:</p> <ol style="list-style-type: none"> 1. Systemic toxicity (e.g., seizures, cardiac arrest). 2. Local complications (e.g., infection, nerve damage). 3. Allergic reactions are also should be explained. <p>. Students pair up to practice these techniques, observe each other, and provide feedback. Groups discuss common mistakes and best practices, sharing tips to reinforce each procedure's importance.</p> <p>Duration: 1Hour.</p>
NLHP 5.3	Aseptic, antiseptic & sterilization procedures of surgical instruments.	<p>Students divided into subgroups, each group Teacher should perform the Techniques stepwise as,</p> <ol style="list-style-type: none"> 1. Aseptic Technique: Demonstrate proper hand hygiene (washing and using hand sanitizers). Show how to put on sterile gloves, masks, and gowns. Demonstrate preparing a sterile field (unwrapping sterile packs, arranging sterile instruments). 2. Antiseptic Technique: Show the use of antiseptics (alcohol or iodine) for cleaning the skin before a procedure.

		<p>Demonstrate wiping instruments with alcohol pads to clean them before use.</p> <p>3. Sterilization: Demonstrate how to clean surgical instruments first (removing any blood or tissue residues using brushes and disinfectants). Show how to load instruments into an autoclave for sterilization. Explain how to check if the instruments are sterile after the process (e.g., use of autoclave indicators, and packaging). Groups present their observations and receive feedback, followed by discussion on aseptic procedures and best practices . The activity concludes with a reflection on the experience and the importance of maintaining proper aseptic procedures and infection control. Duration: 1Hour.</p>
NLHP 5.4	Arrangements required for preventing hospital infections.	<p>Students divided into subgroups For each group teacher organise the arrangements required for preventing hospital infections like</p> <ul style="list-style-type: none"> I. Infection Prevention and Control (IPC) Program II. Environmental Cleaning and Disinfection III. Hand Hygiene IV. Personal Protective Equipment (PPE) V. Sterilization and Disinfection of Equipment VI. Waste Management VII. Surveillance and Monitoring VIII. Staff Education and Training IX. Patient Education and Empowerment X. Quality Improvement <p>Students take turns demonstrating proper techniques to their peers, followed by practicing in pairs and providing feedback. Groups discuss observations and share best practices, and students assess each other's techniques using a checklist. The activity concludes with a reflection on the experience and the</p>

		<p>importance of organising the arrangements required for preventing hospital infection. Duration: 1Hour.</p>
NLHP 5.5	<p>Arrangements required for isolating the infected patient in a hospital.</p>	<p>Students divided into subgroups, for each group teacher organise the arrangements required for isolating the infected patient in a hospital,</p> <ul style="list-style-type: none"> • Pre-isolation preparations • Isolation room preparation • Patient isolation catogeries and isolation procedures • Staff precautions, • Communication &educate the patient also his/her family • Logistics and supplies • Isolation room cleaning and disinfection • Isolation room termination • Also the regulation and guidelines for infection control standards . <p>Groups discuss observations and share best practices, and students assess each other's techniques using a checklist. The activity concludes with a reflection on the experience and the importance of organising the arrangements required for isolating the infected patient in a hospital. Duration: 1Hour.</p>
NLHP 5.6	<p>Documentation procedures of different types of hospital records by manual works and software skills.</p>	<p>Students divided into small group for each group teacher should demonstrate how to document the different types of hospital records by manual works and software skills. Manual Documentation Procedures</p> <ol style="list-style-type: none"> 1. Patient Registration Records 2. Medical Records 3. Nursing Records

		<p>4. Lab & Radiology Records</p> <p>Software Documentation Procedures</p> <ol style="list-style-type: none"> 1. Electronic Health Records (EHRs) 2. Hospital Information Systems (HIS) 3. Picture Archiving and Communication Systems (PACS) <p>Also Software Used and Documentation Standards are to be demonstrated.</p> <p>Each group presents their findings , followed by an open floor for questions and feedback. The activity concludes with a reflection session where groups summarize key insights and emphasize the importance of manual works and software skills for maintaining the documentation procedures of different types of hospital records.</p> <p>Duration: 1Hour.</p>
NLHP 5.7	Different types of hospital records through manual work and software skills.	<p>Students divided into subgroups</p> <p>Student from each group should perform,</p> <ul style="list-style-type: none"> • Maintenance of hospital records which are important for patient care, quality improvement and regulatory compliance • Advantages and disadvantages of maintenance of hospital records • Various hospital records like patient registration, medical, surgical, lab, radiology, pharmacy, billing & insurance, employee and administrative record maintenance & their importance . <p>Groups discuss different skills and share best practices, and students assess each other by using a checklist. The activity concludes with a reflection on the experience and the importance of proper maintenance of hospital records through manual works and software skills.</p> <p>Duration: 1Hour.</p>

Topic 6 Burns, Hemorrhage and Shock (LH :2 NLHT: 1 NLHP: 3)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO4	Describe the Definition, Classification, Pathology, Extend of Burns, Complications as local and systemic changes of Burns. Describe Definition, Classification, Pathophysiology of haemorrhagic shock and Principles of management of Haemorrhage.	CC	DK	K	L,L&PPT	QZ ,T-OBT	F&S		-	LH
CO4	Describe Definition, Classification, Mechanism of Shock, General principles of resuscitation and specific treatment for various types of Shock- Hypovolaemic shock, Cardiogenic shock, Septic shock, Anaphylactic shock & Neurogenic shock.	CC	DK	K	L&PPT, L	T-OBT, O-QZ	F&S		-	LH
CO4	Demonstrate the ability to assess and manage the conditions related to Alkalosis, Acidosis and Water metabolism.	PSY-GUD	DK	SH	BS, L&GD	SP, SBA	F		-	NLHT6.1
CO4	Demonstrate the steps for infusing IV fluids	PSY-GUD	MK	SH	D-M, SIM	OSPE, P-PRF	F&S		-	NLHP6.1
CO4	Perform infusion of IV fluids in a given patient or on simulation.	PSY-GUD	MK	D	SIM, D-BED	DOPS, DOPS, DOAP	F&S		-	NLHP6.2
CO4	Identify the signs of circulatory insufficiency in patients experiencing Hypovolemic shock.	CAN	MK	KH	CBL, PBL	P-RP, P-PRF, P-PS	F		-	NLHP6.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 6.1	Assessment and management of the conditions related to Alkalosis, Acidosis and Water metabolism.	Students divided into small groups, for each group teacher should demonstrate, 1. In Alkalosis Management: Causes, symptoms and treatment of Respiratory Alkalosis and Metabolic Alkalosis 2. In Acidosis Management: Causes, symptoms and treatment of Respiratory Acidosis and Metabolic

		<p>Acidosis</p> <p>3.In Water Metabolism Management: Causes, symptoms and the treatment of Dehydration and Fluid Overload</p> <p>4.In Assessment and Monitoring:</p> <ul style="list-style-type: none"> • Laboratory tests: Arterial blood gas (ABG), electrolyte panel, complete blood count (CBC). • Physical examination: Vital signs, neurological assessment, cardiovascular evaluation. • Imaging studies: Chest X-ray, Electrocardiogram (ECG) and <p>4.In interventions : Pharmacological and non-pharmacological Interventions . Followed by this, the groups will present and discuss their proposed measures, concluding with a summary of key points and the importance of the ability to assess and manage the conditions related to Alkalosis, Acidosis and Water metabolism. Duration: 1Hour.</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 6.1	Steps for infusing IV fluids.	<p>Students divided into small group for each group teacher should demonstrate stepwise procedure for infusing IV fluids in simulation/model as follows,</p> <ul style="list-style-type: none"> • Pre-Infusion Checks: <ol style="list-style-type: none"> 1. Verify patient's identity. 2. Check IV fluid expiry date and integrity. 3. Ensure patient's vein patency and accessibility. 4. Prepare necessary equipment.

- Infusion Steps:

Step 1: Prepare IV Site

1. Clean and disinfect IV site with alcohol swab.
2. Apply tourniquet.

Step 2: Insert IV Cannula/Needle

1. Insert IV cannula/needle at 20-30° angle.
2. Advance needle/cannula until blood flashback is seen.

Step 3: Secure IV Cannula/Needle

1. Remove tourniquet.
2. Secure IV cannula/needle with tape.

Step 4: Connect IV Tubing

1. Connect IV tubing to IV cannula/needle.
2. Ensure tubing is securely attached.
3. Ensure there is no air bubbles intervening

Step 5: Infuse IV Fluids

1. Squeeze drip chamber to fill with fluid.
2. Adjust flow rate according to physician's order.
3. Monitor IV flow and patient's response.

- Post-Infusion Checks

1. Monitor patient's vital signs.
 2. Check IV site for signs of complications (e.g., infiltration, phlebitis).
 3. Document infusion details.
- . Groups discuss observations and share best practices, and students assess each other's techniques using a checklist. The activity concludes with a reflection on the experience and the importance of IV fluid infusion in suitable conditions.

Duration: 1Hour.

NLHP 6.2	<p>Infusing IV fluids in a given patient or on simulation.</p>	<p>Students divided into small group, from each group student should perform infusing IV fluids step by step</p> <p>Pre-Infusion Checks:</p> <ol style="list-style-type: none"> 1. Verify patient's identity. 2. Check IV fluid expiry date and integrity. 3. Ensure patient's vein patency and accessibility. 4. Prepare necessary equipment. <p>Infusion Steps:</p> <p>Step 1: Prepare IV Site</p> <ol style="list-style-type: none"> 1. Clean and disinfect IV site with alcohol swab. 2. Apply tourniquet. <p>Step 2: Insert IV Cannula/Needle</p> <ol style="list-style-type: none"> 1. Insert IV cannula/needle at 20-30° angle. 2. Advance needle/cannula until blood flashback is seen. <p>Step 3: Secure IV Cannula/Needle</p> <ol style="list-style-type: none"> 1. Remove tourniquet. 2. Secure IV cannula/needle with tape. <p>Step 4: Connect IV Tubing</p> <ol style="list-style-type: none"> 1. Connect IV tubing to IV cannula/needle. 2. Ensure tubing is securely attached. 3. Ensure there is no air bubbles intervening in the tube. <p>Step 5: Infuse IV Fluids</p> <ol style="list-style-type: none"> 1. Squeeze drip chamber to fill with fluid. 2. Adjust flow rate according to physician's order. 3. Monitor IV flow and patient's response. <p>Post-Infusion Checks</p> <ol style="list-style-type: none"> 1. Monitor patient's vital signs. 2. Check IV site for signs of complications (e.g., infiltration, phlebitis). 3. Document infusion details. <p>as demonstrated by the teacher. Groups discuss common mistakes and best practices, sharing tips to</p>
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		reinforce each procedure's importance. Duration: 1Hour.
NLHP 6.3	Signs of circulatory insufficiency in patients experiencing Hypovolemic shock.	Students divided into small group for each group teacher should demonstrate, Hypovolemic Shock Stages: 1. Compensatory (mild) 2. Progressive (moderate) 3. Irrversible (severe) and Signs of Circulatory Insufficiency & additional signs Then about the Assessment Tools: 1. Vital signs (BP, HR, RR, Temp) 2. Physical examination (skin, pulses, capillary refill) 3. Laboratory tests (CBC, electrolytes, lactate) 4. Imaging studies (e.g., chest X-ray, ultrasound) 5. Hemodynamic monitoring (e.g., CVP, SvO2). . Groups present their findings and receive feedback, followed by discussion on diagnostic reasoning and best practices. The activity concludes with reflections on the learning process, emphasizing a systematic approach to diagnosis and treatment. Duration: 1Hour.

Topic 7 Anorectal diseases (LH :4 NLHT: 2 NLHP: 6)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) of <i>Moola noikal</i> (Ano rectal diseases).	CC	MK	K	L,EDU	QZ ,INT,T- OBT,CL- PR	F&S		-	LH
CO1,	Describe causes, clinical features, Complications and differential	CC	MK	K	L_VC,B	T-OBT,VV-	F&S		-	LH

CO2, CO8	diagnosis, Investigations, diagnosis, treatment (medical & surgical) of <i>Vireki thapitham</i> (Proctitis),.				L	Viva				
CO1, CO2, CO8	Detail the causes, clinical features, complications, and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) of <i>Asana vai vedippu</i> (Fissure in ano).	CC	MK	K	L&PPT ,TBL	PA,PUZ	F&S		-	LH
CO1, CO2, CO8	Recall the causes, clinical features, Complications, and differential diagnosis, Investigations, diagnosis, and treatment (medical & surgical) of <i>Pavuthiram</i> (Fistula in ano).	CC	MK	K	L&PPT ,FC	COM,S- LAQ	F&S		-	LH
CO1, CO2	Demonstrate the Siddha Pre & Post operative preparation of the patient.	PSY- GUD	MK	SH	DIS,D- BED,C BL,RP	PM,CHK	F&S		-	NLHP7.1
CO1, CO2	Perform the Siddha Pre & Post operative preparation of the patient.	PSY- GUD	MK	SH	KL,PS M,D- M,FC	P-RP,Mini- CEX,P- PRF	F&S		-	NLHP7.2
CO1, CO2	Demonstrate the techniques for rectal examination.	PSY- GUD	MK	KH	SIM,D- M	SP,P-MOD	F&S		-	NLHP7.3
CO1, CO2	Perform the techniques of rectal examination.	CAP	MK	SH	SIM,D- BED,D- M	PM,P- EXAM	F&S		-	NLHP7.4
CO1, CO2, CO8	Perform application of the <i>kara nool</i> in Fistula-in-ano.	PSY- GUD	MK	SH	D-M,SI M,D- BED	SP,P-RP	F&S		-	NLHP7.5
CO1, CO2, CO8	Perform <i>Peechu</i> (Enema / Douch) in a given patient	PSY- GUD	MK	SH	D-M,C BL,D-B ED,PBL	P-RP,SP	F&S		-	NLHP7.6
CO2,	Formulate a dietary plan for anorectal diseases.	PSY-	MK	SH	SIM,DI	M-POS,M-	F&S		V-	NLHT7.1

CO5		GUD			S	CHT,PRN			NAVO	
CO1, CO8	Describe <i>Peechu</i> (Enema/Douch).	CC	MK	K	D-BED, SIM,D, DIS,D- M	SP,P-PRF,P- EXAM	F&S		-	NLHT7.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 7.1	Dietary Plan for Anorectal Diseases.	<p>Discussion: Divide students into small groups to discuss the nutritional needs for anorectal disease patients. Each group creates a comprehensive dietary plan, including meal suggestions and nutritional information. Groups present their plans to the class for a discussion on the effectiveness and practicality of each plan. Duration : 1 hour</p> <p>Simulation: Students simulate planning and preparing meals for patients using hypothetical scenarios. They devise meal plans that meet specific dietary needs and assess their nutritional balance and feasibility. The students then present and review their meal plans, receiving feedback on their nutritional content. Duration : 1 hour</p> <p>Bedside Demonstration: Conduct practical sessions on preparing high-fiber meals. Students observe and discuss the preparation process and the health benefits of these meals. This is followed by a discussion on the importance of diet in managing anorectal diseases, accompanied by Q&A sessions to clarify any doubts. Duration : 1 hour</p>
NLHT 7.2	<i>Peechu</i> (Enema/Douch) Application.	<p>Discussion: Discuss the purpose, benefits, and preparation of <i>Peechu</i> in small groups. The session is followed by a Q&A to clarify doubts and reinforce understanding. Duration : 1 hour</p> <p>Simulation: Students simulate the preparation and application process of <i>Peechu</i> using models in a controlled environment. This allows them to practice the technique, followed by a review of the simulations to highlight proper techniques and common mistakes. Duration : 1 hour</p> <p>Bedside Demonstration: As an experienced practitioner, the teacher can demonstrate the <i>Peechu</i> application. Students observe the preparation and application of <i>Peechu</i> in a clinical setting. This is followed by debrief sessions to discuss observations and reinforce key learning points. Duration : 1 hour</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 7.1	Siddha Pre & Post operative preparation of the patient.	<p>Demonstrate Bedside: Conduct a bedside demonstration of the Siddha pre and post-operative preparation of a patient. This involves showing the specific steps taken before and after surgery to ensure patient safety and recovery. Duration : 1 hour</p> <p>Case-Based Learning: Present case studies to illustrate different scenarios and outcomes in pre and post-operative care. Students analyze these cases to understand the rationale behind each step and discuss best practices. Duration : 1 hour</p>
NLHP 7.2	Siddha Pre & Post operative preparation of the patient.	<p>Problem Solving Method: Present students with common pre and post-operative challenges. Students work in groups to identify and solve these problems, enhancing their critical thinking skills. Duration : 1 hour</p> <p>Flipped classroom : Students can watch video lectures and participate in online discussions before class. In-class activities can include group discussions, hands-on demonstrations, role-playing, and problem-solving exercises to apply their knowledge practically. Duration : 1 hour</p>
NLHP 7.3	Methods of the Rectal examination.	<p>Simulation: Use simulation models to allow students to practice rectal examination techniques in a controlled environment. This helps them gain confidence and proficiency. Duration : 1 hour.</p> <p>Demonstration on Model: Teacher will show a live demonstration of the rectal examination on a model or using per rectal examination trainer, emphasizing proper techniques and common findings. Duration : 1 hour</p>
NLHP 7.4	Examination of Rectum.	<p>Simulation: Have students perform rectal examinations on simulation models. This hands-on practice helps them refine their skills. Duration : 1 hour</p> <p>Demonstration on Model: Conduct a demonstration on a model or per rectal examination trainer, guiding students through each step and correcting any mistakes. Duration : 1 hour</p> <p>Demonstrate Bedside: Show the procedure in a real clinical setting, allowing students to observe and</p>

		understand the nuances of performing a rectal examination on an actual patient. Duration : 1 hour
NLHP 7.5	Application of the <i>kara nool</i> in Fistula-in-ano.	Simulation: Use simulation models to practice the application of <i>Kara Nool</i> in treating Fistula-in-Ano. This helps students understand the procedure's intricacies. Duration : 1 hour Demonstration on Model: Demonstrate the application step-by-step on a model, highlighting key techniques and precautions. Duration : 1 hour Demonstrate Bedside: Provide a bedside demonstration in a clinical setting, showing how the technique is applied to real patients and discussing the outcomes. Duration : 1 hour
NLHP 7.6	Procedure - <i>Peechu</i> (Enema / Douch)	Problem-Based Learning: Present a problem scenario where <i>Peechu</i> is indicated. Students work in groups to devise a treatment plan and discuss the procedure's benefits and potential issues. Duration : 1 hour Case-Based Learning: Analyze case studies where <i>Peechu</i> was used, discussing the indications, methods, and outcomes. This helps students understand the practical application of the technique. Duration : 1 hour Demonstration on Model: Perform a demonstration on a model, showing the preparation, application, and expected results of <i>Peechu</i> . Duration : 1 hour

Topic 8 Study on the following Surgical conditions (LH :7 NLHT: 6 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO8	Explain causes, clinical features, classification, Complications and differential diagnosis Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Yanaikkaal noi</i> (Filariasis)	CC	MK	K	L&PPT, DIS	QZ, T-OBT, DEB	F&S		-	LH
CO1, CO2, CO8	Describe causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Kalladaippu noi</i> (Renal calculi)	CC	MK	K	DIS, L	CHK, DEB, CL-PR	F&S		-	LH

CO1, CO2, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Kandamalai</i> (Cervical adenitis)	CC	MK	K	L&PPT ,BL	CR-W,PA	F&S		-	LH
CO1, CO2, CO8	Describe the causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Piththappai kal</i> - (Gall stones (Cholelithiasis))	CC	DK	K	L&PPT ,IBL	VV-Viva,C L-PR	F&S		-	LH
CO1, CO2, CO8	Explain causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Kanaya thapitham</i> – (Acute & Chronic Pancreatitis)	CC	DK	K	L&GD, L	INT,M- CHT,Log book	F&S		-	LH
CO1, CO2, CO8	Describe the causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Nangoozh thapitham</i> – (Appendicitis)	CC	DK	K	L&GD, L	CHK,RS	F&S		-	LH
CO1, CO2, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Kudal vatham</i> -(Paralytic ileus)	CC	DK	K	L,L_VC	DEB,COM	F&S		-	LH
CO1, CO2, CO8	Create the dietary plan for Renal stones.	PSY- GUD	MK	SH	PL,L& GD	Portfolios, VV-Viva	F&S		-	NLHT8.1
CO1, CO2, CO8	Prepare the dietary plan for Gall stones & Pancreatitis.	PSY- GUD	MK	SH	TBL,BS	M- MOD,INT	F&S		-	NLHT8.2
CO1,	Distinguish advantages and disadvantages of Heat application.	CC	MK	KH	LRI,D-	PRN,PM	F		-	NLHT8.3

CO2, CO8					BED,C BL					
CO1, CO2, CO8	Differentiate the Advantages and disadvantages of Ice application.	CAN	MK	KH	D,TBL	M- CHT,DEB	F		-	NLHT8.4
CO2, CO8	Practice insertion of both male and female catheters on the model.	PSY- GUD	MK	KH	D,SIM	DOPS,P- RP,DOPS	F&S		-	NLHT8.5
CO1, CO2, CO5, CO8	Interpret the given X-Rays,IVP, ECG, USG,CT, Scan and MRI reports.	CE	MK	KH	LRI,CB L,D- BED	Log book,PM	F&S		-	NLHT8.6
CO1, CO2, CO8	Demonstrate the Physical examination of the neck	PSY- GUD	MK	D	D-M	OSPE,Mini- CEX,P- PRF	F&S		-	NLHP8.1
CO1, CO2, CO8	Perform the physical examination of the neck and point out the size, consistency and tenderness of lymph nodes in the neck.	PSY- GUD	MK	D	D- BED,PT	DOPS,SP,O SPE,DOPS	F&S		-	NLHP8.2
CO1, CO2, CO8	Demonstrate the features of Acute abdomen & Chronic abdomen through examination of inspection, palpation, percussion, and auscultation.	PSY- GUD	MK	KH	PSM,SI M	OSCE,Mini- CEX	F&S		-	NLHP8.3
CO1, CO2, CO6, CO8	Perform the physical examination methods of Acute abdomen & Chronic abdomen through inspection, palpation, percussion, and auscultation.	PSY- GUD	MK	SH	D,SIM	P-RP,P- PRF	F&S		-	NLHP8.4
CO1, CO2, CO8	Demonstrate physical examination of the abdominal lump	PSY- GUD	MK	SH	SIM,D- M	P-CASE,D OAP	F&S		-	NLHP8.5

CO1, CO2, CO8	Perform physical examination of the abdominal lump.	PSY- GUD	MK	SH	PBL,SI M	PM,SP	F&S		-	NLHP8.6
CO1, CO2, CO8	Discuss the diagnosis and treatment of Acute abdomen and Chronic abdomen cases.	CAN	MK	KH	CD,LRI	Log book,PA	F&S		-	NLHP8.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 8.1	Dietary plan for Renal stones.	<p>Lecture and Group Discussion : The teacher will deliver a lecture on the causes, types, and dietary management of renal stones. Key topics will include the role of hydration, dietary oxalate, calcium intake, and other nutritional factors. After the lecture, students will engage in a group discussion to explore different dietary strategies, share insights, and ask questions. Duration : 1 hour</p> <p>Peer Learning : Students will be divided into small groups to design a comprehensive dietary plan for renal stone prevention and management. Each group will research and discuss dietary recommendations, including foods to avoid and those that may help reduce the risk of stone formation. Groups will then present their dietary plans to their peers, receiving feedback and refining their strategies. Duration : 1 hour</p>
NLHT 8.2	Dietary plan for Gall stones & Pancreatitis.	<p>Brainstorming : Organize a discussion session where students can brainstorm and share ideas on creating dietary plans for gallstones and pancreatitis. Focus on identifying foods that can help manage symptoms and prevent complications. Encourage students to consider the nutritional needs, potential food triggers, and overall health benefits of different dietary choices. Duration : 1 hour</p> <p>Team-Based Learning : Divide students into teams and assign each team the task of creating a comprehensive dietary plan for gallstones and pancreatitis. Provide them with guidelines and resources on the recommended foods and those to avoid for each condition. Each team will research, discuss, and compile their findings into a detailed dietary plan. Teams will then present their plans to the group, followed by a discussion to compare different approaches and refine the plans. Duration : 1 hour</p>

NLHT 8.3	Advantages and disadvantages of Heat application.	<p>Case-Based Learning : The teacher presents clinical cases where heat application was used as a treatment modality. Students will work in groups to analyze these cases, identify the advantages (such as muscle relaxation, improved blood flow, and pain relief) and disadvantages (like potential burns, increased inflammation, and contraindications in certain conditions) of heat application. Each group will present their findings, followed by a class discussion to compare insights and deepen understanding. Duration : 1 hour</p> <p>Demonstration Bedside :The teacher will conduct a bedside demonstration, showing the proper techniques for heat application and discussing its advantages and disadvantages in real-time. This includes demonstrating various methods (such as hot packs, warm baths, and heat lamps), explaining their effects, and discussing safety precautions. Students will observe the demonstration, practice the techniques on simulation models or peers. Duration : 1 hour</p>
NLHT 8.4	Advantages and disadvantages of Ice application.	<p>Team-Based Learning : Students will be divided into teams and provided with materials on the advantages and disadvantages of ice application. Each team will research, discuss, and compile their findings, focusing on aspects like pain relief, swelling reduction, potential skin damage, and contraindications. Teams will present their conclusions to the class, followed by a discussion to compare insights and understand different perspectives. Duration : 1 hour</p> <p>Demonstration :The teacher will perform a live demonstration of ice application on a volunteer or simulation model. The process will include the correct techniques for applying ice, duration, and precautions to avoid skin damage. The teacher will discuss the immediate effects observed, highlighting both benefits and potential risks. Students will observe, ask questions, and practice the technique under supervision. Duration : 1 hour</p>
NLHT 8.5	Insertion of both male and female catheters on the model.	<p>Demonstration on Model or Simulation :</p> <p>The teacher will start the session by explaining the procedure's importance, indications, and potential complications. Emphasize aseptic techniques and identify anatomical landmarks on the models for both male and female catheterization. Show the proper insertion of the catheter, the application of lubricant gel, and the inflation of the balloon. Attach the catheter to a drainage bag, secure it, and discuss post-procedure care. Allow students to practice the procedure under supervision, providing guidance and feedback. Conclude with a discussion and Q&A session to reinforce key points and</p>

		address any questions. Duration : 1 hour
NLHT 8.6	X-Rays, IVP, ECG, USG, CT, Scan and MRI reports Interpretation.	<p>Case-Based Learning : The teacher will present clinical cases with X-Rays, IVP, ECG, USG, CT, and MRI reports. Students will work in groups to analyze and interpret these reports, identify key findings, and correlate them with patient history and symptoms. Each group will present their interpretations and engage in a class discussion to compare different perspectives and enhance understanding.</p> <p>Duration : 1 hour</p> <p>Lab Report Interpretation or Demonstration Bedside</p> <p>The teacher will conduct a bedside demonstration, interpreting X-Rays, IVP, ECG, USG, CT, and MRI reports in the context of a patient case. This includes discussing the imaging findings, explaining their clinical relevance, and demonstrating how to integrate this information into patient care. Students will observe the demonstration, ask questions, and participate in discussions to solidify their understanding.</p> <p>Duration : 1 hour</p>
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 8.1	Physical examination of the neck	<p>Demonstration on Model: Use simulation models to practice the physical examination of the neck, focusing on palpation and identification of anatomical structures. Duration : 1 hour</p> <p>Demonstration on Bedside: Provide a bedside demonstration to show the examination procedure in a clinical setting, emphasizing real patient interaction. Duration : 1 hour</p>
NLHP 8.2	Physical examination of the neck and point out the size, consistency and tenderness of lymph nodes in the neck.	<p>Practical : The teacher will guide students in a hands-on activity where they practice the physical examination of the neck on simulated patients or peers. This will include inspection, palpation, and assessment of lymph nodes to evaluate their size, consistency, and tenderness. Students will take turns performing the examination and discussing their findings. Duration : 1 hour</p> <p>Demonstration Bedside: The teacher will perform a bedside demonstration on a patient, showing the correct techniques for inspecting and palpating the lymph nodes in the neck. Key aspects such as size, consistency, and tenderness will be highlighted. Students will observe the demonstration, ask</p>

		questions, and then practice the techniques under supervision to ensure proper understanding and application. Duration : 1 hour
NLHP 8.3	Methods of Examining the case of acute abdomen.	<p>Problem Solving Method :The teacher will demonstrate the examination of acute and chronic abdomen features through inspection, palpation, percussion, and auscultation. Students will then work on problem-solving cases where they apply these techniques to diagnose simulated patients. This activity promotes practical skills, critical thinking, and collaborative problem-solving in diagnosing abdominal conditions. Duration : 1 hour</p> <p>Simulation :The teacher will demonstrate inspection, palpation, percussion, and auscultation, highlighting key differences between acute and chronic abdomen features. Students will practice these techniques on simulation models or peers, discuss their findings, and analyze case studies to differentiate between the conditions. Duration : 1 hour</p>
NLHP 8.4	Physical Examination methods of Acute abdomen & Chronic abdomen through inspection, palpation, percussion, and auscultation.	<p>Demonstration or Simulation : The teacher provides an overview of the differences between acute and chronic abdominal conditions and the importance of a thorough physical examination.Students are divided into small groups, each group will practice on an anatomical model or a simulated patient.Each group starts with inspecting the abdomen for visible abnormalities, such as swelling, scars, or discoloration. They document their observations.Groups practice palpation techniques, starting from non-tender areas and systematically moving to tender areas, assessing for lumps, tenderness, and organ size. They differentiate between the findings for acute and chronic conditions.Students perform percussion to evaluate the underlying structures, distinguishing between solid, fluid-filled, and air-filled areas. They document their findings and note differences between acute and chronic conditions.Using a stethoscope, groups listen for bowel sounds and vascular bruits, documenting normal and abnormal findings that can indicate acute or chronic conditions.Each group presents their findings, including any differences observed between acute and chronic abdominal conditions.</p> <p>Duration : 1 hour</p>
NLHP 8.5	Physical examination of the abdominal lump	<p>Demonstration or simulation : The teacher introduces the importance of a thorough physical examination in diagnosing abdominal lumps.The teacher demonstrates proper hand hygiene and the use of gloves before starting the examination.The teacher begins with a visual inspection of the</p>

		<p>abdomen, looking for any visible abnormalities such as swelling, asymmetry, or skin changes. The teacher demonstrates the technique for palpating the abdomen, starting from the non-tender areas and moving systematically. They explain how to assess the lump's size, shape, consistency, mobility, and tenderness.</p> <p>Using a stethoscope, the teacher shows how to listen for bowel sounds and vascular bruits, which can provide additional information about the lump. The teacher explains and demonstrates how to use percussion to evaluate the underlying structures and differentiate between solid and hollow areas. The teacher emphasizes the importance of accurately documenting findings, including the lump's characteristics and any associated symptoms. Duration : 1 hour</p>
NLHP 8.6	Methods of physical examination in an abdominal lump case.	<p>Problem-Based Learning or simulation: The teacher introduces the topic, emphasizing the importance of a thorough physical examination (Inspection, Palpation, Percussion) in diagnosing abdominal lumps. Students are divided into small groups and assigned different case scenarios involving patients with abdominal lumps. Each case provides a detailed patient history and initial findings. Each group researches the possible causes of abdominal lumps, focusing on signs, symptoms, and physical examination techniques. Groups formulate specific questions to guide their physical examination, such as: location, size, shape, and consistency of the lump. lump movable or fixed, associated symptoms, such as pain or changes in bowel habits using models or simulated patients, the groups practice the physical examination techniques, documenting their findings and observations. Duration : 1 hour</p>
NLHP 8.7	Diagnosis and the line of treatment of Acute abdomen and Chronic abdomen cases.	<p>Case diagnosis : Students are divided into small groups and assigned different case scenarios, with some cases depicting acute abdomen conditions and others chronic abdomen conditions. Each group reviews their assigned case, conducts research on potential diagnoses, and outlines possible treatment plans. They document their findings and prepare to present their analysis. Groups present their case analysis to the class, including the patient's history, physical examination findings, diagnostic tests, and proposed treatment plans. They explain their reasoning and decision-making process. The teacher facilitates a class discussion, encouraging students to ask questions, provide feedback, and compare different approaches to diagnosing and treating the cases. The teacher provides additional insights and clarifies any misconceptions. Duration : 1 hour</p> <p>Interpretation of Lab Reports : Students are divided into small groups and assigned different lab reports</p>

to interpret. Each lab report comes with a brief patient history to provide context. Each group reviews their assigned lab report, conducts research using provided materials, and analyzes the results. They document their findings, noting any abnormal values and their potential implications. Groups present their interpretation of the lab report to the class, including the patient's history, lab findings, possible diagnoses, and recommended follow-up actions. They explain their reasoning and how they arrived at their conclusions. The teacher facilitates a class discussion, encouraging students to ask questions, provide feedback, and compare different approaches to interpreting the lab reports. The discussion should cover the significance of various lab values and their relevance to the patient's condition. The class evaluates the accuracy and comprehensiveness of each group's interpretation. Duration : 1 hour

Topic 9 Velvizhi Noikal(Diseases of Sclera) (LH :2 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO8	Describe the definition, Cause, Classification with clinical features and treatment of the following <i>VelvizhiNoikal -Ezhuchi,Padarathi,Nerisal,Putru,Kumulam,Vari.</i>	CC	MK	K	L&PPT,FC	S-LAQ,COM	F&S		-	LH
CO8	Describe the definition, indications and the method of <i>Ratchai</i> (surgical) treatment for <i>Ezhuchi noi.</i>	CC	MK	K	L_VC,EDU	PM,T-OBT	F&S		-	LH
CO1, CO2, CO8	Assess the field of vision.	CAP	MK	SH	PBL,CBL	PM,SP	F		-	NLHT9.1
CO1, CO2, CO8	Demonstrate the Eye Exercises for Squint (Strabismus).	PSY-GUD	MK	SH	RP,D	P-RP,P-PRF	F		-	NLHP9.1
CO1, CO2, CO7, CO8	Demonstrate the skills to manage acute ophthalmic emergencies such as chemical injuries, and traumatic eye injuries on simulation or models.	PSY-GUD	MK	KH	SIM,CBL	P-EXAM,P-PRF	F		-	NLHP9.2

CO1, CO2, CO3, CO5, CO8	Demonstrate the communication skills for educating and counseling patients about eye conditions, treatment options, and preventive measures through interactive discussions.	AFT- VAL	MK	SH	D,D- BED	CHK,SBA	F		-	NLHP9.3
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Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 9.1	Field of vision	<p>Problem-Based Learning : In a problem-based learning session, students are presented with a clinical scenario involving a patient with visual field defects. The teacher provides minimal initial guidance, encouraging students to identify the problem, research relevant information, and develop a plan for assessing the patient's field of vision. Students will work in groups to discuss potential causes of visual field loss, appropriate assessment techniques (such as confrontation visual field test or automated perimetry), and interpret their findings. Each group will present their approach and reasoning, followed by a class discussion to compare different strategies and enhance understanding. Duration : 1 hour</p> <p>Case-Based Learning : The teacher will present detailed case studies of patients with various visual field defects. Students will analyze these cases, focusing on the history, symptoms, and examination findings related to the field of vision. Each group will discuss the methods used to assess the visual field, such as manual perimetry and automated visual field tests, and interpret the results. Students will develop a comprehensive understanding of how to assess and manage visual field defects by correlating clinical findings with the underlying pathology. Duration : 1 hour</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 9.1	Eye Exercises for Squint(Strabismus).	<p>Role Play : The teacher will organize a role-playing session where students take turns acting as healthcare providers and patients. The teacher will first demonstrate various eye exercises for squint, such as pencil push-ups, focus shifting, and convergence exercises. Students will then role-play, with one acting as the healthcare provider guiding the patient (another student) through these exercises.</p>

