



**NUMS**  
NATIONAL UNIVERSITY  
OF MEDICAL SCIENCES

**STUDY GUIDE**  
**ENT**  
**CMH Lahore Medical**  
**&**  
**College of Dentistry**  
**2022-2023**

## **Study Guide 4<sup>th</sup> year MBBS ENT and Head and Neck Surgery**

### **Department Information: -**

The department of ENT and Head & Neck Surgery has following Faculty members

1. **Lt Col (R) Ayub Ahmad Khan**  
Professor of ENT
2. **Brig Attique Ahmed**  
Professor of ENT
3. **Col Muhammad Atif Imran Zaheer**  
Assistant Professor
4. **Lt Col Faiz Ul Hassan Nawaz**  
Assistant Professor
5. **Lt Col Atif Rafique**  
Assistant Professor
6. **Maj Nasir Akram Kundi**  
Assistant Professor
7. **Dr Anam Asif**  
Senior Registrar
8. **Maj Imran**  
PGR
9. **Dr Wajiha**  
PGR
10. **Dr Affaf**  
PGR
11. **Dr Zeinab**  
PGR

Prof Lt Col (r) Ayub Ahmad Khan is considered to be the part of Civilian Faculty while other faculty members are considered army faculty. Civil faculty have their offices in the College building and share the same clinics for patient consultation in Combined Military Hospital Lahore. Civil and Military faculty both are equally involved in teaching the students. Faculty not only teach fourth years MBBS but also take care of learning needs of first, second and third year MBBS and BDS Classes. Combined Military Hospital is a multidisciplinary organization and our undergraduate and postgraduate students work in harmony with Maxillofacial, Neurosurgical, Ophthalmic and Plastic Surgery Departments. Our Postgraduate trainees do their clinical rotations with these departments.

### **Our Mission:**

Our mission is to equip the average student with the minimum essential knowledge, skill and attitude to make him able to:-

- Identify common ENT diseases, emergencies, providing primary health care, referral to an appropriate center and conducting follow-ups.
- Perform minor procedures safely, and enabling the student to communicate effectively with the patient and his/her family about the disease and other relevant issues.
- Understanding ethics, being empathetic to the patient's plight and maintaining patient confidentiality.

Our strategy to achieve the aforementioned goals will be:

- I. Interactive lectures
- II. Small group discussion
- III. Problem based learning
- IV. Clinical rotations and ward visits
- V. Tutorials
- VI. CPCs and Seminars
- VII. PBL- group taken
- VIII. SDL-online tutorial and lecture
- IX. Research projects

**Outcome:**

By the end of the rotation in the Department of ENT and Head and Neck Surgery, the student should be able to:

- I. Obtain an appropriate History including history of present illness, past, personal, Socioeconomic and family history.
- II. Perform routine examination
  - a. General Physical Examination
  - b. Examination of Neck
  - c. Examination of Swelling
  - d. Examination of Oral Cavity and throat.
  - e. Examination of Nose
  - f. Examination of Ear
- III. Identify common ENT problems and perform tests
  - a. Ear
    - i. Pre-auricular region swelling
    - ii. Swelling of Pinna
    - iii. Seroma of Pinna
    - iv. Abscess of Pinna
    - v. Otitis Externa including localized and generalized
    - vi. Tympanic membrane perforation
    - vii. Tympanic membrane granulation
    - viii. Ossicles including Handle of Malleus and long process of incus
    - ix. Tuning fork tests
    - x. Tests of Vestibular Function
    - xi. Tests of cerebellar function
    - xii. Interpret audiogram and tympanogram
  - b. Nose
    - i. Vestibule of nose
    - ii. Nasal septum
    - iii. Lateral wall of Nose
    - iv. Inferior turbinate
    - v. Middle turbinate
    - vi. Deviated nasal septum
    - vii. Check patency of nose
    - viii. Nasal Polyps
    - ix. Identify unilateral and bilateral nasal obstruction
    - x. Interpret X Ray PNS
    - xi. Interpret X Ray Neck for adenoids

- c. Throat and Oral Cavity
    - i. Teeth
    - ii. Vestibule of Oral Cavity
    - iii. Floor of oral cavity
    - iv. Openings of submandibular and parotid ducts
    - v. Anterior and posterior faucial pillars
    - vi. Tonsils
    - vii. Posterior pharyngeal wall
    - viii. Hard palate, soft palate and uvula
    - ix. Tongue and its lateral borders
  - d. Neck
    - i. Colour
    - ii. Thyroid gland
    - iii. Parotid and submandibular gland
    - iv. Neck nodes
    - v. Examination of swelling
    - vi. Laryngeal cartilages
- IV. Outline appropriate management plans
- a. Interpret investigations
    - i. Blood CBC
    - i. Hepatitis Profile
    - ii. Coagulation profile
    - iii. Tympanogram
    - iv. Audiogram
    - v. X Ray Neck, PNS and Chest
  - b. Co-relate history, examination findings and investigations and do clinical reasoning and establish diagnosis considering all differential diagnosis.
  - c. Plan treatment in the light of established diagnosis.

## Curriculum 4<sup>th</sup> Year ENT

Ear					
Theme/ Topic	Learning out comes at the end of this block, student will be able to:	Course content	% Weighta ge	Instr Strategies	Assessment ntool
<b>Basic of hearing and balance</b>	<ul style="list-style-type: none"> <li>• Revisit the applied anatomy and physiology of hearing and balance as well as Eustachian tube and its role in hearing</li> <li>• Recall the pathophysiology of vertigo</li> </ul>	<ul style="list-style-type: none"> <li>• Anatomy and physiology of hearing and balance</li> <li>• Effects of Eustachian tube malfunction</li> <li>• Pathophysiology of vertigo</li> </ul>	<b>05%</b>	Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/ SEQ/ OSCE/ StructuredViva
<b>Discharge &amp; Deafness</b>	Suggest a management plan for a patient with ear discharge after interpreting relevant investigations if needed	<b>Discharge Ear</b> DD of Discharging Ear Overview and Classification of Otitis Media <u><b>Diseases*</b></u> <ul style="list-style-type: none"> <li>• Acute Suppurative Otitis Media</li> <li>• Chronic Suppurative Otitis Media</li> <li>CSF Otorrhoea</li> </ul>	<b>40%</b>	Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/ SEQ/ OSCE/ StructuredViva

		Bleeding from Ear [ Trauma Base of Skull			
	<ul style="list-style-type: none"> <li>Differentiate between various types of deafness on the basis of history and examination</li> <li>Interpret appropriate investigations to reach the final diagnosis</li> <li>Suggest appropriate plan for treatment and rehabilitation</li> </ul>	<p><b>Deafness</b> Overview of Deafness</p> <ul style="list-style-type: none"> <li>Causes [Unilateral/Bilateral/Sudden/Children]</li> <li>DD</li> <li>Social/Medico legal aspects</li> </ul> <p><b><u>Diseases Causing Conductive deafness</u></b></p> <ul style="list-style-type: none"> <li>Wax</li> <li>FB</li> <li>Fluid in Middle Ear [Sec OM]</li> <li>Trauma to ear [Traumatic</li> </ul>		Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/SEQ/ OSCE/ StructuredViva

