

# Rajiv Gandhi University of Health Sciences

Bangalore, Karnataka



Otorhinolaryngology Curriculum

as per

Competency-Based Medical Education

## Preamble

The NMC envisages that the Indian Medical Graduate should function as the Physician of first contact in the community, to provide holistic health care to the evolving needs of the nation and the world. To fulfil this, the IMG should be able to perform the following roles: a clinician, a communicator, a lifelong learner, a professional and a team leader.

Competency-based medical education (CBME) is an outcome-based training model that has become the new standard of medical education internationally. This new curriculum is being implemented across the country and the first batch has been enrolled since the academic year 2019. The regulatory and accrediting body NMC had started the process by training faculty across the country in the key principles of CBME and developing key competencies for each speciality with the input from expert groups under each speciality.

The field of Otorhinolaryngology (ENT) came to be recognized as a separate entity in medicine at the end of the 19th century. It has been evolving as a separate surgical speciality since then owing to the contributions of pioneers in understanding the disease processes.

ENT as a speciality has been steered into new heights today due to the many technological advances in microsurgery by stalwarts in this field. Otolology, Laryngology, Rhinology, Endoscopic Skull Base Surgery, Head and Neck Surgery, Facial Plastic Surgery, Neuro-otology, Pediatric ENT and Phonosurgery are the various sub-specialities that ENT has ramified into. ENT related medical problems are commonly encountered at a primary care and for this, an MBBS graduate requires a basic knowledge and skill in the speciality of ENT. The new CBME curriculum equips the undergraduate students with the skill and knowledge to face these challenges using innovative teaching learning methods.

## Goals and Objectives of the RGUHS Otorhinolaryngology Curriculum

### Goals

The Goal of training in this subject is to make the candidate familiar with common ENT problems. The IMG should be competent enough to diagnosis and treat routine ENT diseases and should be able to identify the cases, which require specialist care and identify the deaf individuals at the earliest and refer them for proper rehabilitation

### Competencies

The Learner must demonstrate

1. Knowledge of the common Otorhinolaryngological(ENT) emergencies and problems
2. Ability to recognize, diagnose and manage common ENT emergencies and problems in primary care setting
3. Ability to perform simple ENT procedures as applicable in a primary care setting
4. Ability to recognize hearing impairment and refer to the appropriate Hearing impairment rehabilitation programme.

### Skills

1. Examine and diagnose common disorders of the Ear, Nose and Throat region and manage at first level of care.
2. Recognize premalignant and malignant cases of head and neck region at an early stage.
3. Remove foreign bodies in the ear and nose.
4. Perform life saving surgical procedures in patients with airway emergencies.
5. Should be familiar with drainage of intra oral and neck abscesses.
6. Able to do anterior and posterior nasal packing to control Epistaxis

### Integration

The teaching should be aligned and integrated horizontally and vertically in order to allow the learner to understand the structural basis of ENT problems, their management and correlation with function, rehabilitation and quality of life

## **Attitude and communication skills**

At the end of the course the student should be able to:

- a. Communicate effectively with patients, their families and the public at large.
- b. Communicate effectively with peers and teachers; demonstrate the ability to work effectively with peers in a team.
- c. Demonstrate professional attributes of punctuality, accountability and respect for teachers and peers.
- d. Appreciate the issues of equity and social accountability while undergoing early clinical exposure.

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Interactive Lectures - 25 hours

Proposed topics

Sl No	Topics
1	<b>Anatomy &amp; Physiology of Ear</b>
2	<b>Anatomy &amp; Physiology of Nose</b>
3	<b>Anatomy &amp; Physiology of Throat</b>
4	<b>Anatomy &amp; Physiology of Head &amp; Neck</b>
5	<b>Diseases of the External Ear</b>
6	<b>Non-infectious disorders of Middle Ear</b>
7	<b>Infections of Middle Ear</b>
8	<b>Diseases of Inner Ear</b>
9	<b>Hearing Loss &amp; Tinnitus</b>
10	<b>Vertigo &amp; Balance Disorders</b>
11	<b>Facial Nerve Paralysis</b>
12	<b>Diseases of Nasal Septum</b>
13	<b>Non-infectious Rhinitis</b>
14	<b>Acute &amp; Chronic Rhinosinusitis</b>
15	<b>Epistaxis &amp; Head &amp; neck Trauma</b>
16	<b>Tumors of Nose &amp; PNS</b>
17	<b>Tumors of Nasopharynx &amp; JNA</b>
18	<b>Diseases of Salivary glands</b>
19	<b>Acute &amp; chronic Pharyngitis &amp; Tonsillitis</b>
20	<b>Head &amp; Neck Space Infections</b>
21	<b>Laryngeal Infections &amp; Benign disorders of Larynx</b>
22	<b>Malignancy of Larynx &amp; Hypopharynx</b>
23	<b>Stridor &amp; management of Airway Emergencies</b>
24	<b>Diseases of Oesophagus</b>
25	<b>HIV manifestations of the ENT</b>