		<p>Duration : 1 hour</p> <p>Demonstration : The teacher will demonstrate various eye exercises for squint to the students.then allow them to practice. Duration : 1 hour</p>
NLHP 9.2	Skills to manage acute ophthalmic emergencies such as chemical injuries, traumatic eye injuries.	<p>Simulation : The teacher will create a simulated environment to demonstrate the management of acute ophthalmic emergencies such as chemical injuries and traumatic eye injuries. Using mannequins or simulation models, the teacher will guide students through the step-by-step process of handling these emergencies, including initial assessment, immediate interventions, and stabilization. Key skills such as irrigating chemical injuries, managing bleeding, and protecting the eye will be practiced. Students will then take turns in the simulation, applying the demonstrated techniques in a controlled setting. Duration : 1 hour</p> <p>Case-Based Learning : The teacher will present detailed case studies of patients with acute ophthalmic emergencies. Students will work in groups to analyze these cases, identify the critical steps in managing the injuries, and discuss the reasoning behind each intervention. Each group will develop a management plan for their assigned case and present it to the class. Discussions will focus on best practices, potential complications, and the importance of timely intervention. Duration : 1 hour</p>
NLHP 9.3	Communication skills for educating and counseling patients about eye conditions, treatment options, and preventive measures	<p>Demonstration : The teacher will demonstrate effective communication techniques for educating and counseling patients about various eye conditions, treatment options, and preventive measures. This will include role-playing scenarios where the teacher acts as the healthcare provider and a student or volunteer plays the patient. Key skills such as using clear and simple language, showing empathy, active listening, and providing detailed explanations of eye conditions and treatments will be emphasized. Duration : 1 hour</p> <p>Simulation : The teacher will conduct a demonstration, communicating with an actual patient or a simulation model about eye conditions, treatment options, and preventive measures. The teacher will demonstrate how to engage the patient, explain medical information in an understandable manner, address patient concerns, and ensure the patient feels informed and supported. Students will observe the interaction, take notes on effective communication strategies, and practice these techniques in supervised role-playing exercises. Duration : 1 hour</p>

Topic 10 Imai Noikal(Diseases of Eyelids) (LH :2 NLHT: 1 NLHP: 3)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO5, CO8	Describe the definition, Cause, Classification with clinical features and treatment of the following <i>Imai noikal.Pillam,Imai thadippu,Mudamayir,Ezhichakan,Parparoham,Kazhalai,Imai neer paichal,Sutrukulaivu,Puzhukkadi,Imaiuyarchi.</i>	CC	MK	K	DIS,L&PPT	S-LAQ,COM	F&S		-	LH
CO8	Describe the definition,Cause,Clinical features and Surgical treatment for <i>Mudamayir.</i>	CC	MK	K	L_VC,BL	PA,Portfolios	F&S		-	LH
CO8	Describe Surgical treatment for <i>Mudamayir</i> (Trichiasis).	CC	MK	K	EDU	VV-Viva,INT	F&S		-	NLHT10.1
CO6, CO8	Discuss the diagnosis and line of treatment for <i>Imai noikal</i> (diseases of eyelids)	CC	MK	KH	LRI,L&GD,PSM	PM,SP	F&S		-	NLHP10.1
CO5, CO6, CO8	Discuss on the points of Spotter diagnosis for assessing <i>Nagapadalam</i> and Pterigiyam comparatively.	CC	MK	KH	PER,FC,DIS	PA,SP	F&S		-	NLHP10.2
CO1, CO2, CO5	Demonstrate the correct technique for eyelid hygiene and warm compress application for the management of blepharitis.	PSY-GUD	MK	KH	D-BED,SIM	TR,DOPS,DOPS	F		-	NLHP10.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 10.1	Surgical treatment for <i>Mudamayir.</i>	Edutainment : Show a video clip demonstrating the surgical treatment for <i>Mudamayir</i> (Trichiasis). The clip should cover the entire procedure, including patient preparation, anesthesia, surgical techniques (such as epilation, electrolysis, or cryotherapy), and post-operative care. Duration : 1 hour Lecture & Group Discussion : Conduct a discussion session where students can ask questions, share

		<p>their observations, and discuss the surgical techniques used. Focus on the indications for surgery, potential complications, and the expected outcomes. Encourage students to compare surgical treatment with other management options and explore the best practices for ensuring patient comfort and successful treatment. Duration : 1 hour</p>
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 10.1	Diagnosis and line of treatment for <i>Imai noikal</i> (diseases of eyelids)	<p>Problem Solving Method : Students will be presented with a clinical scenario involving a patient with eyelid diseases (<i>Imai Noikal</i>). The teacher will provide minimal initial guidance, encouraging students to identify the problem, research relevant information, and develop a diagnostic and treatment plan. Students will work in groups to discuss potential causes, diagnostic techniques (such as visual examination, patient history, and specific tests), and treatment options. Each group will present their approach and reasoning, followed by a class discussion to compare different strategies and enhance understanding. Duration : 1 hour</p> <p>Discussion : Students will explore the diagnosis and treatment of <i>Imai Noikal</i> in depth. The teacher will present detailed information on various eyelid diseases, their symptoms, and diagnostic criteria. Students will engage in a guided discussion, sharing their insights on the most effective diagnostic methods and treatment options. The discussion will focus on understanding the underlying causes of eyelid diseases, such as infections, allergies, or structural abnormalities, and the appropriate medical or surgical interventions. Duration : 1 hour</p>
NLHP 10.2	Points of Spotter diagnosis for assessing <i>Nagapadalam</i> and Pterigiyam comparatively.	<p>Discussion : Students will explore the diagnostic features of <i>Nagapadalam</i> and Pterigiyam using spotter diagnosis techniques. They will compare and contrast the clinical presentations, risk factors, and diagnostic criteria for both conditions. The discussion will focus on identifying key visual indicators, such as the presence of a wing-shaped fibrovascular growth in Pterigiyam and the specific signs of <i>Nagapadalam</i>. Students will also examine the role of patient history, including exposure to environmental factors like UV light, in diagnosing these conditions. Duration : 1 hour.</p> <p>Flipped class room : Students should research about Pterigiyam beforehand. During the session, the teacher facilitates a discussion comparing <i>Nagapadalam</i> and Pterigiyam and allow the students to</p>

		diagnose the spotters. Duration : 1 hour.
NLHP 10.3	Correct technique for eyelid hygiene and warm compress application	Simulation or Demonstration: Students will be presented with scenarios involving acute ophthalmic emergencies, such as chemical injuries and traumatic eye injuries. The teacher will provide minimal initial guidance, encouraging students to identify the necessary interventions, research relevant information, and develop a plan for managing these emergencies. Students will work in groups to discuss immediate actions, appropriate assessment techniques, and treatment protocols. Each group will present their approach and reasoning, followed by a class discussion to compare different strategies and enhance understanding. Duration : 1 hour

Topic 11 Kadaikkan Noikal (Diseases of Canthus) (LH :2 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO5, CO6	Describe the definition, Cause, Classification with clinical features and treatment of the following <i>Kadaikkan Noikal</i> (Diseases of the Canthus), <i>Kannokkadu</i> , <i>Poochathiram</i> , <i>Neerpadarathi</i> , <i>Rakthapadarathi</i> , <i>Thasaipadarathi</i> , <i>Neerkuvai</i> , <i>Rakthakuvai</i> , <i>Mangisakuvai</i> , <i>Vizhivatham</i> , <i>Viranapparu</i> , <i>Vippuruthi</i> , <i>Imaikurudu</i> , <i>Imaikkumizh</i> , <i>Nethira vayu</i> , <i>Kannoi</i> .	CC	MK	K	L&PPT, L&GD	QZ, T-OBT	F&S		-	LH
CO1, CO2, CO6	Describe cause, Clinical features, diagnosis and treatment of other clinical conditions of Eye as mentioned in <i>Agathiyar Nayana Vithi</i>	CC	MK	KH	L_VC, E DU	Portfolios, S-LAQ	F&S		-	LH
CO1, CO2, CO5	Demonstrate the application of <i>Kalikkam and Anjanam</i>	PSY-GUD	MK	SH	D, SIM	M-POS, IN T, DEB	F&S		-	NLHT11.1
CO1, CO2,	Diagnose and infer the line of treatment of <i>Kadaikkan noikal</i> .	CAN	MK	SH	TBL, RP	OSCE, SP	F		-	NLHP11.1

CO6										
CO1, CO2, CO5, CO6	Interpret the Spotter diagnosis for assessing <i>Mudamayir</i> and Trichiasis comparatively.	CAP	MK	SH	DIS,PB L	DOAP,VV- Viva	F&S		-	NLHP11.2
CO1, CO2, CO5	Demonstrate the correct technique for applying eye drops in patients with canthal diseases, ensuring effective medication delivery and minimizing contamination risk.	PSY- GUD	MK	KH	SIM,D- BED	OSPE,SP,D OPS,DOPS	F		-	NLHP11.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 11.1	Application of <i>Kalikkam and Anjanam</i>	<p>Demonstration : The teacher will perform a live demonstration of the application of <i>Kalikkam and Anjanam</i> on a simulation model or volunteer. This will include:</p> <p>Kalikkam Application: Demonstrating the proper technique for instilling <i>kalikkam</i>, ensuring the correct dosage and method to avoid contamination.</p> <p>Anjanam Application: Showing the correct way to apply Anjanam to the inner eyelid, emphasizing hygiene and patient comfort. Students will observe the demonstration, ask questions, and practice the techniques under supervision to ensure they understand the correct procedures. Duration : 1 hour</p> <p>Simulation : The teacher demonstrates the <i>Kalikkam and Anjanam</i> application using a mannequin or volunteer, emphasizing hygiene and safety. Students practice the techniques in pairs or small groups under supervision, receiving feedback and corrections. A discussion follows to address benefits, challenges, and questions. Conclude by summarizing key steps and best practices, reinforcing the importance of proper application. Duration : 1 hour</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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NLHP 11.1	Diagnosis and Line of treatment of <i>Kadaikkan noikal</i> .	<p>Team-Based Learning : Students will be divided into small groups to explore the diagnosis and treatment of <i>Kadaikkan Noikal</i> . Each team will be given clinical scenarios and tasked with researching relevant information on the condition. They will discuss the symptoms, diagnostic methods, and potential causes. Teams will develop a comprehensive treatment plan, including potential medical interventions. Duration : 1 hour</p> <p>Role Play : Students will simulate the doctor-patient interaction for diagnosing and treating <i>Kadaikkan Noikal</i>. One student will act as the healthcare provider, while another plays the role of the patient presenting with <i>Kadaikkan Noi</i>. The "doctor" will conduct a mock examination, asking about symptoms and performing diagnostic tests. They will then explain the diagnosis to the "patient" and outline a treatment plan, discussing the importance of compliance and follow-up care. Duration : 1 hour</p>
NLHP 11.2	Spotter diagnosis for assessing <i>Mudamayir</i> and Trichiasis comparatively.	<p>Discussion : Students will examine the diagnostic features of <i>Mudamayir</i> (Trichiasis) using spotter diagnosis techniques. The discussion will focus on the clinical presentation, risk factors, and diagnostic criteria for <i>Mudamayir</i> compared to Trichiasis. Key points of comparison will include the presence of misdirected eyelashes in <i>Mudamayir</i>, causing irritation and potential corneal damage, versus the broader condition of Trichiasis, which can result from various etiologies. Duration : 1 hour</p> <p>Problem-Based Learning : Students will be presented with clinical scenarios involving patients with symptoms of <i>Mudamayir</i> and Trichiasis. They will work in groups to identify the problem, research relevant information, and develop a plan for diagnosis and management. Students will discuss the appropriate diagnostic techniques, such as slit-lamp examination and fluorescein staining, to identify and differentiate between <i>Mudamayir</i> and Trichiasis. Duration : 1 hour</p>
NLHP 11.3	Correct technique for applying eye drops in patients with canthal diseases	<p>Simulation: Teacher will Use simulation models to demonstrate the correct technique for applying eye drops. This provides students with a controlled environment to learn and perfect their skills without the pressure of a real patient. Duration : 1 hour</p> <p>Demonstration Bedside: Teacher will conduct bedside demonstrations where students can observe and practice the technique on real patients under supervision. This hands-on experience ensures that students understand the practical aspects of the procedure, including patient interaction and comfort. Duration : 1 hour</p>

Topic 12 Tumors and Cysts (LH :6 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO5, CO8	Explain causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the following Benign tumours, Myoma, Lipoma, Neurofibroma	CC	MK	K	BS,L&P PT	M-CHT,O- GAME	F&S		-	LH
CO1, CO2, CO8	Describe the causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the following Malignant Tumours: Carcinoma, Sarcoma.	CC	MK	K	L&PPT ,LS	T-OBT, Log book	F&S		-	LH
CO1, CO2, CO6, CO8	Explain causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the Melanoma	CC	MK	K	FC,L&P PT	COM,S- LAQ	F&S		-	LH
CO1, CO2, CO5, CO8	Describe the causes, clinical features, classification, Complications and differential diagnosis, Investigations, diagnosis and treatment (medical & surgical) with scientific correlations of Carcinoma of Penis.	CC	MK	K	EDU,L	CWS ,VV- Viva,PRN	F&S		-	LH
CO1, CO2, CO6, CO8	Explain causes, clinical features, Classification, Complications and differential diagnosis, Investigations, Diagnosis and treatment (medical & surgical) with scientific correlations of Carcinoma of Rectum	CC	MK	K	L_VC,B S	T-OBT,CL- PR	F&S		-	LH
CO1, CO2, CO8	Describe the causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the Dermoid cyst, Sebaceous cyst, Baker's cyst	CC	MK	K	L&PPT ,BL	QZ ,DEB	F&S		-	LH

CO2	Demonstrate the use and function of essential equipments in a Minor Operating Theatre.	PSY-GUD	MK	SH	FC,GBL	CHK,SA	F		-	NLHT12.1
CO2, CO8	Maintain register for Surgical Procedures.	PSY-GUD	MK	SH	TBL,RP	Log book,RK	F		-	NLHT12.2
CO2, CO5	Identify and differentiate the characteristics and clinical significance of benign and malignant tumors, as well as the differences between carcinoma and sarcoma.	CC	MK	KH	L&PPT, L&GD	M-CHT,PRN	F		-	NLHT12.3
CO2, CO5	Discuss the different modalities of radiation , Radiation hazards and its prevention as Guest lecture.	CC	DK	KH	L_VC,S DL,PER, DIS	PRN,VV-Viva,INT	F&S		-	NLHP12.1
CO2, CO5	Discuss the practices for minimizing radiation exposure to patients and health care workers including the principles of ALARA (As Low As Reasonably Achievable) as invited talk.	CC	MK	KH	BS,DIS	M-CHT,INT,PRN,QZ	F&S		-	NLHP12.2
CO2, CO5	Apply the principles of tumor staging and grading to assess the severity and progression of cancer.	CAP	MK	KH	DIS,PE R,CD,C BL	M-POS,QZ,PRN,INT, DEB	F&S		-	NLHP12.3
CO2, CO5, CO8	Intercept imaging techniques (X-ray, MRI, CT) and pathological investigations to detect and differentiate tumors.	PSY-GUD	MK	SH	PBL,L_VC	P-EXAM,OSCE	F		-	NLHP12.4
CO2, CO5	Analyze and address ethical issues in the treatment of cancer patients.	CAN	DK	KH	CBL,BS	PRN,COM	F		-	NLHP12.5
CO2, CO5	Discuss the role of nutrition in cancer care and recovery.	CAP	MK	KH	CBL,DIS	PRN,INT, M-CHT	F		V-NAVO	NLHP12.6
CO2	Discuss the concepts of Chemotherapy - Cell cycle regulation and Anti cancer drugs, The cytotoxics including plant alkaloids, Immunotherapy and multi disciplinary approach in management	CC	DK	KH	IBL,DIS	M-CHT,QZ,PM,VV-Viva	F		-	NLHP12.7

	of cancer as invited talk.									
CO2, CO5	Appraise the ethical issues in the treatment of cancer patients.	AFT- REC	DK	KH	FC,TBL	COM,RS	F		-	NLHP12.8

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 12.1	Use and function of essential equipment in a Minor Operating Theatre.	<p>Flipped Classroom : Students will first learn about the essential equipment in a Minor Operating Theatre (MOT) through pre-recorded video lectures, reading materials, and online resources provided before the class. These materials will cover the use and function of key equipment such as surgical instruments (e.g., scalpels, forceps, scissors), sterilization devices (e.g., autoclaves), monitoring devices (e.g., ECG, pulse oximeter), and lighting systems. During the in-class session, students will engage in hands-on activities where they can practice using the equipment under supervision. Duration : 1 hour</p> <p>Game-Based Learning : Create an interactive game or simulation where students must navigate a virtual Minor Operating Theatre. They will be tasked with identifying, selecting, and correctly using various pieces of equipment in different surgical scenarios. For example, the game can present a scenario requiring the use of specific instruments and monitoring devices, and students will earn points for correctly identifying and using each item. Duration : 1 hour</p>
NLHT 12.2	Register for Surgical Procedures.	<p>Role play : Divide students into small groups and assign scenario cards depicting various surgical procedures and potential issues with maintaining registers. Each group prepares and performs a roleplay, demonstrating the process of maintaining a surgical register and addressing potential challenges. Following the presentations, facilitate a discussion to debrief, discuss challenges, propose solutions, and explore alternative approaches. Conclude by summarizing key points and emphasizing the importance of best practices for maintaining accurate and secure surgical registers. Duration : 1 hour</p> <p>Team-based learning : Divide students into small teams and assign scenario cards depicting various surgical procedures and potential issues with maintaining registers. Each team prepares and performs a roleplay, demonstrating the process of maintaining a surgical register and addressing potential challenges. Following the presentations, facilitate a discussion to debrief, discuss challenges, propose</p>

		solutions, and explore alternative approaches. Conclude by summarizing key points and emphasizing the importance of best practices for maintaining accurate and secure surgical registers. Duration : 1 hour
NLHT 12.3	Identification and Differentiation Between Benign and Malignant Tumors.	Lecture with PowerPoint presentation : In the lecture, use a PowerPoint presentation to compare benign and malignant tumors, highlighting their characteristics, clinical significance, and differences between carcinoma and sarcoma with images and clinical examples. Duration : 1 hour Group discussion : Organize a group discussion where students can delve deeper into real-life cases and discuss the impact of tumor behavior on patient management, biological mechanisms of invasiveness, and the challenges in diagnosing and treating different types of tumors. Duration : 1 hour
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 12.1	Different modalities of radiation, Radiation hazards and its prevention as Guest lecture.	Lecture with Videoclip : Provide an overview of different radiation modalities used in medical practice, including X-rays, CT scans, MRI, and radiation therapy. Use a videoclip to visually demonstrate how each modality works and its specific applications in diagnosing and treating various conditions. Highlight the benefits and limitations of each technique. Duration : 1 hour Discussion : Organize a discussion session focusing on the hazards of radiation exposure and strategies for prevention. Discuss the biological effects of radiation, such as cell damage and increased cancer risk. Emphasize the importance of adhering to safety principles like ALARA (As Low As Reasonably Achievable), proper use of shielding, and monitoring exposure levels. Encourage students to share their insights, ask questions, and discuss real-world scenarios where radiation safety measures are crucial. Duration : 1 hour
NLHP 12.2	Practices for minimizing radiation exposure to patients and health care workers including the principles of ALARA (As Low As Reasonably Achievable) as invited talk.	Discussion : Students can explore radiation protection principles, such as time, distance, and shielding, and delve into the ALARA approach, which involves using the lowest effective dose, optimizing imaging protocols, and shielding sensitive body parts during diagnostic imaging and radiotherapy. Duration : 1 hour

		Brainstorming : Students can generate innovative ideas for reducing patient exposure during imaging procedures, enhancing worker safety in radiology departments, and educating patients and staff about radiation risks and safety. Duration : 1 hour
NLHP 12.3	Application of the principles of tumor staging and grading to assess the severity and progression of cancer.	<p>Discussion :Organize a discussion session focused on the principles of tumor staging and grading to assess the severity and progression of cancer. Topics to cover include the TNM classification system (Tumor size, Node involvement, Metastasis), different grading systems (such as the Gleason score for prostate cancer), and the significance of staging and grading in treatment planning and prognosis. Encourage students to share their understanding, ask questions, and discuss how these principles are applied in various types of cancer. Duration : 1 hour</p> <p>Case-Based Learning :Present detailed case studies of patients with different types of cancer. Each case will include clinical information, imaging results, and pathological findings. Students will work in groups to apply the principles of tumor staging and grading to these cases, determining the stage and grade of the cancer based on the provided information. They will discuss the implications of their assessments for treatment options and prognosis.Duration : 1 hour</p>
NLHP 12.4	Intereptation of imaging techniques (X-ray, MRI, CT) and pathological investigations to detect and differentiate tumors.	<p>Lectures with Video Clips : Conduct a series of lectures that cover the principles and applications of various imaging techniques such as X-ray, MRI, and CT scans in detecting and differentiating tumors. Integrate video clips into the lectures to visually demonstrate how each imaging technique works, what the images look like, and how to interpret them. These clips should include examples of different types of tumors and how they appear in each imaging modality.</p> <p>Problem-Based Learning : Engage students in problem-based learning by presenting clinical scenarios that involve detecting and differentiating tumors using imaging techniques and pathological investigations. Students will work in groups to analyze the scenarios, identify the appropriate imaging technique or pathological test, and interpret the results. For example, they might be given MRI or CT scan images and asked to distinguish between benign and malignant tumors based on specific characteristics.</p> <p>Duration - 1hour</p>
NLHP 12.5	Ethical issues in the treatment of cancer patients.	Brainstroming : Divide students into small groups to brainstorm and list ethical issues on sticky notes

		<p>or index cards, then share and organize these into thematic categories. Facilitate a group discussion to delve deeper into the issues, encouraging participants to share experiences and hypothetical scenarios. Following this, brainstorm potential solutions within the groups and present them. Conclude by summarizing key points and proposed solutions, emphasizing the importance of ethical considerations in cancer treatment. Duration : 1 hour</p> <p>Case-Based Learning : Present detailed case studies that highlight various ethical dilemmas in the treatment of cancer patients. Students will analyze these cases, considering factors such as patient autonomy, informed consent, treatment decisions, and end-of-life care. Each group will discuss the ethical issues presented in their assigned case, develop a resolution plan, and present their findings to the class. Duration : 1 hour</p>
NLHP 12.6	Role of Nutrition in Cancer Care and Recovery	<p>Discussion : Organize a group discussion where students explore the role of nutrition in cancer care and recovery. Topics can include the impact of nutrition on treatment side effects, the importance of maintaining a healthy weight, and specific dietary recommendations for different types of cancer. Encourage participants to share their knowledge, experiences, and questions. Duration : 1 hour</p> <p>Case-Based Learning : Present case studies of cancer patients with different nutritional needs and challenges. Students will analyze these cases, considering factors such as the type of cancer, treatment regimen, and individual patient needs. Each group will develop a nutritional plan tailored to their assigned case, focusing on optimizing the patient's recovery and quality of life. Groups will present their plans to the class, discussing the rationale behind their recommendations and potential challenges. Duration : 1 hour</p>
NLHP 12.7	Concepts of Chemotherapy.	<p>Discussion : Facilitate a discussion on chemotherapy, focusing on cell cycle regulation, anti-cancer drugs, cytotoxic agents (like plant alkaloids), immunotherapy, and the multidisciplinary approach in cancer treatment. Encourage students to share insights, ask questions, and explore the challenges and advancements in these areas. Duration : 1 hour</p> <p>Inquiry-Based Learning : Engage students in inquiry-based learning by assigning specific topics related to chemotherapy and cancer management. Each group will research, formulate questions, and present their findings. Topics include cell cycle regulation, anti-cancer drug mechanisms, cytotoxic agent efficacy, immunotherapy principles, and multidisciplinary team roles. Duration : 1 hour</p>

NLHP 12.8	Ethical issues in the treatment of cancer patients.	<p>Flipped classroom : Students can watch video lectures and participate in online discussions before class. In-class activities can include group discussions, role-playing, debates, and problem-solving exercises to apply their knowledge practically. Duration : 1 hour</p> <p>Team-based learning :team-based learning involves students researching topics such as informed consent, end-of-life care, resource allocation, patient autonomy, communication, and cultural sensitivity. Pre-class activities include reading assignments and video lectures. In-class activities involve team discussions, case analysis, role-playing, debates, and team projects to develop comprehensive ethical care plans. Duration : 1 hour</p>

Topic 13 Diseases of Blood and Lymphatic Vessels (LH :5 NLHT: 2 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO4, CO7	Describe the causes, clinical features, Complications and differential diagnosis , Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the following Diseases of arteries, Haemangioma, Aneurysm and EmbolismThrombosis	CC	DK	K	L&PPT ,L_VC	Log book,P ortfolios	F&S		-	LH
CO1, CO2, CO4, CO5, CO6, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the following Diseases of veins -Thrombosis of vein,Varicose vein,	CC	MK	K	L&GD, L&PPT	QZ ,S-LAQ	F&S		-	LH
CO1, CO2,	Describe causes, clinical features,Complications and differential diagnosis, Investigations, diagnosis, treatment (medical &	CC	MK	K	L&GD, L&PPT	PUZ,CL-P R,DEB,QZ	F&S		-	LH

CO4, CO5, CO8	surgical) with scientific correlations of the following Diseases of veins - Venous ulcer, Thrombophlebitis				,L					
CO1, CO2, CO4, CO5	Describe causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the following Diseases of lymphatic vessels and lymph nodes -Lymphangioma	CC	DK	K	L&GD, L	M- POS,INT	F&S		-	LH
CO1, CO4, CO5	Explain causes, clinical features,Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of the following Diseases of lymphatic vessels and lymph nodes - Lymphangitis, Lymphangioma, Lymphadenoma (Hodgekin's disease)	CC	DK	K	L&PPT ,L	CL-PR,S- LAQ	F&S		-	LH
CO2, CO5	Enlist clinical signs of ischemia, identify symptoms, and perform diagnostic procedures to accurately detect and assess the condition.	CE	MK	SH	RP,FC	PM,P- PRF,SBA	F		-	NLHT13.1
CO2, CO5	Diagnosis and assessment of saphenofemoral incompetence, including identifying clinical signs, performing diagnostic procedures, and understanding treatment options.	PSY- GUD	MK	KH	DIS,SI M	Mini- CEX,CHK	F		-	NLHT13.2
CO2, CO4, CO5	Demonstrate the physical examination of a vascular lesion.	PSY- GUD	MK	KH	D,SIM	P- PRF,OSCE	F		-	NLHP13.1
CO2, CO4	Demonstrate the physical examination including Perthes Test & Trendelenburg Test.	PSY- GUD	MK	KH	D,GBL	OSPE,DOA P,DOPS	F&S		-	NLHP13.2
CO2, CO4	Perform the physical examination of a vascular lesion.	PSY- GUD	MK	SH	CBL,D- M,D,SI M,D- BED	P-PRF,P- RP,OSCE	F&S		-	NLHP13.3

CO2, CO4	Demonstrate the examination of Prostate.	PSY- GUD	MK	KH	RP,SIM	OSCE,DOP S,DOPS	F&S		-	NLHP13.4
CO2, CO4	Demonstrate the physical examination of the lymphatic system.	PSY- GUD	MK	SH	DIS,SI M	P-EXAM,S P,OSPE	F&S		-	NLHP13.5
CO2, CO4	Perform physical examination of the lymphatic system.	PSY- GUD	MK	D	PER,CB L,SIM, D,DIS	P-PRF,PRN ,SP	F&S		-	NLHP13.6
CO2, CO4	Demonstrate the steps in pleural and ascitic fluid aspiration using appropriate techniques.	PSY- GUD	MK	KH	D- M,SIM	P-MOD,OS PE	F&S		-	NLHP13.7
CO1, CO4, CO5	Discuss the diagnosis and line of treatment of the diseases of veins, arteries and lymphatic vessels	CAN	MK	KH	PBL,CB L	CHK,CWS	F&S		-	NLHP13.8

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 13.1	Clinical signs of ischemia, including identifying symptoms and diagnostic procedures to accurately detect and assess the condition.	<p>Role play :Divide students into pairs or small groups where one person acts as the patient with ischemic symptoms and the other(s) perform the examination and diagnostic procedures. Duration : 1 hour</p> <p>Flipped classroom : Start with video lectures and supplementary reading materials for pre-class activities. In class, perform a live demonstration of the physical examination and diagnostic procedures, such as physical examination, Ankle-Brachial Index (ABI), Doppler ultrasound, and angiography, on a volunteer or mannequin. Allow students to practice the techniques under supervision, provide feedback, and facilitate group discussions on interpreting findings and their clinical implications.Duration : 1 hour</p>
NLHT 13.2	Diagnosis and assessment of saphenofemoral	Simulation:Using realistic models or volunteers, students can practice identifying clinical signs such as

	incompetence, including identifying clinical signs, performing diagnostic procedures, and understanding treatment options.	varicose veins, swelling, and skin changes. They will learn how to perform diagnostic procedures like Trendelenburg test to assess the function of the saphenofemoral junction. Duration : 1 hour Group discussion:Divide students into small groups and provide detailed case studies, including patient history, symptoms, and diagnostic findings. Each group will analyze the cases, discuss the diagnosis, and explore various treatment options in siddha. Duration : 1 hour
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 13.1	Demonstration of the the physical examination of a vascular leision.	Simulation : use a realistic models or volunteers with simulated lesions. teacher will demonstrate the steps of inspection, palpation, and documentation, focusing on identifying abnormalities such as color changes, size, shape, texture, and tenderness.Duration : 1 hour Demonstration : Teacher will Perform a live demonstration on a volunteer or mannequin, explaining each step and its significance. Allow students to practice the examination techniques under supervision, provide feedback, and facilitate group discussions on interpreting findings and their clinical implications.Duration : 1 hour
NLHP 13.2	Demonstration on the physical examination including Perthes Test & Trendelenburg Test.	Demonstration :In class, perform live demonstrations on a volunteer or mannequin, explaining each step and its significance. Allow students to practice the tests under supervision, provide feedback, and facilitate group discussions on interpreting test results and their clinical implications.Duration : 1 hour Game-based learning : To demonstrate the Perthes and Trendelenburg tests using game-based learning, start with interactive online modules and video tutorials for pre-class activities. In class, use simulation games and team challenges where students practice the tests and interpret results. Incorporate role-playing activities to help students understand different perspectives and improve their communication skills.Duration : 1 hour
NLHP 13.3	Perform the physical examination of a vascular leision.	Case-Based Learning :Students are presented with detailed patient cases involving vascular lesions. Each case includes patient history, symptoms, and images of the vascular lesion. Students work through the cases to identify the lesion, discuss diagnostic methods, and propose examination

		<p>techniques.Duration : 1 hour</p> <p>Simulation : Students can practice performing a physical examination of vascular lesions using realistic models or volunteers with simulated lesions. The simulation should include steps such as inspection (looking for color changes, size, shape), palpation (feeling for temperature, texture, tenderness), and documenting findings.Duration : 1 hour</p>
NLHP 13.4	Demonstration of the Prostate examination.	<p>Demonstration or simulation :The teacher begins with an overview of the examination's importance and procedure, then demonstrates the technique on a model or patient, highlighting key steps. Students practice in small groups, taking turns to perform the digital rectal examination (DRE) while receiving guidance and feedback from the instructor. This is followed by a debriefing session for reflection and discussion, ensuring students gain confidence and proficiency in conducting prostate.Duration : 1 hour</p>
NLHP 13.5	Demonstration of physical examination of the lymphatic system,	<p>Simulation:Use a simulation, mannequins or standardized patients presenting with various lymphatic system abnormalities.Teacher will demonstrate physical examinations, including inspection and palpation of lymph nodes, and student will document their findings.Duration : 1 hour</p> <p>Group Discussions:Provide students with clinical cases involving lymphatic system disorders.Students discuss the cases in small groups with teacher, identifying clinical signs, examination techniques, and management plans.Duration : 1 hour</p>
NLHP 13.6	Performing physical examination of the lymphatic system.	<p>Simulation:Using realistic models or volunteers to practice inspection and palpation of lymph nodes. Record findings accurately during this hands-on practice, focusing on identifying any abnormalities and gaining proficiency in the examination techniques.Duration : 1 hour</p> <p>Discussion:Students can share their observations, discuss any challenges they encountered, and review the proper techniques for examining the lymphatic system.Duration : 1 hour</p>
NLHP 13.7	Demonstration of the steps in pleural and ascitic fluid aspiration using appropriate techniques .	<p>Simulation or Demonstration : The teacher begin the session with a brief explanation of the procedures' purpose and potential complications. then the teacher demonstrate how position the trainer</p>

		<p>appropriately: sitting for pleural aspiration and supine for ascitic aspiration. The teacher shows how to identify anatomical landmarks, maintain aseptic techniques, simulate local anesthesia administration, and insert a needle or catheter to collect simulated fluid. Conclude by simulating post-procedure care and discussing the importance of monitoring for complications. This activity provides hands-on practice in a controlled environment.</p> <p>Duration : 1 hour</p>
NLHP 13.8	line of treatment of diseases of veins, arteries, and lymphatic vessels	<p>Problem-Based Learning (PBL) :Students are presented with real-life clinical problems related to venous, arterial, and lymphatic diseases. They work in small groups to research and discuss the diagnosis and treatment options for these conditions. For example, a case might involve a patient with chronic venous insufficiency, peripheral arterial disease, or lymphedema. Students would explore the pathophysiology, diagnostic tests (e.g., Doppler ultrasound, angiography, lymphoscintigraphy), and treatment modalities (e.g., compression therapy, lifestyle changes, surgical interventions, medications).</p> <p>Duration : 1 hour</p> <p>Case-Based Learning (CBL) :Students are given detailed patient cases and work through them step-by-step to diagnose and develop treatment plans. Each case provides comprehensive patient history, symptoms, lab results, and imaging studies. For instance, a case might describe a patient with deep vein thrombosis (DVT) presenting with leg swelling and pain. Students would discuss the diagnostic process, including risk factors, physical examination findings, and the use of D-dimer tests and venous Doppler ultrasound. They would then propose treatment options such as anticoagulation therapy, lifestyle modifications, and monitoring for complications like pulmonary embolism. Duration : 1 hour</p>

Topic 14 Comparison with Modern diagnosis (LH :3 NLHT: 1 NLHP: 5)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO6	Distinguish the clinical features of following eye diseases with modern diagnosis - <i>Suzhal vanderithal</i> (Vitreous opacities), <i>Naga padalam</i> (Pterygium), <i>Mayir puzhuvettu</i> (Ulcerative blepharitis)	CAN	MK	K	L_VC,L &GD,L	PRN,T-OBT	F&S		V-NN2	LH

CO2, CO6	Distinguish the clinical features of following eye diseases with modern diagnosis - <i>Amaram</i> (Ophthalmia neonatorum), <i>Kuvalai vippuruthi</i> (Dacryocystitis)	CAN	MK	K	L,DIS,L &PPT	QZ ,CL-PR,T-OBT	F&S		V-NN2	LH
CO2, CO6	Interprete the clinical features of following eye diseases with modern diagnosis - <i>Vellezhuthu</i> (Presbyopia), <i>Thurmamisa valarchi</i> (Episcleritis), <i>Mudamayir</i> (Trichiasis)	CAN	MK	K	DIS,L&GD,L,L _VC,L &PPT	PUZ,T-OBT,QZ ,T-CS	F&S		V-NN2	LH
CO2, CO6	Identify common eye dieases like <i>Amaram</i> (Ophthalmia Neonatorum) and <i>Nagapadalam</i> (Pterygium)	CAP	MK	K	L_VC	INT,SBA	F&S		-	NLHT14.1
CO2, CO7	Demonstrate examination of a patient with the condition of <i>Naga Padalam</i> (Pterigyum)	CAP	MK	SH	CBL,D	DOPS,OSCE,DOPS	F		-	NLHP14.1
CO2, CO5	Examine a patient with the condition of <i>Suzhal vanderithal</i> (Vitreous opacities)	CAP	MK	KH	SIM,CBL	P-VIVA,CBA	F&S		-	NLHP14.2
CO2, CO5	Perform examination of a patient with the condition of <i>Mudamayir</i> (Trichiasis)	CAP	MK	D	D,CBL	OSCE,P-PRF,P-VIVA	F&S		-	NLHP14.3
CO2, CO5	Examine a patient with the condition of <i>Vellezhuthu</i> (Presbyopia)	CAP	MK	KH	CBL,PT	DOPS,P-PRF,DOPS	F&S		-	NLHP14.4
CO2, CO5	Demonstrate examination of a patient with the condition of <i>Thurmamisa valarchi</i> (Episcleritis)	CAP	MK	KH	D,SIM	DOPS,P-EXAM,DOPS	F&S		-	NLHP14.5

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 14.1	Identification of the modern diagnostic techniques to identify common eye dieases like <i>Amaram</i> (Ophthalmia Neonatorum) and <i>Nagapadalam</i>	Teacher should divide the students into two groups.