	<ul style="list-style-type: none"> <li>Retell medico legal and social aspects of deafness</li> </ul>	<p>Perforation of TM Haemotympanum/Ossicular disruption</p> <ul style="list-style-type: none"> <li>Otosclerosis</li> </ul> <p><b><u>Diseases Causing Senso Neural Deafness</u></b></p> <ul style="list-style-type: none"> <li>Presbycusis</li> <li>Drug Induced Deafness</li> <li>Noise Induced Deafness and Acoustic Trauma</li> </ul> <p>Psychogenic Deafness Deaf-Mutism in Children Rehabilitation of the Deaf Hearing Aid Cochlear implant</p>			
<b>Otalgia</b>	<ul style="list-style-type: none"> <li>Differentiate between referred otalgia and that arising from local conditions of ear</li> <li>Suggest appropriate treatment after the interpretation of relevant investigations if needed</li> </ul>	<p><b>Causes and Differential Diagnosis of Otalgia</b> *Eiology/ Pathogenesis, Signs Symptoms, Investigations, treatment Complications Follow-up</p> <ul style="list-style-type: none"> <li>Boil</li> <li>Otitis Externa</li> <li>Ac Otitis media</li> <li>Herpes Simplex</li> <li>Perichondritis</li> <li>Traumatic conditions of external and middle ears</li> <li>Referred otalgia</li> <li>Barotrauma</li> <li>Complications of CSOM</li> <li>Ca- Middle Ear??</li> </ul>	<b>20%</b>	<p>Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars</p>	<p>MCQ/SAQ/SEQ/ OSCE/ Structured Viva</p>
<b>Vertigo &amp; Tinnitus</b>	<ol style="list-style-type: none"> <li>Differentiate between various types of vertigo in relation to its pathophysiology</li> <li>Suggest appropriate treatment including rehabilitation after the interpretation of investigations if needed</li> </ol>	<p><b>Overview of Vertigo</b></p> <ul style="list-style-type: none"> <li>Differentiation between True rotator vertigo, Dizziness and Unsteadiness</li> <li>Causes of vertigo</li> </ul> <p><b><u>Diseases Causing Vertigo</u></b> (BPPV, Vestibular Neuronitis, Meniere, S Disease)</p>	<b>25%</b>	<p>Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars</p>	<p>MCQ/SAQ/SEQ/ OSCE/ Structured Viva</p>
	<ol style="list-style-type: none"> <li>Diagnose a case presenting with</li> </ol>	<p><b>Overview of Tinnitus</b></p>		<p>Problem based</p>	<p>MCQ/SAQ/SEQ/</p>

	tinnitus on the basis of signs, symptoms and appropriate investigations 4. Suggest thorough management plan	<ul style="list-style-type: none"> <li>• Causes of Tinnitus</li> <li>• How to investigate and manage a case of Tinnitus</li> <li>• Acoustic Neuroma</li> </ul>		teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	OSCE/ Structured Viva
<b>Facial disfigurement</b>	Identify the lesions of facial nerve relating to its etiology	<ul style="list-style-type: none"> <li>• Anatomy of Facial Nerve</li> <li>• Electrophysiological Test for Facial Nerve</li> <li>• Differentiation between upper and lower motor Neuron lesion</li> <li>• Causes and work-up in a case of Facial Paralysis</li> <li>• Treatment/ Complications and Follow-up</li> <li>• facial nerve palsy (secondary to ear surgery, trauma, bell's palsy and Attic disease), Unsafe chronic otitis media, Fracture Temporal bone</li> </ul>	<b>10%</b>	Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/ SEQ/ OSCE/ Structured Viva
	Recognize the salient features of common tumors of Ear	Presentation, features and diagnosis of Basal cell carcinoma of pinna, Squamous cell carcinoma of external and middle ear, Glomus tumor and Acoustic neuroma		Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/ SEQ/ OSCE/ Structured Viva
<b>Total</b>			<b>100</b>		
<b>End Block/rotation Assessment to be taken by concerned institute itself</b>					
<b>Assessment tools: MCQs &amp; SAQs/SEQs/ OSCE</b>					



**ENT – NOSE & PARANASAL SINUSES**

Theme/Topic	Learning outcome At the end of this block, student will be able to:	Course Content	% Weightage	Instr Strategies	Assessment tool
<b>Basic of Nose and Para nasal Sinuses</b>	Revisit the applied anatomy and physiology of nose and Paranasal sinuses	<b>Anatomy of Nose &amp; Para-Nasal Sinuses</b> <ul style="list-style-type: none"> <li>• Basic concepts in clinical anatomy of nose &amp; Para-nasal sinuses</li> <li>• Anatomical routes of extensions of disease of nose and PNS into oral cavity, nose, orbit and skull base.</li> </ul> <b>Physiology of Nose &amp; Para-Nasal Sinuses</b> <ul style="list-style-type: none"> <li>• Basic concepts in clinical physiology of nose &amp; Para-nasal sinuses</li> <li>• Patho-physiology and extensions of diseases of nose and PNS into oral cavity, nose orbit and skull base</li> </ul>	<b>10%</b>	Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/SEQ/ OSCE/ Structured Viva
<b>Nasal obstructions</b>	<ul style="list-style-type: none"> <li>• Enlist different causes of unilateral and bilateral obstruction</li> <li>• Suggest appropriate plan of investigations and management</li> </ul>	<b>Overview of Nasal Obstruction [unilateral/Bilateral/Adults/Children/Neonate]</b> Diseases causing Obstruction <ul style="list-style-type: none"> <li>• DNS</li> <li>• Nasal Polypi [ in Children, adults, Elderly]</li> <li>• FB Nose</li> <li>• Septal Haematoma/Abscess</li> <li>• ADENOIDS</li> <li>• Obstructive Sleep Apnoea</li> </ul>	<b>40%</b>	Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/SEQ/OSCE/ Structured Viva

		<ul style="list-style-type: none"> <li>• Congenital abnormalities as Choanal Atresia/ Menigocele /Encephalocele</li> <li>• Tumors of Nose [Classification + special Emphasis on Angofibroma, Ca-Maxilla and Ca-Nasopharynx]</li> </ul>			
<b>Discharge and Epistaxis</b>	<ul style="list-style-type: none"> <li>• Differentiate between various types of Rhinitis on the basis of signs and symptoms</li> <li>• Interpret necessary investigations</li> <li>• Suggest symptomatic and curative treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Overview of Rhinitis</li> </ul> <p>Rhinitis*</p> <ul style="list-style-type: none"> <li>○ Allergic rhinitis</li> <li>○ Vasomotor Rhinitis</li> <li>○ Infective rhinitis [Viral, Bacterial]</li> <li>○ Rhinitis Medica Mentosa</li> <li>○ Atrophic Rhinitis</li> <li>○ Wegners Granuloma and list of other</li> </ul> <p>Granulomatous diseases</p> <ul style="list-style-type: none"> <li>• Etiology of Nasal Allergy</li> <li>• Symptoms and signs of Allergic Rhinitis.</li> <li>• Examination of patients of Allergic Rhinitis.</li> <li>• Investigation of Allergic Rhinitis</li> </ul> <p>Symptomatic and curative treatment options</p>	<b>30%</b>	Problem based teaching /practical sessions/tutorials Clinical rotations, ward visits, lectures CPC's and seminars	MCQ/SAQ/SEQ/OSCE/ Structured Viva
	<ul style="list-style-type: none"> <li>• Suggest thorough management plan in case of Epistaxis</li> <li>• Suggests measures to</li> </ul>	<ul style="list-style-type: none"> <li>• Blood Supply of Nose</li> <li>• Epistaxis</li> <li>• Angiofibroma</li> </ul>			