## Small Group Teaching- 40 hours

### Proposed topics

Sl No	Topics	No of hours	SG TL methods
1	Anatomy & Physiology of Ear	2	Seminars & Model/chart making
3	Otoscopic examination of the Tympanic membrane	2	Simulation (DOAP)
4	Otomicroscopic examination in a simulated environment	2	Simulation (DOAP)
5	Tuning fork Tests	2	DOAP
6	Foreign body removal from ear / Syringing wax from ear	2	Simulation (DOAP)
7	Assessment & Rehabilitation of Hearing impaired & NPPCD	2	Seminars & SGD (DOAP)
8	Interpretation of Pure Tone Audiograms & Impedan audiograms	2	SGD (Discussion of patient reports)
9	Surgical Procedures of the Ear	3	Seminars & Video demonstration
10	Diagnostic nasal endoscopy & anatomy of Nose	3	Seminars, Video demonstration & Simulation
11	Smell and taste perception	2	Seminars, SGD – chart making
12	Epistaxis & Anterior Nasal packing	3	Seminars, Video demonstration & Simulation
13	Foreign bodies in the nose & Upper respiratory tract & their management	3	Video demonstration & Simulation
14	Surgical procedures of the Nose	2	Seminars & Video demonstration
15	Anatomy & Physiology of throat	2	Seminars & Model/chart making
16	Surgical procedures of the throat	2	Seminars & Video demonstration
17	Airway emergencies & management of Stridor (including Tracheostomy)	3	Seminars, Video demonstration & Simulation
18	Counsel & Administer informed consent	1	Simulation -DOAP
19	Malignant & pre- malignant ENT diseases	1	Seminars, SGD
20	The national programs for prevention of deafness, cancer, noise & environmental pollution	1	Seminars, Awareness activities (Poster making)

### Topics for Integration with Otorhinolaryngology from other Departments

Sl. No	Integrated Teaching	Integrated with (Department)
1	Describe the (1) morphology, relations, blood supply and applied anatomy of palatine tonsil and (2) composition of soft palate	Human Anatomy
2	Describe the components and functions of Waldeyer's lymphatic ring	Human Anatomy
3	Describe the boundaries and clinical significance of pyriform fossa	Human Anatomy
4	Describe the anatomical basis of tonsillitis, tonsillectomy, adenoids and peri-tonsillar abscess	Human Anatomy
5	Describe the clinical significance of Killian's dehiscence	Human Anatomy
6	Describe & demonstrate features of nasal septum, lateral wall of nose, their blood supply and nerve supply	Human Anatomy
7	Describe location and functional anatomy of paranasal sinuses	Human Anatomy
8	Describe anatomical basis of sinusitis & maxillary sinus tumours	Human Anatomy
9	Describe the morphology, identify structure of the wall, nerve supply, blood supply and actions of intrinsic and extrinsic muscles of the larynx	Human Anatomy
10	Describe the anatomical aspects of laryngitis	Human Anatomy
11	Describe anatomical basis of recurrent laryngeal nerve injury	Human Anatomy
12	Explain the anatomical basis of hypoglossal nerve palsy	Human Anatomy
13	Describe & identify the parts, blood supply and nerve supply of external ear	Human Anatomy
14	Describe & demonstrate the boundaries, contents, relations and functional anatomy of middle ear and auditory tube	Human Anatomy
15	Describe the features of internal ear	Human Anatomy
16	Explain anatomical basis of otitis externa and otitis media	Human Anatomy
17	Explain anatomical basis of myringotomy	Human Anatomy
18	Describe and discuss perception of smell and taste sensation	Physiology
19	Describe and discuss functional anatomy of ear and auditory pathways & physiology of hearing	Physiology
20	Describe and discuss pathophysiology of deafness. Describe hearing tests	Physiology
21	Demonstrate (i) hearing (ii) testing for smell and (iii) taste sensation in volunteer/ simulated environment	Physiology
22	Describe the health hazards of air, water, noise, radiation and pollution.	Community Medicine
23	Discuss the prevalence of oral cancer and enumerate the common types of cancer that can affect tissues of the oral cavity	Dentistry
24	Discuss the role of etiological factors in the formation of precancerous /cancerous lesions	Dentistry