	(Pterygium)	<ul style="list-style-type: none"> • First group is assigned the topic: The modern diagnostic techniques to identify <i>Amaram</i> (Ophthalmia Neonatorum). • Second group is assigned the topic: The modern diagnostic techniques to identify <i>N agapadalam</i> (Pterygium). <p>The students are asked to create video on the assigned topic and instructed to present the video to the other group. Duration : 1 Hour</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 14.1	Demonstration of eye examination of a patient with the condition of <i>Naga Padalam</i> (Pterigyum)	<p>The teacher starts with the demonstration of examination of <i>Naga Padalam</i> (Pterigyum) Divide the students into groups. Each group is instructed to do the procedure</p> <ul style="list-style-type: none"> • Greets the patient and introduces themselves • Explain the procedure, and obtain consent. • Inspect for triangular growth on the conjunctiva extending onto the cornea. • Perform slit lamp examination for size, vascularity, and corneal involvement. • Test visual acuity and assess tear film. • Discuss findings, conservative care, and surgical options, ensuring patient <p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>
NLHP 14.2	Examination of a patient with the condition of <i>S uzhal vanderithal</i> (Vitreous opacities)	<p>The teacher demonstrate the examination of <i>Suzhal vanderithal</i> (Vitreous opacities). Divide the students into groups. Each group is instructed to do the procedure</p>

		<ul style="list-style-type: none"> • Greets the patient and introduces themselves • Explain the procedure, and obtain consent. • Examine for floaters, visual disturbances, or blurred vision. • Check for any underlying conditions like diabetic retinopathy or retinal detachment. • Perform fundoscopy and assess for signs of inflammation or hemorrhage, if needed <p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>
NLHP 14.3	Performing eye examination of a patient with the condition of <i>Mudamayir</i> (Trichiasis)	<p>The teacher starts with the demonstration of examination of <i>Mudamayir</i> (Trichiasis) Divide the students into groups. Each group is instructed to do the procedure,</p> <ul style="list-style-type: none"> • Greet the patient, introduce yourself, • Explain procedure, and obtain consent. • Inspect eyelids and lashes for inward misdirection, redness, or corneal abrasions. • Use slit lamp and fluorescein staining for detailed examination if needed. • Check for irritation signs and document it. <p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>
NLHP 14.4	Examination a patient with the condition of <i>Vellezhuthu</i> (Presbyopia)	<p>The teacher starts with the demonstration of examination of <i>Vellezhuthu</i> (Presbyopia) Divide the students into groups. Each group is instructed to do the procedure</p> <ul style="list-style-type: none"> • Greets the patient and introduces themselves • Explain the procedure, and obtain consent. • Examine for difficulty in reading small print or seeing close objects. • Assess visual acuity at near distances.

		<ul style="list-style-type: none"> • Check for accommodative dysfunction. • Rule out other refractive errors or underlying eye conditions. <p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>
NLHP 14.5	Demonstration of eye examination of a patient with the condition of <i>Thurmamisa valarchi</i> (Episcleritis)	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Examine for localized redness, inflammation, and tenderness in the episcleral tissue. • Assess for discomfort, mild pain, and lack of discharge. • Rule out any Autoimmune disorders like rheumatoid arthritis or lupus. <p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>

Topic 15 Medicines commonly used for Eye Diseases (LH :2 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO6	Describe the ingredients ,method of preparations of <i>Padalathi mathirai, Kankasa mathirai, Matcha Rethinadhi mathirai, I laneer kuzhambu</i> along with the mode of application	CK	MK	K	L&PPT ,FC,RE C,L	CL-PR,QZ	F&S		-	LH
CO2, CO6	Describe the ingredients and method of preparation of <i>Santhirodhaya mathirai, Naarikelanjanam, Pazha kirambu pakkuva vennai, Kandu Parpam, Anda neer</i> along with the mode of application	CK	MK	K	FC,L&P PT ,L	T- OBT,PRN	F&S		V-GMK	LH
CO2,	Advise the preparation of simple medicines for eye application by	CAP	MK	SH	L_V C,D	DOPS,DOP	F		-	NLHT15.1

CO6	video clippings					S				
CO1, CO2, CO6	Perform the various treatment options for various eye diseases by visiting a traditional Eye hospital	PSY-GUD	NK	KH	FV,CBL	PM,CBA	F		-	NLHP15.1
CO1, CO2, CO6	Demonstrate the various treatment options for various eye diseases by visiting a traditional Eye hospital	PSY-GUD	NK	KH	CBL,FV	PM,CBA	F		-	NLHP15.2
CO1, CO2, CO6	Demonstrate the examination techniques with instruments used for diagnosis and treatment of eye diseases by visiting a traditional Eye hospital	PSY-GUD	NK	KH	FV,RLE	C-INT,TR	F		-	NLHP15.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 15.1	Discovery of preparation techniques of simple medicines for eye application by video clippings	The teacher should collect and present video clips demonstrating preparation of eye medicines like <i>Pazhakirambu pakkuva vennai, Kandu Parpam, Anda neer</i> etc. Students should observe the clippings and replicate the process such as selecting raw drugs, purifying and preparing the medicines . Discuss the method of application and usage of the prepared medicine. Duration : 1 Hour

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 15.1	Perform the various treatment options for various eye diseases by visiting a traditional Eye hospital	The teacher should divide the students into four groups, instructed to do the following activities in a rotatory manner,

		<ul style="list-style-type: none"> • Group 1: Raw drug Identification and analysis of its Properties • Group 2: Preparation of Eye drops in various forms like Medicated Oils, Ghee and its application techniques • Group 3: Observing traditional minor surgical interventions • Group 4: Lifestyle Practices and Preventive Care <p>Each group are allowed to discuss the observed examination procedures with others for diagnosis. Duration : 1 Hour</p>
NLHP 15.2	Demonstrating the various treatment options for various eye diseases by visiting a traditional Eye hospital	<p>The teacher should divide the students into four groups, each group focusing on given aspects in a rotatory manner</p> <ul style="list-style-type: none"> • Group 1: Raw drug Identification and analysis of its Properties • Group 2: Preparation of Eye drops in various forms like Medicated Oils, Ghee and its application techniques • Group 3: Observing traditional minor surgical interventions • Group 4: Lifestyle Practices and Preventive Care <p>Each group are allowed to discuss the observed examination procedures with others for diagnosis. Duration : 1 Hour</p>
NLHP 15.3	Demonstrating the examination techniques with instruments used for diagnosis and treatment of eye diseases by visiting a traditional Eye hospital	<p>The teacher should divide the students into two groups, each focusing on eye examinations including</p> <ul style="list-style-type: none"> • GROUP 1: Visual acuity and Pupil examination • GROUP 2: Extraocular muscles examination <p>Each group are allowed to discuss the observed examination procedures with others for diagnosis. Duration : 1 Hour</p>

Topic 16 Diseases of Male Genital organs (LH :7 NLHT: 4 NLHP: 9)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO4, CO6, CO8	Describe causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) with scientific correlations of <i>Aankuri noikal</i> (Diseases of Male genitalia)	CK	MK	K	L&PPT	CL-PR	F&S		-	LH
CO1, CO2, CO4, CO6, CO8	Describe causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis and treatment (medical & surgical) of the diseases of Urethra, Phymosis, Paraphymosis, Testicular tumours	CK	DK	K	L&GD	QZ	F		-	LH
CO2	Define the diseases of <i>Vithai Noikal</i> (Testis & Scrotum)	CK	MK	K	L&GD	PUZ	F		-	LH
CO1, CO2, CO6, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) of the following <i>Vithai Noikal</i> (Diseases of Testis & Scrotum) - Orchitis, Hydrocele, Haematocele, Varicocele	CK	MK	K	L&PPT	DEB	F&S		-	LH
CO1, CO2, CO4, CO6, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) of <i>Vanchanagatha pithukkam</i> (Hernia)	CK	MK	K	L,L&PP T ,L_VC	PRN,T- OBT	F&S		-	LH
CO1, CO2, CO4, CO6, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) of <i>Purasthakola Thabitham</i> (Prostatism) - Acute & Chronic Prostatitis, Benign Prostatic Hyperplasia,	CC	MK	K	L,L&G D	T-CS	F&S		V-UK	LH

CO1, CO2, CO8	Explain causes, clinical features, Complications and differential diagnosis, Investigations, diagnosis, treatment (medical & surgical) of <i>Purasthakola putru</i> (Carcinoma Prostate)	CK	DK	K	L	PRN	F&S		-	LH
CO2	Discuss on the causes of Male infertility	CC	DK	D	TBL	DEB	F		-	NLHT16.1
CO2	Describe the causes of Impotence	CC	DK	D	PER,FC	CL-PR	F		-	NLHT16.2
CO2, CO5	Perform counselling for cases diagnosed as hernia	CAP	NK	D	RP,SIM	SBA	F		-	NLHT16.3
CO1, CO2, CO4	Identify the complications of Hernia and the ways and means to overcome.	CAN	MK	D	SIM	SP	F		-	NLHT16.4
CO2	Demonstrate the physical examination of inguinoscrotal swellings.	PSY-GUD	MK	D	PT,CD	P-ID	F		-	NLHP16.1
CO2	Perform the physical examination of inguinoscrotal swellings.	PSY-GUD	MK	SH	PT	P-PRF	F&S		-	NLHP16.2
CO2, CO8	Identify the diagnosis and line of treatment after examination of inguinoscrotal swellings	PSY-GUD	NK	K	CD	DOPS,DOP S,P-PRF	F&S		-	NLHP16.3
CO2, CO6	Demonstrate the Physical examination of the male external genitalia.	PSY-GUD	MK	KH	CBL,SI M	OSCE,P- PRF	F		-	NLHP16.4
CO1, CO2	Perform the physical examination of the male external genitalia.	PSY-GUD	MK	SH	CBL,K L	OSPE,P- PRF	F		-	NLHP16.5
CO2, CO6	Diagnose the line of treatment after examination of male external genitalia	PSY-GUD	NK	K	PBL,D- M	P-PS,P- PRF	F&S		-	NLHP16.6
CO2, CO6	Demonstrate the techniques of physical examination of a hernia	PSY-GUD	MK	KH	D,CBL	SP,CBA	F&S		-	NLHP16.7

CO2, CO6	Perform physical examination of hernia	CAP	MK	SH	SIM,CB L	P-PRF,DO PS,DOPS	F		-	NLHP16.8
CO2, CO6	Identify the diagnosis and line of treatment after examination of <i>vanchanagatha pithukkam</i> (Hernia)	PSY- GUD	MK	K	CBL,D- BED	SP,Mini- CEX	F&S		-	NLHP16.9

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 16.1	Discussion on the causes of male infertility	<p>The teacher should divide the students into two groups</p> <ul style="list-style-type: none"> • One group analyse and deliver their collected points in the topic of Hormonal imbalances and infections • Another group analyse and deliver in the topic of genetic issues and Life style factors are the cause of infertility <p>After the debate, the teacher should clarify misunderstandings and grasp the complexity and variety of factors involved. Duration : 1 Hour</p>
NLHT 16.2	Description of the causes of Impotence	<p>The teacher should divide the students in four groups Each group is instructed to prepare materials for the given topic by using various source materials. Any one of the student from each group deliver the lecture in the following topics,</p> <ul style="list-style-type: none"> • Psychological causes • Hormonal causes • Vascular causes • Neurological causes

		Duration : 1 Hour
NLHT 16.3	Performing the Counselling for cases diagnosed as hernia	<p>The teacher should divide the students into two groups , In group 1 everyone act as doctor in Group 2 everyone act as patients.All the students in group 1 are asked to council their patients in given scinerio like</p> <ul style="list-style-type: none"> • Clear information about the types of hernia - Inguinal, Umbilical, Femoral, etc. • Underlying causes for the development of hernia • Siddha managemet to reduce symptoms and aggravation. • Dietary and lifestyle changes such as avoiding heavy lifting, managing weight, and engaging in gentle exercises to strengthen the abdominal muscles. <p>Duration : 1 Hour</p>
NLHT 16.4	Identification of the complications of Hernia and the ways and means to overcome.	<p>The teacher should demonstrate the following steps to identify complications of hernia and overcome them in a simulated patient:</p> <ul style="list-style-type: none"> • Assess patient history: Note symptoms, medical history. • Identify complications: Look for signs of incarceration, strangulation, obstruction. • Develop management plans: Create treatment plans for each complication. • Refer the patient for surgical intervention if needed <p>Instruct the students to perform the same procedure to identify the complications of hernia and to overcome it</p> <p>Duration : 1 Hour</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 16.1	Physical examination of inguinoscrotal swellings.	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Inspect the the inguinal canal, scrotum, and surrounding structures (spermatic cord, testicles, and epididymis). • Analyse the swelling and discuss potential conditions, including inguinal hernias, hydroceles, varicoceles, and testicular masses. • Differentiate conditions based on characteristics, such as fluctuation, reducibility, and consistency. <p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>
NLHP 16.2	Physical examination of inguinoscrotal swellings.	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following</p> <ul style="list-style-type: none"> • Greet and introduce yourself to the patient. and obtain the consent • Inspect the inguinal canal, scrotum, and surrounding structures (spermatic cord, testicles, and epididymis). • Analyse the swelling and discuss potential conditions, including inguinal hernias, hydroceles, varicoceles, and testicular masses. • Differentiate conditions based on characteristics, such as fluctuation, reducibility, and consistency. <p>The students are allowed to discuss the examination procedures to confirm diagnosis</p>

		Duration : 1 Hour
NLHP 16.3	Identification of diagnosis and line of treatment after examination of inguinoscrotal swellings	<p>Provide students with detailed patient case studies that include patient history, symptoms, and physical examination findings</p> <p>Based on the history and physical examination the teacher should educate the students to</p> <ul style="list-style-type: none"> • Formulate a list of possible differential diagnosis. • Obtain the radiological and specialised tests to narrow down the possibilities and arrive the most likely diagnosis. • Based on the derranged <i>mukkutram, uyir thathukkal, udar thathukkal, envagai thervu</i>, investigation results, arrive a personalized line of treatment, internal and external medications, and council the patient for diet, lifestyle modification and for further follow up for inguinoscrotal swelling <p>Students are divided into groups, Groups present their findings and receive systematic approach to diagnosis and treatment.</p> <p>The students will gain a vast clinical knowledge in the case of inguinoscrotal swellings</p> <p>Duration : 1 Hour</p>
NLHP 16.4	Physical examination of the male external genitalia.	<p>The teacher should demonstrate the students to start with the basics of clinicals and progress with the examination like</p> <ul style="list-style-type: none"> • Greet and introduce yourself to the patient. and obtain the consent • Demonstrate the examination of male external genitalia, including structures such as the penis, scrotum, testes, epididymis, and spermatic cord. • Demonstrate correct palpation techniques to assess any abnormality in size, consistency and tenderness.

		<p>The students are allowed to discuss the examination procedures to confirm diagnosis Duration : 1 Hour</p>
NLHP 16.5	Physical examination of the male external genitalia.	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following</p> <ul style="list-style-type: none"> • Greet and introduce yourself to the patient and obtain the consent • Perform the examination of male external genitalia, including structures such as the penis, scrotum, testes, epididymis, and spermatic cord. • Perform correct palpation techniques to assess any abnormality in size, consistency and tenderness. <p>Students are allowed to discuss the observed examination procedures for diagnosis. Duration : 1 Hour</p>
NLHP 16.6	Diagnose the line of treatment after examination of male external genitalia	<p>The teacher should provide detailed patient case studies to the students that include patient history, symptoms, and physical examination findings Based on the history and physical examination the teacher should educate the students to</p> <ul style="list-style-type: none"> • Formulate a list of possible differential diagnosis. • Obtain the radiological and specialised tests to narrow down the possibilities and arrive the most likely diagnosis. • Based on the derranged mukkutram, investigation results, arrive a personalized line of treatment, internal and external medications, • Council the patient for diet, lifestyle modification and for further follow up for diagnosed condition of male external genitalia <p>Students are divided into groups, Groups present their findings and receive systematic approach to</p>

		<p>diagnosis and treatment.</p> <p>Through this the students will gain a vast clinical knowledge in the diseases</p> <p>Duration : 1 Hour</p>
NLHP 16.7	Techniques of physical examination of a hernia	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Greet and introduce yourself to the patient and obtain the consent • Inspect the inguinal canal, scrotum, and surrounding structures (spermatic cord, testicles, and epididymis). • Analyse the swelling and discuss potential conditions, including inguinal hernias, hydroceles, varicoceles, and testicular masses. • Differentiate conditions based on characteristics, such as fluctuation, reducibility, and consistency. • Educate examination of Cough impulse test and Transillumination test <p>The students should discuss the appropriate examination procedures to confirm the diagnosis</p> <p>Duration : 1 Hour</p>
NLHP 16.8	Physical examination of hernia	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following</p> <ul style="list-style-type: none"> • Greet and introduce yourself to the patient. and obtain the consent • Inspect the inguinal canal, scrotum, and surrounding structures (spermatic cord, testicles, and epididymis). • Analyse the swelling and discuss potential conditions, including inguinal hernias, hydroceles, varicoceles, and testicular masses. • Differentiate conditions based on characteristics, such as fluctuation, reducibility, and

		<p>consistency.</p> <ul style="list-style-type: none"> • Perform examination of Cough impulse test and Transillumination test. <p>Students are allowed to discuss the examination procedure to confirm the diagnosis. Duration : 1 Hour</p>
NLHP 16.9	Identification of the diagnosis and line of treatment after examination of <i>vanchanagatha pithukkam</i> (Hernia)	<p>The teacher should provide detailed patient case studies to the students that include patient history, symptoms, and physical examination findings Based on the history and physical examination the teacher should educate the students to</p> <ul style="list-style-type: none"> • Formulate a list of possible differential diagnosis. • Obtain the radiological and specialised tests to narrow down the possibilities and arrive the most likely diagnosis. • Based on the derranged mukkutram, investigation results, arrive a personalized line of treatment, internal and external medications, and council the patient for diet, lifestyle modification and for further follow up for hernia. <p>Groups present their findings and receive systematic approach to diagnosis and treatment. Through this the students will gain a vast clinical knowledge in the case of Hernia. Duration : 1 Hour</p>

Topic 17 Study of most prevalent Eye Diseases (LH :9 NLHT: 6 NLHP: 11)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5	Describe the clinical significance, prevention and treatment of Conjunctivitis (other than Viral) and its treatment.	CK	MK	K	L,L_VC	QZ ,M-POS	F&S		-	LH
CO2	Describe the causes, clinical features and diagnosis of Glaucoma.	CK	DK	K	L,L&PP T	QZ ,PRN	F&S		-	LH

CO2, CO5, CO6	Describe the clinical significance, prevention and treatment of <i>V ellezhuthuNoi</i> (Presbyopia)	CK	MK	K	L,L&PPT, L_VC	O-QZ,CL-PR	F&S		-	LH
CO2, CO5, CO6	Explain the clinical significance, prevention and treatment of <i>K ittapparvai</i> (Myopia)	CK	MK	K	SY,L,L&PPT	CL-PR,QZ	F&S		-	LH
CO2, CO5	Explain the clinical significance, prevention and treatment of Astigmatism	CK	DK	K	L,L&PPT	DEB,O-GAME	F&S		-	LH
CO2, CO5	Describe the clinical significance, prevention and treatment of Nystagmus	CK	MK	K	L,SY,L&PPT	PRN,WP	F&S		-	LH
CO2, CO6	Explain the causes and prevention of <i>Kurudu</i> (Blindness)	CK	MK	K	L&GD, L	PRN,M-CHT	F&S		-	LH
CO2	Describe the prevention and treatments of Glaucoma	CK	DK	K	L&PPT,CD,DIS,L	QZ,PRN	F		-	LH
CO2, CO5	Demonstrate preventive measures of viral infections of eye.	CAP	DK	KH	RP,D	DEB,O-GAME	F		-	NLHT17.1
CO2, CO5	Demonstrate the preventive measures to be taken to retain the vision in Glaucoma	PSY-GUD	DK	D	DIS,KL	M-CHT,INT	F		-	NLHT17.2
CO2, CO5	Describe the causes, clinical features, diagnosis and treatment of other viral infections of Eye	CK	MK	K	L,L&PPT	QZ,T-OBT	F&S		-	LH
CO2	Interpret the causes, clinical features, Diagnosis and treatment of Astigmatism, Nystagmus.	CAP	DK	SH	CBL,TBL	SP, C-VC	F&S		-	NLHT17.3
CO2	Describe the causes, clinical features, Diagnosis and treatment of Conjunctivitis.	PSY-GUD	DK	KH	RLE,PSM	SP,CHK	F&S		-	NLHT17.4

CO2	Interpret the causes, clinical features, Diagnosis and treatment of Presbyopia, Myopia	CAN	DK	KH	SIM,DI S	PM,PUZ	F&S		-	NLHT17.5
CO2, CO5	Demonstrate the methods of Physical examination to evaluate Glaucoma.	PSY- GUD	NK	SH	D- M,IBL	P- PRF,OSCE	F&S		-	NLHP17.1
CO2	Practice the counseling strategies to educate a patient about possible causes that lead to blindness and preventive care.	AFT- VAL	NK	D	RP,PER	PM,INT	F&S		-	NLHP17.2
CO2, CO5	Demonstrate clinical examination to evaluate a patient with suspected Nystagmus	CAP	NK	D	D,CBL	P-PS,P- PRF	F&S		-	NLHP17.3
CO2	Plan the prophylactic measures to prevent different types of Conjunctivitis.	CAP	NK	D	CBL,RL E	P-PRF,Log book	F&S		-	NLHP17.4
CO1, CO7	Prepare and apply <i>Sirukala poo thylam</i> for <i>Padalam</i> (Pterygium).	PSY- GUD	NK	SH	DL,KL, PT	PM,INT	F		-	NLHP17.5
CO7	Demonstrate the procedure of visualizing moon through <i>palagani pinnal</i> to prevent Eye diseases.	PSY- GUD	NK	SH	KL,SIM	SP,INT	F		-	NLHP17.6
CO1, CO7	Apply <i>palakirambu pakuva vennai</i> for <i>Varatchi thimiram</i> (Xerophthalmia).	PSY- GUD	NK	KH	D,CBL, PT	CL-PR,P- PRF	F&S		-	NLHP17.7
CO1, CO5	Organise guest lecture on principles of eye donation.	PSY- GUD	NK	KH	SY	CL-PR,TR	F		-	NLHT17.6
CO2, CO7	Aspire to be an entrepreneur in the Management of eye health.	AFT- VAL	NK	D	DA,PT	PM,PRN	F		-	NLHP17.8
CO2	Identify the different conditions of Eye Diseases by the given OCT, CT and MRI Reports.	CAP	DK	KH	LRI,CD	P-ID,PRN	F&S		-	NLHP17.9
CO2	Discuss on the points of Spotter diagnosis for assessing <i>Kuvalai vippuruthi</i> and Dacryocystitis comparatively.	CC	DK	D	CD,PER	P-ID,INT	F&S		-	NLHP17.10

CO2	Compare Spotter diagnosis for <i>Mayir Puzhuvettu</i> and Ulcerative blepharitis.	CC	NK	SH	ML,PB L	P-ID,INT	F		-	NLHP17.11
Non Lecture Hour Theory										
S.No	Name of Activity	Description of Theory Activity								
NLHT 17.1	Demonstration of preventive measures of viral infections of eye.	<p>The teacher will divide the students in to 5 Groups and in each group one student acts as the Doctor and another as a patient.</p> <ul style="list-style-type: none"> • Educate the importance of clean hands in preventing viral spread to the eyes. • Highlight the risks of transferring viruses by touching the eyes and promote alternatives. • Use tissues to wipe the eyes and dispose of them immediately in a covered bin. • Teach the importance of personal hygiene and avoiding shared items to prevent cross-infection • The teacher facilitates discussions among groups and summarises the keypoints <p>Duration : 1 Hour</p>								
NLHT 17.2	Demonstration of the preventive measures to be taken to retain the vision in Glaucoma	<p>The teacher should divide the students into 2 groups.</p> <ul style="list-style-type: none"> • One group is instructed to prepare models to show how elevated IOP affects the optic nerve • Another group is instructed to prepare charts to understand warning signs for blurred vision, halos around lights, or eye pain need immediate attention. <p>The students are assigned to discuss the conditions among themselves using the prepared models and charts.</p> <p>Duration : 1 Hour</p>								
NLHT 17.3	Interpretation the causes, clinical features,	Team Based Learning:								

	Diagnosis and treatment of Astigmatism, Nystagmus.	<p>The teacher will give a brief explanation about the topics. Then, students will be divided into two groups, and each group will be assigned a topic. The groups will collaborate to research their assigned topics, prepare a material and present the topic to others.</p> <p>Duration : 1 Hour</p>
NLHT 17.4	Description of the causes, clinical features, Diagnosis and treatment of Conjunctivitis.	<p>The teacher will present a real-life scenarios of conjunctivities to the students .students will be divided into groups and each group will analyze the causes, clinical features, diagnosis of conjunctivitis and suggest treatment plan.The teacher facilitates discussions among groups and summarises the keypoints</p> <p>Duration : 1 Hour</p>
NLHT 17.5	Interpret the causes, clinical features, Diagnosis and treatment of Presbyopia, Myopia	<p>The teacher will present a case scenarios on myopia and pressmyopia.Students will be divided in to groups to analyze causes, symptoms, and preventive strategies.Advice the treatment options such as Ponnangani Nei (internal) wearing glasses, contact lenses, or refractive surgery (LASIK) if needed,The teacher facilitates discussions among groups and summarises the keypoints</p> <p>Duration : 1 Hour</p>
NLHT 17.6	Organization of guest lecture on principles of eye donation.	<p>The teacher should invite an esteemed ophthalmologist to deliver a presentation on this topic, covering</p> <ul style="list-style-type: none"> • Medical aspects, eligibility criteria and corneal transplantation procedures. • Emphasize awareness strategies through engaging talks. • Incorporate an interactive Q&A session to foster student engagement. • Highlight the significance of eye donation in restoring sight. <p>The students are supposed to gain atmost knowledge from the talk.</p> <p>Duration : 1 Hour</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 17.1	Demonstration of the methods of Physical examination to evaluate Glaucoma.	<ul style="list-style-type: none"> • Inspection: Observe the patient's general appearance, posture, skin, and visible abnormalities in the targeted area. • Palpation: Use hands to feel for texture, temperature, tenderness, and masses. • Percussion: Tap the area gently to assess underlying structures for resonance or dullness. • Auscultation: Use a stethoscope to listen for abnormal sounds in lungs, heart, or abdomen. • Documentation: Record all findings systematically for analysis and diagnosis. <p>Duration : 1 Hour</p>
NLHP 17.2	Demonstrating the counseling strategies to educate a patient about possible causes that lead to blindness and preventive care.	<p>In a role-play, The teacher will demonstrate the causes and preventive measures of blindness in a stimulated patient.</p> <ul style="list-style-type: none"> • Counsel patients on blindness prevention by explaining causes like diabetes, glaucoma, cataracts, infections, and injuries • .Emphasize regular eye exams for early detection and control of conditions like hypertension and diabetes. • Encourage avoiding smoking and seeking prompt treatment for eye issues to maintain vision health. • Highlight protective measures like wearing sunglasses and timely treatment for infection. <p>Duration : 1 Hour</p>
NLHP 17.3	Demonstration of the clinical examination to evaluate a patient with suspected Nystagmus	<ul style="list-style-type: none"> • The teacher should demonstrate and ask the students to Greet and introduce yourself to the patient. • Choose an appropriate clinical site and ensure it has adequate facilities to conduct the procedure and obtain the consent from the patient

		<ul style="list-style-type: none"> • Asses the patient's vital elements, uyir thathukkal, udar thathukkal and envagai thervu • Perform general examination and systemic examination. • Evaluate nystagmus through history taking (onset, triggers, symptoms), gaze testing (direction, intensity),and associated signs like vertigo or oscillopsia. <p>Duration : 1 Hour</p>
NLHP 17.4	Demonstration of the prophylactic measures to prevent different types of Conjunctivitis.	<ul style="list-style-type: none"> • Evaluate the patient's imbalanced mukkuttram, naadi and analyse the cause for the disease. • Administer siddha formulations like Triphala chooranam, Ponnangani nei and Brahmi nei to nourish the nervous system. • Stimulate specific varma points for eye diseases. • Recommend yoga, meditation, and dietary modifications <p>Monitor progress and adjust therapies as needed.</p> <p>Duration : 1 Hour</p>
NLHP 17.5	Preparation and application of <i>Sirukala poo thylam</i> for <i>Padalam</i> (Pterygium).	<p>The teacher should demonstrate the procedure for preparation and application of <i>sirukala poo thylam</i>,</p> <ul style="list-style-type: none"> • Take an earthen mud part and add sesame oil along with <i>sirukala poo</i> (<i>Carissa carandas</i>) • Close the mud pot with a thin clean cloth • Keep the mud pot in sunlight (<i>Suriya pudam</i>) and let the essence seep into the oil. • Instill 2 drops of prepared oil every night into the affected eye. <p>The students are asked to document the prognosis.</p> <p>Duration : 1 Hour</p>
NLHP 17.6	Demonstrate the procedure of visualizing moon through <i>palagani pinnal</i> to prevent Eye diseases.	<p>The teacher should demonstrate the procedure as</p>

		<ul style="list-style-type: none"> • Looking at the moon for sometime through the fingers of the hands making them in the shape of a latticed window (<i>palagani pinnal</i>) • See the moon through the fingers for 24 minutes when the sky is clear. • After this eye should be rinsed with clean water and eyelids are rubbed gently. <p>The students are instructed to do the procedure as a prophylactic measures for eye disease. Duration : 1 Hour</p>
NLHP 17.7	Application of <i>palakirambu pakuva vennai</i> for <i>Varatchi thimiram</i> (Xerophthalmia).	<p>The teacher should demonstrate the procedure of application of <i>palakirambu pakuva vennai</i>,</p> <ul style="list-style-type: none"> • Externally apply <i>palakirambu pakuva vennai</i> on the lacrimal caruncle of the eye. • This procedure induces lacrimation in the eye thus reducing dryness of the eye (<i>Varatchi thimiram</i>) • Students are instructed to perform the demonstrated procedure in a patient suffering with <i>Varatchi thimiram</i> (Xerophthalmia). • Document the prognosis. <p>Duration : 1 Hour</p>
NLHP 17.8	Build entrepreneurship in Management of eye health.	<p>The teacher should encourage the students to do the following steps involved in entrepreneurship</p> <ul style="list-style-type: none"> • Analyse market research and Identify needs in eye care products • Assess technical, financial, and regulatory aspects. • Develop eye drops incorporating natural extracts from flowers like <i>Nanthiyavattai</i>, <i>Kala</i>, and <i>Sirunerunjil</i>, among others. • Develop capsules or powders containing herbs such as <i>ponnanganni</i>, <i>triphala</i>, and others to enhance vision and eye health. • Prepare pre-packaged herbal powder as cooling eye masks using Neem, Turmeric, and

		<p>Sandalwood</p> <ul style="list-style-type: none"> • Prepare an eye mask using Aloe vera, cucumber, and rose water for a calming treatment. <p>Duration : 1 Hour</p>
NLHP 17.9	Identification of the different conditions of Eye Diseases by the given OCT, CT and MRI images	<p>The teacher should divide the students in groups and make them to</p> <ul style="list-style-type: none"> • Examine OCT Reports by looking for retinal layer abnormalities and fluid accumulation • Analyze CT Scans by evaluating orbit anatomy for fractures, tumors and calcifications • Interpret MRI Scans by assessing soft tissues for optic nerve compression, ischemia or vascular abnormalities. • Combine imaging results with clinical symptoms to differentiate conditions. <p>The students are instructed to conclude and document the suspected eye disease, suggesting further tests if needed.</p> <p>Duration : 1 Hour</p>
NLHP 17.10	Discussion on the points of Spotter diagnosis for assessing <i>Kuvalai vippuruthi</i> and Dacryocystitis comparatively.	<p>The teacher should divide the students into five groups Each group should Identify and discuss the mentioned key points in the given spotter and confirm the diagnosis with modern terminology in rotatory manner.</p> <p>Spotter Preparation: Select clinical images of eye conditions such as</p> <ul style="list-style-type: none"> • Swelling at the site of the sac • inflammed conjunctiva • Mucus or Mucopus discharge <p>Duration : 1 Hour</p>

NLHP 17.11	Comparison of Spotter diagnosis for <i>Mayir Puzhuvettu</i> and Ulcerative blepharitis.	<p>The teacher will divide the students into 5 groups. Each group should Identify and discuss the mentioned key points in the given spotter and confirm the diagnosis with modern terminology in rotatory manner.</p> <p>Spotter Preparation: Select clinical images of the condition such as</p> <ul style="list-style-type: none"> • Yellow crusts adhere the lashes together • Small ulcers with bleeding present around the bases of the lashes. • Eye lashes fall out • Redness of the edges of the eye lids <p>Duration : 1 Hour</p>
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Paper 2 (THOAL MARUTHUVAM, KATHU, MOOKKU, THONDAI & PAL MARUTHUVAM (DERMATOLOGY, ENT AND DENTISTRY))

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	J3 Integration	K3 Type
Topic 18 Aids to healthy Skin (LH :1 NLHT: 2 NLHP: 0)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5, CO7	Explain Principles of Skin care, Dietary advices & Medicines for bath (<i>Kuliyal podi, Nalanguma & Panchakarpam</i>)	CC	MK	KH	L&PPT, L, L_V C	T-CS, T-OBT	F&S		V-NAVO	LH
CO2,	Describe relevant prophylactic measures to overcome common	CC	MK	KH	FC,BS	P-POS,P-	F		-	NLHT18.1

CO5	skin lesions					VIVA				
CO1, CO2, CO5	Demonstrate home made herbal cosmetics for the prevention of common skin lesions and to improve skin complexion	CAP	DK	KH	D,PT	P- VIVA,PRN	F&S		-	NLHT18.2

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 18.1	Prophylactic measures to overcome common skin lesions	Brainstroming : (Duration : 1 Hour)The teacher starts the session with a brief introduction to the importance of prophtlactic measures and an overview of common skin lesions. Teams then brainstorm specific preventive measures for assigned skin lesions and present their findings. The session concludes with a wrap-up and discussion on implementing these measures in daily life, emphasizing the importance of preventive care in maintaining skin health. Flipped Classroom : (Duration : 1 Hour) Students will first independently study provided materials, including readings and a video lecture, and summarize key points along with proposing new preventive measures. In class, they'll review these materials, discuss and refine their ideas in groups, present their refined measures, and finally, reflect on their learning and its practical applications. This approach promotes active learning and collaboration.
NLHT 18.2	Home made herbal cosmetics for the prevention of common skin lesions and to improve skin complexion.	Practical or Demonstration : The teacher will introduce the concept, discussing the benefits of natural herbal cosmetics. Following this, the teacher demonstrates how to prepare a Face Mask, Face Scrub, and a Face Pack by using natural herbs. Students are then divided into small groups to practice making these cosmetics under the teacher's guidance. Duration : 1 Hour