	control refractory epistaxis			Clinical rotations, ward visits, lectures CPC's and seminars	
<b>Headache and facial pains</b>	<ul style="list-style-type: none"> <li>Differentiate between various causes of Facial Pain and Headache on the basis of history and clinical examination</li> <li>Advise necessary investigations if needed</li> <li>Suggest appropriate treatment plan</li> </ul>	<p>Overview of Facial Pain and headache</p> <p><b>Acute and Chronic Sinusitis</b></p> <ul style="list-style-type: none"> <li>Patho-physiology of sinus infection</li> <li>Signs and symptoms of sinus disease.</li> <li>Detailed Investigation of sinus infection / how to read a sinus CT scan</li> <li>Medical &amp; Surgical treatment of sinus infection</li> <li>Basics of FESS its indication /procedure/ complications</li> </ul> <p><b>Complications of Sinusitis</b></p> <ul style="list-style-type: none"> <li>Common orbital, nasal, oral, dental and intra-cranial complication of Sinus pathology and its management.</li> <li>Fungal Sinusitis and its management.</li> <li>Atypical facial pains</li> <li>Granulomatous diseases and Tumors</li> <li>Sinus barotrauma</li> </ul>	<b>20%</b>	<p>Problem based teaching /practical sessions/tutorials</p> <p>Clinical rotations, ward visits, lectures CPC's and seminars</p>	<p>MCQ/SAQ/SEQ/OSCE/Structured Viva</p>
<b>Total</b>			<b>100</b>		
<p><b>End Block/rotation Assessment to be taken by concerned institute itself</b></p> <p><b>Assessment tools: MCQs &amp; SAQs/SEQs/ OSCE</b></p>					

**ENT - THROAT & LARYNX**

<b>Theme/Topic</b>	<b>Learning Outcomes</b> At the end of this block, student will be able to	<b>Course Contents</b>	<b>% Weightage</b>	<b>Instr Strategies</b>	<b>Assessment tool</b>
<b>Sore throat and pain</b>	<ul style="list-style-type: none"> <li>• Manage acute and chronic tonsillitis</li> <li>• Identify need of tonsillectomy in a case of chronic tonsillitis</li> </ul>	<p><b>Acute &amp; Chronic Tonsillitis</b></p> <ul style="list-style-type: none"> <li>• symptoms and signs of Acute and Chronic Tonsillitis</li> <li>• important investigations</li> <li>• medical and surgical treatment options</li> <li>• Indications and technique of tonsillectomy</li> </ul>	<b>40%</b>	Problem based teaching /practical sessions/tutorials  <b>Clinical rotations, ward visits, lectures CPC's and seminars</b>	<b>MCQ/SAQ/SEQ/OSCE/ Structured Viva</b>
		<p><b>Acute &amp; Chronic Pharyngitis</b></p> <ul style="list-style-type: none"> <li>• Basic anatomy and physiology of pharynx and oesophagus and its clinical importance symptoms, signs, investigations and management of sore throat and recurrent throat infections</li> </ul>		Problem based teaching /practical sessions/tutorials  <b>Clinical rotations, ward visits, lectures CPC's and seminars</b>	<b>MCQ/SAQ/SEQ/OSCE/ Structured Viva</b>

	<ul style="list-style-type: none"> <li>• Manage acute and chronic Pharyngitis</li> <li>• Manage the common disorders of oral cavity</li> <li>• Suspect a tumor of oropharynx on the basis of signs and symptoms</li> </ul>	<p><b>Common disorders of oral cavity.</b></p> <p>Basic understanding of the common disorders of oral cavity</p> <p><b>Tumors of Oro-pharynx</b></p> <ul style="list-style-type: none"> <li>• Common sites of tumor of oro-pharynx</li> <li>• Symptoms, signs, investigations and management of these tumors</li> </ul>		<p>Problem based teaching /practical sessions/tutorials</p> <p><b>Clinical rotations, ward visits, lectures CPC's and seminars</b></p> <p>Problem based teaching /practical sessions/tutorials</p> <p><b>Clinical rotations, ward visits, lectures CPC's and seminars</b></p>	<p><b>MCQ/SAQ/</b></p> <p><b>SEQ/OSCE/ Structured Viva</b></p>
<b>Dysphagia and Odynophagia</b>	<ul style="list-style-type: none"> <li>• Differentiate between various types of dysphagia basing on its etiology and patho physiology</li> <li>• Suspect abscesses around the pharynx on the</li> </ul>	<p><b>Dysphagia &amp; Disorders of Oesophagus –</b></p> <ul style="list-style-type: none"> <li>• Normal swallowing mechanism</li> <li>• Types of dysphagia</li> <li>• Causes and patho-physiology of each cause</li> </ul> <p><b>Abscesses around Pharynx (Retro-Pharyngeal Abscess &amp; Peri-Tonsillar Abscess</b></p> <ul style="list-style-type: none"> <li>• Symptoms of Acute Retero-pharyngeal abscess, and possible</li> </ul>	<b>30%</b>	<p>Problem based teaching /practical sessions/tutorials</p> <p><b>Clinical rotations, ward visits, lectures CPC's and seminars</b></p>	<p><b>MCQ/SAQ/ SEQ/OSCE/ Structured Viva</b></p>

	<p>basis of symptoms and signs</p> <ul style="list-style-type: none"> <li>• Suggest treatment for these abscesses</li> <li>• Recognize mass arising from lateral margin of tongue</li> <li>• Suggest different treatment modalities on the basis of biopsy</li> </ul>	<p>complications if this condition is not recognized in time</p> <ul style="list-style-type: none"> <li>• Emergency investigations and management of this condition</li> </ul> <p><b>Oropharyngeal tumors</b>            Carcinoma Tongue &amp; Oral Cavity CBL – symptoms, signs and examination of CA.            Tongue emergency investigations and management of this condition</p>			
<b>Hoarseness and stridor</b>	<ul style="list-style-type: none"> <li>• Differentiate between different causes of hoarseness and stridor on the basis of signs and symptoms</li> <li>• Outline relevant investigations</li> <li>• Suggest treatment modalities for hoarseness and stridor</li> </ul>	Congenital Lesions of Larynx & Stridor – Basic differences between anatomy and physiology of larynx of a child as compared to the adult Pathophysiology of congenital lesions of larynx	<b>20%</b>	Problem based teaching /practical sessions/tutorials <b>Clinical rotations, ward visits, lectures CPC's and seminars</b>	<b>MCQ/SAQ/SEQ/OSCE/Structured Viva</b>
		Acute & Chronic Laryngitis CBL: <ul style="list-style-type: none"> <li>• Symptoms, signs and examination of Acute Laryngitis</li> <li>• Emergency investigations and</li> </ul>		Problem based teaching /practical sessions/tutorials <b>Clinical rotations, ward visits, lectures</b>	

		management of this condition		<b>CPC's and seminars</b>	
		Laryngeal Paralysis, Voice & Speech Disorders – <ul style="list-style-type: none"> <li>• Patho-physiology of Laryngeal paralysis</li> <li>• Patho-physiology of Voice and speech disorders</li> </ul>		Problem based teaching /practical sessions/tutorials <b>Clinical rotations, ward visits, lectures CPC's and seminars</b>	<b>MCQ/SAQ/SEQ/OSCE/Structured Viva</b>
		Carcinoma of Larynx – <ul style="list-style-type: none"> <li>• symptoms, signs and examination of a patient suspected to have CA. Larynx</li> <li>• emergency investigations and different management plan of this condition</li> </ul>		Problem based teaching /practical sessions/tutorials <b>Clinical rotations, ward visits, lectures CPC's and seminars</b>	<b>MCQ/SAQ/SEQ/OSCE/Structured Viva</b>
<b>Neck masses</b>	<ul style="list-style-type: none"> <li>• Differentiate between different types of neck masses on the basis of signs and symptoms</li> <li>• Advise relevant Investigations and management plan</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution and drainage area of Neck Lymph Nodes</li> <li>• DD of Lateral Neck Masses</li> <li>• DD of Lymph Node enlargement in Neck</li> <li>• Work-up for a suspected Metastatic Lymph Node</li> <li>• Thyroid gland-</li> </ul>		Problem based teaching /practical sessions/tutorials <b>Clinical rotations, ward visits, lectures CPC's and seminars</b>	<b>MCQ/SAQ/SEQ/OSCE/Structured Viva</b>