25	Identify potential pre-cancerous /cancerous lesions	Dentistry
26	Counsel patients to risks of oral cancer with respect to tobacco, smoking, alcohol and other causative factors	Dentistry
27	Describe and discuss the etiopathogenesis, clinical presentation, identification, functional changes, acute care, stabilization, management and rehabilitation of hearing loss in the elderly	General Medicine
28	Discuss the risk factors, clinical features, Diagnosis and management of Kerosene ingestion	Paediatrics
29	Discuss the etio-pathogenesis, clinical features and management of Naso pharyngitis	Paediatrics
30	Discuss the etio-pathogenesis of Pharyngo Tonsillitis	Paediatrics
31	Discuss the clinical features and management of Pharyngo Tonsillitis	Paediatrics
32	Discuss the etio-pathogenesis, clinical features and management of Acute Otitis Media (AOM)	Paediatrics
33	Discuss the etio-pathogenesis, clinical features and management of Epiglottitis	Paediatrics
34	Discuss the etio-pathogenesis, clinical features and management of Acute laryngo-trachea-bronchitis	Paediatrics
35	Discuss the etiology, clinical features and management of Stridor in children	Paediatrics
36	Discuss the types, clinical presentation, and management of foreign body aspiration in infants and children	Paediatrics
37	Elicit, document and present age appropriate history of a child with upper respiratory problem including Stridor	Paediatrics
38	Perform otoscopic examination of the ear	Paediatrics
39	Perform throat examination using tongue depressor	Paediatrics
40	Perform examination of the nose	Paediatrics
41	Interpret X-ray of the paranasal sinuses and mastoid; and /or use written report in case of management. Interpret CXR in foreign body aspiration and lower respiratory tract infection, understand the significance of thymic shadow in pediatric chest X-rays	Paediatrics
42	Describe the etio-pathogenesis, management and prevention of Allergic Rhinitis in Children	Paediatrics
43	Describe the etio-pathogenesis, clinical features and management of Atopic dermatitis in children	Paediatrics
44	Describe etiopathogenesis of oral cancer, symptoms and signs of pharyngeal cancer. Enumerate the appropriate investigations and discuss the principles of treatment.	General Surgery



## Self-Directed Learning

### Proposed topics

Sl. No	Topics	SLOs
1	Hearing Loss	
2	Vertigo	
3	Allergy	
4	Rhinosinusitis	
5	Head & Neck Tumors	

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# OTORHINOLARYNGOLOGY

Core competencies – color Blue

Non - Core competencies – color Green

<b>TOPIC: ANATOMY AND PHYSIOLOGY OF EAR, NOSE, THROAT, HEAD &amp; NECK</b>
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Number of competencies:(02)

Number of procedures that require certification:(NIL)

**EN1.1 Describe the Anatomy & physiology of ear, nose, throat, head & neck**

**Domain – K**

**Level - KH**

Vertical Integration – Human Anatomy

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN1.1.1	Describe the Anatomy of ear	Lecture, Demonstration	Written, viva-voce
EN1.1.2	Describe the Anatomy of nose	Lecture, Demonstration	Written, viva-voce
EN1.1.3	Describe the Anatomy of throat	Lecture, Demonstration	Written, viva-voce
EN1.1.4	Describe the Anatomy of head & neck	Lecture, Demonstration	Written, viva-voce
EN1.1.5	Describe the Physiology of ear	Lecture, Demonstration	Written, viva-voce
EN1.1.6	Describe the Physiology of nose	Lecture, Demonstration	Written, viva-voce
EN1.1.7	Describe the Physiology of throat	Lecture, Demonstration	Written, viva-voce
EN1.1.8	Describe the Physiology of head & neck	Lecture, Demonstration	Written, viva-voce

**EN1.2 Describe the patho-physiology of common diseases in ENT**

**Domain – K**

**Level - KH**

Vertical Integration – Pathology

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN1.2.1	Describe the patho-physiology of common diseases of the ear	Lecture, Demonstration, Bedside clinics	Written, viva-voce
EN1.2.2	Describe the patho-physiology of common diseases of the nose	Lecture, Demonstration, Bedside clinics	Written, viva-voce
EN1.2.3	Describe the patho-physiology of common diseases of the throat	Lecture, Demonstration, Bedside clinics	Written, viva-voce
EN1.2.4	Describe the patho-physiology of common diseases of the head & neck	Lecture, Demonstration, Bedside clinics	Written, viva-voce

## TOPIC: CLINICAL SKILLS

Number of competencies: (15)

Number of procedures that require certification: (NIL)

To be taught and assessed in bed-side clinics and / or simulated environment.