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
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Topic 19 Ovammai Noikal (Allergic skin diseases) (LH :6 NLHT: 3 NLHP: 9)										
A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5, CO6, CO7	Describe the Definition, Causes and Classification with clinical features of <i>Karappan</i> (Dermatitis / Eczema) as per <i>Yugi Vaidhya Chinthamani</i>	CK	MK	KH	L,DIS,L &PPT	P-CASE,T-OBT	F&S		-	LH
CO2, CO5, CO6, CO7	Differentiate each type of <i>Karappan</i> (Dermatitis / Eczema) as per the classifications mentioned in <i>Yugi Chinthamani</i> .	PSY-GUD	MK	KH	TBL,BS	M-CHT,P-VIVA	F&S		-	NLHT19.1
CO2, CO5, CO6, CO7	Explain Eczematous diathesis.	CC	MK	KH	L,L&PPT	CL-PR,T-OBT	F&S		-	LH
CO2, CO5, CO6, CO7	Differentiate Papular urticaria, Angio neurotic oedema, Purpura, Anaphlaxis.	CC	MK	KH	L&PPT ,L,L_V C	O-QZ,T-OBT	F&S		-	LH
CO2, CO5, CO6, CO7	Distinguish between Contact Dermatitis & Air Borne Contact Dermatitis.	CC	MK	KH	L_VC,L &PPT ,L	O-QZ,DEB	F&S		-	LH
CO2, CO5, CO6, CO7	Describe Neuro Dermatitis, Infectious Eczematoid Dermatitis and Atopic Dermatitis.	CK	MK	KH	L,L_VC	DEB,PRN	F&S		-	LH

CO2, CO5, CO6, CO7	Describe <i>Kanakadi, Silvidathadippu</i> (urticaria).	CK	MK	K	L,L_VC	QZ ,CL-PR	F&S		-	LH
CO2	Demonstrate exact blood letting practice (<i>Kuruthivangal</i>) to cure chronic local eczematous lesions.	PSY-GUD	MK	KH	SY,SIM	T-OBT,QZ	F&S		-	NLHT19.2
CO2, CO5, CO6, CO7	Describe the treatment of <i>Karappan</i> (Eczema) with reference to the type of presentation.	CK	MK	K	CBL,L &PPT	PRN,P-CASE,P-ID,T-CS,Log book	F&S		-	NLHT19.3
CO2, CO5, CO6, CO7	Demonstrate the humoral predominance based on <i>Envagai thervu</i> (Siddha diagnostic tools) of the <i>Karappan</i> patient.	PSY-GUD	MK	KH	PBL,D	P-EXAM,P-VIVA	F&S		-	NLHP19.1
CO2, CO5, CO6, CO7, CO8	Display the similarities and differences between Endogenous and Exogenous Eczema features.	PSY-GUD	NK	SH	FC,CBL	P-REC,P-VIVA,QZ ,Log book	F&S		-	NLHP19.2
CO1, CO2, CO5, CO7	Analyse the effects of applying facial foundations, powders & facial blushes	CAN	DK	SH	DIS,PE R	P-PRF,P-VIVA	F&S		-	NLHP19.3
CO1, CO2, CO5, CO6, CO7	Analyse the effects of applying facial masks, face packs & skin cleansers.	CAN	MK	SH	RLE,CB L	P-VIVA,PR N,P-EXAM	F&S		-	NLHP19.4

CO2, CO5, CO6, CO7	Demonstrate the methods of physical examination to differentiate the Thadippu (Urticarial weal) and Angioneurotic oedema for the given patient.	PSY- GUD	NK	KH	PBL,D- BED	P-PRF,PRN	F&S		-	NLHP19.5
CO1, CO2, CO5, CO6, CO7	Demonstrate patient centric relevant external therapy <i>Vamanaam/ Viresanam/ Peechu</i> to correct digestion, absorption and to tone up immune system.	PSY- GUD	MK	KH	SIM,D	PRN,P- VIVA	F&S		-	NLHP19.6
CO1, CO2, CO3, CO4, CO5, CO6, CO7	Perform <i>Attai vidal</i> (Leech application) in treating Eczema	PSY- GUD	MK	SH	D- BED,PT	P-VIVA,P- PRF	F&S		-	NLHP19.7
CO1, CO2, CO3, CO4, CO5, CO6, CO7	Perform <i>Peechu</i> for treating <i>Karappan</i> according to humoural predominance.	PSY- GUD	MK	SH	SIM,PT	P-PRF,P- EXAM	F&S		-	NLHP19.8
CO1, CO2, CO3, CO4, CO5, CO6,	Perform the techniques of Vamanam(Emetic therapy) for <i>Karappan</i> .	PSY- GUD	MK	SH	CBL,D- BED	P-VIVA,P- PRF	F&S		-	NLHP19.9

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 19.1	Types of <i>Karappan</i> (Dermatitis / Eczema).	<p>Team-Based Learning: Students are divided into small teams and assigned different types of <i>Karappan</i> (Dermatitis/Eczema) as classified in <i>Yugi Chinthamani</i>. Each team analyzes a case study related to their assigned type, discusses key symptoms and diagnostic features, and presents their findings to the class. The instructor provides feedback, clarifies misconceptions, and emphasizes accurate diagnosis and individualized treatment plans based on <i>Siddha</i> medicine principles. This collaborative activity promotes critical thinking and a deeper understanding of <i>Karappan</i> classifications. Duration : 1 Hour</p> <p>Brainstorming: Students are divided into small groups to differentiate the types of <i>Karappan</i> (Dermatitis/Eczema) as classified in <i>Yugi Chinthamani</i>. Each group brainstorms the key symptoms, diagnostic features, and treatments for their assigned type, referring to provided materials. The groups then share their findings, compiling a comprehensive list of differentiating factors, followed by an open discussion. The instructor summarizes key points, emphasizing the importance of accurate diagnosis and individualized treatment plans based on <i>Siddha</i> medicine classifications. Duration : 1 Hour</p>
NLHT 19.2	Blood letting practice (<i>Kuruthivangal</i>) to cure chronic local eczematous lesion	Symposium or Simulation: The teacher demonstrates the <i>Siddha</i> practice of bloodletting (<i>Kuruthivangal</i>) to treat chronic local eczematous lesions using a simulation model or patient. The session includes a brief introduction, a historical context of the practice, and a detailed demonstration of the bloodletting procedure, emphasizing proper technique and patient safety. This is followed by an interactive Q&A session where students can ask questions and discuss the procedure. Duration : 1 Hour
NLHT 19.3	Treatment methods for <i>Karappan</i> Eczema) with reference to the type of presentation.	Lecture with PowerPoint presentation: The teacher uses a PowerPoint presentation to explain the treatment of <i>Karappan</i> (Eczema) based on its type of presentation in <i>Siddha</i> me, using visual aids to illustrate specific <i>Siddha</i> medicines. Real-life case studies are medicine. The lecture covers symptoms and treatments for <i>Vata</i> , <i>Pitta</i> , and <i>Kapha</i> -dominant <i>Karappan</i> resented, followed by an interactive discussion where students can ask questions. The session concludes with a summary of key points and an assessment through a quiz or group activity to ensure understanding. Duration : 1 Hour

	Case-Based Learning: Students analyze a detailed case study of a <i>Karappan</i> (Eczema) patient to diagnose the type of <i>Karappan</i> (<i>Vata</i> , <i>Pitta</i> , <i>Kapha</i>) and develop a treatment plan using <i>Siddha</i> principles. Working in small groups, they use <i>Siddha</i> diagnostic tools (<i>Envagai Thervu</i>) to gather information, discuss their findings, and present their diagnosis and treatment plan. The instructor provides feedback and facilitates an interactive discussion, emphasizing the importance of individualized treatment based on the type of <i>Karappan</i> presentation. Duration : 1 Hour
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 19.1	Humoural predominance based on <i>Envagai thervu</i> (Siddha diagnostic tools) of the <i>Karappan</i> patient.	<p>Problem-Based Learning : Students will be provided with a case study and divided into groups, with each group assigned a specific diagnostic tool such as <i>Naadi</i> (pulse) or <i>Naa</i> (tongue). Students will collect data using their tools, record observations, and present findings to the class. The activity encourages collaboration, critical thinking, and practical application of <i>Siddha</i> medicine principles, ultimately discussing how the combined use of these tools helps in diagnosing and treating <i>Karappan</i>. Duration : 1 Hour</p> <p>Demonstration: The teacher will demonstrate the use of <i>Siddha</i> diagnostic tools (<i>Envagai Thervu</i>) to diagnose <i>Karappan</i> (Eczema). This involves checking a patient's pulse, skin, tongue, eyes, speech, stools, and urine. The instructor explains the significance of each diagnostic tool and encourages students to engage with questions. Duration : 1 Hour</p>
NLHP 19.2	Similarities and differences between Endogenous and Exogenous Eczemas features using photos.	<p>Flipped class room : Students watch a video lecture and read an article on endogenous and exogenous eczema before class. In class, they form small groups, analyze case studies, discuss their findings, and present them to the class. This is followed by a Q&A session and a class reflection. Post-class, students write a reflection essay and take a quiz to assess their understanding. Duration : 1 Hour</p> <p>Case based learning : Students prepare by watching a video lecture and reading an article on endogenous and exogenous eczema. In class, they analyze patient case studies in small groups, discuss their findings, and present them to the class, followed by a Q&A session. The class then reflects on the lessons learned, and students write a reflection essay and take a quiz afterward. Duration : 1 Hour</p>

NLHP 19.3	Effects of applying facial foundations, powders & facial blushes	<p>Discussions:Students could be divided into groups to research and discuss the effects of each product, share personal experiences, and compare different products' impacts. Each group would then present their findings, fostering a comprehensive understanding of makeup products and their effects.Duration : 1 Hour</p> <p>Problem-Solving Method:Students address common skin concerns (acne, uneven skin tone, oiliness, dryness, sensitivity) by researching makeup products (foundations, powders, blushes) to develop solutions. They create step-by-step routines with product recommendations and present their findings, facilitating discussion and reflective analysis on problem-solving in skincare.Duration : 1 Hour</p>
NLHP 19.4	Effects of applying facial masks, face packs & skin cleansers.	<p>Case based learning:Students could analyze a scenario where a person with varied skin concerns is using different skincare products. They would research the effects of these products, propose a customized skincare routine, and present their findings. This approach helps students apply their knowledge practically and understand the importance of tailored skincare.Duration : 1 Hour</p> <p>Real-life experience:Students should use various facial masks, face packs, and skin cleansers over a set period, document their daily usage and skin changes in a journal, and take before-and-after photos. They then share their observations in a group discussion and present their findings, fostering practical knowledge and personal care through hands-on experimentation.Duration : 1 Hour</p>
NLHP 19.5	Physical examination to differentiate the <i>Thadippu</i> (Urticarial weal) and Angioneurotic oedema for the given patient.	<p>Problem-Based Learning:Students are presented with a detailed patient case, including history and symptoms. They work in small groups to analyze the case, research diagnostic criteria, and discuss possible diagnoses. Each group presents their findings, reasoning, and differential diagnosis to the class. The session concludes with a reflection and debrief to summarize key takeaways and emphasize the importance of thorough patient assessment and collaboration.Duration : 1 Hour</p> <p>Demonstration Bedside:The teacher begin the process with a brief overview, followed by taking patient history and performing physical examinations, such as inspecting the skin and palpating lesions. Students then practice role-playing, simulating patient-practitioner interactions, while instructors provide real-time feedback. Each group presents their findings and diagnoses, concluding with a discussion and summary to reinforce the key learning points.Duration : 1 Hour</p>

NLHP 19.6	External therapy (<i>Vamanam/ Viresanam/ Peechu</i>) to correct digestion, absorption and to tone up immune system.	Simulation or Demonstration :Teacher will introduce the therapies, explain their benefits, and provide a step-by-step demonstration using a mannequin or volunteer. Students will then practice the procedures in small groups, simulate patient-practitioner interactions, and receive real-time feedback. The will conclude with an assessment of students' skills and understanding, along with a reflection and discussion to reinforce learning.Duration : 1 Hour
NLHP 19.7	<i>Attai vidal</i> (Leech application) in treating Eczema	Demnstration on Bedside :Students can work together to explain the medical significance of attai vidal therapy for <i>Karappan</i> , prepare the materials, demonstrate the application of the leech, monitor the entire procedure, and provide post-application care. They will also discuss safety precautions and the importance of follow-up observations. Each student can take on a specific role to ensure understanding and engagement throughout the process.Duration : 1 Hour Practical:Students will work in pairs. They will prepare by cleaning the affected area normal water and handling medicinal leeches with proper technique. The leech is placed on the eczema-affected area and monitored for 30-45 minutes until it detaches naturally. After the leech detaches, the area is cleaned again and bandaged. Students will document their observations, discuss the progosis and any signs of infection or adverse reactions, and present their findings in a follow-up session while adhering to strict safety protocols.Duration : 1 Hour
NLHP 19.8	<i>Peechu</i> for treating <i>Karappan</i> according to humoural predominance.	Simulation :Teacher will create a realistic patient scenarios, assign students into teams with specific roles, and setup a simulated clinical environment. Run the scenarios, allowing students to assess and treat patients while teacher observe and provide feedback. Afterward, conduct a debriefing session to discuss the team's performance, followed by individual reflection and follow-up training to address any identified weaknesses.Duration : 1 Hour Practical :Teacher will conduct a live demonstration, allowing students to observe each step. Let students practice individually or in small groups, while offering supervision and feedback. Assess their performance based on accuracy and understanding, and conclude with a reflection and discussion to reinforce learning and share insights.Duration : 1 Hour
NLHP 19.9	<i>Vamanam</i> (Emetic therapy) for <i>Karappan</i> .	Role play:Students are divided into pairs or small groups to simulate the <i>Vamanam</i> therapy process for

treating *Karappan*. One student acts as the Practitioner and explains the therapy's purpose to the Patient, who simulates receiving the treatment. The Practitioner prepares and administers a special formulation to induce vomiting, monitors the Patient, and provides post-care instructions. The activity concludes with a group discussion about the experience, challenges faced, and the therapeutic benefits of *Vamanam* in *karappan*. Duration : 1 Hour

Bedside demonstration : The teacher will provide a hands-on demonstration of *Vamanam* therapy for treating *Karappan*. Students will observe the patient history taking, physical examination, preparation, administration of the emetic formulation, monitoring of the vomiting process, and post-therapy care. The activity concludes with a discussion and Q&A session, allowing students to ask questions and gain a practical understanding of *Vamanam* therapy in a clinical setting. Duration : 1 Hour

Topic 20 Noi Ethirppu Mandala Kolaral Varum Thol Noikal (Auto Immune related skin Disorders) & Thol Nirami Kuraipattu Noigal (Hypopigmentary diseases of the skin) (LH :8 NLHT: 4 NLHP: 11)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5, CO6, CO7	Define causes, clinical features, humoral vitiations and treatment of <i>Kalanjagapadai</i> (Psoriasis- Various types)	CK	MK	K	L&PPT, L_VC, L	O-QZ, DEB	F&S		-	LH
CO2, CO5, CO6, CO7	Explain the types of <i>Kalanjagapadai</i> (Psoriasis)-Psoriasis vulgaris, Guttate Psoriasis, Nummular Psoriasis.	CC	DK	K	L&GD, L	CL-PR, M-CHT	F&S		-	LH
CO2, CO5, CO6, CO7	Define Erythro dermal Psoriasis, Pustular Psoriasis.	CK	DK	KH	L&PPT	INT, CL-PR	F		-	LH
CO2, CO5,	Differentiate regional Psoriasis (Scalp Psoriasis, Palmar Psoriasis, Plantar Psoriasis, Palmo-Plantar Psoriasis) and its complications.	CAN	DK	KH	L&PPT, L	QZ, PUZ	F		-	LH

CO6, CO7										
CO2	Describe the definition, causes, clinical features and treatments of <i>Puzhuvettu</i> (Alopecia – Various types).	CC	MK	K	L&GD, L	INT,CL-PR	F&S		-	LH
CO2, CO5, CO6, CO7	Define causes, classification with clinical features and treatments of <i>Venpadai</i> (Vitiligo / Leucoderma)	CC	MK	K	L,L&PP T	PRN,QZ	F&S		-	LH
CO2, CO5, CO6, CO7	Describe Achromia and its types	CK	DK	K	L_VC,L	INT,CL-PR	F		-	LH
CO2, CO5, CO6	Distinguish between Albinism and Naevus depigmentosus	CC	DK	KH	L&PPT ,L	QZ	F		-	LH
CO2, CO5	Discuss the patient centered external therapy (<i>Vamanam/Viresanam/Peechu</i>) to normalise digestion, absorption and to tone up immune system.	PSY- GUD	DK	KH	PER,PS M	CL-PR	F		-	NLHT20.1
CO2, CO5	Identify different external therapies to promote sleep, reduce stress and to treat <i>Kalanjagapadai</i> (Psoriasis) like <i>Sirodharai</i> , <i>Sirovasthi</i> , <i>Thokkanam</i> , <i>Yoga</i> and Meditation.	PSY- GUD	DK	KH	PBL,IB L	P-ID,CL- PR	F		-	NLHT20.2
CO2, CO5	Perform counselling to overcome social stigma on <i>Kalanchagapadai</i> (Psoriasis).	AFT- VAL	DK	KH	RP,DIS	P-RP	F		-	NLHT20.3
CO2, CO5, CO6	Describe the Line of treatment for <i>Puzhuvettu</i> (Alopecia)	CAP	MK	KH	DIS,TU T	PRN	F		-	NLHT20.4

CO2, CO5, CO6, CO7	Describe suitable life style to avoid complications like <i>KalanchagaVatham</i> (Psoriatic arthritis)	CE	MK	KH	CBL,SD L	P-PRF,PRN	F&S		-	NLHP20.1
CO2, CO5, CO6	Demonstrate the methods to determine the Humoural predominance in <i>Kalanchagapadai</i> and <i>Venpadai</i> .	PSY- GUD	MK	KH	D,PT	P-PRF	F&S		-	NLHP20.2
CO2, CO5, CO6	Demonstrate the Methods of physical examination to rule out various types of <i>Kalanchagapadai</i> .	PSY- GUD	MK	KH	SIM,D	PRN,P-PRF	F&S		-	NLHP20.3
CO2, CO5, CO6	Perform the Methods of physical examination to rule out various types of <i>Kalanchagapadai</i> .	PSY- GUD	MK	KH	D- BED,PT	P-PRF,RK, P-ID,M- CHT,T-CS	F&S		-	NLHP20.4
CO2, CO5, CO6	Demonstrate the Methods of physical examination to rule out various types of Achromia.	PSY- GUD	NK	KH	PT,D- BED	P-PRF	F		-	NLHP20.5
CO2, CO5, CO6	Differentiate <i>Mutrudal Veluppu Noi</i> (Albinism) and <i>Ven macham</i> (Naevus depigmentosus).	CAN	DK	KH	PBL,CD	P-PRF,P-VI VA,T- CS,PRN	F&S		-	NLHP20.6
CO2, CO5	Practice the counseling to overcome the social stigma on <i>Venpadai</i> (Vitiligo), <i>Mutrudal Velupu Noi</i> (Albinism) and <i>Ven Macham</i> (Naevus depigmentosus).	AFT- VAL	MK	K	RP,TBL ,PT	P-VIVA,T- CS,PRN,T- OBT,DEB	F&S		-	NLHP20.7
CO1, CO2	Perform <i>Vamanam</i> (Emetic Therapy) for <i>Kaalanchagapadai</i> .	PSY- GUD	MK	SH	SIM,RP	P-PRF	F&S		-	NLHP20.8
CO1, CO2	Perform <i>Peechu</i> (Douch/Enema) for <i>Kaalanchagapadai</i> to normalise the deranged humours.	PSY- GUD	MK	SH	D,KL	P-PRF	F&S		-	NLHP20.9

CO2	Perform yoga therapy for <i>Karappan / Venpadai / Kaalanachagapadai</i> .	PSY-GUD	MK	SH	PT,W	P-PRF	F&S		-	NLHP20.10
CO1, CO2, CO6, CO7	Perform <i>Nasiyam</i> (nasal application) for <i>Karappan</i> .	PSY-GUD	MK	SH	RP,PSM	PRN,P-PRF	F&S		-	NLHP20.11

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 20.1	External therapy (<i>Vamanam/Viresanam/Peechu</i>) to normalise digestion, absorption and to tone up immune system.	<p>Problem Solving Method: Presenting students with a real-life problem related to digestion, absorption, and immune system issues in patients with <i>Kalanchagapadai</i>. Students will work in small groups to identify and propose patient-centric external therapies such as <i>Vamanam</i> (emetic therapy), <i>Viresanam</i> (purgation therapy), and <i>Peechu</i> (enema) as potential solutions. They will discuss the benefits and limitations of each therapy, develop a treatment plan, and present their findings. Duration : 1 Hour</p> <p>Presentation: Students will prepare and deliver presentations on the patient-centric external therapies (<i>Vamanam, Viresanam, Peechu</i>) to normalize digestion, absorption, and tone up the immune system. Each group will research and present the techniques, benefits, and potential side effects of these therapies. The teacher will facilitate the presentations, provide feedback, and encourage discussion among the students. Duration : 1 Hour</p>
NLHT 20.2	External therapies to promote sleep, reduce stress and to treat <i>Kalanjagapadai</i> (Psoriasis) ,like <i>Sirodharai, Sirovasthi, Thokkanam, Yoga</i> and Meditation.	<p>Inquiry-Based Learning: Students actively exploring and investigating different external therapies to promote sleep, reduce stress, and treat <i>Kalanchagapadai</i> (Psoriasis). Students will research therapies such as <i>Thalaidharai, Thokkanam, Yoga, and Meditation</i>. They will gather information, ask questions, and analyze the effectiveness of these therapies. Duration : 1 Hour</p> <p>Problem-Based Learning: Students will be presented with a real-life problem related to sleep, stress, and <i>Kalanchagapadai</i>. They will work in small groups to identify and propose external therapies like <i>Thalaidharai, Thokkanam, Yoga and Meditation</i> as potential solutions. Students will discuss the benefits and limitations of each therapy, develop a treatment plan, and present their findings. Duration : 1 Hour</p>

NLHT 20.3	Counselling to overcome social stigma on <i>Kalanchagapadai</i> (Psoriasis).	Discussion: A group discussion facilitated by the teacher, focusing on the social stigma associated with <i>Kalanchagapadai</i> (Psoriasis). Students will share their insights, experiences, and opinions on the topic, fostering a collaborative learning environment. Duration : 1 Hour Roleplay: Students will engage in role-playing activities where they act as counselors and patients. The teacher will provide scenarios related to the social stigma of <i>Kalanchagapadai</i> . Students will practice counseling techniques to help patients overcome social stigma, improving their communication skills and empathy. Duration : 1 Hour
NLHT 20.4	Describing the Line of treatment for <i>Puzhuvettu</i> (Alopecia)	Tutorial: The teacher provides detailed information about the line of treatment for <i>Puzhuvettu</i> (Alopecia). The teacher will cover various aspects, including the causes, symptoms, and treatment options. Students will have the opportunity to ask questions and clarify their doubts. Discussion: The teacher will facilitate a group discussion among the students. The discussion will focus on the line of treatment for <i>Puzhuvettu</i> , including the use of <i>Siddha</i> medicine, lifestyle modifications, and other therapeutic approaches. Students will share their insights, experiences, and opinions, fostering a collaborative learning environment.

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 20.1	Adopting a suitable life style to avoid complications like <i>KalanchagaVatham</i> (Psoriatic arthritis).	Case-Based Learning: The teacher will provide the patient's medical history, lifestyle, symptoms, and current treatment plan. Students will analyze the case in small groups, identify potential risk factors, and suggest lifestyle modifications to avoid complications.
NLHP 20.2	Humoural predominance in <i>Kalanchagapadai</i> and <i>Venpadai</i> .	Practical: where students actively engage in performing physical examinations to determine the Humoural predominance in <i>Kalanchagapadai</i> and <i>Venpadai</i> . Students will work in small groups, applying the techniques demonstrated by the teacher on patients or simulated patients. Duration : 1 Hour Demonstration: The teacher will demonstrate the techniques to determine the Humoural predominance

		at the bedside of a patient or a simulated patient. Students will observe the teacher's methods, including inspection, palpation, and other diagnostic methods specific to Humoural analysis. Duration : 1 Hour
NLHP 20.3	Physical examination to rule out various types of <i>Kalanchagapadai</i> .	Simulation : The teacher will create realistic clinical scenarios to illustrate these methods, allowing students to observe and practice in a simulated environment, with real-time feedback and guidance provided throughout the session. Duration : 1 Hour Demonstration: The session will begin with the instructor providing an overview of <i>Kalanchagapadai</i> , including its symptoms and significance. The teacher will demonstrate physical examination techniques, such as visual inspection, palpation, and the use of diagnostic tools like <i>Envagai thervu</i> . Duration : 1 Hour
NLHP 20.4	Physical examination to rule out various types of <i>Kalanchagapadai</i> .	Practical: This method involves hands-on practice where students actively engage in performing physical examinations to rule out various types of <i>Kalanchagapadai</i> . Students will work in small groups, applying the techniques demonstrated by the instructor on patients or simulated patients. This approach allows students to develop their skills through direct experience, observation, and feedback from the instructor. Duration : 1 Hour Demonstration Bedside: In this method, the instructor will demonstrate the physical examination techniques at the bedside of a patient or a simulated patient. Students will observe the instructor's methods, including inspection, palpation, percussion, and auscultation. This visual and practical demonstration helps students understand the correct procedures and the specific signs and symptoms to look for in different types of <i>Kalanchagapadai</i> . Duration : 1 Hour
NLHP 20.5	Physical examination to rule out various types of Achromia.	Practical :Hands-on techniques such as visual inspection, palpation, and vision assessment. Visual inspection focuses on identifying skin, hair, and eye pigment deficiencies, while palpation involves feeling the skin to check for texture and temperature changes. Vision assessments are also conducted to detect any impairments like nystagmus, photophobia, or strabismus that may be associated with achromia. Duration : 1 Hour Bed side Demonstration :Demonstration is a teaching method where techniques for examining achromia are shown to students or trainees. This involves a step-by-step illustration of how to conduct visual inspections, palpation, and vision assessments. Demonstrations can also incorporate anatomical

		models to highlight areas affected by achromia and include interactive sessions for students to practice the techniques under supervision. Duration : 1 Hour
NLHP 20.6	Difference between <i>Mutrudal Veluppu Noi</i> (Albinism) and <i>Ven macham</i> (Naevus depigmentosus).	<p>Case diagnosis :Students are divided into small groups and given detailed case studies, including patient history, symptoms, and visual aids. They analyze the cases to identify key symptoms and differentiate between the conditions, using diagnostic tools to support their findings. Through role-playing, students simulate the diagnosis process, emphasizing accurate diagnosis and effective patient communication. Duration : 1 Hour</p> <p>Problem-based learning :Students are divided into small groups and presented with real-world problems related to these conditions. Each group researches the condition, analyzes the problem, and develops a comprehensive plan to address it, including medical management, social support, and awareness campaigns. They role-play the implementation of their solutions, focusing on empathy and effective communication. Duration : 1 hour</p>
NLHP 20.7	Counseling Patients in Overcoming Fear and Social Stigma of Skin Conditions	<p>Team-based learning :Students are divided into small groups to research these conditions and their societal impacts. Each team prepares presentations and role-play scenarios to practice empathetic communication and support strategies. They then participate in counseling role-plays, followed by group discussions and class-wide presentations. The activity concludes with a debriefing session where students reflect on their experiences and discuss ways to reduce social stigma. Duration : 1 Hour</p> <p>Role-play :Students are divided into small groups and assigned roles such as Counselor, Patient, Bystander, and Support Group Member. They are presented with detailed case study scenarios and rotate roles to ensure each student experiences different perspectives. Through role-playing sessions, students practice empathetic communication and counseling strategies. Observations and feedback from peers and teacher help refine their techniques. The activity concludes with group discussions, reflections in journals, and class-wide sharing of key takeaways, enhancing students' understanding and ability to support individuals with these conditions. Duration : 1 hour</p>
NLHP 20.8	<i>Vamanam</i> (Emetic Therapy) for <i>Kaalanchagapadai</i>	Simulation :Students are divided into small groups and provided with a case study. They gather materials and set up a simulation environment. The teacher demonstrates the procedure, and students

		<p>take turns performing the simulated therapy, role-playing as practitioners and patients. The activity focuses on proper techniques, hygiene, and patient communication. Afterward, groups discuss their experiences, reflect on challenges, and receive feedback. Duration : 1 hour</p> <p>Role play :Students are divided into small groups and assigned roles such as practitioner, assistant, and patient. After discussing a case study, students perform a simulated <i>Vamanam</i> procedure, emphasizing patient communication, technique, and safety. Each role rotates to ensure all students experience every perspective. Instructors and peers observe and provide feedback. The session concludes with a debriefing and reflection on experiences, challenges, and learnings. Duration : 1 hour</p>
NLHP 20.9	<i>Peechu</i> (Douch/Enema) for <i>Kaalanachagapadai</i> to normalise the deranged humours.	<p>Kinaesthetic Learning or Demonstration:Students work in groups to gather materials, research the procedure, and present their findings. One student demonstrates the enema kit setup, while pairs role-play as instructor and patient, practicing the steps. Under supervision, students prepare and position for the procedure, share observations, and reflect on hygiene and safety. The session concludes with a Q&A to clarify doubts and reinforce understanding.</p> <p>Duration : 1 hour</p>
NLHP 20.10	<i>Yoga</i> Therapy for <i>Karappan</i> / <i>venpadai</i> / <i>kaalanachagapadai</i> .	<p>Practical :Students can engage in a series of <i>yoga</i> therapy activities starting with a group discussion to set intentions, followed by warm-up and breathing exercises. Each student can lead a pose demonstration and explain its benefits. Partner <i>yoga</i> encourages teamwork, while guided meditation led by a student promotes relaxation. <i>Yoga</i> journaling allows for personal reflection, and the session ends with a closing circle for sharing experiences and feedback. These activities foster leadership, engagement, and a deeper understanding of <i>yoga</i> therapy. Duration : 1 Hour</p> <p>Workshop:Students practice <i>yoga</i> techniques to manage <i>Karappan</i> (Eczema), <i>Venpadai</i> (Psoriasis), and <i>Kaalanachagapadai</i> (Psoriasis). The session includes a brief overview of the conditions, an explanation of beneficial <i>yoga</i> poses and breathing exercises, and guided practice sessions. Students work in pairs or small groups, receiving feedback on proper technique and alignment from an experienced <i>yoga</i> instructor. The workshop concludes with a discussion and Q&A, emphasizing the importance of incorporating <i>yoga</i> into daily routines for long-term benefits.</p> <p>Duration : 1 hour</p>

NLHP 20.11	<i>Nasiyam</i> (nasal application) for <i>Karappan</i> .	<p>Role Plays: Students are paired to practice the <i>Nasiyam</i> (nasal application) procedure for treating <i>Karappan</i> (Eczema). One student acts as the practitioner while the other as the patient. The instructor first demonstrates the procedure, then students perform the <i>Nasiyam</i> on each other using herbal oils or medicines. The session concludes with feedback, discussion, and emphasis on proper technique, hygiene, and patient comfort, ensuring a hands-on understanding of <i>Nasiyam</i> in <i>Siddha</i> medicine. Duration: 1 hour</p> <p>Problem-Solving Method: Students will practice the <i>Nasiyam</i> (nasal application) procedure for treating <i>Karappan</i> (Eczema). They start by discussing the benefits of <i>Nasiyam</i>, then review reference materials and formulate a detailed plan for performing the procedure. In small groups, students implement their plan on a simulation model or volunteer under teacher supervision. They evaluate their results, discuss challenges, and revise their plans as needed. The teacher emphasizes proper technique, hygiene, and patient safety throughout the session, enhancing students' practical skills in <i>Siddha</i> medicine. Duration: 1 hour</p>
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Topic 21 Diseases of the Ear (LH :6 NLHT: 3 NLHP: 9)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5, CO6, CO7	Describe Perichondritis, Hematoma of the auricle , Otomycosis	CK	DK	K	L&PPT ,L	QZ ,CL-PR	F		-	LH
CO2, CO6, CO7	Describe Otitis externa, Impacted wax, Bullous myringitis, Diseases of Eustachian tube	CK	DK	K	L&PPT ,L	O-QZ,INT	F		-	LH
CO2, CO5, CO6, CO7	Define Acute and Chronic Suppurative Otitis Media	CK	MK	K	L&PPT ,L	WP,T-OBT	F&S		-	LH
CO2,	Describe Vertigo, Vestibulitis	CK	MK	K	DIS,L&	DEB,QZ	F&S		-	LH

CO5, CO6					PPT					
CO2, CO5, CO6, CO7	Describe Tinnitus	CK	MK	K	L,L&G D	QZ	F&S		-	LH
CO2, CO5, CO6, CO7	Define Deafness ,Otological aspect of facial paralysis	CK	MK	K	L,L&PP T	DEB,CL- PR	F&S		-	LH
CO2, CO6	Identify the relevant prophylactic measures to overcome common Ear Diseases and its complications	CAP	DK	KH	RP,DIS	CL- PR,PUZ	F&S		-	NLHT21.1
CO2, CO6	Interpret the various presentations and investigations of <i>Thalaichutral Noi</i> (Vertigo) and <i>Sevi Iraichal Noi</i> (Tinnitus).	CAP	DK	KH	TUT,DI S	PRN,M- CHT	F&S		-	NLHT21.2
CO2, CO6, CO7	Differentiate various presentations of <i>Sevidu</i> (Deafness).	CAN	MK	KH	PER,CD	CL- PR,DEB	F&S		-	NLHT21.3
CO2, CO6	Demonstrate various methods of Examination of the Ear.	PSY- GUD	MK	SH	D-BED, PER	PRN,P-PRF	F&S		-	NLHP21.1
CO2, CO6	Demonstrate Functional assessment of the Ear.	PSY- GUD	MK	SH	PER,D	P-PRF,PRN	F&S		-	NLHP21.2
CO2, CO6	Demonstrate History taking with associated clinical features of <i>Sevi Iraichal</i> (Tinnitus)	PSY- GUD	MK	KH	D-BED, CD	CBA,P- CASE	F&S		-	NLHP21.3
CO2, CO6	Perform the Physical examination and Investigation methods for diagnosis of <i>Sevi Iraichal</i> (Tinnitus).	PSY- GUD	MK	SH	PER,CD	P-ID,P-PRF	F&S		-	NLHP21.4

CO2, CO5	Interpret the signs and symptoms to diagnose <i>Sevi Iraichal</i> (Tinnitus) and Infer its line of treatment.	CAN	DK	KH	CD,PT	P-PRF,P-ID	F&S		-	NLHP21.5
CO2	Conduct history taking with associated clinical features of Thalai Chutral Noi (Vertigo).	PSY-GUD	MK	KH	CD,BL	P-EXAM,PRN	F&S		-	NLHP21.6
CO6, CO7	Perform Physical examination and Investigation methods for diagnosis of Thalai Chutral Noi (Vertigo).	CAN	MK	KH	CBL,PT	PRN,P-EXAM	F&S		-	NLHP21.7
CO2, CO5	Identify the signs and symptoms to diagnose <i>Thalai Chutral Noi</i> (Vertigo) and Infer its line of treatment.	CAN	MK	KH	LRI,CD	P-PRF,P-EXAM	F&S		-	NLHP21.8
CO2	Illustrate by Guest lecture -the different types of Hearing Aids and Cochlear Implant	CC	DK	KH	D-M,PER	PRN,P-ID	F&S		-	NLHP21.9

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 21.1	Prophylactic measures to overcome common Ear Diseases and its complications	<p>Discussion: The teacher will facilitate a group discussion among the students, focusing on the relevant prophylactic measures to overcome common ear diseases and their complications. Students will share their insights, experiences, and opinions on the topic, fostering a collaborative learning environment. Duration : 1 hour</p> <p>Role Play: In this method, students will engage in role-playing activities where they act as healthcare providers and patients. The teacher will provide scenarios related to common ear diseases and their complications. Students will practice counseling patients on the importance of prophylactic measures, such as maintaining ear hygiene, avoiding exposure to loud noises, and seeking timely medical attention. Duration : 1 hour</p>
NLHT 21.2	Various presentations and investigations of <i>Thalaichutral Noi</i> (Vertigo) and <i>Sevi Eraichal Noi</i> (Tinnitus).	Tutorial: The teacher will provide a structured teaching session on the various presentations and investigations of <i>Thalaichutral Noi</i> (Vertigo) and <i>Sevi Eraichal Noi</i> (Tinnitus). This will include an overview of the conditions, their symptoms, and the importance of accurate diagnosis. The tutorial will cover different diagnostic techniques such as vestibular function tests, audiometry, and imaging studies. The teacher will also discuss the interpretation of test results and their implications for