<b>Advances in ENT/Neck surgeries</b>	Reproduce the basic concept about recent trends in different ENT treatment modalities	<p>Laser Surgery, Cryosurgery, HIV Infection/ AIDS &amp; ENT Managements –</p> <ul style="list-style-type: none"> <li>• Physics and physiology of LASER surgery and Cryosurgery</li> <li>• Basics of HIV and AIDS infection</li> </ul> <p>Radiotherapy / Chemotherapy for Head &amp; Neck Cancers – Basics of Radiotherapy and Chemotherapy in head and neck cancers</p>	<b>10%</b>	<p>Problem based teaching /practical sessions/tutorials</p> <p><b>Clinical rotations, ward visits, lectures CPC's and seminars</b></p>	<b>MCQ/SAQ/ SEQ/OSCE/ Structured Viva</b>
<b>Total</b>			<b>100</b>		
<p><b>End Block/rotation Assessment to be taken by concerned institute itself</b></p> <p><b>Assessment tools: MCQs &amp; SAQs/SEQs/ OSCE</b></p>					



## SCHEDULE OF CLINICAL TRAINING

S. No	LEARNING OUTCOMES	ACTIVITY
	At the end of 09 weeks training, the student will be able to:	
<b><u>Ear</u></b>		
1	<p><b><u>Special Skills</u></b></p> <ul style="list-style-type: none"> <li>➤ Take history of a patient with Ear pathology</li> <li>➤ Demonstrate the use of Otoscope to aid in examination of the external auditory canal and the tympanic membrane and learn (Use of Seigle’s speculum).</li> <li>➤ Demonstrate the use of tuning forks and interpret the findings.</li> <li>➤ Demonstrate Syringing of ear.</li> <li>➤ Reproduce steps of recording tympanogram and hearing levels on audiogram</li> <li>➤ Interpret audiogram and tympanogram</li> <li>➤ Identify all common Ear instruments used in OPD</li> </ul>	<p><b><u>OPD / Ward</u></b></p> <ul style="list-style-type: none"> <li>➤ Video clip of examination of ear.</li> <li>➤ Demonstration of clinical examination of ear.</li> <li>➤ Practical session of examination of ear</li> <li>➤ Examination of ear on patients</li> <li>➤ Assessment of Hearing</li> <li>➤ Audiogram / Tympanogram, practical demonstration &amp; discussion</li> </ul> <p><b><u>Instruments</u></b></p> <p>Students must be shown ear instruments used in OPD</p>
2	<ul style="list-style-type: none"> <li>➤ Perform OT scrub for surgery according to the protocol</li> <li>➤ Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care</li> <li>➤ Identify all common Ear instruments used in OT</li> <li>➤</li> </ul>	<p><b><u>OT</u></b></p> <ul style="list-style-type: none"> <li>➤ How to enter the operation theatre.</li> <li>➤ How to behave in OT</li> <li>➤ Steps of washing and preparation for operation</li> <li>➤ Students should observe the following operations <ul style="list-style-type: none"> <li>• Myringotomy</li> <li>• I/D of hematoma ear</li> <li>• Removal of Foreign body ear</li> <li>• Removal of wax</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>• Myringoplasty and Mastoidectomy</li> <li>• Abscess incision drainage/Hematoma ear</li> </ul> <p><b><u>Instruments</u></b></p> <ul style="list-style-type: none"> <li>➤ Students must be shown ear instruments used in above mentioned surgeries</li> </ul>
<b><u>Nose</u></b>		
3	<p><b><u>Special Skills</u></b></p> <ul style="list-style-type: none"> <li>➤ Take history of a patient with nasal pathology</li> <li>➤ Perform basic examination of nose and paranasal sinuses in a stepwise fashion</li> <li>➤ Diagnose a case of Nasal Polypi on the basis of glistening appearance of nasal polypi in anterior rhinoscopy</li> <li>➤ Interpret a simple X-Ray / CT Scan for Sinus, Paranasal Sinus, Nasopharynx and other simple ENT pathologies</li> <li>➤ Identify all common Nasal instruments used in OPD</li> </ul>	<p><b><u>OPD / Ward</u></b></p> <ul style="list-style-type: none"> <li>➤ Examination of nose and para nasal sinuses. The steps and logic behind it</li> <li>➤ Video clip of examination of nose and para nasal sinuses.</li> <li>➤ Demonstration of nose and para nasal sinuses</li> <li>➤ Practical session of examination of nose and para nasal sinuses in patients</li> <li>➤ Nasal Polypi – demonstration on patient</li> <li>➤ Simple X-Ray / CT Scan for Sinus, Paranasal Sinus, Nasopharynx and other simple ENT pathologies</li> </ul>

4	<ul style="list-style-type: none"> <li>➤ Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care</li> <li>➤ Identify all common Nasal instruments used in OT</li> </ul>	<p><b><u>OT</u></b></p> <ul style="list-style-type: none"> <li>➤ Students should observe the following operations</li> <li>➤ Tonsillectomy</li> <li>➤ Adenoidectomy</li> <li>➤ Septoplasty</li> <li>➤ How to carry out anterior nasal packing</li> <li>➤ Sinus lavage, electrocautery</li> <li>➤ SMR, procedure, indications and post-operative care</li> <li>➤ Observation of SMR procedure</li> <li>➤ FESS, indications, procedure and post-operative care</li> <li>➤ Observation of FESS procedure</li> <li>➤ Epistaxis and its management</li> </ul> <p><b><u>Instruments</u></b></p> <p>Students must be shown instruments used in above mentioned surgeries</p>
<b>Throat &amp; Larynx</b>		
3	<p><b><u>Special Skills</u></b></p> <ul style="list-style-type: none"> <li>➤ Take history of a patient with throat and laryngeal pathology</li> <li>➤ Perform examination of throat</li> <li>➤ Perform basic examination of larynx in a clinical setting</li> <li>➤ Identify all common instruments used in OPD</li> </ul>	<p><b><u>OPD / Ward</u></b></p> <ul style="list-style-type: none"> <li>➤ Clinical examination of throat, the steps and logic behind it</li> <li>➤ Video clip of throat examination.</li> <li>➤ Demonstration of examination of throat</li> <li>➤ Practical session of examination of throat on patients</li> <li>➤ Laryngeal Disorders – Ward demonstration</li> </ul>