		<p>treatment. Duration : 1 hour</p> <p>Discussion: The teacher will facilitate a group discussion among the students, focusing on the presentations and investigations of <i>Thalaichutral Noi</i> and <i>Sevi Eraichal Noi</i>. Students will share their insights, experiences, and opinions on the topic, fostering a collaborative learning environment.</p> <p>Duration : 1 hour</p>
NLHT 21.3	Various presentations of <i>Sevidu</i> (Deafness), using video and presentations.	<p>Presentation: The teacher will provide a detailed presentation on the various presentations of <i>Sevidu</i> (Deafness). This will include an overview of the different types of deafness, such as conductive, sensorineural, and mixed hearing loss. The presentation will cover the causes, symptoms, and diagnostic criteria for each type. The teacher will also discuss the implications of each type of deafness for patient care and management. Duration : 1 hour</p> <p>Case Diagnosis: The teacher will present students with case studies of patients exhibiting different presentations of <i>Sevidu</i> (Deafness). Students will analyze the cases to identify key symptoms and differentiate between the types of deafness. They will discuss the differential diagnosis and determine the underlying causes, such as ear infections, genetic factors, or exposure to loud noise. Duration : 1 hour</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 21.1	Examination of the Ear.	<p>Presentation: The teacher will provide a detailed presentation on the various methods of ear examination. This will include an overview of the ear's anatomy and physiology, common ear disorders, and the importance of thorough examination. The presentation will cover techniques such as otoscopic examination, tuning fork tests, and audiometry. The teacher will also discuss the interpretation of findings and their implications for diagnosis and treatment. Duration : 1 Hour</p> <p>Demonstration: The teacher will demonstrate the various ear examination techniques at the bedside of a patient or a simulated patient. Students will observe the teacher's methods, including performing otoscopic examinations, tuning fork tests, and audiometric assessments. This visual and practical demonstration helps students understand the correct procedures and the specific signs and symptoms to look for during ear examinations. The teacher will also explain how to interpret the results and their</p>

		relevance to patient care.Duration : 1 Hour
NLHP 21.2	Functional assessment of the Ear.	<p>Presentation: The teacher will provide a detailed presentation on the functional assessment of the ear. This will include an overview of the ear's anatomy and physiology, common ear disorders, and the importance of functional assessment. The presentation will cover various assessment techniques such as audiometry, tympanometry, and otoacoustic emissions testing. The teacher will also discuss the interpretation of test results and their implications for diagnosis and treatment.Duration : 1 Hour</p> <p>Demonstration: The teacher will demonstrate the functional assessment techniques at the bedside of a patient or a simulated patient. Students will observe the teacher's methods, including performing audiometric tests, tympanometry, and otoacoustic emissions testing. This visual and practical demonstration helps students understand the correct procedures and the specific signs and symptoms to look for in assessing ear function. The teacher will also explain how to interpret the results and their relevance to patient care.Duration : 1 Hour</p>
NLHP 21.3	History taking with associated clinical features of <i>Sevi Iraichal</i> (Tinnitus)	<p>Case Diagnosis: The teacher will present students with case studies of patients exhibiting signs and symptoms of <i>Sevi Iraichal</i> (Tinnitus). Students will analyze the cases to identify key symptoms such as ringing, buzzing, or hissing sounds, and associated factors like hearing loss or dizziness. They will discuss the differential diagnosis and determine the underlying causes of tinnitus, such as exposure to loud noise, ear infections, or neurological conditions.Duration : 1 Hour</p> <p>Demonstration Bedside: The teacher will demonstrate the history-taking process and associated clinical features of <i>Sevi Iraichal</i> (Tinnitus) at the bedside of a patient or a simulated patient. Students will observe the teacher's methods, including asking relevant questions about the patient's medical history, lifestyle, and symptoms. The teacher will also demonstrate the physical examination techniques used to assess tinnitus. Duration : 1 Hour</p>
NLHP 21.4	Physical examination and Investigation methods like, Ear exam, Hearing test, Neurological exam etc,for diagnosis of <i>Sevi Iraichal</i> (Tinnitus).	<p>Presentation: Students will prepare and deliver presentations on the physical examination and investigation methods for diagnosing <i>Sevi Iraichal</i> (Tinnitus). They will research the condition, its symptoms, and the various examination techniques such as otoscopic examination, audiometry, and vestibular function tests. Students will also discuss the interpretation of diagnostic test results and the role of imaging studies in identifying underlying causes of tinnitus.Duration : 1 Hour</p>

		Case Diagnosis: Students will be presented with case studies of patients exhibiting signs and symptoms of <i>Sevi Iraichal</i> (Tinnitus). They will analyze the cases to identify key symptoms such as ringing, buzzing, or hissing sounds, and associated factors like hearing loss or dizziness. Students will discuss the differential diagnosis and determine the appropriate investigation methods, such as audiometric testing, imaging studies, and laboratory tests. Duration : 1 Hour
NLHP 21.5	Clinical features of <i>Sevi Iraichal</i> (Tinnitus) and finalizing its line of treatment.	<p>Practical: The teacher will guide students through hands-on practice to interpret the signs and symptoms to diagnose <i>Sevi Iraichal</i> (Tinnitus). Students will work in small groups, applying the techniques demonstrated by the teacher on patients or simulated patients. They will perform physical examinations, document their findings, and discuss them within their groups. Duration : 1 Hour</p> <p>Case Diagnosis: The teacher will present students with case studies of patients exhibiting signs and symptoms of <i>Sevi Iraichal</i> (Tinnitus). Students will analyze the cases to identify key symptoms such as ringing, buzzing, or hissing sounds, and associated factors like hearing loss or dizziness. They will discuss the differential diagnosis and infer the appropriate line of treatment, which may include medications, sound therapy, or other therapeutic interventions. Duration : 1 Hour</p>
NLHP 21.6	History taking with associated clinical features of <i>Thalai Chutral Noi</i> (Vertigo)	<p>Case diagnosis : Students will then engage in role-playing exercises to practice these skills, with the teacher providing guidance and feedback. The session will conclude with a discussion of findings, a demonstration of physical examination techniques, an explanation of relevant diagnostic tests, and a Q&A session to address any questions. Duration : 1 Hour</p> <p>blended learning : Students begin with pre-class preparation by reading materials and watching pre-recorded lectures. In the in-class session, the teacher demonstrates patient interviews and physical examinations while students engage in role-playing exercises to practice these skills. The session concludes with a group discussion and explanation of diagnostic tests. Post-class, students write reflective essays and participate in online discussions to share their experiences and insights, ensuring a comprehensive understanding of vertigo diagnosis. Duration : 1 Hour</p>
NLHP 21.7	Physical examination and Investigation methods for diagnosis of <i>Thalai Chutral Noi</i> (Vertigo).	Case-Based Learning: Presenting students with case studies of patients exhibiting signs and symptoms of <i>Thalai Chutral Noi</i> (Vertigo). Students will analyze the cases to identify key symptoms such as dizziness, spinning sensation, unsteadiness, nausea, and abnormal eye movements. They will discuss

		<p>the differential diagnosis and determine the underlying causes of vertigo, such as inner ear problems, infections, or neurological conditions. Duration : 1 Hour</p> <p>Practical: Students actively engage in performing physical examinations and investigation methods for diagnosing <i>Thalai Chutral Noi</i> (Vertigo). Students will work in small groups, applying the techniques demonstrated by the teacher on patients or simulated patients. This approach allows students to develop their skills through direct experience, observation, and feedback from the teacher. Duration : 1 Hour</p>
NLHP 21.8	Clinical features of <i>Thalai Chutral Noi</i> (Vertigo) and finalizing its line of treatment.	<p>Case Diagnosis: The teacher will present students with case studies of patients exhibiting signs and symptoms of <i>Thalai Chutral Noi</i> (Vertigo). Students will analyze the cases to identify key symptoms such as dizziness, spinning sensation, unsteadiness, nausea, and abnormal eye movements. They will discuss the differential diagnosis and determine the underlying causes of vertigo, such as inner ear problems, infections, or neurological conditions. Duration : 1 Hour</p> <p>Lab Report Interpretation: The teacher will provide students with lab reports and diagnostic test results related to patients with <i>Thalai Chutral Noi</i>. Students will interpret the findings, such as results from vestibular function tests, imaging studies, and blood tests. They will correlate the lab results with the clinical symptoms to infer the appropriate line of treatment, which may include medications, vestibular rehabilitation, or other therapeutic interventions. Duration : 1 Hour</p>
NLHP 21.9	Awareness about Hearing Aids and Cochlear Implant.	<p>Presentation: Organizing guest lecture where experts present detailed information about different types of hearing aids and cochlear implants. The invited speakers will cover various aspects, including the technology, benefits, and usage of these devices. Students will have the opportunity to ask questions and clarify their doubts. Duration : 1 Hour</p> <p>Demonstration on Model: The guest lecturer will demonstrate the use of hearing aids and cochlear implants on models. Students will observe the practical application of these devices, including how they are fitted and adjusted. This visual and hands-on demonstration helps students understand the correct procedures and the functionality of hearing aids. Duration : 1 Hour</p>
Topic 22 Infectious conditions of the skin (LH :11 NLHT: 8 NLHP: 13)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5	Define Causes, Classification with Clinical features and Treatment of <i>Peru noi</i> (Leprosy)	CK	MK	K	L&PPT ,EDU	DEB,QZ	F		-	LH
CO2, CO5	Describe the Cause, Classification with Clinical features and Treatment of <i>Sirangu</i> (Scabies).	CK	MK	K	RLE,L &PPT	DEB,QZ	F&S		-	LH
CO2, CO5	Explain Sycosis barbae (Pseudofolliculitis barbae),AKN (Acne Keloidalis Nuchae) Sycosis Nuchae,Follicular Infective Eczema.	CC	DK	KH	L_VC,L	INT,S-LAQ	F&S		-	LH
CO2, CO5	Describe Trichomycosis axillaris (Trichobacteriosis) and Erythrasma.	CC	DK	KH	L&PPT ,L	QZ ,CL-PR	F&S		-	LH
CO2, CO5	Describe <i>Palunni</i> (Molluscum contagiosum), <i>Maru</i> (Verrucae/Warts),Genital Warts (Condiloma acuminatum)	CK	MK	K	L&GD, L&PPT	PRN,QZ	F&S		-	LH
CO2, CO5	Describe the cause, Clinical features and treatment of <i>Akki noi</i> (Herpes Zoster Virus),Herpes Simplex Virus 1 &2 infections.	CK	MK	K	L&PPT ,L	DEB,QZ	F&S		-	LH
CO2, CO5	Explain Skin manifestations in HIV and the causes,Clinical features,Investigations,differential diagnosis of ORF(Ecthyma contagiosum).	CK	MK	K	L&PPT ,L	T-OBT,QZ	F&S		-	LH
CO2, CO5	Describe the cause,clinical features,Investigation and Differential diagnosis of Milkers nodes.	CK	DK	K	L&PPT ,L	PRN,QZ	F&S		-	LH
CO2, CO5	Explain the Viral infection, Hand-Foot-Mouth Disease (HFMD)	CK	DK	K	L&PPT ,L	DEB,T- OBT	F&S		-	LH
CO2, CO5	Describe the Causes, Classification with Clinical features and Treatment of <i>Padarthamarai</i> (Tinea infections)	CK	MK	K	LS,L,D, RLE,ED U	CWS ,M- CHT,INT	F&S		-	LH
CO2, CO5	Describe Rhinosporidiosis and Chromoblastomycosis.	CC	DK	SH	L_VC,L	VV-Viva,C L-PR	F&S		-	LH

CO2, CO5	Demonstrate healthy life style practices to prevent <i>Peru Noi</i> (Leprosy).	PSY-GUD	MK	K	D,DIS	DEB,PRN, QZ	F		V-SATV	NLHT22.1
CO2, CO5	Perform counselling to Kids and Family members to overcome reinfection of <i>Sirangu</i> (Scabies)	AFT-RES	MK	KH	DIS,D,PER	DOPS,PM, DOPS,CBA	F		-	NLHT22.2
CO2, CO5	Demonstrate the principles of <i>Ashtangayogam</i> to overcome Stress in Skin Diseases.	PSY-GUD	MK	KH	TBL,LS, D	SP,P-RP	F		H-VPS	NLHT22.3
CO2, CO5	Demonstrate Chuttigai for <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts)	PSY-GUD	MK	KH	D,KL,SI M,D-BE D,D-M	PP-Practical,CBA,SP	F		-	NLHT22.4
CO2, CO5	Discuss successful stories of HIV treatment in <i>Siddha</i>	CC	MK	KH	CBL,DIS	INT,DEB	F		-	NLHT22.5
CO2, CO5	Practice social, preventive aspects and diet for <i>Akki Noi</i> (Herpes zoster infections).	CAP	MK	KH	L&GD, FC	INT,VV-Viva	F		-	NLHT22.6
CO1, CO5	Demonstrate Healthy Lifestyle Practices to Overcome Reinfection of <i>Padarthamarai noi</i> (Tinea - Various Types)	PSY-GUD	MK	KH	PER,L&GD	PUZ,INT	F		-	NLHT22.7
CO2, CO5	Demonstrate preventive measures and treatment options for Impetigo	PSY-GUD	MK	KH	D,L&GD	INT,DEB	F		-	NLHT22.8
CO1, CO2, CO3, CO4, CO5, CO6, CO7, CO8	Demonstrate the methods of physical examination to differentiate various skin lesions.	PSY-GUD	MK	KH	D,CBL, D-BED	OSCE,PM	F		-	NLHP22.1
CO1,	Perform the application of <i>Patru, Poochu</i> (topical applications)for	CE	MK	KH	CBL,D-	Mini-CEX,	F		-	NLHP22.2

CO2, CO3, CO4, CO5, CO6, CO7, CO8	various skin infections.				BED,SIM	DOPS,DOPS				
CO2, CO5	Describe history taking methods to rule out skin infections.	CC	MK	KH	SIM,D-BED	SP,DOPS,DOPS	F		-	NLHP22.3
CO2, CO5	Perform the methods of physical examination to differentiate various skin lesions.	PSY-GUD	MK	KH	D-BED,CBL	DOPS,DOPS,Mini-CEX	F		-	NLHP22.4
CO2, CO5	Prepare the <i>Nal Ozhukkam</i> (Daily routine) and <i>Kala Ozhukkam</i> (Seasonal routine) practices to overcome various skin lesions.	PSY-GUD	MK	KH	TPW,PL	INT,CHK	F		V-NAVO	NLHP22.5
CO2, CO5	Interpret the role of <i>Thega vanmai</i> (Healthy immune status) and <i>Kala vanmai</i> (Seasonal Status) to prevent skin infections.	PSY-GUD	MK	SH	PSM,D-BED	DOPS,DOPS,S,P-PRF,OSPE	F		V-NAVO	NLHP22.6
CO2, CO5	Discuss the successful stories in the treatment of bacterial Skin infections.	AFT-VAL	MK	KH	PBL,CBL	INT,QZ	F		-	NLHP22.7
CO2, CO5	Interpret clinical case studies to improve diagnostic and treatment skills.	PSY-GUD	NK	KH	BL,CBL	QZ ,CWS,Log book	F		H-RM	NLHP22.8
CO2, CO5	Discuss the differential diagnosis and line of treatment for various infectious skin diseases.	CC	MK	KH	CBL,BS	DEB,INT	F		-	NLHP22.9
CO2, CO5	Discuss the successful stories of the treatment of viral skin infections.	CAP	MK	KH	CBL,DIS	Log book,INT	F		-	NLHP22.10
CO2,	Interpret Blood, Microbiological and histological investigations	PSY-	MK	SH	CD,LRI	INT,CBA	F		V-NN2	NLHP22.11

CO5	relavent to infectious skin diseases.	GUD								
CO2, CO5	Demonstrate handwashing and infection control procedures.	PSY- GUD	MK	SH	D,PL	CHK,PA	F		-	NLHP22.12
CO2, CO5	Practice the relevant prophylactic measures to prevent Skin infections.	CAN	MK	KH	PBL,DI S,D- BED	CHK,DEB	F		-	NLHP22.13

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 22.1	Healthy life style practices to prevent <i>Peru Noi</i> (Leprosy).	Demonstration & Discussion : Teacher will demonstrate the proper handwashing technique. Teach the nutritional importance, Principles of <i>Ashtanga yogam</i> , Effects of <i>Karma</i> . Teach Students about preventive measures like to avoid close contact with infected individuals. Duration : 1 hour
NLHT 22.2	Prevent Reinfection of <i>Sirangu</i> (Scabies)	Discussion:Discuss the following with students. Explain scabies , how it spreads, and the importance of preventing reinfection Discuss the common symptoms of scabies and how it is diagnosed. Emphasize the importance of completing the full course of treatment and the necessity of treating all close contacts simultaneously. Highlight the importance of personal hygiene, such as regular handwashing and avoiding sharing personal items like towels and clothing. Discuss the need to clean and disinfect bedding, clothing, and other personal items to eliminate mites. Duration : 1 hour Demonstration: Handwashing Technique: Demonstrate proper handwashing techniques, including the use of soap and water, and the recommended duration.Cleaning and Disinfecting: Show how to clean and disinfect personal items, such as bedding, clothing, and towels. Explain the importance of using hot water and drying on a high heat setting.Avoiding Close Contact: Demonstrate how to avoid close physical

		<p>contact with others until the treatment is complete and all mites are eradicated. Duration : 1 hour</p>
<p>NLHT 22.3</p>	<p>Principles of <i>Ashtangayogam</i> to overcome Stress in Skin Diseases.</p>	<p>Demonstration :The teacher wil explain how stress negatively impacts skin diseases and how <i>Ashtangayogam</i> can help manage stress.</p> <p>Iyamam and Niyama:Discuss the ethical guidelines (<i>Iyamam</i>) and personal observances (<i>Niyamam</i>) and their relevance to stress management.</p> <p><i>Asanam</i>:Demonstrate stress-relieving yoga postures. Encourage students to practice those poses, focusing on breath and relaxation.</p> <p>Pranayama:Demonstrate <i>Pranayamam</i> (<i>Pooragam,Resagam,Kumbagam</i>).Guide students through these exercises, emphasizing slow and mindful breathing.</p> <p><i>Dhyanam and Pratyaharam</i>: Introduce techniques for meditation (<i>Dhyanam</i>) and withdrawal of senses (<i>Pratyaharam</i>). Lead a guided meditation session focusing on mindfulness and relaxation. Allow students to practice the demonstrated techniques, providing guidance and feedback.Encourage them to focus on their breath, body awareness, and relaxation. Discuss the key steps of the <i>Ashtangayogam</i> practice and address any questions or concerns.Emphasize the importance of regular practice for managing stress and improving skin health. Duration : 1 hour</p> <p>Library Session:</p> <p>Assign students to research the eight types of <i>Ashtangayogam</i> and their benefits in managing stress. Provide a list of recommended books, articles, and journals on <i>Ashtangayogam</i> and stress management in skin diseases. Form small study groups and assign each group a specific type of <i>Ashtangayogam</i> to focus on.Each group will study their assigned type, highlighting its principles, practices, and benefits.Each group will present their findings to the class, using visual aids and library resources. Encourage the use of diagrams, charts, and references to support their presentation. Duration : 1 hour</p> <p>Team-Based Learning and Discussion:</p> <p>Divide students into small groups.Provide each group with a case scenario involving a patient with a skin disease exacerbated by stress. Ask students to develop a management plan incorporating <i>Ashtangayogam</i> practices.Each group will discuss the following ;</p> <p>Stress impact the patient's skin condition.</p> <p><i>Ashtangayogam</i> and it's benefits for skin diseases.</p> <p>Patient incorporation these practices into their daily routine.</p> <p>Each group will present their management plan to the class, explaining their rationale and expected</p>

		<p>outcomes.</p> <p>Facilitate a class discussion to compare different management plans and their potential effectiveness.</p> <p>Encourage students to ask questions and share insights from their research and discussions. Duration : 1 hour</p>
NLHT 22.4	Chuttigai for <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts)	<p>Demonstration or Simulation :The teacher will Demonstrate how to position the patient comfortably and explain the procedure to the students.Clean the area around the lesion with antiseptic solution in <i>siddha</i> (<i>Padigaara neer</i>) and drape the area with sterile drapes.Using the <i>Salaagai</i>, demonstrate the precise technique to apply heat to the lesion for <i>Chuttigai</i>.Explain how to adjust the Heat for effective application of <i>Chuttigai</i> without causing excessive damage to surrounding tissues.Show how to clean the treated area, apply an Medication, and dress the wound.Provide instructions on post-procedure care, including how to manage pain and prevent infection.Allow students to practice the <i>Chuttigai</i> technique on simulation models or synthetic skin lesions.Provide guidance and feedback to ensure proper technique and adherence to aseptic principles.Discuss the key steps of the Chuttigai procedure and address any questions or concerns with students. Duration : 1 hour</p>
NLHT 22.5	Successful stories of HIV treatment in <i>Siddha</i>	<p>Case-Based Learning or Discussion : Divide students into small groups.Provide each group with the case studies.Ask students to review the case studies and identify key aspects of the treatment, including <i>Siddha</i> medicines used, duration of treatment, and outcomes.Each group will discuss the cases.Each group will present their findings and insights to the class.Encourage the use of visual aids, such as slides or charts, to enhance their presentation.Facilitate a class discussion to compare the different aspects of the case studies.Encourage students to ask questions and share their thoughts on the integration of <i>Siddha</i> medicine with conventional treatment.Ask students to reflect on the importance of integrating traditional medicine with modern treatments.Discuss the potential benefits and challenges of such an approach. Duration : 1 hour</p>
NLHT 22.6	Social, Preventive aspects and Diet for <i>Akki Noi</i> (Herpes Zoster Infections).	<p>Flipped Classroom:</p> <p>Students will be assigned pre-class materials, including articles and videos, to study the social and preventive aspects, as well as dietary recommendations for managing <i>Akki Noi</i> (Herpes zoster infections). Participants will review these resources at their own pace before the class, ensuring they</p>

		<p>come prepared with a foundational understanding of the topic. Duration : 1 hour</p> <p>Discussion: Students will share insights from their pre-class study, apply their knowledge to case studies, and engage in collaborative learning. Duration : 1 hour</p>
NLHT 22.7	Healthy Lifestyle Practices to Overcome Reinfection of <i>Padarthamarainoi</i> (Tinea - Various Types)	<p>Lecture and Group Discussion : Students will learn about healthy lifestyle practices to overcome reinfection of <i>Padarthamarai noi</i> (Tinea - various types) through an engaging presentation. The lecture will cover key topics, such as hygiene practices, dietary recommendations, and environmental adjustments to prevent reinfection. Following the lecture, participants will engage in a group discussion to reinforce their understanding, share insights, and ask questions. Duration : 1 hour</p> <p>Presentation : Students will be provided with practical tips, and visual aids will be used to emphasize important concepts, making it easier to understand and implement effective prevention strategies. Duration : 1 hour</p>
NLHT 22.8	Preventive measures and treatment options for Impetigo	<p>Lecture and group discussion : Students will learn about preventive measures and treatment options for Impetigo through an engaging presentation. The lecture will cover key topics, including hygiene practices and the importance of early detection. Following the lecture, participants will engage in a group discussion to reinforce their understanding, share insights, and ask questions. Duration : 1 hour</p> <p>Demonstration :Begin with a brief explanation of impetigo and its causes. Show proper handwashing techniques, how to clean and cover wounds, and the importance of not sharing personal items. Have students practice these skills using provided materials. Demonstrate the application of simulated patru and poochu and kalimbu to a mock wound, emphasizing the need to complete the treatment course. Duration : 1 hour</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity

NLHP 22.1	Methods of physical examination to differentiate various skin lesions.	<p>Case-Based Learning :The Teacher will guide Students through case-based learning, presenting real-life scenarios involving various skin lesions. Students will analyze each case, discussing differential diagnoses, and identifying key clinical features that distinguish different skin conditions. This interactive approach enhances critical thinking and clinical reasoning skills. Duration : 1 hour</p> <p>Demonstration : The Teacher will showcase the examination techniques, emphasizing the identification of unique characteristics of different lesions. This hands-on demonstration allows students to observe and learn effective examination practices.The teacher demonstrates the proper technique for using the dermatoscope, including adjusting the focus and lighting.The teacher shows how to identify and differentiate various types of skin lesions using the dermatoscope.The teacher demonstrates how to document findings accurately, including taking notes and capturing images if applicable. Duration : 1 hour</p> <p>Demonstration Bedside :The teacher will conduct bedside demonstrations, where students will observe and practice physical examination methods directly on patients. Under the teacher's guidance, Students will apply their skills in a real clinical setting, enhancing their ability to accurately differentiate skin lesions through practical experience. Duration : 1 hour</p>
NLHP 22.2	Application of <i>Patru, Poochu</i> (topical applications)for various skin infections.	<p>Case-Based Learning (CBL) :Provide students with detailed case studies involving patients with different skin infections. Each case study should include patient history, symptoms, and prescribed topical medications.Ask students to individually review and analyze the case studies, identifying the appropriate use of topical medications for each condition.Encourage students to consider factors such as dosage, application techniques, and potential side effects.</p> <p>Form small groups and have students discuss their individual analyses.</p> <p>Each group will discuss the case, focusing on:</p> <ul style="list-style-type: none"> Identifying the correct topical medication and its mechanism of action. Discussing the appropriate application technique for the medication. Discussing patient education on the proper use of topical medications. <p>Each group will present their case analysis to the class, highlighting:</p> <ul style="list-style-type: none"> The chosen topical medication and its rationale. The application technique and any special considerations. Important points for patient education. <p>Duration : 1 hour</p>

		<p>Bedside or Simulation Demonstration :</p> <p>Demonstrate how to explain the medication and its use to the patient. Demonstrate the correct technique for applying different types of topical medications, such as creams, ointments, and lotions. Show how to apply the medication evenly and avoid contamination. Provide instructions on how the patient should apply the medication at home, including dosage, frequency, and duration. Discuss any potential side effects and how to manage them. Allow students to practice applying topical medications on simulation models or standardized patients. Provide guidance and feedback to ensure proper technique and adherence to aseptic principles.</p> <p>Duration : 1 hour</p>
NLHP 22.3	History taking methods to rule out skin infections.	<p>Simulation : In this activity, Students will pair up and take turns role-playing as healthcare providers and patients with various skin conditions. They will practice history-taking interviews to gather critical information to rule out skin infections, enhancing their diagnostic skills and patient interaction techniques. Duration : 1 hour</p> <p>Demonstration : The teacher will perform a live demonstration of an ideal history-taking session, highlighting essential questions and observational techniques. students will observe, take notes, and engage in a Q&A session to deepen their understanding of the process. Duration : 1 hour</p>
NLHP 22.4	Methods of physical examination to differentiate various skin lesions.	<p>Case-based learning : The teacher will present clinical cases with patient history and images of skin lesions. After demonstrating examination techniques such as inspection, palpation, and dermatoscopy, students will work in groups to identify and differentiate types of lesions, present their findings, and participate in a class discussion. Duration : 1 hour</p> <p>Demonstration on bedside : The teacher will perform a live demonstration, focusing on patient history, physical examinations, and identifying clinical signs. The teacher will demonstrate the use of dermatoscope for examine the skin. Students will observe, ask questions, and practice techniques under supervision. The session will include a case discussion to analyze findings and formulate a diagnosis and treatment plan. Duration : 1 hour</p>
NLHP 22.5	<i>Nal Ozhukkam</i> (Daily routine) and <i>Kala Ozhukkam</i> (Seasonal routine) practices to	<p>Team project work : The Teacher will explain the topic briefly first. then students are divided into groups and assign a topic to them. They will work in groups to research their assigned topics, create</p>

	overcome various skin lesions.	engaging presentation. Duration : 1 hour Peer learning :Students will work in peer groups to explore <i>Nal Ozhukkam</i> and <i>Kala Ozhukkam</i> practices for managing skin lesions. Each group will research an assigned topic, create engaging learning materials, and teach their peers through interactive sessions, including presentations, Q&A, and demonstrations. Duration : 1 hour
NLHP 22.6	Importance of <i>Thega vanmai</i> (Healthy immune status) and <i>Kala vanmai</i> (Seasonal Status) to prevent skin infections.	Demonstration on bedside :The teacher will explain the concepts of <i>Thega vanmai</i> (Healthy immune status) and <i>Kala vanmai</i> (Seasonal Status) to prevent skin infections., demonstrate skin examinations at the patient's bedside, and discuss preventive measures related to immune health and seasonal adaptations. Students will observe, ask questions, and practice techniques under supervision, followed by case discussions and feedback to reinforce the learning experience. Duration : 1 hour Problem solving method :Students can lead an activity to develop a seasonal health plan by discussing common skin infections in different seasons, researching <i>Thega Vanmai</i> and <i>Kala Vanmai</i> principles, and analyzing how immune status and seasonal changes impact skin health. They will create a health plan with dietary adjustments, lifestyle practices, and preventive measures, implement it in their daily lives, and evaluate its effectiveness, making necessary adjustments.Duration : 1 hour
NLHP 22.7	Successful stories in the treatment of bacterial Skin infections.	Problem-based learning (PBL) :Guide students through real-life clinical scenarios involving bacterial skin infections. Begin by presenting detailed case scenarios, including patient symptoms, medical history, and initial examination findings. Divide the class into groups, each analyzing different aspects such as diagnosis, treatment options, and prevention strategies. Provide resources for research and facilitate group discussions to deepen understanding. Conclude with group presentations and a class-wide discussion to highlight key takeaways and clinical implications. Duration : 1 hour Case-Based Learning (CBL) : The teacher presents a detailed clinical case, including patient history, symptoms, examination findings, and initial investigations. The class is divided into small groups, each analyzing the case to identify clinical problems, formulate differential diagnoses, and propose management plans. The teacher guides discussions, provides resources, and ensures evidence-based practice. Groups present their findings, followed by a class-wide discussion on approaches and reasoning. Duration : 1 hour

NLHP 22.8	Interpretation of clinical case studies to improve diagnostic and treatment skills.	<p>Blended learning : Students begin with an online pre-class assignment to review background information and complete preliminary questions. In class, the teacher presents a clinical case study, and students analyze it in small groups to propose differential diagnoses and treatment plans. They document their analysis on an online platform, present their findings to the class, and engage in a class discussion. The activity concludes with a post-class reflection assignment where students summarize key insights, and the teacher provides feedback, emphasizing systematic approaches to diagnosis and treatment. Duration : 1 hour</p> <p>Case-based learning : The session begins with an overview of common conditions and their importance. The teacher presents a detailed case study, guiding small group analyses to propose differential diagnoses and treatment plans. Groups present their findings and receive feedback, followed by a class discussion on diagnostic reasoning and best practices. The activity concludes with reflections on the learning process, emphasizing a systematic approach to diagnosis and treatment. Duration : 1 hour</p>
NLHP 22.9	Differential diagnosis and line of treatment for various infectious skin diseases	<p>Brainstorming :Devide students into small groups.Sudents receive an overview of common conditions and the importance of accurate diagnosis. Small groups analyze case studies, brainstorming possible diagnoses and treatment plans based on symptoms. Each group presents their findings, prompting questions and further insights from their peers. The activity concludes with a class discussion on the challenges and best practices in diagnosing and treating skin infections, followed by reflections on the process and feedback from the instructor, emphasizing critical thinking and collaboration. Duration : 1 hour</p> <p>Case based Learning:The teacher presents a detailed case study and guides students through group analysis to propose differential diagnoses. Groups then develop comprehensive treatment plans and present their findings to the class, followed by a feedback session. The class discussion focuses on diagnostic reasoning and treatment decisions, highlighting best practices and challenges. Duration : 1 hour</p>
NLHP 22.10	Successful stories in the treatment of viral skin infections.	<p>Discussion : Begin with a brief overview provided by the teacher, followed by a presentation of a case study detailing symptoms, diagnosis, and treatment. Small groups discuss the case study, identifying key factors in successful treatments and sharing relevant experiences or research. Each group then</p>

		<p>presents their findings and shared stories to the class, leading to an open discussion on common themes and effective strategies. Duration : 1 hour</p> <p>Case-Based Learning : Case-based learning : Students review a case study, discussing the symptoms, diagnosis, and treatment plan in small groups. Following this, students share and reflect on successful treatment stories from their experiences or research, emphasizing key factors that led to positive outcomes. Duration : 1 hour</p>
NLHP 22.11	Blood, microbiological, and histological investigations relevant to infectious skin diseases.	<p>Case Diagnosis :Provide students with detailed patient case studies that include patient history, symptoms, and physical examination findings.Ask students to individually analyze the case studies and document their observations and initial diagnoses.Form small groups and have students share their analyses, discuss possible diagnoses, and consider differential diagnoses.</p> <p>Each group will present their case analysis, including the rationale behind their final diagnosis and any differential diagnoses considered.Facilitate a class discussion to provide feedback on each group's presentation and encourage reflection on the diagnostic process. Duration : 1 hour</p> <p>Lab Report Interpretation :Provide students with lab reports from patients with infectious skin diseases, including blood test results, microbiological cultures, and histological examinations. Ask students to individually interpret the lab reports and correlate the findings with the clinical presentations of the patients.Form small groups and have students discuss their interpretations, focusing on key findings and their significance in the diagnosis.Each group will present their analysis of the lab reports, including how each type of investigation contributed to their understanding of the patient's condition.Facilitate a class discussion to provide feedback on each group's presentation and encourage reflection on the importance of integrating lab results with clinical findings. Duration : 1 hour</p>
NLHP 22.12	Handwashing and infection control procedures.	<p>Demonstration : The teacher demonstrates proper handwashing techniques and infection control procedures, including the use of soap, water, hand sanitizer, gloves, masks, and surface disinfection. Students pair up to practice these techniques, observe each other, and provide feedback. Groups discuss common mistakes and best practices, sharing tips to reinforce each procedure's importance. Peer reviews are conducted where one student demonstrates the techniques while another assesses them against a checklist. Duration : 1 hour</p>

		Peer learning : Students take turns demonstrating proper techniques to their peers, followed by practicing in pairs and providing feedback. Groups discuss observations and share best practices, and students assess each other's techniques using a checklist. The activity concludes with a reflection on the experience and the importance of maintaining proper hand hygiene and infection control. Duration : 1 hour
NLHP 22.13	Relevant prophylactic measures to prevent skin infections.	<p>Problem-based learning: Students will begin with a brief introduction about skin infections and relevant prophylactic measures. They will then be divided into groups to analyze specific case scenarios and propose preventive plans. Following this, the groups will present and discuss their proposed measures, concluding with a summary of key points and the importance of preventive care. Duration : 1 hour</p> <p>Discussion: Students are divided into small groups and given case studies to analyze, identifying potential risk factors for skin infections. The groups discuss and propose relevant prophylactic measures, ensuring a collaborative approach. Each group presents their findings to the class, followed by an open floor for questions and feedback. The activity concludes with a reflection session where groups summarize key insights and emphasize the importance of preventive care in maintaining skin health. Duration : 1 hour</p>

Topic 23 Diseases of Hair, Nail and Foot (LH :8 NLHT: 4 NLHP: 12)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO5	Describe the Cause, Clinical features and Treatment of <i>Podugu</i> (Pityriasis capitis), Hypertrichosis, <i>Ila narai</i> (Greying Hair/Canities).	CK	MK	K	L_VC,L	DEB,INT	F&S		-	LH
CO1, CO2,	Explain the Cause, Clinical features and Treatment of Koilanychia, Pachynychia, Paronychia.	CC	MK	K	L&PPT,FC,L	COM,Log book	F&S		-	LH