4	<ul style="list-style-type: none"> <li>➤ Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care</li> <li>➤ Perform tracheostomy in emergency situations</li> <li>➤ Identify all common instruments used in OT</li> </ul>	<p><b><u>OT</u></b></p> <ul style="list-style-type: none"> <li>➤ Students should observe the following operations <ul style="list-style-type: none"> <li>• Tracheostomy, procedure, indications and post-operative care</li> </ul> </li> </ul> <p><b>Instruments</b></p> <p>Students must be shown instruments used in above mentioned surgeries</p>
<b>WARD TEST</b>		

**SCHEDULE OF CLINICAL TRAINING**

S. No.	LEARNING OUTCOMES	ACTIVITY
<b>At the end of 8 weeks training the student should be able to:</b>		
<b>EAR</b>		
<b>1.</b>	<b><u>SPECIAL SKILLS</u></b> 1. Take history of a patient with Ear pathology 2. Demonstrate the use of Otoscope to aid in examination of the external auditory canal and the tympanic membrane and learn (Use of Seigle’s speculum). 3. Demonstrate the use of tuning forks and interpret the findings. 4. Demonstrate Syringing of ear. 5. Reproduce steps of recording tympanogram and hearing levels on audiogram. 6. Interpret audiogram and tympanogram 7. Identify all common Ear instruments used in OPD	<b><u>OPD / Ward</u></b> 1. Video clip of examination of ear. 2. Demonstration of clinical examination of ear. 3. Practical session of examination of ear 4. Examination of ear on patients 5. Assessment of Hearing 6. Audiogram / Tympanogram, practical demonstration & discussion  <b>Instruments</b> Students must be able to identify ear instruments used in ENT OPD
<b>2.</b>	1. Perform OT scrub for surgery according to the protocol 2. Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care 3. Identify all common Ear instruments used in OT	<b><u>OT</u></b> 1. How to enter the operation theatre. 2. How to behave in OT 3. Steps of washing and preparation for operation 4. Students should observe the following operations 5. Myringotomy 6. I/D of hematoma ear 7. Removal of Foreign body ear 8. Removal of wax 9. Myringoplasty and Mastoidectomy 10. Abscess incision drainage/Hematoma ear  <b>Instruments</b> <input type="checkbox"/> Students must be shown ear instruments used in above mentioned surgeries
<b>NOSE</b>		
<b>1.</b>	<b>Special Skills</b> 1. Take history of a patient with nasal pathology 2. Perform basic examination of nose and paranasal sinuses in a stepwise fashion 3. Diagnose a case of Nasal Polypi on the basis of glistening appearance of nasal polypi in anterior rhinoscopy	<b><u>OPD / Ward</u></b> 1. Examination of nose and para nasal sinuses. The steps and logic behind it 2. Video clip of examination of nose and para nasal sinuses. 3. Demonstration of nose and para

	<ol style="list-style-type: none"> <li>4. Interpret a simple X-Ray / CT Scan for Sinus, Paranasal Sinus, Nasopharynx and other simple ENT pathologies</li> <li>5. Identify all common Nasal instruments used in OPD</li> </ol>	<p>nasal sinuses</p> <ol style="list-style-type: none"> <li>4. Practical session of examination of nose and para nasal sinuses in patients</li> <li>5. Nasal Polypi – demonstration on patient</li> <li>6. Simple X-Ray / CT Scan for Sinus, Paranasal Sinus, Nasopharynx and other simple ENT pathologies</li> </ol>
2.	<ol style="list-style-type: none"> <li>1. Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care</li> <li>2. Identify all common Nasal instruments used in OT</li> </ol>	<p>OT</p> <p>Students should observe the following operations</p> <ol style="list-style-type: none"> <li>1. Septoplasty</li> <li>2. Anterior nasal packing</li> <li>3. Sinus lavage</li> <li>4. Electrocautery</li> <li>5. SMR, procedure, indications and post-operative care</li> <li>6. FESS procedure and post-operative care</li> <li>7. Observation of FESS procedure</li> <li>8. Epistaxis and its management</li> </ol> <p><b>Instruments</b></p> <p>Students must be shown instruments used in above mentioned surgeries</p>
<b>Throat &amp; Larynx</b>		
1.	<p><b>Special Skills</b></p> <ol style="list-style-type: none"> <li>1. Take history of a patient with throat and laryngeal pathology</li> <li>2. Perform examination of throat</li> <li>3. Perform basic examination of larynx in a clinical setting</li> <li>4. Identify all common instruments used in OPD</li> </ol>	<p><b>OPD / Ward</b></p> <ol style="list-style-type: none"> <li>1. Clinical examination of throat, the steps and logic behind it</li> <li>2. Video clip of throat examination.</li> <li>3. Demonstration of examination of throat</li> <li>4. Practical session of examination of throat on patients</li> <li>5. Laryngeal Disorders – Ward demonstration</li> </ol>
2.	<p>Reproduce the procedure of the operations, mentioned in column III, including their indications and post-operative care</p> <ol style="list-style-type: none"> <li>1. Perform tracheostomy in emergency situations</li> <li>2. Identify all common instruments used in OT</li> </ol>	<p><b>OT</b></p> <p>Students should observe the following operations</p> <ol style="list-style-type: none"> <li>1. Tracheostomy, procedure, indications and post-operative care</li> </ol> <p><b>Instruments</b></p> <p>Students must be shown instruments used in above mentioned surgeries</p>
<b>WARD TEST</b>		

**Table of Specification**  
**ENT**  
**Fourth Professional MBBS Examination 2023**

Marks of theory paper	= 80	
Time Allowed	= 03 hrs	
Internal assessment (20%)	= 20	
<b>Total Marks</b> (MCQs:40%+SEQs:40%+IA:20%)	= 100	
Pass Marks	= 50	
<b>Paper-1:</b> (*Marks of MCQ component shall be rationalized to 40% weightage)		
60 x MCQs (1 mark each)	(60 Marks)	Time =60 min
<b>Paper-2:</b>		
	(40 Marks)	Time = 120 min

\*If a candidate obtains 50 marks in MCQs it will be rationalized as:  $(50/60 \times 40 = 33.33)$

TOPIC	Number of MCQs (60)		Number of SEQs (8) (5 Marks Each)
	Recall:20	Application:40	
<b>EAR</b>			
Basics of hearing and balance	01	03	-
Deafness & Discharge	02	03	01
Otalgia	02	04	01
Vertigo & Tinnitus	01	03	01
Facial disfigurement	01	03	-
<b>Nose</b>			
Basics of Nose and Para nasal Sinuses	02	01	-
Nasal obstructions	01	03	01
Discharge and Epistaxis	02	02	-
Headache and facial pains	01	03	01
<b>Throat &amp; Larynx</b>			
Sore throat and pain	01	04	01
Hoarseness and stridor	02	03	01
Dysphagia and Odynophagia	01	03	-
Neck masses	02	03	01
Advances in ENT/Neck surgeries	01	02	-
<b>Total</b>	<b>60 (60 Marks)</b>		<b>8 (40 Marks)</b>