CO5										
CO1, CO2, CO5	Identify and describe the causes, clinical features and treatment of Dystrophy of nails, Pterygium of the nails, Onycholysis, Subungual Hyperkeratosis	CK	DK	KH	L&PPT ,L	T-OBT,M- POS,QZ	F&S		-	LH
CO1, CO2, CO5	Describe the causes, clinical features and treatment of <i>Mugaparu</i> (Acne Vulgaris), Sebaceous cyst, Cradle cap (Milk crusts).	CK	MK	K	L&PPT ,L	M-POS,CL- PR	F&S		-	LH
CO1, CO2, CO5	Explain causes, clinical features and treatment of Miliaria and types.	CK	DK	K	L&PPT ,L	PRN,QZ	F&S		-	LH
CO1, CO2, CO5	Define the causes, clinical features and treatment of Anhidrosis, Bromhidrosis, Hyperhidrosis.	CK	DK	K	L,L&PP T	T-OBT,INT	F		-	LH
CO1, CO2, CO5	Describe the causes, clinical features and treatment of <i>Kaal aani</i> (Corn).	CK	MK	K	L&GD, L_VC,L &PPT ,L	PUZ,PRN	F&S		-	LH
CO1, CO2, CO5	Explain the Causes, clinical features and treatment of Callus.	CK	MK	K	L&GD, L&PPT	DEB,INT	F&S		-	LH
CO2, CO5	Perform Prophylactic Measures for <i>Podugu</i> (Dandruff) and <i>Pen</i> (Pediculosis).	PSY- GUD	MK	KH	BS,DIS	M- CHT,PM	F		-	NLHT23.1
CO2, CO5	Perform Prophylactic Measures for Hair fall and <i>Ila narai</i> (Premature Gray hairs).	PSY- GUD	MK	KH	PL,TBL	CL-PR,INT	F		-	NLHT23.2
CO2, CO5	Demonstrate best practices of Nail cutting, Cleaning of nails and clefts and the importance of correct foot wear to prevent	CAP	MK	KH	D,L&G D	DOPS,DOP S,P-PRF	F		-	NLHT23.3

	infections of Hand and Foot.									
CO1, CO2, CO5	Design SoP for <i>Chuttigai</i> in <i>Kaal aani</i> (Corn foot).	CAP	MK	KH	DIS,PS M	QZ ,Log book	F		-	NLHT23.4
CO1, CO2, CO5	Perform the procedures of history taking to rule out hair, nail, and foot conditions.	PSY- GUD	MK	KH	PBL,RP ,D- BED,D	PRN,P- EXAM	F		-	NLHP23.1
CO1, CO2, CO5	Perform chuttigai for <i>Kaal Aani</i> (Corn foot).	PSY- GUD	MK	KH	D,SIM	OSCE,DOP S,DOPS	F		-	NLHP23.2
CO1, CO2, CO5	Demonstrate the procedures of history taking to rule out hair, nail, and foot conditions.	PSY- GUD	MK	KH	D,PBL	SP,Log book,OSCE	F		-	NLHP23.3
CO1, CO2, CO5	Demonstrate the methods of topical applications such as <i>Patru</i> and <i>Poochu</i> for treating nail infections.	PSY- GUD	MK	KH	PT,D- BED	P-PRF,Mini- CEX	F		-	NLHP23.4
CO1, CO2, CO5	Perform practical training in KOH smear examination to confirm fungal infections.	PSY- GUD	MK	KH	KL,CD	P- PRF,OSPE	F		V-NU	NLHP23.5
CO1, CO2, CO5	Construct SoP for the application of Karamarunthukal in <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts).	CAN	MK	KH	PER,FC	PRN,DOA P	F		-	NLHP23.6
CO1, CO2, CO5	Perform the application of Karamarunthukal in <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts).	PSY- GUD	MK	KH	D,PT	DOPS,OSP E,DOPS	F		-	NLHP23.7
CO1,	Perform the technique of Nail avulsion in cases of <i>Naga</i>	PSY-	MK	KH	D,SIM	DOPS,DOP	F		-	NLHP23.8

CO2, CO5	<i>stru</i> (Paronychia), <i>Naga sothai</i> (Tinea unguim).	GUD				S				
CO1, CO2, CO5	Describe the prophylactic measures to prevent infections of foot.	CC	MK	KH	FC,RP	PRN,DEB	F		V- NAVO	NLHP23.9
CO1, CO2, CO5	Discuss successful stories in the treatment of <i>Puzhuvettu</i> (Alopecia)	CC	MK	KH	PER,CB L	PRN,INT	F		-	NLHP23.10
CO2, CO5	Practice different methods of physical examinations to identify the variations in the nails due to infections.	CAP	MK	KH	CBL,D- BED	Log book,DOA P	F		-	NLHP23.11
CO2, CO5	Demonstrate the methods of physical examination of Hair.	PSY- GUD	MK	KH	SIM,D	CBA,SP	F		-	NLHP23.12

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 23.1	Prophylactic Measures for <i>Podugu</i> (Dandruff) and <i>Pen</i> (Pediculosis).	Brainstorming :Organize a brainstorming session where students are divided into groups to generate ideas for preventing dandruff (<i>Podugu</i>) and lice (<i>Pediculosis</i>). Groups will discuss and note down various preventive measures, then share and refine their ideas through group discussion, focusing on aspects like hygiene practices, dietary changes, and natural remedies. Duration : 1 hour Discussion :Facilitate a group discussion on the prevention of dandruff (<i>Podugu</i>) and lice (<i>Pediculosis</i>) by providing background information and discussion prompts. students will be divided into small groups to share their thoughts, experiences, and ideas on effective home remedies, lifestyle factors, and hygiene practices. Groups will then present their insights to the larger group. Duration : 1 hour
NLHT 23.2	Prophylactic Measures for Hair fall and <i>Ila narai</i> (Premature Gray hairs).	Team-Based Learning :Students are divided into small teams to research and present on various prophylactic measures for hair fall and premature gray hair. Each team focuses on a specific aspect such as diet, stress management, hair care routines, or natural remedies. After conducting their

		<p>research, teams prepare and deliver a presentation summarizing their findings. This is followed by a group discussion students engage in questions, share personal experiences, and deepen their understanding of the preventive measures. Duration : 1 hour</p> <p>Peer Learning : Students engage in peer learning by discussing their personal experiences and challenges related to hair fall and premature gray hair. Each students shares tips and methods they have found effective, and the group collectively evaluates the practicality and effectiveness of these methods. Duration : 1 hour</p>
NLHT 23.3	Best practices of Nail cutting, Cleaning of nails and clefts and the importance of correct foot wear to prevent infections of Hand and Foot.	<p>Lecture and Group Discussion : Deliver a lecture on best practices for nail care and proper footwear. Discuss techniques for cutting nails straight, cleaning with a nail brush and soap, and the significance of breathable, well-fitting shoes. Follow this with a group discussion for sharing experiences, addressing challenges and a Q&A session. Duration : 1 hour</p> <p>Demonstration : Conduct a demonstration on proper nail cutting and cleaning methods. Show how to use nail clippers and a nail brush effectively. Demonstrate selecting and checking the fit and support of footwear. Ensure students practice these techniques to maintain healthy nails and feet. Duration : 1 hour</p>
NLHT 23.4	SoP for <i>Chuttigai</i> in <i>Kaal aani</i> (Corn foot).	<p>Problem solving method : Students are divided into groups to identify issues related to the <i>Chuttigai</i> procedure for treating <i>Kaal aani</i> (corn foot). Each group researches the issues, brainstorms potential solutions, and presents their findings to the class. After discussing the feasibility and effectiveness of the proposed solutions, students collaboratively develop an action plan to implement the best ideas. Duration : 1 hour</p> <p>Discussion : The teacher discuss the effectiveness, challenges, and potential improvements of <i>Chuttigai</i> for treating <i>Kaal ani</i> (corn foot) with students. then studentd are allowed to reviewing research articles and case studies in small groups, they present their findings to the class. The teacher facilitates a larger discussion, summarizing key points and encouraging further exploration. Duration : 1 hour</p>
Non Lecture Hour Practical		

S.No	Name of Practical	Description of Practical Activity
NLHP 23.1	Procedures of history taking to rule out hair, nail, and foot conditions.	<p>Problem-based learning :Students are divided into groups and assigned case scenarios. Each group takes a comprehensive history from the case description or a simulated patient, then presents their findings and proposed diagnoses to the class. Duration : 1 hour</p> <p>Role play :Students are Working in pairs or groups, one student acts as the patient while the others take on the role of physician. They perform the history-taking process, document findings, and receive feedback from peers and the teacher. Duration : 1 hour</p>
NLHP 23.2	Chuttigai for <i>Kaal Aani</i> (Corn foot).	Simulation or demonstration : The teacher demonstrates the procedure using mannequin feet, guiding students through the steps of cleaning, <i>chuttigai</i> , and aftercare. Students practice the procedure in small groups under supervision of teacher. Afterward, the class discusses their experiences, challenges, and observations, with the teacher providing feedback and additional insights. Duration : 1 hour
NLHP 23.3	Procedures of history taking to rule out hair, nail, and foot conditions.	<p>Problem-Based Learning: Present a problem scenario that requires taking a comprehensive patient history focused on hair, nail, and foot conditions. Students work in groups to identify the key questions and information needed. Duration : 1 hour</p> <p>Demonstration: Show the process of taking a detailed patient history, highlighting important aspects such as open-ended questions and attentive listening. Duration : 1 hour</p>
NLHP 23.4	Methods of topical applications such as <i>Patru</i> and <i>Poochu</i> for treating nail infections.	<p>Practical: Engage students in hands-on practice to apply topical medications for nail infections on models, ensuring they understand the proper techniques and dosage. Duration : 1 hour</p> <p>Demonstration Bedside: Provide a bedside demonstration with a patient to illustrate the practical aspects and considerations of applying topical medications in a clinical setting. Duration : 1 hour</p>
NLHP 23.5	Practical training in KOH smear examination to confirm fungal infections.	Practical Training : Students will engage in a practical training activity to perform KOH smear examination for confirming fungal infections. This hands-on session will guide students through the process of preparing a KOH smear, applying potassium hydroxide (KOH) solution to the sample, and examining it under a microscope. Duration : 1 hour

		Kinesthetic Learning : Students will work through a series of stations that simulate the steps of the examination, including sample collection, slide preparation, KOH application, and microscopic observation. Each station will provide opportunities for repetitive practice. Duration : 1 hour
NLHP 23.6	SoP for the application of Karamarunthukal in <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts).	Flipped classroom: Students research the traditional use of <i>Karamarunthukal</i> for treating <i>Palunni</i> and <i>Maru</i> before class, summarizing their findings and raising questions. During class, they share their insights, in a discussion, prepare the Kaaram, apply it to samples or volunteers, and monitor the outcomes. Duration : 1 hour Presentation: The teacher introduces the traditional use of Karamarunthukal for treating <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts) and then teacher will explain the SoP for Kaaram with the students. Duration : 1 hour
NLHP 23.7	Application of Karamarunthukal in <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts).	Practical : Students will engage in a practical activity to learn the application of <i>Karamarunthukal</i> in treating <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts). They will practice the entire process, from preparing the <i>Karamarunthukal</i> to its proper application on the affected areas. This hands-on session will help students understand the precise steps involved and the importance of hygiene and technique in <i>kaaramaruthugal</i> applications. Duration : 1 hour Demonstration : Students will observe a detailed demonstration by an experienced teacher on the application of Karamarunthukal for <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts). The teacher will showcase the preparation of the paste, explain the rationale behind its use, and demonstrate the application techniques. Duration : 1 hour
NLHP 23.8	Technique of Nail avulsion in cases of <i>Naga sutru</i> (Paronychia), <i>Naga sothai</i> (Tinea unguim).	Simulation: Use simulation models to practice the technique of nail avulsion, allowing students to learn and refine their skills in a controlled environment. Duration : 1 hour Demonstration: Perform a live demonstration to show the correct procedure for nail avulsion, emphasizing precision and safety. Duration : 1 hour
NLHP 23.9	Prophylactic measures to prevent infections of foot.	Roleplay : Students will engage in a roleplay activity to learn about the prophylactic measures to prevent foot infections. They will act out various scenarios where they educate patients on foot care

		<p>practices such as regular washing and drying of feet, wearing breathable footwear, keeping toenails trimmed, avoiding walking barefoot in public areas, and inspecting feet for any signs of infection. Duration : 1 hour</p> <p>Flipped Classroom : In the flipped classroom approach, students will be assigned pre-class materials, including articles, videos, and guidelines, to study prophylactic measures for preventing foot infections. They will review these resources at their own pace before the class. During the class, students will discuss their insights, share experiences, and apply their knowledge to case studies and scenarios. Duration : 1 hour</p>
NLHP 23.10	Successful stories about the treatment of <i>Puzhuvettu</i>	<p>Case-Based Learning: The teacher will Discuss case studies involving the treatment of <i>Puzhuvettu</i>, analyzing the diagnosis, treatment methods, and outcomes with the students. Duration : 1 hour</p> <p>Presentation: Teacher share successful treatment stories through presentations, highlighting the key aspects and students will learned from each case. Duration : 1 hour</p>
NLHP 23.11	Diffrent methods of physical examinations to identify the variations in the nails due to infections.	<p>Case-Based Learning : Students will engage in case-based learning to explore different methods of physical examinations for identifying variations in nails due to infections. Real-life case scenarios will be presented, allowing students to analyze symptoms, discuss differential diagnoses, and identify key signs of nail infections. Duration : 1 hour</p> <p>Demonstration on Bedside : The teacher will conduct a bedside demonstration, showcasing the proper techniques for examining nails to identify variations caused by infections. Students will observe the examination process on actual patients, learning how to assess nail color, shape, texture, and other critical features. Duration : 1 hour</p>
NLHP 23.12	Methods of physical examination of Hair.	<p>Simulation : Students will engage in a simulation exercise to practice the methods of physical examination of hair. They will pair up, with one acting as the healthcare provider and the other as the patient. Using a structured guide, they will assess hair health by examining the scalp condition, hair texture, and growth patterns. Duration : 1 hour</p> <p>Demonstration : The teacher will perform a detailed demonstration of the proper techniques for examining hair. The demonstration will cover how to assess scalp health, examine hair shafts, and identify signs of hair abnormalities. Participants will observe the process, take notes, and participate in</p>

a Q&A session to clarify any doubts. Duration : 1 hour

Topic 24 Mooku Noigal (Diseases of the Nose) (LH :7 NLHT: 3 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO5, CO7, CO8	Describe the Definition, Causes, Classification with Clinical features and Treatment of <i>Peenism</i> (Sinusitis)	CK	MK	K	L&PPT ,L&GD, L,L_VC	PUZ,QZ ,INT,M- POS	F&S		-	LH
CO1, CO2, CO5, CO7	Define and describe the Definition, Causes, Clinical features and Treatment of <i>Nasigapeedam</i> (Nasal polyps)	CK	MK	K	L&PPT ,L_VC, L&GD, L	QZ ,M-CH T,PUZ,DE B	F&S		-	LH
CO1, CO2, CO5	Explain the Definition, Causes, Clinical features and Treatment of <i>Karapan, Kalalai, Paru</i> and <i>Pilavai</i>	CK	MK	K	L&GD, L&PPT ,L	PUZ,QZ ,DEB	F&S		-	LH
CO2, CO5	Explain Furunculosis ,Cavernous sinus thrombosis	CC	DK	KH	L&GD, L_VC,L ,L&PPT	INT,CL- PR,QZ	F		-	LH
CO1, CO2, CO5	Describe Erysipelas, Lupus erythematosus, Rhinophyma.	CC	DK	KH	L,L_VC ,L&PPT	CL-PR,PU Z,QZ	F&S		-	LH
CO1, CO2, CO5	Describe <i>Raktha Peenisam</i> (Epistaxis)	CK	DK	K	L,L&G D,L&PP T ,L_VC	QZ ,DEB,PUZ	F&S		-	LH

CO1, CO2, CO5	Define Nasal Septal disease and classify the different types of Rhinitis	CC	DK	K	L,L_VC ,L&PPT ,L&GD	QZ ,CL- PR,DEB	F&S		-	LH
CO1, CO2, CO5	Interpret the effective application of <i>Oppurai</i> and <i>Ethirurai</i> for various types of <i>Peenisam</i> (Sinusitis)	PSY- GUD	MK	SH	IBL,DIS ,PBL	INT,DEB	F&S		V- SATV	NLHT24.1
CO1, CO2, CO5, CO6	Demonstrate examination of Nose, Paranasal sinuses and Naso pharynx.	PSY- GUD	MK	SH	SIM,D, CBL	INT,SP,SB A	F&S		-	NLHP24.1
CO1, CO2, CO5	Construct SoP for <i>Pugai</i> and <i>Nasiyam</i> for <i>Mookku noikal</i> (Nasal diseases)	CAN	MK	KH	IBL,DIS	CL-PR,INT ,PRN	F&S		-	NLHT24.2
CO1, CO2, CO5, CO8	Perform <i>Nasiyam</i> (Nasal application) for <i>Mookku Noikal</i> (Diseases of Nose)	PSY- GUD	MK	D	SIM,RP ,TBL,C BL	PRN,P-VIV A,P-EXAM ,P-PRF	F&S		-	NLHP24.2
CO1, CO2, CO5	Demonstrate First aid for <i>Ratha Peenisam</i> (Epistaxis).	CAP	DK	KH	L&PPT ,BS,L_ VC	P-PRF,P- RP	F		-	NLHT24.3
CO1, CO2, CO5, CO8	Perform <i>Vedhu</i> (Steam therapy) for <i>Mookku Noikal</i> (Diseases of Nose).	PSY- GUD	MK	D	TBL,RP	P-PRF,P- VIVA	F&S		-	NLHP24.3
CO1, CO2,	Conduct examination of Nose, Paranasal sinuses and Naso pharynx	PSY- GUD	MK	SH	PBL,D- BED	P-RP,SP,P- PS	F&S		-	NLHP24.4

CO5										
CO1, CO2, CO5	Demonstrate the proper steps in inserting a Ryle's tube using appropriate techniques.	PSY- GUD	MK	SH	SIM,D	P-RP,P- PRF	F&S		-	NLHP24.5
CO1, CO2, CO5	Achieve diagnosis and line of treatment by Integrating the results of Physical examination and Investigations of Nasal diseases.	CAN	MK	SH	PSM,K L	PM,P-PS	F&S		-	NLHP24.6
CO1, CO2, CO5	Assess the humoural predominance in different types of <i>Peenisam</i> .	CAN	MK	SH	CBL,PB L	P-CASE,P- RP,P-MOD ,P-PRF	F&S		-	NLHP24.7
CO1, CO2	Demonstrate the techniques for removal of foreign bodies from the nose in simulations.	PSY- GUD	MK	KH	D,SIM	SP,PM	F		-	NLHP24.8
CO1, CO2, CO5	Demonstrate proper steps in inserting a Ryle's tube using appropriate techniques.	PSY- GUD	MK	KH	D,SIM	SP,DOPS,D OPS	F		-	NLHP24.9
CO1, CO2, CO5	Describe the radiological, microbiological, and histological investigations relevant to diseases of Nose.	CC	MK	SH	CBL,LR I	Log book,D OPS,DOPS	F		-	NLHP24.10

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 24.1	<i>Oppurai</i> and <i>Ethirurai</i> for various types of <i>Peenisam</i> (Sinusitis)	Discussion: Facilitate a discussion on the concepts of <i>Oppurai</i> (alternative therapies) and <i>Ethirurai</i> (contrary treatments) and their applications in treating different types of <i>Peenisam</i> (sinusitis). Students engage in conversations about the principles, benefits, and potential challenges of these treatments. Duration : 1 hour Project-Based Learning: Assign a project where students research and develop treatment plans using <i>Oppurai</i> and <i>Ethirurai</i> for various sinusitis types. They work in groups to create comprehensive plans,

		including theoretical background, practical application, and expected outcomes, then present their findings to the class. Duration : 1 hour
NLHT 24.2	SoP for <i>Pugai</i> and <i>Nasiyam</i> for <i>Mookku noikal</i> (Nasal diseases)	Discussion: The teacher will Initiate a discussion on the significance of Standard Operating Procedures (SoPs) for <i>Pugai</i> (steam therapy) and <i>Nasiyam</i> (nasal application) in treating nasal diseases. Cover the fundamental aspects of these treatments and their therapeutic benefits. Duration : 1 hour Inquiry-Based Learning: Encourage students to ask questions and explore the procedures in depth. Guide them to investigate the best practices and protocols for <i>Pugai and Nasiyam</i> , fostering a deeper understanding through independent research. Duration : 1 hour
NLHT 24.3	First aid for <i>Ratha Peenisam</i> (Epistaxis).	Brainstorming : Teacher will Start with a brief introduction to the topic of epistaxis and the objective of the brainstorming session.Encourage students to share their ideas and knowledge about the causes, symptoms, and first aid measures for epistaxis.Write down all contributions on the whiteboard or flip chart.Facilitate a discussion to organize the ideas and identify common themes or gaps in knowledge.Review the categorized ideas and reflect on the key points generated during the brainstorming session.Summarize the key takeaways and highlight areas that need further exploration or clarification. Duration : 1 hour Lecture with Video Clips: Provide a lecture on the causes, symptoms, and first aid techniques for epistaxis, supported by video clips demonstrating the steps. Duration : 1 hour Demonstration:Conduct a live demonstration of the first aid procedures for managing epistaxis. The instructor will demonstrate steps such as applying pressure, positioning the head, and using nasal sprays or packing if necessary. Duration : 1 hour
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 24.1	Examination of Nose, Paranasal sinuses and Naso	Demonstration or Simulation : Conduct a live demonstration of the examination techniques for the

	pharynx.	nose, paranasal sinuses, and nasopharynx in a patient or simulation. The teacher will demonstrate the steps involved in the examination, such as inspection, palpation, and use of appropriate tools. Duration : 1 hour
NLHP 24.2	<i>Nasiyam</i> (Nasal application) for <i>Mookku Noikal</i> (Diseases of Nose)	Case-based learning: Present scenarios involving nasal diseases requiring <i>Nasiyam</i> (nasal application). Students analyze these cases to understand when and how <i>Nasiyam</i> is applied. Duration : 1 hour Problem-based learning, students address hypothetical problems related to nasal diseases, formulating treatment plans that include <i>Nasiyam</i> as a component. Duration : 1 hour
NLHP 24.3	<i>Vedhu</i> (Steam therapy) for <i>Mookku Noikal</i> (Diseases of Nose).	Team-based learning : Students work in teams to simulate steam therapy applications, ensuring they understand its therapeutic use and effectiveness. Duration : 1 hour Role play : Divide students into groups. Assign the roles like practitioner and patient to the students. Then ask the practitioner to perform the procedure to the students. Repeat this for another group. Duration : 1 hour
NLHP 24.4	Examination of Nose, Paranasal sinuses and Nasopharynx	Problem-Based Learning : Students are presented with a problem scenario involving a patient with symptoms related to the nose, paranasal sinuses, and nasopharynx. In groups, analyze the problem, identify the symptoms, discuss possible causes, and perform the examination techniques using nasal examination kit . Duration : 1 hour Demonstration on Bedside : Student will perform each step of the examination, including inspection, palpation, and the use of appropriate tools . Emphasize key anatomical landmarks and common findings. Duration : 1 hour
NLHP 24.5	Proper steps in inserting a Ryle's tube using appropriate techniques.	Simulation or Demonstration : The teacher will explain the purpose, gathering materials, and positioning the trainer then the teacher will perform and demonstrate the steps in inserting the Ryle's tube. Students will observe, take notes, and discuss the procedure, potential complications, and patient care with the teacher. The teacher will clear any doubts raised by students.

NLHP 24.6	Diagnosis and line of treatment by integrating the results of physical examination and investigations of nasal diseases.	Problem solving method : Employ the problem-solving method to integrate physical examination findings with lab and X-ray results. Duration : 1 hour Kinaesthetic learning: hands-on practice with X-ray identification and lab report interpretation. Duration : 1 hour
NLHP 24.7	Humoural predominance in different types of <i>Peenisam</i> .	Problem-based learning : Present hypothetical scenarios requiring diagnosis and treatment planning for nasal diseases in students. Duration : 1 hour Case-based learning : Students will analyze the actual cases to understand the indications for various treatments and their effectiveness. Duration : 1 hour
NLHP 24.8	Techniques for removal of foreign bodies from the nose in simulations.	Simulation or Demonstration : Utilize simulations to practice the removal of foreign bodies from the nose, ensuring students learn the proper techniques. Follow up with live demonstrations to reinforce these skills and provide real-world context. Duration : 1 hour
NLHP 24.9	Proper steps in inserting a Ryle's tube using appropriate techniques.	Role play or Demonstration : Students are divided in to groups. One student will act as the practitioner, explaining the purpose, gathering materials, and positioning the trainer then the practioner perform and demonstrate the steps in inserting the ryles tube. Other students will observe, take notes, and discuss the procedure, potential complications, and patient care with the teacher. the teacher will clear and correct any doubts or mistakes in demonstration. The roles will rotate to ensure each student gets hands-on experience. Duration : 1 Hour
NLHP 24.10	Radiological, microbiological, and histological investigations relevant to diseases of Nose.	Lab Report Interpretation : The teacher will guide students through interpreting lab reports related to nasal diseases. Starting with a review of patient history to set context, the activity will then examine radiological findings like CT and MRI scans for key features such as sinus opacification and polyps. Students will analyze microbiological results to identify pathogens from nasal swabs or cultures, and interpret histological findings from slides for signs of inflammation, infection, or neoplastic changes. Finally, students will engage in group discussions to present and refine their interpretations, integrating theoretical knowledge with practical skills for a comprehensive understanding of nasal disease diagnosis. Duration : 1 hour

Case-Based Learning : The teacher begin the class with an overview of relevant investigations, followed by a case study presentation of a patient with chronic nasal symptoms. Students examine radiological images like CT and MRI scans to identify abnormalities, perform microbiological tests such as nasal swabs and cultures to detect pathogens, and review histological slides under a microscope to observe tissue changes. The session concludes with an interactive Q&A to deepen understanding and a summary highlighting the integration of these techniques for accurate diagnosis.
Duration : 1 hour

Topic 25 Arpaviranam (Minor Skin diseases) (LH :2 NLHT: 1 NLHP: 3)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO1, CO2, CO5	Define <i>Viyarkuru</i> – (Prickly heat), <i>Koppulam</i> (Vesicles / Bullae), <i>Thavalai chori</i> (Phrynoderma).	CK	MK	K	L_VC,L	INT,T-OBT	F&S		-	LH
CO1, CO2, CO5	Define <i>Akkul Koppulam</i> / <i>Akkul katti</i> (Hidradenitis suppurativa) , <i>Setrupun</i> (Tinea pedis), <i>Varagu koppulam</i> (Pustules).	CK	MK	K	L,L&PP T	DEB,WP	F&S		-	LH
CO1, CO2, CO5	Construct the prophylactic measures of <i>Setruppun</i> (Tenia Pedis)	CAN	DK	KH	DIS,D,F C	SBA,PM	F		-	NLHT25.1
CO1, CO2, CO5	Demonstrate <i>Vamanam</i> (Emetic therapy) to neutralise three humours in specific skin conditions.	PSY- GUD	MK	SH	RP,SIM	DOPS,DOP S,P-PS	F&S		-	NLHP25.1
CO1, CO2, CO5	Conduct <i>Viresanam</i> (Purgative therapy) to neutralize three humours in specific skin conditions.	PSY- GUD	MK	SH	RP,SIM	PM,OSPE	F&S		-	NLHP25.2
CO1, CO2,	Identify the humoral predominance in each type of <i>Arpa viranam</i> (Minor skin lesions).	CAP	MK	SH	PBL,CB L	P-PRF,Mini- CEX	F&S		-	NLHP25.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 25.1	Prophylactic measures of <i>Setruppun</i> (Tinea Pedis)	<p>Group Discussion: Facilitate a discussion on various preventive measures for tinea pedis. Provide case studies or scenarios involving tinea pedis prevention. Divide students into small groups to discuss and list preventive measures. Each group presents their findings to the class. Duration : 1 hour</p> <p>Flipped Classroom: For pre-class preparation, students should watch pre-recorded lectures on Tinea Pedis, covering causes, symptoms, foot hygiene, antifungal measures, and footwear tips. They should read provided materials and complete a quiz to assess comprehension. In-class activities include setting up stations for Tinea Pedis prevention, a Q&A session, and group discussions on case scenarios, with each group presenting their findings. Duration : 1 hour</p>

Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 25.1	<i>Vamanam</i> (Emetic therapy) to neutralise three humours	<p>Role Play : Arrange a simulation area with a patient bed, Medicines, and other necessary materials. Assign roles to students (e.g., practitioner, patient, assistant). Briefly explain the purpose of <i>Vamanam</i> therapy and the steps involved.</p> <p>Assign roles to the students. Practitioner: Explain the procedure to the "patient," including the purpose and expected outcomes. Patient: Act as a patient following the instructions given by the practitioner. Assistant: Support the practitioner in preparing and administering the herbal decoctions. Duration : 1 hour</p> <p>Simulation: The students simulate the administration of Medicines to induce vomiting, while the assistant monitors the patient's response. The teacher provides post-therapy care instructions and dietary recommendations. Debrief:</p> <p>Discuss the experience, challenges faced, and areas for improvement. Provide feedback on communication and procedural skills. Duration : 1 hour</p>

NLHP 25.2	<i>Viresanam</i> (Purgative therapy) to neutralise three humours in specific skin conditions.	<p>Role Play :</p> <p>Arrange a simulation area with necessary materials for <i>Viresanam</i> therapy, including herbal purgatives, medicines, steam therapy equipment, and patient bedding. Assign roles to students (e.g., practitioner, patient, assistant). Briefly explain the purpose of <i>Viresanam</i> therapy and the steps involved.</p> <p>Assign roles to the students. Practitioner: Explain the procedure to the "patient," including the purpose and expected outcomes. Patient: Act as a patient following the instructions given by the practitioner. Assistant: Support the practitioner in preparing and administering the herbal purgatives, and assisting with steam therapy. Duration : 1 hour</p> <p>Simulation:</p> <p>The practitioner simulates the administration of medicines, steam therapy, and herbal purgatives, while the assistant monitors the patient's response. The practitioner provides post-therapy care instructions and dietary recommendations. Duration : 1 hour</p>
NLHP 25.3	Humoral predominance in each type of <i>Arpa viranam</i> (Minor skin lesions).	<p>Problem-Based Learning :</p> <p>Students will be divided into groups, each analyzing patient scenarios with specific symptoms to determine the predominant humor (<i>Vatham, Pitham, Kabam</i>). Groups will research, discuss, and diagnose the humoral imbalance in their cases, preparing a presentation to share their findings with the class. Duration : 1 hour</p> <p>Case-Based Learning :</p> <p>Student will analyze a detailed patient case studies, discuss in groups to identify the type of lesion and the predominant humor (<i>Vatham, Pitham, Kabam</i>), and develop a comprehensive treatment plan. Groups will present their findings and treatment plans, participate in peer review sessions. Duration : 1 hour</p>
Topic 26 Special medicines in Siddha for Skin diseases (LH :2 NLHT: 1 NLHP: 3)		

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO5, CO6	Describe the preparation and administration of <i>Rasa Chendurum</i> , <i>Kanthaga Sudar Thailam</i> , and <i>Parangipattai Rasayanam</i> specifying appropriate dosages, indications and procedural steps for the effective management of chronic skin diseases	CK	MK	K	L,L&G D	O-QZ,PRN	F&S		-	LH
CO2, CO5, CO6	Describe the preparation and administration of <i>Sivanarvembu Chooranam</i> , <i>Karunkozhi Chooranam</i> , <i>Sarvanga Rasayanam</i> specifying appropriate dosages, indications and procedural steps for the effective management of chronic skin diseases	CK	MK	K	PER,L	CL-PR,QZ	F&S		V-GMK	LH
CO2, CO5, CO8	Demonstrate the video presentation of preparing special medicines for skin diseases.	PSY-GUD	MK	KH	BL,L_V C	INT,P-POS	F		-	NLHT26.1
CO2, CO5, CO7	Demonstrate the methods to review latest research papers on the topic of special siddha medicines for treatment and maintenance of chronic skin diseases and publish as a paper in a indexed journal.	PSY-GUD	MK	D	DA,CB L,PL	CR-RED,P ortfolios,C R-W	F&S		-	NLHP26.1
CO2, CO5, CO7, CO8	Demonstrate the efficacy of Special medicines by incorporating before and after treatment photographs for preparing a poster presentation.	PSY-GUD	MK	D	DA,LRI	RK,Log book	F		H-RM	NLHP26.2
CO2, CO5, CO7, CO8	Analyse the possibilities to become Entrepreneur in manufacturing and marketing special medicines in siddha.	CAN	NK	KH	TBL,D A	360D,PRN	F		-	NLHP26.3

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
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NLHT 26.1	Demonstrating the video presentation of preparing special medicines for skin diseases.	<p>The teacher will shows a video clipping emphasising</p> <ul style="list-style-type: none"> • Prepare medicines viz. <i>Sivanarvembu Chooranam, Karunkozhi Chooranam, Kanthaga Sudar Thailam, Parangipattai Rasayanam</i>-- show the ingredients and its purification process • Demonstrate the steps (e.g., grinding herbs, mixing powders, or boiling decoctions) involved in the preparation. <p>Highlight the efficacy and safety of Siddha medicines prepared.</p> <p>Duration : 1 Hour</p>
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Non Lecture Hour Practical

S.No	Name of Practical	Description of Practical Activity
NLHP 26.1	Demonstrating the methods to review latest research papers on the topic of special siddha medicines for treatment and maintenance of chronic skin diseases and publish as a paper in a indexed journal.	<p>Peer learning: Students divided into small groups, for each group teacher should demonstrate the common method to review research papers. Then the students are allowed to</p> <ul style="list-style-type: none"> • Identify & allocate suitable research publications on the topic of chronic skin diseases treated by special siddha medicines to different student groups. • The students are instructed to conduct group discussion on the efficacy and contraindications of the approaches from different research studies • Based on the gained knowledge prepare a manuscript and submit it to a indexed journal. • After a Peer Review, recieve the acceptance from the indexed journal and publish it as per the norms of the publication <p>Duration : 1 Hour</p>

NLHP 26.2	Demonstrating the efficacy of Special medicines by incorporating before and after treatment photographs for preparing a poster presentation.	<p>Drug Analysis:</p> <p>The teacher should demonstrate the methodology of poster presentation to the students. Each student is instructed to prepare and present articles/ posters on the efficacy of siddha special medicines in the management of chronic skin diseases. (for eg., <i>Karunkozhi Chooranam</i> and <i>Kanthaga Sudar thailam</i> in the treatment of eczema)</p> <p>Articles/Posters to include details like dosage, usage pattern, duration, supplementary medicines for optimal results.</p> <p>Duration : 1 Hour</p>
NLHP 26.3	Analysing the possibilities to become Entrepreneur in manufacturing and marketing special medicines in siddha.	<p>Team Based Learning:</p> <p>Teachers can inspire students to develop innovative solutions for eye health issues. They can guide projects on creating affordable vision aids or organizing community eye check-ups by</p> <ul style="list-style-type: none"> • Identify some unique, effective formulations for skin disease • Obtain licenses from AYUSH and follow GMP standards. • Online platforms, traditional branding, and export opportunities. • Partner with practitioners and wellness centers for trust and outreach. <p>This collaborative effort helps students build technical, entrepreneurial, and social skills, ensuring they become future leaders in health innovation.</p> <p>Duration : 1 Hour</p>

Topic 27 Vaai Noikal (Diseases of Oral Cavity) (LH :6 NLHT: 3 NLHP: 8)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO6, CO8	Describe the causes, classifications, clinical features and treatment of <i>Naaku noigal</i> (Tongue diseases)	CC	MK	K	L,L&PP T	CL-PR,QZ	F&S		V-UK	LH