**Practical Table**  
**of Specification**

**ENT**

**Max Marks** = 80  
**Internal Assessment** = 20  
**Grand Total** = 100  
**Pass Marks** = 50

<b>OSCE ENT</b>													
<b>OSCE- (Observed)</b>					<b>Non-Observed</b>								<b>Total Marks</b>
1	2	3	4	5	6	7	8	9	10	11	12	13	
History taking	Examination of Ear	Examination of Nose	Examination of Throat	Counselling	Picture identification, Differential diagnosis, Management	Picture identification, Differential diagnosis, Management	X Ray identification of findings, Differential diagnosis, Management	Instrument identification, uses and complication	Implant/Drug and its uses	Investigation including PTA and Tympanogram	Scenario Having Diagnosis, DD and Management	Materials including NG Tube,/ tracheostomy tube/ Sutures	80 Marks
<b>08</b>	<b>08</b>	<b>08</b>	<b>08</b>	<b>08</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	
<b>5 minutes for each station</b> <b>For 25 students = 125 Minutes= 2hrs 5 minutes</b>													
<b>*Number of rest stations depends upon the number of students</b>													



**FORTH PROFESSIONAL MBBS EXAMINATION 2023**

Marks of theory paper	=80
Time Allowed	=03hrs
Internal assessment (20%)	=20
<b>Total Marks</b> (MCQs:40%+SEQs:40%+IA:20%)	=100

Pass Marks	=50
<b>Paper-1</b> :(*Marks of MCQ component shall be rationalized to 40%weightage)	
60xMCQs (1mark each)	(60 Marks) Time=60min
<b>Paper-2:</b>	(40 Marks) Time=120min
*If a candidate obtains 50 marks in MCQ sit will be rationalized as :( 50/60*40=33.33)	

TOPIC	Number of MCQs (60)		Number of SEQs (8) (05 Marks)
	Recall:20	Application:40	
EyeLid & adnexa	01	04	01
Conjunctiva	02	02	
Episclera & sclera	01	02	
Orbit	02	04	01
Uveitis	01	02	
Corneal Diseases	02	03	01
Lens	02	05	
Refractive errors & Refractive Surgery	01	03	01
Glaucoma and ocular therapeutics	02	05	
Ocular trauma and emergencies	01	02	01
Retinal vascular diseases	01	02	01
Retinal Detachment	01	02	
Common Fundus Pathologies	01	01	01
Strabismus & Neuro Ophthalmology	02	03	01
<b>Total</b>	<b>60(60 Marks)</b>		<b>8(40 Marks)</b>

## Practical

### Table of Specification For 2023 Examination Ophthalmology

**Max Marks** = 80 **Internal Assessment** = 20 **Grand Total** = 100

**Pass Marks** = 50

<b>OSCE Ophthalmology</b>													
<b>5x Observed</b>					<b>8x Non-Observed</b>								<b>Total Marks</b>
1	2	3	4	5	6	7	8	9	10	11	12	13	
Focused History	Shortcase-1	Shortcase-2	Shortcase-3	Counselling/Comm Skills	2 x Data Interpretation	2xPicture	2xInstrument	2xXrays	Drugs	Picture/Visual acuity Charts	Picture	Picture	
<b>08</b>	<b>08</b>	<b>08</b>	<b>08</b>	<b>08</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>05</b>	<b>80Marks</b>
<b>5 minutes for each station</b>													
<b>For 25 students = 125 Minutes = 2hrs 5 minutes</b>													
<b>*Number of rest stations depends upon the number of students</b>													

<b>INTERNAL ASSESSMENT - THEORY</b>	
<b>INTERNAL ASSESSMENT WEIGHTING: 20%</b>	
<b>Exams</b>	<b>Weightings</b>
Attendance in Lectures: a. $\geq 90\%$ = 10% b. 80-89% = 7% c. 75-79% = 5%	10%
End of Block/ clinical rotation (theory) Examination	45%
Continuous assessment (average score of all tests attempted after every learning session during the academic year)	20%
Pre-Annual Exam	25%
<b>Total</b>	<b>100%</b>
<b>INTERNAL ASSESSMENT STRUCTURE - PRACTICAL</b>	
<b>INTERNAL ASSESSMENT WEIGHTING: 20%</b>	
<b>Exams</b>	<b>Weightings</b>
Attendance in Practicals: a. $\geq 90\%$ = 10% b. 80-89% = 7% c. 75-79% = 5%	10%
*End of Block/ clinical rotation (OSCE) Examination	45%
*Continuous assessment of practical/ clinical skills and attitude	20%
Pre-Annual Exam	25%
<b>Total</b>	<b>100%</b>

## Academic Calander

### Amended Academic Calendar - 4th Year MBBS (2022-23)

Weeks	Details	Dates	
		From	To
	Start of New Class	05 Dec 2022	
1-3	1 <sup>st</sup> Module (3/12 weeks)	05 Dec 2022	23 Dec 2022
4	<b>Winter Vacation (1 week)</b>	<b>26 Dec 2022</b>	<b>30 Dec 2022</b>
5-12	1 <sup>st</sup> Module (8/12 week)	02 Jan 2023	23 Feb 2023
	<b>1<sup>st</sup> Module Exam (1/12 week)</b>	24 Feb 2023	27 Feb 2023
	EYE	24 Feb 2023 (Fri)	
	Special Pathology	27 Feb 2023 (Mon)	
13	<b>Sport Week</b>	<b>27 Feb 2023</b>	<b>02 Mar 2023</b>
	<b>Note: 3<sup>rd</sup> March 2023 - full day routine classes</b>		
	2 <sup>nd</sup> Module (1/11 Weeks)	06 Mar 2023	10 Mar 2023
	ENT	06 Mar 2023 (Med)	
	<b>Final Sport Day</b>	<b>7 Mar 2023</b>	
14	Prep leave for 1 <sup>st</sup> Module Exam	08 Mar 2023	
	Community Medicine	09 Mar 2023 (Thu)	
	Note: The academic activities on 10 <sup>th</sup> March 2023 (Friday) will not be carried out for the Olympiad activities to go as plan.		
15	2 <sup>nd</sup> Module (1/11 Weeks)	13 Mar 2023	17 Mar 2023
16	<b>Spring Vacation</b>	<b>20 Mar 2023</b>	<b>26 Mar 2023</b>
	2 <sup>nd</sup> Module (08/11 Weeks)	27 Mar 2023	19 May 2023
17-24	<b>Eid ul Fiter</b>	<b>21 – 25 Apr 2023 (Fri-Tue)</b>	
	<b>Labour Day</b>	<b>1<sup>st</sup> May 2023</b>	
	2 <sup>nd</sup> Module Exam (1/11 week)	22 May 2023	29 May 2023
	Special Pathology	22 May 2023 (Mon)	
	Prep leave	23 May 2023 (Tue)	
	Eye	24 May 2023 (Wed)	
25	Prep leave	25 May 2023 (Thu)	
	Community Medicine	26 May 2023 (Fri)	
	27 & 28 May 2023 (Sat & Sun)		
	ENT	29 May 2023 (Mon)	
26-33	3 <sup>rd</sup> Module (08/10 Weeks)	30 May 2023	21 Jul 2023
	Eid ul Adha (Tentative)	29-30 Jun 2023 (Thu – Fri)	
	<b>Summer Vacations (4x Weeks)</b>	<b>24 Jul 2023</b>	<b>18 Aug 2023</b>
34-37	<b>Independence Day</b>	<b>14 Aug 2023</b>	
38	Prep Leave for Pre Annual / Send Up Exam	21 Aug 2023	25 Aug 2023
	<b>Pre Annual / Send Up Exam (02/10)</b>	<b>28 Aug 2023</b>	<b>08 Sep 2023</b>
	Special Pathology	28 Aug 2023 (Mon)	
	Prep leave	29 Aug 2023 (Tue)	
	Community Medicine	30 Aug 2023 (Wed)	
39-40	Prep leave	31 Aug 2023 (Thu)	
	Eye	01 Sep 2023 (Fri)	
	02 & 03 Aug 2023 (Sat & Sun)		
	ENT	04 Sep 2023 (Mon)	
	<b>OSPE</b>	<b>5 (Tue) ,06 (Wed),07(Thu),08 (Fri) Sep 2023</b>	
41-45	Prep Leave for Annual Exam (5 Weeks)	09 Sep 2023	16 Oct 2023
	<b>NUMS Annual Exam</b>	<b>17 Oct 2023 onwards</b>	

**Note:**

- The summer vacations will be observed from 24th July to 18th Aug 2023.
- The Annual Prof Examination date has been rescheduled to 17 Oct 2023 instead of 09 Oct 2023.

*Rizwana Kamran*  
Dr Rizwana Kamran  
Assistant Professor  
SHaPE

Prepared By: Miss Humaira Sardar  
Dated: 26<sup>th</sup> July 2023

## Clinical Rotation Program

Amended 4th Year MBBS Clinical Rotation Programme Session (2022 - 2023)													
WEEKS	Dates	Batch-A	Batch-B	Batch-C	Batch-D	Batch-E	Batch-F	Batch-G	Batch-H	Batch-I	Batch-K	Batch-L	Batch-M
1-3	06 Dec 2022 to 23 Dec 2022	ENT	Paeds	Dermatology	Medicine/ICU	ENT	Urology	EYE	Gynaec/Obs	Psychiatry	EYE	Anaesthetic	Radiology
4	26 Dec 2022 to 30 Dec 2022	Winter Vacation											
5-7	02 Jan 2023 to 20 Jan 2023	EYE	Gynaec/Obs	Psychiatry	EYE	Anaesthesia	Radiology	ENT	Paeds	Dermatology	Medicine/ICU	ENT	Urology
New Clinical Rotation Start from 23 Jan 2023 to onward with 10 batches													
8-10	23 Jan 2023 to 10 Feb 2023	Paeds	Dermatology	Medicine/ICU	ENT	Urology	EYE	Gynaec/Obs	ENT	EYE	Anaesthesia		
11-12	13 Feb 2023 to 24 Feb 2023	Dermatology 2/3	Medicine/ICU 2/3	Anaesthesia 2/3	Urology 2/3	EYE 2/3	Gynaec/Obs 2/3	ENT 2/3	EYE 2/3	Paeds 2/3	ENT 2/3		
1st Module EYE 24 Feb 2023													
13	27 Feb 2023 to 02 Mar 2023	Special Pathology 27 Feb 2023 Sports Week											
Note: 3rd March 2023 is full day routine classes													
14	06 Mar 2023 to 16 Mar 2023	ENT Middle Exam 6th Mar 2023 Annual Sports Gala 7th Mar 2023 Prep Leave for Medicine Exam Community Medicine 8th Mar 2023											
Note: The academic activities on 10 <sup>th</sup> March 2023 (Friday) will not be carried out for the Olympiad activities to go as plan.													
15	13 Mar 2023 to 17 Mar 2023	Dermatology 1/3	Medicine/ICU 1/3	Anaesthesia 1/3	Urology 1/3	EYE 1/3	Gynaec/Obs 1/3	ENT 1/3	EYE 1/3	Paeds 1/3	ENT 1/3		
16	20 Mar 2023 to 24 Mar 2023	Spring Holidays											
17-19	27 Mar 2023 to 14 Apr 2023	Medicine/ICU	ENT	Paeds	Dermatology	Gynaec/Obs	ENT	EYE	Urology	Anaesthesia	EYE		
20-22	17 Apr 2023 to 05 May 2023	ENT	Urology	EYE	Gynaec/Obs	ENT	EYE	Anaesthesia	Dermatology	Medicine/ICU	Paeds		
Eid ul Fitr 21-25 Apr 2023 (Fri - Thu)													
1st May Labour Day													
23-24	08 May 2023 to 19 May 2023	Urology 2/3	EYE 2/3	Gynaec/Obs 2/3	ENT 2/3	EYE 2/3	Anaesthesia 2/3	Paeds 2/3	Medicine/ICU 2/3	ENT 2/3	Dermatology 2/3		
25	22 May 2023 to 29 May 2023	2nd Module Special Pathology 22 May 2023, EYE 24 May 2023, Community Medicine 28 May 2023, ENT 28 May 2023											
26	30 May 2023 to 02 Jun 2023	Urology 1/3	EYE 1/3	Gynaec/Obs 1/3	ENT 1/3	EYE 1/3	Anaesthesia 1/3	Paeds 1/3	Medicine/ICU 1/3	ENT 1/3	Dermatology 1/3		
27-29	05 Jun 2023 to 23 Jun 2023	EYE	Anaesthesia	ENT	EYE	Medicine/ICU	Paeds	Dermatology	ENT	Urology	Gynaec/Obs		
30-31	26 Jun 2023 to 07 Jul 2023	Gynaec/Obs	ENT	EYE	Anaesthesia	Paeds	Dermatology	Medicine/ICU	EYE	ENT	Urology		
Eid ul Adha (Ternative) 28 - 30 Jun 2023 (Thu - Fri)													
32	10 Jul 2023 to 14 Jul 2023	Anaesthesia 1/2	EYE 1/2	ENT 1/2	Paeds 1/2	Dermatology 1/2	Medicine/ICU 1/2	Urology 1/2	Anaesthesia 1/2	EYE	ENT 1/2		
33-36	17 Jul 2023 to 11 Aug 2023	Summer Vacations											
37	14 Aug 2023 to 19 Aug 2023	Anaesthesia 1/2	EYE 1/2	ENT 1/2	Paeds 1/2	Dermatology 1/2	Medicine/ICU 1/2	Urology 1/2	Anaesthesia 1/2	Gynaec/Obs 1/2	ENT 1/2		
Independence Day 14 Aug 2023													
38	21 Aug 2023 to 25 Aug 2023	Prep Leave for Pre Annual / Send up Exam											
39-40	28 Aug 2023 to 08 Sep 2023	Special Pathology 28 Aug 2023, Community Medicine / ICU 30 Aug 2023, EYE 01 Sep 2023, ENT 04 Sep 2023 OSPE 06 (Tue), 06(Wed), 07(Thu), 08(Fri) Sep 2023											
41-43	09 Sep 2023 to 16 Oct 2023	Prep Leave for Annual Exam											
NWMS Annual Exam													
Note: Gynaec/Obs share 1 week rotation with EYE from 10 Jul 2023 to 14 Jul 2023													