CO2, CO6, CO8	Describe the causes, classifications, clinical features and treatment of <i>Ulnaakku noigal</i> (Diseases of the Uvula)	CC	MK	K	L,L&PP T	QZ ,PRN	F&S		-	LH
CO2, CO6	Explain the clinical features of pemphigus. Enumerate common symptoms of oro pharynx inflammation and differentiate cysts of mouth.	CK	DK	K	L,L&PP T	QZ ,PRN	F&S		-	LH
CO2, CO6, CO8	Define <i>Naaku Pun</i> (Stomatitis) and Describe the causes, classifications, Clinical features and treatment of <i>Naakku puttru</i> (Carcinoma of Tongue)	CK	MK	K	L,L&PP T	T-CS,CL- PR	F&S		-	LH
CO2, CO6, CO8	Describe the causes, classifications, clinical features and treatment of <i>Kannaputtru</i> (Carcinoma of cheek)	CK	MK	K	L,L&PP T	CL-PR,DE B,T-CS	F&S		-	LH
CO2, CO6, CO8	Describe the causes, classifications, clinical features and treatment of diseases of Salivary gland including Carcinoma of Parotid gland and Sialolithiasis	CK	MK	K	L&PPT ,DIS,L	PUZ,PRN, T-OBT,T- CS	F&S		-	LH
CO2, CO5, CO6	Discuss natural resources/herbal products that can be used for oral health care.	CAP	DK	KH	FC,DIS	O-QZ,PRN	F		-	NLHT27.1
CO2, CO5	Explain the detrimental effects of tobacco chewing	CC	DK	K	PER,L& GD	PRN	F		-	NLHT27.2
CO1, CO2, CO6, CO7	Demonstrate understanding of advanced techniques to proactively identify and treat <i>Naakkuputtru</i> (Cancer of tongue) and <i>K annaputtru</i> (Cancer of cheek)	PSY- GUD	NK	KH	CBL,PT	PRN	F&S		-	NLHT27.3
CO2	Demonstrate examination of Buccal cavity	PSY- GUD	MK	SH	D	P-PRF,P- EXAM	F&S		-	NLHP27.1

CO2, CO3	Perform examination of the buccal cavity	PSY- GUD	DK	SH	PT,D- BED	OSCE	F&S		-	NLHP27.2
CO2, CO5	Diagnose and construct line of treatment after examination of buccal cavity	PSY- GUD	MK	SH	D,CBL	P-VIVA	F		-	NLHP27.3
CO1, CO2	Demonstrate examination techniques of <i>Naakku puttru</i> (Carcinoma of Tongue)	PSY- GUD	MK	SH	D-BED	P-VIVA	F		-	NLHP27.4
CO2, CO6	Perform examination of <i>Naakku puttru</i> (Carcinoma of Tongue)	PSY- GUD	MK	SH	PER,D	PRN	F		-	NLHP27.5
CO2, CO8	Indicate the histo pathological diagnosis and line of treatment after examination of <i>Naaku Puttru</i> (carcinoma of tongue)	PSY- GUD	MK	SH	CBL	P-VIVA	F		-	NLHP27.6
CO2, CO3, CO5	Describe the importance of Tumour markers for different kind of Cancers.	CC	MK	KH	LRI,DIS ,D	P-VIVA	F&S		-	NLHP27.7
CO2, CO3, CO5	Discuss the role of Family history and environmental hazards in developing different types of cancers.	CAN	MK	KH	TBL,DI S,RLE	Log book,S- LAQ	F&S		-	NLHP27.8

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 27.1	Discussion on natural resources/herbal products for oral health care	<p>Flipped Classroom: Students will be assigned pre-class materials, including articles and videos, to understand natural resources/herbal products for oral health care. Participants will review these resources at their own pace before the class, ensuring they come prepared with a foundational understanding of the topic.</p> <p>Discussion: Students will share insights from their pre-class study, apply their knowledge to case studies, and engage in collaborative learning.</p> <p>The teacher should involve in the discussion of natural resources/herbal products that can be used for</p>

		oral health care. Duration : 1 Hour
NLHT 27.2	Explanation of the detrimental effects of tobacco chewing	<p>The teacher should divide the students into small groups with 4 to 5 members Each group of students should discuss about the,</p> <ul style="list-style-type: none"> • Harmful effects of tobacco chewing, including oral cancer, gum diseases, tooth decay, and bad breath. • Health risks and behavior change strategies. • Real-life cases and challenges in quitting tobacco can be discussed with the teacher for a practical knowledge. <p>Duration : 1 Hour</p>
NLHT 27.3	Demonstration of acute understanding of advanced techniques to proactively identify and treat <i>Naakuputtru</i> (Cancer of tongue) and <i>Kannaputtru</i> (Cancer of cheek)	<p>The teacher should divide the students into small groups of 2-3 members Provide each group with a detailed case study of a patient presenting with <i>Naakuputtru</i> and <i>Kannaputtru</i> Include patient history, symptoms, and initial examination findings. Each group reviews their case study, discussing the following:</p> <ul style="list-style-type: none"> • Patient history and key presenting symptoms. • Potential diagnoses based on the information provided. • Necessary physical examinations to assess the <i>Naakuputtru</i> (Cancer of tongue) and <i>Kannaputtru</i> (Cancer of cheek) to Interpret the test results. • Further diagnostic tests if needed (e.g., biopsy, imaging). • The Students should also develop a management plan for the patient. <p>Duration : 1 Hour</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 27.1	Demonstration of Buccal cavity examination	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Visual Inspection: Check for lesions, swelling. • Palpation: Feel for lumps. • Assess Saliva Flow: Check dryness. • Examine Teeth and Gums: Check for abnormalities. <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>
NLHP 27.2	Performance of buccal cavity examination	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following Greet the patient and obtain the consent. Continue with the examination such as,</p> <ul style="list-style-type: none"> • Visual Inspection: Check for lesions, swelling. • Palpation: Feel for lumps. • Assess Saliva Flow: Check dryness. • Examine Teeth and Gums: Check for issues. <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>

NLHP 27.3	Diagnosis and construction of the line of treatment after examination of buccal cavity	<p>Group Discussions: Students are divided into small groups Provide students with clinical cases involving clinical conditions of buccal cavity. Students discuss the cases in small groups with teacher, identifying clinical signs, examination techniques, diagnosis and management plans.</p> <p>Case-Based Learning (CBL) Divide students into small groups of 2-3 members. Provide each group with a detailed case study of a patient presenting with buccal cavity abnormalities. Each group reviews their case study, discussing the following:</p> <ul style="list-style-type: none"> • Patient history and key presenting symptoms. • Potential diagnoses based on the information provided. • Interpretation of examination and test results. • Further diagnostic tests if needed (e.g., biopsy, imaging). • Confirmation of the diagnosis. • Immediate management and treatment options. • Long-term follow-up and patient education. <p>Each group presents their case analysis and management plan to the class. After each presentation, conduct a class-wide discussion. Encourage questions from other groups and provide feedback on the case analysis and management plans. Duration : 1 Hour</p>
NLHP 27.4	Demonstration of examination techniques of <i>Naakku puttru</i> (Carcinoma of Tongue)	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Visual Exam: Inspect tongue for lesions. • Palpation: Check for lumps.

		<ul style="list-style-type: none"> • Biopsy: Take tissue sample. (outsourcing) • Imaging: CT/MRI scans.(outsourcing) • Lab Tests: Bio markers(outsourcing) <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis.</p> <p>Duration : 1 Hour</p>
NLHP 27.5	Performance of <i>Naakku Puttru</i> examination (Carcinoma of Tongue)	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following</p> <p>Greet the patient and obtain the consent. Continue with the examination such as,</p> <ul style="list-style-type: none"> • Visual Exam: Inspect tongue for lesions. • Palpation: Check for lumps. • Biopsy: Take tissue sample. (outsourcing) • Imaging: CT/MRI scans.(outsourcing) • Lab Tests: Bio markers(outsourcing) <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis.</p> <p>Duration : 1 Hour</p>
NLHP 27.6	Indicating the histopathological diagnosis and line of treatment after examination of <i>Naaku Puttru</i> (carcinoma of tongue)	<p>Case Based Learning:</p> <p>The teacher should divide the Students into smaller groups. Each groups are instructed to do:</p> <ul style="list-style-type: none"> • Examine for ulceration, induration, and nodules on the tongue. • Check for pain, bleeding, or difficulty in swallowing/speech. • Confirm via biopsy and imaging (MRI/CT).

		<ul style="list-style-type: none"> • Include Siddha interventions like <i>Rasaganthi mezhugu</i>, <i>Nanthi mai</i>, <i>Chithira moola kuzhigai</i>, <i>Nellikai leghiyam</i> for symptom management and immunity enhancement. <p>Duration : 1 Hour</p>
NLHP 27.7	Describing the importance of Tumour markers for different kind of Cancers.	<p>Demonstration: The teacher should demonstrate different types of tumor markers for detecting and diagnosing various cancers, such as PSA for prostate cancer or CA-125 for ovarian cancer. It helps to assess prognosis, guide treatment decisions, and monitor treatment effectiveness.</p> <p>Lab Report interpretation: The teacher must analyze various tumor marker reports to assess staging, prognosis, and treatment options for different cancer types.</p> <p>Duration : 1 Hour</p>
NLHP 27.8	Discussing the role of Family history and environmental hazards in developing different types of cancers.	<p>Real Life Experience:</p> <p>The teacher should divide the students into groups Each group is instructed to discuss Family History, Genetic Predisposition, Environmental Exposures, Lifestyle Factors are the causes of developing different types of cancer. The students are then allowed to discuss the findings.</p> <p>Duration : 1 Hour</p>

Topic 28 Thondai Noikal (Diseases of Throat) (LH :6 NLHT: 4 NLHP: 7)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2	Define causes, types, clinical features and treatment of Tonsilitis and Pharyngitis	CK	MK	K	L,L&PP T	PRN,QZ	F&S		-	LH
CO2	Describe the causes, pathology, types, clinical features and treatment of tumours of Pharynx Distinguish Palatal and Pharyngeal Palsy	CK	MK	K	L,L&PP T	QZ ,CL-PR	F		-	LH

CO2, CO6	Explain the clinical features of Trismus and <i>Anna pilavai</i> (Cleft palate)	CK	DK	K	L&PPT, L	PUZ, DEB	F&S		-	LH
CO2, CO8	Explain the causes, types, clinical features and treatment of Laryngitis	CK	MK	K	L, L&PPT	T-OBT, M-CHT	F		-	LH
CO2	Describe the causes, types, clinical features and treatment of Laryngeal paralysis	CK	MK	K	L, FC	CL-PR, WP	F		-	LH
CO2	Describe disorders of voice	CK	DK	K	L&PPT, DIS, L	O-GAME, P-RN	F&S		-	LH
CO2	Describe clinical features and treatment of <i>Lasuna thabitham</i> (Tonsillitis)	CC	MK	KH	D-BED, CBL	PRN, M-POS	F&S		-	NLHT28.1
CO2	Describe the clinical features and treatment of Laryngitis	CC	MK	KH	PBL, PE-R	INT, PUZ	F&S		-	NLHT28.2
CO2	Describe the clinical features and treatment of tumours of Pharynx	CC	MK	KH	L_VC, DIS	CL-PR, M-POS	F&S		-	NLHT28.3
CO2	Describe the social and preventive aspects of <i>Lasuna thabitham</i> (Tonsillitis)	CC	DK	KH	IBL, L&GD	CWS, PRN	F&S		-	NLHT28.4
CO2, CO7, CO8	Demonstrate the physical examination techniques and instruments used for diagnosis and treatment of Tonsilitis	PSY-GUD	MK	KH	CBL, RP	P-VIVA, P-EXAM, OSCE	F&S		-	NLHP28.1
CO2, CO7, CO8	Conduct the physical examination for diagnosis and treatment of Tonsilitis	PSY-GUD	MK	SH	RP, SIM	P-RP, P-VIVA, P-EXAM	F&S		-	NLHP28.2
CO2	Demonstrate history taking with associated clinical features during examination of <i>Lasuna thabitham</i> (Tonsillitis)	PSY-GUD	MK	D	CBL, TBL	P-PRF, Mini-CEX	F&S		-	NLHP28.3

CO2	Describe the prophylactic measures to prevent hoarseness of voice.	CAP	MK	KH	CBL	P-PRF	F		-	NLHP28.4
CO2	Demonstrate the methods of physical examination of Larynx	CAP	MK	KH	D-M,CBL	P-CASE,P-RP	F		-	NLHP28.5
CO2	Perform physical examination of Larynx	PSY-GUD	MK	SH	D-BED, KL	P-MOD,P-PRF	F		-	NLHP28.6
CO2	Demonstrate the diagnosis and line of treatment for diseases of Larynx	CAP	MK	KH	LRI,CD	P-PRF	F		-	NLHP28.7

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 28.1	Description of clinical features and treatment of <i>Lasuna thabitham</i> (Tonsillitis)	<p>Provide detailed case studies of patients with vascular lesions. Students analyze the cases, identify clinical signs like sore throat and difficulty swallowing, red, swollen tonsils with possible white patches, Fever, headache, and fatigue. Perform differential diagnoses, and propose treatment plans. Demonstration of Bedside Examination -The teacher should demonstrate the physical examination of a standardized patient with a Tonsillitis. The teacher performs the examination, explaining each step and technique. Students observe and take notes.</p> <p>Duration : 1 Hour</p>
NLHT 28.2	Description of the clinical features and treatment of Laryngitis	<p>Problem-Based Learning (PBL)</p> <p>Present students with a complex clinical problem involving a patient with Laryngitis. Students work in groups to identify the clinical features like hoarseness or loss of voice, throat discomfort or pain, dry cough or frequent throat clearing and develop a treatment plan.</p> <p>Presentation</p> <p>Assign topics related to the diagnosis and treatment of Laryngitis to small groups. Each group researches their topic, prepares a presentation, and delivers it to the class.</p> <p>Duration : 1 Hour</p>

NLHT 28.3	Description of the clinical features and treatment of tumours of Pharynx	<p>The teacher should demonstrate clinical examination and treatment of tumours of Pharynx through video clips</p> <p>The displayed video clips include</p> <ul style="list-style-type: none"> • Overview of pharyngeal anatomy. • Types of tumors (benign and malignant). • Lump or swelling in the throat or neck. • Clinical examination and Investigations: • Summarize the importance of early diagnosis and multidisciplinary management. <p>The students are divided into small groups to discuss the gained knowledge for better understanding of Pharyngeal tumors.</p> <p>Duration : 1 Hour</p>
NLHT 28.4	Description of the social and preventive aspects of <i>Lasuna thabitham</i> (Tonsillitis)	<p>Brainstorming :</p> <p>Organize a brainstorming session where students are divided into groups to generate ideas for preventing <i>Lasuna thabitham</i> (Tonsillitis). Groups will discuss and note down various preventive measures, then share and refine their ideas through group discussion, focusing on aspects like hygiene practices, dietary changes, and natural remedies.</p> <p>Discussion :</p> <p>Facilitate a group discussion on the prevention of <i>Lasuna thabitham</i> (Tonsillitis) by providing background information and discussion prompts. students will be divided into small groups to share their thoughts, experiences, and ideas on prevention of tonsillitis by practicing good hygiene, precautionary measures to avoid spreading it, possible complications and impact to social life. Groups will then present their insights to the larger group.</p> <p>Duration : 1 Hour</p>

Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 28.1	Demonstration of the physical examination techniques and instruments used for diagnosis and treatment of Tonsillitis	<p>Split students into smaller groups Demonstrate the physical examination techniques and instruments used for diagnosis and treatment of Tonsillitis to each group such as,</p> <ul style="list-style-type: none"> • Visual Inspection: Check for red, swollen tonsils. • Palpation: Feel lymph nodes in the neck. • Tongue Depressor: Use to inspect tonsils. • Check for Exudate: Look for pus or white spots <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>
NLHP 28.2	Physical examination of Tonsillitis for diagnosis and treatment	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following Greet the patient and obtain the consent. Continue with the examination such as,</p> <ul style="list-style-type: none"> • Visual Inspection: Check for red, swollen tonsils. • Palpation: Feel lymph nodes in the neck. • Otoscope Exam: Use to inspect throat. • Check for Exudate: Look for pus or white spots <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>

NLHP 28.3	Demonstration of history taking with associated clinical features during examination of <i>lasuna thabitham</i> (Tonsillitis)	<p>The teacher starts with the demonstration of history taking with associated clinical features during examination of <i>lasuna thabitham</i> (Tonsillitis)</p> <ul style="list-style-type: none"> • Greet the patient and introduce themselves. • Introgate the onset, duration, severity, and associated symptoms • Inquire about previous illnesses, medications, and surgeries. • Examine the tonsils with proper techniques. • Identify diagnosis linked to the complaint. <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>
NLHP 28.4	Describing the prophylactic measures to prevent hoarseness of voice.	<p>Students are divided into smaller groups For each group teacher should demonstrate</p> <ul style="list-style-type: none"> • Methods to maintain healthy throat by avoiding excessive cold or spicy foods. • Demonstrate gargle method with warm salt water • Demonstrate the preparation and application of <i>Athimathuram</i> (<i>Glycyrrhiza glabra</i>) decoction to soothe the throat. • Practice gentle voice exercises, • Avoid overstraining vocal cords • Stay hydrated to ensure optimal vocal health. <p>Duration : 1 Hour</p>
NLHP 28.5	Demonstration of the methods of physical examination of Larynx	<p>The teacher starts with the demonstration of examination of Larynx Then divide the students into groups. Each group is instructed to do the procedure</p>

		<ul style="list-style-type: none"> • Greets the patient and introduces themselves • Explain the procedure, and obtain consent. • Preparation: Patient may receive a local or general anesthetic. • Insertion: A laryngoscope (a thin tube with a light and camera) is inserted through the mouth or nose. • Visualization: The larynx and vocal cords are examined for abnormalities. • Biopsy: If needed, tissue samples are taken for further analysis. • Documentation: Findings are recorded for diagnosis and treatment planning <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>
NLHP 28.6	Performance of physical examination of larynx	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following</p> <ul style="list-style-type: none"> • Greet and introduce yourself to the patient. and obtain the consent • Preparation: Patient may receive a local or general anesthetic. • Insertion: A laryngoscope (a thin tube with a light and camera) is inserted through the mouth or nose. • Visualization: The larynx and vocal cords are examined for abnormalities. • Biopsy: If needed, tissue samples are taken for further analysis. • Documentation: Findings are recorded for diagnosis and treatment planning <p>Duration : 1 Hour</p>

NLHP 28.7	Demonstration of the diagnosis and line of treatment for diseases of Larynx	<p>Provide students with detailed patient case studies that include patient history, symptoms, and physical examination findings</p> <p>Based on the history and physical examination the teacher should educate the students to</p> <ul style="list-style-type: none"> • Obtain the radiological and lab investigation to rule out the diagnosis. • Based on the derranged <i>mukkutram</i> along with the investigation results, arrive a personalized line of treatment, internal and external medications • Council the patient for diet, lifestyle modification and for further follow up. <p>Students are divided into groups, Groups present their findings and receive systematic approach to diagnosis and treatment.</p> <p>Through this the students will gain a vast clinical knowledge in the case of diseases of Larynx</p> <p>Duration : 1 Hour</p>
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Topic 29 Pal Noikal (Dental Diseases) (LH :7 NLHT: 4 NLHP: 10)

A3	B3	C3	D3	E3	F3	G3	H3	I3	J3	K3
CO2, CO6, CO8	Define <i>Pal noikal</i> and describe its causes, types with clinical features and treatment	CK	MK	K	L&PPT ,L	O-QZ,PRN	F&S		-	LH
CO2, CO8	Define <i>Palladi noikal</i> and describe its causes, types with clinical features and treatment	CK	MK	K	L&PPT ,L	WP,QZ	F&S		-	LH
CO2, CO5	Identify and differentiate diseases affecting tooth structure including attrition, abrasion, erosion and resorption of teeth.	CC	NK	K	L&PPT ,L	CL-PR,QZ	F&S		-	LH
CO1,	Explain the diseases of gingiva, hereditary gingival fibromatosis,	CK	NK	K	L&PPT	M-	F&S		-	LH

CO2	gingivitis, gingival abscess and gingival recession				,L	POS,INT				
CO2	Define the characteristics and common symptoms associated with the cancer of gingiva.	CK	DK	K	L&PPT ,L	O-QZ,PRN	F		-	LH
CO5, CO6	Explain the key practices for maintaining healthy teeth and oral hygiene	CK	DK	K	L_VC,L	P-RP,PRN	F		-	LH
CO2, CO5	Describe the causes, clinical features of common problems like dental caries, flurosis etc	CK	NK	K	L&GD, L	O- GAME,WP	F&S		-	LH
CO2, CO5	Describe the complications of dental caries	CC	DK	KH	PBL,D	QZ ,P-RP	F&S		-	NLHT29.1
CO2, CO5	Describe the life style practices to maintain healthy gingiva	CC	DK	KH	D,DIS	PRN,M- CHT	F&S		-	NLHT29.2
CO1, CO2	Explore case studies of buccal cancer treatments	CAN	NK	SH	CBL,PL	CR-RED,T- CS	F		-	NLHT29.3
CO2, CO5	Describe the preventive measures of dental caries	PSY- GUD	DK	KH	DIS,PB L	PRN	F		-	NLHT29.4
CO1, CO2, CO5	Demonstrate the proper usage techniques and maintenance of equipments used in dentistry	PSY- GUD	MK	SH	D,KL	P-ID	F		-	NLHP29.1
CO2	Diagnose and frame the line of treatment after gingiva examination	PSY- GUD	MK	D	D,CBL	PP-Practica l,SP,DOAP	F		-	NLHP29.2
CO2	Perform examination of gingiva	PSY- GUD	MK	SH	RLE,CB L	P-CASE,P- PS	F		-	NLHP29.3
CO2	Demonstrate examination of gingiva	PSY- GUD	MK	SH	SIM,CB L,KL	SP,PP- Practical	F		-	NLHP29.4

CO2	Diagnose and construct line of treatment after teeth examination	PSY-GUD	MK	D	D,CBL	P-VIVA	F&S		-	NLHP29.5
CO2	Perform examination of the tooth	PSY-GUD	MK	D	RLE,D-M	CBA	F		-	NLHP29.6
CO1, CO2	Demonstrate examination of tooth	PSY-GUD	MK	KH	PBL,D	DOPS,DOPS	F&S		-	NLHP29.7
CO3, CO7	Perform examination of patient with dental caries	CAN	MK	KH	PT,SDL	OSPE	F		-	NLHP29.8
CO1, CO3	Demonstrate examination of patient with dental caries	CAP	MK	KH	CBL,D	OSCE	F&S		-	NLHP29.9
CO2, CO3, CO5	Describe the prophylactic measures of gingival diseases.	CAP	MK	KH	D	DOPS,DOPS	F		-	NLHP29.10

Non Lecture Hour Theory

S.No	Name of Activity	Description of Theory Activity
NLHT 29.1	Description of the complications of dental caries	<p>The teacher should educate the students to solve real-life problems to enhance critical thinking and knowledge application such as</p> <ul style="list-style-type: none"> • Tooth abscesses, which cause intense pain and swelling, and potential tooth loss. • Caries may also result in infection spreading to surrounding tissues, affecting the gums and bone. • It can lead to systemic infections, impacting overall health. <p>Duration : 1 Hour</p>

NLHT 29.2	Description of the life style practices to maintain healthy gingiva	<p>Demonstration and Discussion: The teacher should describe the life style practices to maintain healthy Gingiva by</p> <ul style="list-style-type: none"> • Focus on key lifestyle practices for healthy gingiva (e.g., oral hygiene, diet). • Categorize into sections like good habits, nutrition, and professional care. • The students are asked to follow the same and create awareness to the patients. <p>Duration : 1 Hour</p>
NLHT 29.3	Exploration of case studies treating cancers in buccal cavity	<p>The teacher instruct the to identify case studies in medical journals, conferences, or training sessions related to Buccal cancer Treatment A case study should have a Detailed Documentation which includes</p> <ul style="list-style-type: none"> • Detailed patient history, clinical images, diagnostics, treatment steps, and follow-up data. • Evidence-based, and provide insights that are broadly applicable or advance medical understanding. <p>The students should share or discuss the gained knowledge through presentation for better understanding and clarify the doubts with the teacher.</p> <p>Duration : 1 Hour</p>
NLHT 29.4	Description of the preventive measures of dental caries	<p>Problem-Based learning: The teacher will begin with a brief introduction about Dental caries and relevant prophylactic measures. The students will be divided into groups to analyze preventive plans for the given case scenario. Following this, the groups will discuss their proposed measures, concluding with a presentation on the importance of preventive care.</p> <p>Discussion: Students are divided into small groups and given case studies to analyze, identifying potential risk factors for dental carries. The groups discuss and propose relevant prophylactic</p>

		measures. Each group share their findings within themselves, followed by an open floor for questions and feedback. Duration : 1 Hour
Non Lecture Hour Practical		
S.No	Name of Practical	Description of Practical Activity
NLHP 29.1	Demonstration of the proper usage techniques and maintenance of equipments used in dentistry	<p>The teacher should demonstrate different equipments in dentistry and explain the purpose, right usage techniques and maintenance</p> <ul style="list-style-type: none"> • Mirror, Explorer for checking hard to see areas and to check for cavities • Scaler to remove plaques and tartar • Suction to clear saliva/debris. <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>
NLHP 29.2	Diagnosis and framing of the line of treatment after gingiva examination	<p>The teacher should divide the students into smaller groups and demonstrate the each group,</p> <ul style="list-style-type: none"> • To interpret the gingiva examination results. • Consider differential diagnosis • Confirm the Diagnosis • Identify line of treatment and patient care <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis. Duration : 1 Hour</p>

NLHP 29.3	Performance of gingival examination	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following</p> <p>Greet the patient and obtain the consent. Continue with the examination such as,</p> <ul style="list-style-type: none"> • Preparation for examination - wash hands, wear gloves, patient positioning • Inspection of gums for redness, swelling, bleeding • Examination of gum line for plaque/tartar, palpate for tenderness <p>Duration : 1 Hour</p>
NLHP 29.4	Demonstration of gingival examination	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Preparation for examination - wash hands, wear gloves, patient positioning • Inspection of gums for redness, swelling, bleeding • Examination of gum line for plaque/tartar, palpate for tenderness <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis.</p> <p>Duration : 1 Hour</p>
NLHP 29.5	Diagnosis and construction of line of treatment after teeth examination	<p>Group Discussions:</p> <p>The teacher should divide the students into small groups</p> <p>Provide students with clinical cases involving clinical conditions of teeth</p> <p>Students discuss the cases in small groups with teacher, identifying clinical signs, examination techniques, diagnosis and management plans.</p> <p>Case-Based Learning (CBL)</p>

		<p>The teacher should divide the students into small groups of 2-3 members. Provide each group with a detailed case study of a patient presenting with dental abnormalities. Each group reviews their case study, discussing the following:</p> <ul style="list-style-type: none"> • Patient history and key presenting symptoms. • Potential diagnoses based on the information provided. • Interpretation of examination and test results. • Further diagnostic tests if needed (e.g., biopsy, imaging). • Confirmation of the diagnosis. • Immediate management and treatment options. • Long-term follow-up and patient education. <p>Each group presents their case analysis and management plan to the class. After each presentation, conduct a class-wide discussion. Encourage questions from other groups and provide feedback on the case analysis and management plans. Duration : 1 Hour</p>
NLHP 29.6	Performing examination of the tooth.	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following Greet the patient and obtain the consent. Continue with the examination such as,</p> <ul style="list-style-type: none"> • Preparation for examination - wash hands, wear gloves, patient positioning • Inspection of face/neck for swelling, lips, tongue and cheeks for abnormalities • Examination of gums and teeth for issues • Check bite alignment and mobility <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis.</p>

		Duration : 1 Hour
NLHP 29.7	Demonstration of tooth examination	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p> <ul style="list-style-type: none"> • Use a mouth mirror and light to visually examine all teeth and surrounding tissues. • Gently check for abnormalities in teeth along with gums and other oral structures. • Check bite alignment and mobility • Measure pocket depths with a periodontal probe. <p>The students should record findings for diagnosis and treatment planning. Duration : 1 Hour</p>
NLHP 29.8	Perform the examination of dental caries in the given patient	<p>The teacher should divide the students into groups. Each group is instructed to do the procedure as following Greet the patient and obtain the consent. Continue with the examination such as,</p> <ul style="list-style-type: none"> • Visual inspection using adequate lighting, dental mirror, and explorer. • Assess for discoloration, pits, or cavitation on enamel surfaces. • Palpate for softness in suspected areas and confirm findings with radiographic imaging if necessary. <p>Document the findings, and recommend preventive or restorative treatments as appropriate. Duration : 1 Hour</p>
NLHP 29.9	Demonstration of dental caries patient examination	<p>The teacher should demonstrate the students to Greet the patient, obtain the consent and progress with the examination such as,</p>

		<ul style="list-style-type: none"> • Check for visible cavities. • Inspect for plaque/tartar around cavities. • Use explorer to detect soft spots. <p>Demonstrate the right way of history taking with associated clinical features, investigation results to confirm diagnosis</p> <p>Duration : 1 Hour</p>
NLHP 29.10	Describing the prophylactic measures of gingival diseases.	<p>Students are divided into smaller groups For each group teacher should demonstrate</p> <ul style="list-style-type: none"> • Proper brushing method as per text • Perform dental check-ups to detect early signs of gingivitis periodically. • List out a balanced diet rich in vitamins C and D to strengthen gums. • Educate the effects of smoking or chewing tobacco to reduce gum disease risk. • Use herbals mouth wash like <i>triphala</i> decoction <p>The students are involved in the discussion of the examination procedures to rule out and achieving diagnosis.</p> <p>Duration : 1 Hour</p>

Table 4 : NLHT Activity

(*Refer table 3 of similar activity number)

Activity No*	CO No	Activity details
1.1	CO1,CO5,CO6	Preparation of <i>Peechu</i> (Enema) & <i>Varthi</i> (Medicated wicks)
1.2	CO1,CO5,CO6	SoP for <i>Attai vidal</i> (Leech Therapy, <i>Chuttigai</i> (Cauterization), <i>Varthi</i> (medicated wick), <i>Pugai</i> (Fumigation), <i>Karam</i> (Caustic applications), <i>Vedhu</i> (Steam therapy).
2.1	CO2,CO5	Visual acuity by using SNELLEN'S DISTANT VISION CHART.
3.1	CO1,CO2,CO5	Management of <i>Punkal</i> (Ulcers).
3.2	CO1,CO2,CO5	Management of <i>Veekam</i> (Inflammation).
3.3	CO1,CO2,CO5	Management of <i>Kattikal</i> (Abscesses).
3.4	CO1,CO2,CO5	Management of <i>Kiranthi noi</i> (Chronic ulcers).
4.1	CO1,CO2	Video presentation on surgery of Cataract and Pterygium.
5.1	CO3,CO5	Segregation, Disposal and Record maintenance of Bio Medical Waste.
5.2	CO3,CO5	Procedures of infection control in a hospital
5.3	CO3,CO5	Documentation and Maintenance of records in the Infection control registers.
6.1	CO4	Assessment and management of the conditions related to Alkalosis, Acidosis and Water metabolism.
7.1	CO2,CO5	Dietary Plan for Anorectal Diseases.
7.2	CO1,CO8	<i>Peechu</i> (Enema/Douch) Application.
8.1	CO1,CO2,CO8	Dietary plan for Renal stones.
8.2	CO1,CO2,CO8	Dietary plan for Gall stones & Pancreatitis.

8.3	CO1,CO2,CO8	Advantages and disadvantages of Heat application.
8.4	CO1,CO2,CO8	Advantages and disadvantages of Ice application.
8.5	CO2,CO8	Insertion of both male and female catheters on the model.
8.6	CO1,CO2,CO5,CO8	X-Rays,IVP, ECG,USG,CT, Scan and MRI reports Interpretation.
9.1	CO1,CO2,CO8	Field of vision
10.1	CO8	Surgical treatment for <i>Mudamayir</i> .
11.1	CO1,CO2,CO5	Application of <i>Kalikkam and Anjanam</i>
12.1	CO2	Use and function of essential equipment in a Minor Operating Theatre.
12.2	CO2,CO8	Register for Surgical Procedures.
12.3	CO2,CO5	Identification and Differentiation Between Benign and Malignant Tumors.
13.1	CO2,CO5	Clinical signs of ischemia, including identifying symptoms and diagnostic procedures to accurately detect and assess the condition.
13.2	CO2,CO5	Diagnosis and assessment of saphenofemoral incompetence, including identifying clinical signs, performing diagnostic procedures, and understanding treatment options.
14.1	CO2,CO6	Identification of the modern diagnostic techniques to identify common eye diseases like <i>Amaram</i> (Ophthalmia Neonatorum) and <i>Nagapadalam</i> (Pterygium)
15.1	CO2,CO6	Discovery of preparation techniques of simple medicines for eye application by video clippings
16.1	CO2	Discussion on the causes of male infertility
16.2	CO2	Description of the causes of Impotence
16.3	CO2,CO5	Performing the Counselling for cases diagnosed as hernia

16.4	CO1,CO2,CO4	Identification of the complications of Hernia and the ways and means to overcome.
17.1	CO2,CO5	Demonstration of the preventive measures to be taken to retain the vision in Glaucoma
17.2	CO2	Interpretation the causes, clinical features, Diagnosis and treatment of Astigmatism, Nystagmus.
17.3	CO2	Description of the causes, clinical features, Diagnosis and treatment of Conjunctivitis.
17.4	CO2	Interpret the causes, clinical features, Diagnosis and treatment of Presbyopia, Myopia
17.5	CO1,CO5	Organization of guest lecture on principles of eye donation.
17.6	CO2,CO5	Demonstration of preventive measures of viral infections of eye.
18.1	CO2,CO5	Prophylactic measures to overcome common skin lesions
18.2	CO1,CO2,CO5	Home made herbal cosmetics for the prevention of common skin lesions and to improve skin complexion.
19.1	CO2,CO5,CO6,CO7	Types of <i>Karappan</i> (Dermatitis / Eczema).
19.2	CO2	Blood letting practice (<i>Kuruthivangal</i>) to cure chronic local eczematous lesion
19.3	CO2,CO5,CO6,CO7	Treatment methods for <i>Karappan</i> Eczema) with reference to the type of presentation.
20.1	CO2,CO5	External therapy (<i>Vamanam/Viresanam/Peechu</i>) to normalise digestion, absorption and to tone up immune system.
20.2	CO2,CO5	External therapies to promote sleep, reduce stress and to treat <i>Kalanjagapadai</i> (Psoriasis) ,like <i>Sirodharai</i> , <i>Sirovasthi</i> , <i>Thokkanam</i> , <i>Yoga</i> and Meditation.
20.3	CO2,CO5	Counselling to overcome social stigma on <i>Kalanchagapadai</i> (Psoriasis).
20.4	CO2,CO5,CO6	Describing the Line of treatment for <i>Puzhuvettu</i> (Alopecia)

21.1	CO2,CO6	Prophylactic measures to overcome common Ear Diseases and its complications
21.2	CO2,CO6	Various presentations and investigations of <i>Thalaichutral Noi</i> (Vertigo) and <i>Sevi Eraichal Noi</i> (Tinnitus).
21.3	CO2,CO6,CO7	Various presentations of <i>Sevidu</i> (Deafness), using video and presentations.
22.1	CO2,CO5	Healthy life style practices to prevent <i>Peru Noi</i> (Leprosy).
22.2	CO2,CO5	Prevent Reinfection of <i>Sirangu</i> (Scabies)
22.3	CO2,CO5	Principles of <i>Ashtangayogam</i> to overcome Stress in Skin Diseases.
22.4	CO2,CO5	Chuttigai for <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts)
22.5	CO2,CO5	Successful stories of HIV treatment in <i>Siddha</i>
22.6	CO2,CO5	Social, Preventive aspects and Diet for <i>Akki Noi</i> (Herpes Zoster Infections).
22.7	CO1,CO5	Healthy Lifestyle Practices to Overcome Reinfection of <i>Padarthamarainoi</i> (Tinea - Various Types)
22.8	CO2,CO5	Preventive measures and treatment options for Impetigo
23.1	CO2,CO5	Prophylactic Measures for <i>Podugu</i> (Dandruff) and <i>Pen</i> (Pediculosis).
23.2	CO2,CO5	Prophylactic Measures for Hair fall and <i>Ila narai</i> (Premature Gray hairs).
23.3	CO2,CO5	Best practices of Nail cutting, Cleaning of nails and clefts and the importance of correct foot wear to prevent infections of Hand and Foot.
23.4	CO1,CO2,CO5	SoP for <i>Chuttigai</i> in <i>Kaal aani</i> (Corn foot).
24.1	CO1,CO2,CO5	<i>Oppurai</i> and <i>Ethirurai</i> for various types of <i>Peenisam</i> (Sinusitis)
24.2	CO1,CO2,CO5	SoP for <i>Pugai</i> and <i>Nasiyam</i> for <i>Mookku noikal</i> (Nasal diseases)

24.3	CO1,CO2,CO5	First aid for <i>Ratha Peenisam</i> (Epistaxis).
25.1	CO1,CO2,CO5	Prophylactic measures of <i>Setruppun</i> (Tenia Pedis)
26.1	CO2,CO5,CO8	Demonstrating the video presentation of preparing special medicines for skin diseases.
27.1	CO2,CO5	Explanation of the detrimental effects of tobacco chewing
27.2	CO2,CO5,CO6	Discussion on natural resources/herbal products for oral health care
27.3	CO1,CO2,CO6,CO7	Demonstration of acute understanding of advanced techniques to proactively identify and treat <i>Naakuputtru</i> (Cancer of tongue) and <i>Kannaputtru</i> (Cancer of cheek)
28.1	CO2	Description of clinical features and treatment of <i>Lasuna thabitham</i> (Tonsillitis)
28.2	CO2	Description of the clinical features and treatment of Laryngitis
28.3	CO2	Description of the clinical features and treatment of tumours of Pharynx
28.4	CO2	Description of the social and preventive aspects of <i>Lasuna thabitham</i> (Tonsillitis)
29.1	CO2,CO5	Description of the complications of dental caries
29.2	CO2,CO5	Description of the life style practices to maintain healthy gingiva
29.3	CO1,CO2	Exploration of case studies treating cancers in buccal cavity
29.4	CO2,CO5	Description of the preventive measures of dental caries

Table 5 : List of Practicals

(*Refer table 3 of similar activity number)

Practical No*	CO No	Practical Activity details
1.1	CO1	Criteria to write the case sheets.
1.2	CO1,CO2,CO5	Various Siddha and Modern Surgical instruments, Various surgical procedures by using Siddha and Modern Surgical instruments.
1.3	CO1,CO2,CO5	Selection criteria and Procedure for <i>Attai vidal</i> (Leech application) in the suitable location of the given patient.
1.4	CO1,CO2,CO5	Procedure for <i>Chuttigai</i> (Cauterization), <i>Varthi</i> (medicated wick), <i>Vedhu</i> (Steam therapy), <i>Pugai</i> (Fumigation), <i>Karam</i> (Caustic applications) in a given patient.
2.1	CO2,CO5	Physical examination techniques of an eye to support diagnosis and treatment.
2.2	CO2,CO5	Presenting evidence-based treatment options for various eye diseases, including Siddha pharmacological and surgical interventions.
2.3	CO1,CO2	The instruments used in Ophthalmology.
3.1	CO1,CO2,CO5	Physical Examination of an Ulcer.
3.2	CO1,CO2,CO5	Examination of <i>Punkal</i> (Ulcer).
3.3	CO1,CO2,CO5	Diagnosis and Line of treatment for each type of Ulcer.
3.4	CO1,CO2,CO5	Incision and drainage of abscess, excision of cysts and demonstration of <i>kattuthal</i> (bandaging).
3.5	CO1,CO2,CO5	The incision and drainage of abscess, excision of cysts and various types of <i>kattuthal</i> (bandaging)
3.6	CO1,CO2,CO5	Physical examination of a Sinus or Fistula.
3.7	CO1,CO2,CO5	Diagnosis and Line of treatment for Sinus or Fistula.
3.8	CO1,CO2,CO5	Suture on the skin of an Orange.