Checked: 26th July 2023  
Prepared by: Miss Humaira Sardar

Dr. Rizwan Kamran  
Assistant Professor  
SMBPE

**Reading Material:**

<b>S. No</b>	<b>Topic</b>	<b>Resource</b>
1.	<b>Basics of Hearing and Balance</b>	<b>Appendex-1(Attached)</b> <b>Youtube Video</b> <a href="https://www.youtube.com/watch?v=3G5jiXl2LSM">https://www.youtube.com/watch?v=3G5jiXl2LSM</a>
2.	<b>Ear Discharge and Deafness</b>	1. <a href="https://www.slideshare.net/DennisLee14/ear-discharge-and-otalgia-58522286?qid=229e390a-0885-4d59-a0a5-875e5d85bda1&amp;v=&amp;b=&amp;from_search=2">https://www.slideshare.net/DennisLee14/ear-discharge-and-otalgia-58522286?qid=229e390a-0885-4d59-a0a5-875e5d85bda1&amp;v=&amp;b=&amp;from_search=2</a> 2. Diseases of Ear Nose and Throat by PL Dhingra <sup>4th</sup> Edition Publisher Elsevier Page 22-29, 48-89, 103-109, 110-112.
3.	<b>Otalgia</b>	1. <a href="https://www.slideshare.net/DennisLee14/ear-discharge-and-otalgia-58522286?qid=229e390a-0885-4d59-a0a5-875e5d85bda1&amp;v=&amp;b=&amp;from_search=2">https://www.slideshare.net/DennisLee14/ear-discharge-and-otalgia-58522286?qid=229e390a-0885-4d59-a0a5-875e5d85bda1&amp;v=&amp;b=&amp;from_search=2</a> 2. Diseases of Ear Nose and Throat by PL Dhingra <sup>4th</sup> Edition Publisher Elsevier Page 48-89, 103-109, 124-125
4.	<b>Vertigo</b>	1. <a href="https://www.youtube.com/watch?v=1AfVnSaQnTE">https://www.youtube.com/watch?v=1AfVnSaQnTE</a> 2. <a href="https://www.youtube.com/watch?v=jBzID5nVQjk">https://www.youtube.com/watch?v=jBzID5nVQjk</a> 3. Diseases of Ear Nose and Throat by PL Dhingra, 4th Edition Publisher Elsevier Page 99-103, 110-112
5.	<b>Tinnitus</b>	1. <a href="https://www.youtube.com/watch?v=yMigvtQMIEA">https://www.youtube.com/watch?v=yMigvtQMIEA</a> 2. Diseases of Ear Nose and Throat by PL Dhingra, 4th Edition Publisher Elsevier Page
6.	<b>Facial Disfigurement</b>	1. <a href="https://www.slideshare.net/Amro1988/facial-nerve-paralysis-common-causes?qid=bdfd436a-1f10-4772-aaa0-93e1348173e0&amp;v=&amp;b=&amp;from_search=1">https://www.slideshare.net/Amro1988/facial-nerve-paralysis-common-causes?qid=bdfd436a-1f10-4772-aaa0-93e1348173e0&amp;v=&amp;b=&amp;from_search=1</a> 2. <a href="https://www.youtube.com/watch?v=qoE3Mp07tWI">https://www.youtube.com/watch?v=qoE3Mp07tWI</a> 3. Diseases of Ear Nose and Throat by PL Dhingra <sup>4th</sup> Edition Publisher Elsevier Page 90-98, 171-178
7.	<b>Tumours of the Ear</b>	1. <a href="https://www.youtube.com/watch?v=z92B-fiUbnE">https://www.youtube.com/watch?v=z92B-fiUbnE</a> 2. <a href="https://www.youtube.com/watch?v=u_h9O4BRbMg">https://www.youtube.com/watch?v=u_h9O4BRbMg</a> 3. <a href="https://www.slideshare.net/Anwaaar/glomus-tumours-pakistan?qid=e15818de-b492-4d9d-bb0b-35441117d37&amp;v=&amp;b=&amp;from_search=5">https://www.slideshare.net/Anwaaar/glomus-tumours-pakistan?qid=e15818de-b492-4d9d-bb0b-35441117d37&amp;v=&amp;b=&amp;from_search=5</a> 4. <a href="https://www.slideshare.net/Anwaaar/tumours-of-ear?qid=e862e755-f592-4c5c-8461-4092588de37d&amp;v=&amp;b=&amp;from_search=1">https://www.slideshare.net/Anwaaar/tumours-of-ear?qid=e862e755-f592-4c5c-8461-4092588de37d&amp;v=&amp;b=&amp;from_search=1</a>



**Reading Material:**

<b>S. No</b>	<b>Topic</b>	<b>Resource</b>
<b><u>1</u></b>	<b><u>Basic of Nose and Para nasal Sinuses</u></b>	<p><b>1.</b>Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6<sup>th</sup> edition publisher Elsevier ,chapter 23 page 134-139,chapter 35 pg 187-190.</p> <p><b>2.</b> Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6<sup>th</sup> edition publisher Elsevier ,chapter 24,pg 140-142,chapter 35 pg 190.</p> <p><b>3.</b> Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6<sup>th</sup> edition publisher Elsevier ,chapter 26,pg 127</p> <p><b>4.</b> Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6<sup>th</sup> edition publisher Elsevier ,chapter 25,pg 143-146,chapter 26.pg 147-151</p>
<b><u>2</u></b>	<b><u>Nasal obstructions</u></b>	Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6 <sup>th</sup> edition publisher Elsevier ,chapter 26 pg 148-150,chapter 32 pg 172-175,chapter 29 pg 161,chapter 48 pg 243-244,chapter 55 pg 276-279,chapter 29 pg 163,chapter 39 pg 202-204
<b><u>3</u></b>	<b><u>Discharge and Epistaxis</u></b>	Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6 <sup>th</sup> edition publisher Elsevier ,chapter 27 pg 154-157,chapter 30 pg 166-169,chapter 31 pg 170-171,chapter 28 pg 159-160,chapter 33 pg 176-180.
<b><u>4</u></b>	<b><u>Headache and facial pains</u></b>	<p><b>1.</b>Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6<sup>th</sup> edition publisher Elsevier chapter 36 pg 191-194,chapter 37 pg 195-197,chapter 38 pg 198-201,chapter 39,40,41 pg 202-213</p> <p><b>2.</b> Youtube video link  <a href="https://www.youtube.com/watch?v=mLeq2f-3GbU">https://www.youtube.com/watch?v=mLeq2f-3GbU</a></p>
<b><u>5</u></b>	<b><u>Sore throat and pain</u></b>	Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6 <sup>th</sup> edition publisher Elsevier chapter 51 pg 257-262, chapter 50 chapter 254-256,chapter 47 pg 238-242,chapter 42&43 pg 216-222,chapter 44,45 &46 pg 223-237.chapter 53 pg 269-272.
<b><u>6</u></b>	<b><u>Dysphagia and Odynophagia</u></b>	Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6 <sup>th</sup> edition publisher Elsevier chapter 68&69 pg 342-348.chapter 67 pg 340-341

<u>7</u>	<b><u>Hoarseness and Stridor</u></b>	Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6 <sup>th</sup> edition publisher Elsevier chapter 56-62
<u>8</u>	<b><u>Neck masses</u></b>	Diseases of EAR, NOSE and THROAT and HEAD and NECK surgery_by PL Dhingra, Shruti Dhingra 6 <sup>th</sup> edition publisher Elsevier Chapter 52
<u>9</u>	<b><u>Advances in ENT/Neck surgeries</u></b>	<a href="https://www.slideshare.net/ksreenivask77/recent-advances-in-ent-frmi-contact-endoscopy-pet-scan-and-immunotherapy?qid=70b96ae3-eb5a-4ed5-85ca-eab2704e0f56&amp;v=&amp;b=&amp;from_search=1">https://www.slideshare.net/ksreenivask77/recent-advances-in-ent-frmi-contact-endoscopy-pet-scan-and-immunotherapy?qid=70b96ae3-eb5a-4ed5-85ca-eab2704e0f56&amp;v=&amp;b=&amp;from_search=1</a>