3.9	CO1,CO2,CO5	Suturing of fresh injuries.
4.1	CO2,CO5	Guest lecture or Video lecture on Organ Donation
4.2	CO2,CO5	Guest lecture on Organ Donation.
4.3	CO2,CO5	Guest or Video lecture on Organ Donation
5.1	CO2,CO5	Local anesthetic techniques in minor surgical procedures
5.2	CO3,CO5	Aseptic or antiseptic procedures & sterilization of surgical instruments and Operation theater maintenance measures.
5.3	CO3,CO5	Aseptic, antiseptic & sterilization procedures of surgical instruments.
5.4	CO3,CO5	Arrangements required for preventing hospital infections.
5.5	CO3,CO5	Arrangements required for isolating the infected patient in a hospital.
5.6	CO3,CO5	Documentation procedures of different types of hospital records by manual works and software skills.
5.7	CO3,CO5	Different types of hospital records through manual work and software skills.
6.1	CO4	Steps for infusing IV fluids.
6.2	CO4	Infusing IV fluids in a given patient or on simulation.
6.3	CO4	Signs of circulatory insufficiency in patients experiencing Hypovolemic shock.
7.1	CO1,CO2	Siddha Pre & Post operative preparation of the patient.
7.2	CO1,CO2	Siddha Pre & Post operative preparation of the patient.
7.3	CO1,CO2	Methods of the Rectal examination.
7.4	CO1,CO2	Examination of Rectum.

7.5	CO1,CO2,CO8	Application of the <i>kara nool</i> in Fistula-in-ano.
7.6	CO1,CO2,CO8	Procedure - <i>Peechu</i> (Enema / Douch)
8.1	CO1,CO2,CO8	Physical examination of the neck
8.2	CO1,CO2,CO8	Physical examination of the neck and point out the size, consistency and tenderness of lymph nodes in the neck.
8.3	CO1,CO2,CO8	Methods of Examining the case of acute abdomen.
8.4	CO1,CO2,CO6,CO8	Physical Examination methods of Acute abdomen & Chronic abdomen through inspection, palpation, percussion, and auscultation.
8.5	CO1,CO2,CO8	Physical examination of the abdominal lump
8.6	CO1,CO2,CO8	Methods of physical examination in an abdominal lump case.
8.7	CO1,CO2,CO8	Diagnosis and the line of treatment of Acute abdomen and Chronic abdomen cases.
9.1	CO1,CO2,CO8	Eye Exercises for Squint(Strabismus).
9.2	CO1,CO2,CO7,CO8	Skills to manage acute ophthalmic emergencies such as chemical injuries, traumatic eye injuries.
9.3	CO1,CO2,CO3,CO5, CO8	Communication skills for educating and counseling patients about eye conditions, treatment options, and preventive measures
10.1	CO6,CO8	Diagnosis and line of treatment for <i>Imai noikal</i> (diseases of eyelids)
10.2	CO5,CO6,CO8	Points of Spotter diagnosis for assessing <i>Nagapadalam</i> and Pterigiyam comparatively.
10.3	CO1,CO2,CO5	Correct technique for eyelid hygiene and warm compress application
11.1	CO1,CO2,CO6	Diagnosis and Line of treatment of <i>Kadaikkan noikal</i> .

11.2	CO1,CO2,CO5,CO6	Spotter diagnosis for assessing <i>Mudamayir</i> and Trichiasis comparatively.
11.3	CO1,CO2,CO5	Correct technique for applying eye drops in patients with canthal diseases
12.1	CO2,CO5	Different modalities of radiation, Radiation hazards and its prevention as Guest lecture.
12.2	CO2,CO5	Practices for minimizing radiation exposure to patients and health care workers including the principles of ALARA (As Low As Reasonably Achievable) as invited talk.
12.3	CO2,CO5	Application of the principles of tumor staging and grading to assess the severity and progression of cancer.
12.4	CO2,CO5,CO8	Interpretation of imaging techniques (X-ray, MRI, CT) and pathological investigations to detect and differentiate tumors.
12.5	CO2,CO5	Ethical issues in the treatment of cancer patients.
12.6	CO2,CO5	Role of Nutrition in Cancer Care and Recovery
12.7	CO2	Concepts of Chemotherapy.
12.8	CO2,CO5	Ethical issues in the treatment of cancer patients.
13.1	CO2,CO4	Demonstration of the Prostate examination.
13.2	CO2,CO4	Performing physical examination of the lymphatic system.
13.3	CO2,CO4,CO5	Demonstration of the the physical examination of a vascular lesion.
13.4	CO2,CO4	Demonstration on the physical examination including Perthes Test & Trendelenburg Test.
13.5	CO2,CO4	Perform the physical examination of a vascular lesion.
13.6	CO2,CO4	Demonstration of physical examination of the lymphatic system,

13.7	CO2,CO4	Demonstration of the steps in pleural and ascitic fluid aspiration using appropriate techniques .
13.8	CO1,CO4,CO5	line of treatment of diseases of veins, arteries, and lymphatic vessels
14.1	CO2,CO7	Demonstration of eye examination of a patient with the condition of <i>Naga Padalam</i> (Pterigyum)
14.2	CO2,CO5	Examination of a patient with the condition of <i>Suzhal vanderithal</i> (Vitreous opacities)
14.3	CO2,CO5	Performing eye examination of a patient with the condition of <i>Mudamayir</i> (Trichiasis)
14.4	CO2,CO5	Examination a patient with the condition of <i>Vellezhuthu</i> (Presbyopia)
14.5	CO2,CO5	Demonstration of eye examination of a patient with the condition of <i>Thurmamisa valarchi</i> (Episcleritis)
15.1	CO1,CO2,CO6	Demonstrating the examination techniques with instruments used for diagnosis and treatment of eye diseases by visiting a traditional Eye hospital
15.2	CO1,CO2,CO6	Perform the various treatment options for various eye diseases by visiting a traditional Eye hospital
15.3	CO1,CO2,CO6	Demonstrating the various treatment options for various eye diseases by visiting a traditional Eye hospital
16.1	CO2	Physical examination of inguinoscrotal swellings.
16.2	CO2	Physical examination of inguinoscrotal swellings.
16.3	CO2,CO8	Identification of diagnosis and line of treatment after examination of inguinoscrotal swellings
16.4	CO2,CO6	Physical examination of the male external genitalia.
16.5	CO1,CO2	Physical examination of the male external genitalia.
16.6	CO2,CO6	Diagnose the line of treatment after examination of male external genitalia

16.7	CO2,CO6	Techniques of physical examination of a hernia
16.8	CO2,CO6	Physical examination of hernia
16.9	CO2,CO6	Identification of the diagnosis and line of treatment after examination of <i>vanchanagatha pithukkam</i> (Hernia)
17.1	CO2	Demonstration of the prophylactic measures to prevent different types of Conjunctivitis.
17.2	CO2,CO5	Demonstration of the methods of Physical examination to evaluate Glaucoma.
17.3	CO2	Demonstrating the counseling strategies to educate a patient about possible causes that lead to blindness and preventive care.
17.4	CO2,CO5	Demonstration of the clinical examination to evaluate a patient with suspected Nystagmus
17.5	CO1,CO7	Preparation and application of <i>Sirukala poo thylam</i> for <i>Padalam</i> (Pterygium).
17.6	CO7	Demonstrate the procedure of visualizing moon through <i>palagani pinnal</i> to prevent Eye diseases.
17.7	CO1,CO7	Application of <i>palakirambu pakuva vennai</i> for <i>Varatchi thimiram</i> (Xerophthalmia).
17.8	CO2,CO7	Build entrepreneurship in Management of eye health.
17.9	CO2	Identification of the different conditions of Eye Diseases by the given OCT, CT and MRI images
17.10	CO2	Discussion on the points of Spotter diagnosis for assessing <i>Kuvalai vippuruthi</i> and Dacryocystitis comparatively.
17.11	CO2	Comparison of Spotter diagnosis for <i>Mayir Puzhuvettu</i> and Ulcerative blepharitis.
19.1	CO2,CO5,CO6,CO7	Humoural predominance based on <i>Envagai thervu</i> (Siddha diagnostic tools) of the <i>Karappan</i> patient.

19.2	CO2,CO5,CO6,CO7, CO8	Similarities and differences between Endogenous and Exogenous Eczemas features using photos.
19.3	CO1,CO2,CO5,CO7	Effects of applying facial foundations, powders & facial blushes
19.4	CO1,CO2,CO5,CO6, CO7	Effects of applying facial masks, face packs & skin cleansers.
19.5	CO2,CO5,CO6,CO7	Physical examination to differentiate the <i>Thadippu</i> (Urticarial weal) and Angioneurotic oedema for the given patient.
19.6	CO1,CO2,CO5,CO6, CO7	External therapy (<i>Vamanam/ Viresanam/ Peechu</i>) to correct digestion, absorption and to tone up immune system.
19.7	CO1,CO2,CO3,CO4, CO5,CO6,CO7	<i>Attai vidal</i> (Leech application) in treating Eczema
19.8	CO1,CO2,CO3,CO4, CO5,CO6,CO7	<i>Peechu</i> for treating <i>Karappan</i> according to humoural predominance.
19.9	CO1,CO2,CO3,CO4, CO5,CO6,CO7	<i>Vamanam</i> (Emetic therapy) for <i>Karappan</i> .
20.1	CO2,CO5,CO6,CO7	Adopting a suitable life style to avoid complications like <i>KalanchagaVatham</i> (Psoriatic arthritis).
20.2	CO2,CO5,CO6	Humoural predominance in <i>Kalanchagapadai</i> and <i>Venpadai</i> .
20.3	CO2,CO5,CO6	Physical examination to rule out various types of <i>Kalanchagapadai</i> .
20.4	CO2,CO5,CO6	Physical examination to rule out various types of <i>Kalanchagapadai</i> .
20.5	CO2,CO5,CO6	Physical examination to rule out various types of Achromia.
20.6	CO2,CO5,CO6	Difference between <i>Mutrudal Veluppu Noi</i> (Albinism) and <i>Ven macham</i> (Naevus depigmentosus).
20.7	CO2,CO5	Counseling Patients in Overcoming Fear and Social Stigma of Skin Conditions
20.8	CO1,CO2	<i>Vamanam</i> (Emetic Therapy) for <i>Kaalanchagapadai</i>
20.9	CO1,CO2	<i>Peechu</i> (Douch/Enema) for <i>Kaalanchagapadai</i> to normalise the deranged humours.

20.10	CO2	<i>Yoga Therapy for Karappan / venpadai / kaalanachagapadai.</i>
20.11	CO1,CO2,CO6,CO7	<i>Nasiyam (nasal application) for Karappan.</i>
21.1	CO2,CO6	Examination of the Ear.
21.2	CO2,CO6	Functional assessment of the Ear.
21.3	CO2,CO6	History taking with associated clinical features of <i>Sevi Iraichal</i> (Tinnitus)
21.4	CO2,CO6	Physical examination and Investigation methods like, Ear exam, Hearing test, Neurological exam etc,for diagnosis of <i>Sevi Iraichal</i> (Tinnitus).
21.5	CO2,CO5	Clinical features of <i>Sevi Iraichal</i> (Tinnitus) and finalizing its line of treatment.
21.6	CO2	History taking with associated clinical features of <i>Thalai Chutral Noi</i> (Vertigo)
21.7	CO6,CO7	Physical examination and Investigation methods for diagnosis of <i>Thalai Chutral Noi</i> (Vertigo).
21.8	CO2,CO5	Clinical features of <i>Thalai Chutral Noi</i> (Vertigo) and finalizing its line of treatment.
21.9	CO2	Awareness about Hearing Aids and Cochlear Implant.
22.1	CO1,CO2,CO3,CO4, CO5,CO6,CO7,CO8	Methods of physical examination to differentiate various skin lesions.
22.2	CO1,CO2,CO3,CO4, CO5,CO6,CO7,CO8	Application of <i>Patru, Poochu</i> (topical applications)for various skin infections.
22.3	CO2,CO5	History taking methods to rule out skin infections.
22.4	CO2,CO5	Methods of physical examination to differentiate various skin lesions.
22.5	CO2,CO5	<i>Nal Ozhukkam</i> (Daily routine) and <i>Kala Ozhukkam</i> (Seasonal routine) practices to overcome various skin lesions.
22.6	CO2,CO5	Importance of <i>Thega vanmai</i> (Healthy immune status) and <i>Kala vanmai</i> (

		Seasonal Status) to prevent skin infections.
22.7	CO2,CO5	Successful stories in the treatment of bacterial Skin infections.
22.8	CO2,CO5	Interpretation of clinical case studies to improve diagnostic and treatment skills.
22.9	CO2,CO5	Differential diagnosis and line of treatment for various infectious skin diseases
22.10	CO2,CO5	Successful stories in the treatment of viral skin infections.
22.11	CO2,CO5	Blood, microbiological, and histological investigations relevant to infectious skin diseases.
22.12	CO2,CO5	Handwashing and infection control procedures.
22.13	CO2,CO5	Relevant prophylactic measures to prevent skin infections.
23.1	CO1,CO2,CO5	Chuttigai for <i>Kaal Aani</i> (Corn foot).
23.2	CO1,CO2,CO5	Procedures of history taking to rule out hair, nail, and foot conditions.
23.3	CO1,CO2,CO5	Methods of topical applications such as <i>Patru</i> and <i>Poochu</i> for treating nail infections.
23.4	CO1,CO2,CO5	Technique of Nail avulsion in cases of <i>Naga sutru</i> (Paronychia), <i>Naga sothai</i> (Tinea unguim).
23.5	CO1,CO2,CO5	Successful stories about the treatment of <i>Puzhuvettu</i>
23.6	CO1,CO2,CO5	Procedures of history taking to rule out hair, nail, and foot conditions.
23.7	CO1,CO2,CO5	Practical training in KOH smear examination to confirm fungal infections.
23.8	CO1,CO2,CO5	SoP for the application of Karamarunthukal in <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts).
23.9	CO1,CO2,CO5	Application of Karamarunthukal in <i>Palunni</i> (Molluscum) and <i>Maru</i> (Warts).
23.10	CO1,CO2,CO5	Prophylactic measures to prevent infections of foot.

23.11	CO2,CO5	Diffrent methods of physical examinations to identify the variations in the nails due to infections.
23.12	CO2,CO5	Methods of physical examination of Hair.
24.1	CO1,CO2,CO5,CO6	Examination of Nose, Paranasal sinuses and Naso pharynx.
24.2	CO1,CO2,CO5,CO8	<i>Nasiyam</i> (Nasal application) for <i>Mookku Noikal</i> (Diseases of Nose)
24.3	CO1,CO2,CO5,CO8	<i>Vedhu</i> (Steam therapy) for <i>Mookku Noikal</i> (Diseases of Nose).
24.4	CO1,CO2,CO5	Proper steps in inserting a Ryle's tube using appropriate techniques.
24.5	CO1,CO2,CO5	Diagnosis and line of treatment by integrating the results of physical examination and investigations of nasal diseases.
24.6	CO1,CO2,CO5	Humoural predominance in different types of <i>Peenisam</i> .
24.7	CO1,CO2	Techniques for removal of foreign bodies from the nose in simulations.
24.8	CO1,CO2,CO5	Examination of Nose, Paranasal sinuses and Naso pharynx
24.9	CO1,CO2,CO5	Proper steps in inserting a Ryle's tube using appropriate techniques.
24.10	CO1,CO2,CO5	Radiological, microbiological, and histological investigations relevant to diseases of Nose.
25.1	CO1,CO2,CO5	<i>Vamanam</i> (Emetic therapy) to neuralise thre humours
25.2	CO1,CO2,CO5	<i>Viresanam</i> (Purgative therapy) to neutralise three humours in specific skin conditions.
25.3	CO1,CO2,CO5	Humoral predominence in each type of <i>Arpa viranam</i> (Minor skin lesions).
26.1	CO2,CO5,CO7	Demonstrating the methods to review latest research papers on the topic of special siddha medicines for treatment and maintenance of chronic skin diseases and publish as a paper in a indexed journal.

26.2	CO2,CO5,CO7,CO8	Demonstrating the efficacy of Special medicines by incorporating before and after treatment photographs for preparing a poster presentation.
26.3	CO2,CO5,CO7,CO8	Analysing the possibilities to become Entrepreneur in manufacturing and marketing special medicines in siddha.
27.1	CO2	Demonstration of Buccal cavity examination
27.2	CO2,CO3	Performance of buccal cavity examination
27.3	CO2,CO3,CO5	Describing the importance of Tumour markers for different kind of Cancers.
27.4	CO2,CO3,CO5	Discussing the role of Family history and environmental hazards in developing different types of cancers.
27.5	CO2,CO5	Diagnosis and construction of the line of treatment after examination of buccal cavity
27.6	CO1,CO2	Demonstration of examination techniques of <i>Naakku puttru</i> (Carcinoma of Tongue)
27.7	CO2,CO6	Performance of <i>Naakku Puttru</i> examination (Carcinoma of Tongue)
27.8	CO2,CO8	Indicating the histopathological diagnosis and line of treatment after examination of <i>Naaku Puttru</i> (carcinoma of tongue)
28.1	CO2,CO7,CO8	Demonstration of the physical examination techniques and instruments used for diagnosis and treatment of Tonsilitis
28.2	CO2,CO7,CO8	Physical examination of Tonsilitis for diagnosis and treatment
28.3	CO2	Demonstration of history taking with associated clinical features during examination of <i>lasuna thabitham</i> (Tonsillitis)
28.4	CO2	Describing the prophylactic measures to prevent hoarseness of voice.
28.5	CO2	Demonstration of the methods of physical examination of Larynx
28.6	CO2	Performance of physical examination of larynx

28.7	CO2	Demonstration of the diagnosis and line of treatment for diseases of Larynx
29.1	CO1,CO2,CO5	Demonstration of the proper usage techniques and maintenance of equipments used in dentistry
29.2	CO2	Diagnosis and framing of the line of treatment after gingiva examination
29.3	CO2	Performance of gingival examination
29.4	CO2	Demonstration of gingival examination
29.5	CO1,CO2	Demonstration of tooth examination
29.6	CO1,CO3	Demonstration of dental caries patient examination
29.7	CO2	Diagnosis and construction of line of treatment after teeth examination
29.8	CO2	Performing examination of the tooth.
29.9	CO3,CO7	Perform the examination of dental caries in the given patient
29.10	CO2,CO3,CO5	Describing the prophylactic measures of gingival diseases.

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 (150)					Grand Total
			Practical	Viva	Elective	IA	Sub Total	
SIDUG-AM	2	200	100	20	10 (Set-TC)*	20	150	350

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	B	C	D		F	G
	1 (20)	2 (20)	3 (20)	Average (A+B+C/3) (20)	Term Test (MCQ+SAQ+LAQ and Practical) (Converted to 20)	Sub Total	Term Assessment
First						D+E	D+E /2
Second						D+E	D+E /2
Third					NIL		D
Final IA	Average of Three Term Assessment Marks as Shown in 'G' Column						
	* Select an Evaluation Methods which is appropriate for the objectives of Topics from the Table 6 D. Convert it to 20 marks. ** Conduct Theory (100 Marks) (MCQ (20*1 Marks), SAQ (8*5), LAQ (4*10)) and Practical (100 Marks) Then convert to 20 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

Exam type	Paper 1	Paper 2
PA1	Topic No: 1,2	Topic No: 18,19
PA 2	Topic No: 3,4	Topic No: 20,
PA 3	Topic No: 5,6	Topic No: 21
FIRST TT	Topic No: 1-6	Topic No: 18-21
PA 1	Topic No: 7,9	Topic No: 22
PA 2	Topic No: 8,10,11	Topic No: 23, 24
PA 3	Topic No: 12,13	Topic No: 25
SECOND TT	Topic No: 7-13	Topic No: 22-25
PA 1	Topic No: 14,15	Topic No: 26,27
PA 2	Topic No: 16	Topic No: 28
PA 3	Topic No: 17	Topic No: 29

6 E : Question Paper Pattern

III PROFESSIONAL B.S.M.S EXAMINATIONS

SIDUG-ARU

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 (ARUVAI MARUTHUVAM & KAN MARUTHUVAM (GENERAL SURGERY & OPHTHALMOLOGY))					
Sr. No	A List of Topics	B Marks	MCQ	SAQ	LAQ
1	Siddha Classical Surgical methods (Asurarurai)	10	Yes	Yes	Yes
2	Introduction to Eye diseases	05	Yes	Yes	No
3	Inflammation and Ulcers	10	Yes	Yes	Yes
4	Karuvizhi Noikal (Diseases of Cornea)	05	Yes	Yes	No
5	Basic principles of Surgery and infectious diseases	05	Yes	Yes	No
6	Burns, Hemorrhage and Shock	05	Yes	Yes	No
7	Anorectal diseases	10	Yes	Yes	Yes
8	Study on the following Surgical conditions	10	Yes	Yes	Yes
9	Velvizhi Noikal(Diseases of Sclera)	05	Yes	Yes	No
10	Imai Noikal(Diseases of Eyelids)		Yes	Yes	No
11	Kadaikkan Noikal (Diseases of Canthus)		Yes	Yes	No
12	Tumors and Cysts	10	Yes	Yes	Yes
13	Diseases of Blood and Lymphatic Vessels	05	Yes	Yes	No
14	Comparision with Modern diagnosis	05	Yes	Yes	No
15	Medicines commonly used for Eye Diseases		Yes	Yes	No
16	Diseases of Male Genital organs	10	Yes	Yes	Yes
17	Study of most prevalent Eye Diseases	05	Yes	Yes	No
Total Marks		100			

Paper 2 (THOAL MARUTHUVAM, KATHU, MOOKKU, THONDAI & PAL MARUTHUVAM (DERMOTOLOGY, ENT AND DENTISTRY))					
Sr. No	A List of Topics	B Marks	MCQ	SAQ	LAQ
18	Aids to healthy Skin	15	Yes	Yes	No
19	Ovammai Noikal (Allergic skin diseases)		Yes	Yes	Yes
20	Noi Ethirppu Mandala Kolaral Varum Thol Noikal (Auto Immune related skin Disorders) & Thol Nirami Kuraipattu Noigal(Hypopigmentory diseases of the skin)	10	Yes	Yes	Yes
21	Diseases of the Ear	10	Yes	Yes	Yes

22	Infectious conditions of the skin	10	Yes	Yes	Yes
23	Diseases of Hair, Nail and Foot	10	Yes	Yes	Yes
24	Mooku Noigal (Diseases of the Nose)	10	Yes	Yes	Yes
25	Arpaviranam (Minor Skin diseases)	05	No	Yes	No
26	Special medicines in Siddha for Skin diseases		No	Yes	No
27	Vaai Noikal (Diseases of Oral Cavity)	10	Yes	Yes	Yes
28	Thondai Noikal (Diseases of Throat)	10	Yes	Yes	Yes
29	Pal Noikal (Dental Diseases)	10	Yes	Yes	Yes
Total Marks		100			

6 G : Instructions for UG Paper Setting & Blue print

1. All questions shall be compulsory.
2. The maximum marks for one question paper shall be 100.
3. 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)).
4. 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.
5. Ensure that the total marks allocated per topic/group of topics do not exceed the limits specified in Table 6F.
6. 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”.
7. Each 100-mark question paper shall contain:
 - 20 MCQs
 - 8 SAQs
 - 4 LAQs
8. 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.
9. 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.
10. 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.
11. Long Answer Questions shall be structured to assess higher cognitive abilities, such as application, analysis, and synthesis.
12. Follow the guidelines in User Manual III for framing MCQs, SAQs, and LAQs.

Demo Blueprint for Illustration. Blue printing should be done based on Instructions for Question paper setting and using 6 F table.

Paper No:1		
Question No	Type of Question	Question Paper Format
Q1	<p>Multiple choice Questions 20 Questions 1 mark each All compulsory</p>	<ol style="list-style-type: none"> 1. Siddha Classical Surgical methods (Asurarurai) 2. Siddha Classical Surgical methods (Asurarurai) 3. Introduction to Eye diseases 4. Introduction to Eye diseases 5. Inflammation and Ulcers 6. Inflammation and Ulcers 7. Karuvizhi Noikal (Diseases of Cornea) 8. Basic principles of Surgery and infectious diseases 9. Burns, Hemorrhage and Shock 10. Anorectal diseases 11. Study on the following Surgical conditions 12. Velvizhi Noikal(Diseases of Sclera) 13. Imai Noikal(Diseases of Eyelids) 14. Kadaikkan Noikal (Diseases of Canthus) 15. Tumors and Cysts 16. Diseases of Blood and Lymphatic Vessels 17. Comparision with Modern diagnosis 18. Medicines commonly used for Eye Diseases 19. Diseases of Male Genital organs 20. Study of most prevalent Eye Diseases
Q2	<p>Short answer Questions 8 Questions 5 Marks Each All compulsory</p>	<ol style="list-style-type: none"> 1. Introduction to Eye diseases / Siddha Classical Surgical methods (Asurarurai) 2. Karuvizhi Noikal (Diseases of Cornea) / Inflammation and Ulcers 3. Burns, Hemorrhage and Shock / Basic principles of Surgery and infectious diseases 4. Study on the following Surgical conditions / Anorectal diseases 5. Kadaikkan Noikal (Diseases of Canthus) / Imai Noikal(Diseases of Eyelids) / Velvizhi Noikal(Diseases of Sclera) 6. Diseases of Blood and Lymphatic Vessels / Tumors and Cysts 7. Medicines commonly used for Eye Diseases / Comparision with Modern diagnosis 8. Study of most prevalent Eye Diseases / Diseases of Male Genital organs
Q3	<p>Long answer Questions 4 Questions</p>	<ol style="list-style-type: none"> 1. Inflammation and Ulcers / Siddha Classical Surgical methods (Asurarurai) 2. Study on the following Surgical conditions / Anorectal diseases

	10 marks each All compulsory	3. Tumors and Cysts 4. Diseases of Male Genital organs
Paper No:2		
Question No	Type of Question	Question Paper Format
Q1	Multiple choice Questions 20 Questions 1 mark each All compulsory	<ol style="list-style-type: none"> 1. Aids to healthy Skin 2. Ovammai Noikal (Allergic skin diseases) 3. Ovammai Noikal (Allergic skin diseases) 4. Noi Ethirppu Mandala Kolaral Varum Thol Noikal (Auto Immune related skin Disorders) & Thol Nirami Kuraipattu Noigal(Hypopigmentory diseases of the skin) 5. Noi Ethirppu Mandala Kolaral Varum Thol Noikal (Auto Immune related skin Disorders) & Thol Nirami Kuraipattu Noigal(Hypopigmentory diseases of the skin) 6. Diseases of the Ear 7. Diseases of the Ear 8. Infectious conditions of the skin 9. Infectious conditions of the skin 10. Diseases of Hair, Nail and Foot 11. Diseases of Hair, Nail and Foot 12. Mooku Noigal (Diseases of the Nose) 13. Mooku Noigal (Diseases of the Nose) 14. Vaai Noikal (Diseases of Oral Cavity) 15. Thondai Noikal (Diseases of Throat) 16. Pal Noikal (Dental Diseases) 17. Pal Noikal (Dental Diseases) 18. Vaai Noikal (Diseases of Oral Cavity) 19. Thondai Noikal (Diseases of Throat) 20. Pal Noikal (Dental Diseases)
Q2	Short answer Questions 8 Questions 5 Marks Each All compulsory	<ol style="list-style-type: none"> 1. Ovammai Noikal (Allergic skin diseases) / Aids to healthy Skin 2. Noi Ethirppu Mandala Kolaral Varum Thol Noikal (Auto Immune related skin Disorders) & Thol Nirami Kuraipattu Noigal(Hypopigmentory diseases of the skin) 3. Infectious conditions of the skin / Diseases of the Ear 4. Arpaviranam (Minor Skin diseases) / Diseases of Hair, Nail and Foot 5. Special medicines in Siddha for Skin diseases / Mooku Noigal (Diseases of the Nose) 6. Vaai Noikal (Diseases of Oral Cavity) 7. Thondai Noikal (Diseases of Throat) 8. Pal Noikal (Dental Diseases)
Q3		1. Noi Ethirppu Mandala Kolaral Varum Thol

Long answer Questions
4 Questions
10 marks each
All compulsory

Noikal (Auto Immune related skin Disorders) & Thol Niram Kuraipattu Noigal (Hypopigmentary diseases of the skin) / Ovammai Noikal (Allergic skin diseases)

2. Infectious conditions of the skin / Diseases of the Ear
3. Mooku Noigal (Diseases of the Nose) / Diseases of Hair, Nail and Foot
4. Pal Noikal (Dental Diseases) / Thondai Noikal (Diseases of Throat) / Vaai Noikal (Diseases of Oral Cavity)

6 H : Distribution of Practical Exam

S.No	Heads	Marks
1	<p>LONG CASE-ONE NUMBER</p> <p>Demographic details -03 marks</p> <p>Application of Criteriae for second half of first page of case sheet - 15 marks</p> <p>Expressing vital signs -05 marks</p> <p>Assessment of sense organs - 05 marks</p> <p>Assessment of seven physical constituents & Assessment of Three humours - 10 marks</p> <p>Performance of Envagaitervu, Performance of Local and systemic examination -10 marks</p> <p>Writting case summary - 05 marks</p> <p>Writting Differential diagnosis -05 marks</p> <p>Achieving Diagnosis by incorporating signs & Symptoms , Envagai thervu and local & systemic examinations- 05 marks</p> <p>Line of treatment -02 marks</p> <p>Comprehensive Prescription - 05 marks</p>	70
2	<p>SPOTTERS -5 numbers</p> <p>1. FROM OPHTHOLMOLOGY- photo/ Patient/ Simulated patient/ Case scenario - to identify the diagnosis -04 marks</p> <p>2. FROM DERMATOLOGY - photo/ Patient/ Simulated patient/ Case scenario - to identify the diagnosis -04 marks</p> <p>3. FROM ENT & DENTISTRY -photo/ Patient/ Simulated patient/ Case scenario - to identify the diagnosis -04 marks</p> <p>4. FROM ONE EQUIPMENT- to write the uses -04 Marks</p> <p>5. FROM ONE SURGICAL OR PARASURGICAL PROCEDURE (Demonstration of SoP) in a patient/Mannequine/ simulated patient- 04 Marks</p>	20
3	Record Book of ten cases- Each case caries one mark	10
4	Viva Voce	20
5	Electives	10
6	IA- Internal Assessment	20
Total Marks		150

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25	Sivapathasundharam B. Shafer's Textbook of Oral Pathology. 8th ed. ELSEVIER RELX India Pvt. Ltd.; 2016. ISBN: 978-0-7216-8128-3.
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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-SATV	V-SATV
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how	T-OBT	Theory open book test	V-UK	V-UK
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how	P-VIVA	Practical Viva	V-UT	V-UT
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does	P-REC	Practical Recitation	V-UV	V-UV
CS	Cognitive/Synthesis	REC	Recitation			P-EXAM	Practical exam	V-NU	V-NU
CE	Cognitive/Evaluation	SY	Symposium			PRN	Presentation	V-MT	V-MT
PSY-SET	Psychomotor/Set	TUT	Tutorial			P-PRF	Practical Performance	V-GMM	V-GMM
PSY-GUD	Psychomotor/Guided response	DIS	Discussions			P-SUR	Practical Survey	V-GMK	V-GMK
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming			P-EN	Practical enact	V-SSM-NM	V-SSM-NM
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning			P-RP	Practical Role play	V-NN1	V-NN1
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning			P-MOD	Practical Model	V-NN2	V-NN2
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning			P-POS	Practical Poster	V-NAVO	V-NAVO
AFT-RES	Affective/Responding	PrBL	Project-Based Learning			P-CASE	Practical Case taking	H-MM	H-MM
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning			P-ID	Practical identification	H-VPS	H-VPS
AFT-SET	Affective/Organization	TPW	Team Project Work			P-PS	Practical Problem solving	H-AM	H-AM
AFT-CHR	Affective/ characterization	FC	Flipped Classroom			QZ	Quiz	H-SMM	H-SMM
PSY-PER	Psychomotor/perception	BL	Blended Learning			PUZ	Puzzles	H-KM	H-KM
PSY-COR	Psychomotor/ Complex Overt Response	EDU	Edutainment			CL-PR	Class Presentation	H-RM	H-RM
		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	Objective Structured Clinical Examination		
						OSPE	Objective Structured Practical Examination		

						DOPS	Direct observation of procedural skills		
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