**EN2.1 Elicit document and present an appropriate history in a patient presenting with an ENT complaint**

**Domain – K/S/A/C**

**Level – SH**

**EN2.2 Demonstrate the correct use of a headlamp in the examination of the ear, nose and throat**

**Domain – S**

**Level – SH**

**EN2.3 Demonstrate the correct technique of examination of the ear including Otoscopy**

**Domain – K/S/A**

**Level – SH**

**EN2.4 Demonstrate the correct technique of performance and interpret tuning fork tests**

**Domain – K/S/A**

**Level – SH**

**EN2.5 Demonstrate the correct technique of examination of the nose & paranasal sinuses including the use of nasal speculum**

**Domain – S**

**Level – SH**

**EN2.6 Demonstrate the correct technique of examining the throat including the use of a tongue depressor**

**Domain – S**

**Level – SH**

**EN2.7 Demonstrate the correct technique of examination of neck including elicitation of laryngeal crepitus**

**Domain – S**

**Level – SH**

**EN2.8 Demonstrate the correct technique to perform and interpret pure tone audiogram & impedance audiogram**

**Domain –K/S**

**Level – SH**

**EN2.9 Choose correctly and interpret radiological, microbiological & histological investigations relevant to the ENT disorders**

**Domain –K/S**

**Level – SH**

**EN2.10 Identify and describe the use of y common instruments used in ENT surgery**

**Domain –K**

**Level – SH**

**EN2.11 Describe and identify by clinical examination malignant & pre- malignant ENT diseases**

**Domain –K/S**

**Level – SH**

**EN2.12 Counsel and administer informed consent to patients and their families in a simulated environment**

**Domain –S/A/C**

**Level – SH**

EN2.13 Identify, resuscitate and manage ENT emergencies in a simulated environment (including tracheostomy, anterior nasal packing, removal of foreign bodies in ear, nose, throat and upper respiratory tract)

Domain –K/S/A

Level – SH

EN2.14 Demonstrate the correct technique to instilling topical medications in to the ear, nose and throat in a simulated environment

Domain –K/S

Level – SH

EN2.15 Describe the national programs for prevention of deafness, cancer, noise & environmental pollution

Domain –K

Level – KH

## TOPIC: DIAGNOSTIC AND THERAPEUTIC PROCEDURES IN ENT

Number of competencies:(06)

Number of procedures that require certification: (NIL)

To be taught and assessed in bed-side clinics and / or simulated environment.

EN3.1 Observe and describe the indications for and steps involved in the performance of Oto-microscopic examination in a simulated environment

Domain –S

Level – KH

EN3.2 Observe and describe the indications for and steps involved in the performance of diagnostic nasal Endoscopy

Domain –S

Level – KH

EN3.3 Observe and describe the indications for and steps involved in the performance of Rigid/Flexible Laryngoscopy

Domain –K

Level – KH

EN3.4 Observe and describe the indications for and steps involved in the removal of foreign bodies from ear, nose & throat

Domain –K

Level – KH

EN3.5 Observe and describe the indications for and steps involved in the surgical procedures in ear, nose & throat

Domain –K

Level – KH

EN3.6 Observe and describe the indications for and steps involved in the skills of emergency procedures in ear, nose & throat

Domain –K

Level – KH

## TOPIC: MANAGEMENT OF DISEASES OF EAR, NOSE & THROAT

Number of competencies: (53)

Number of procedures that require certification: (NIL)

**EN4.1 Elicit, document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Otagia**

**Domain – K/S**

**Level - SH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.1.1	List the causes of Otagia	Lecture	Written, viva-voce
EN4.1.2	Elicit correct history in patients with Otagia	Bedside clinic	Skill assessment
EN4.1.3	Document and present correct history in patients with Otagia	Bedside clinic	Skill assessment
EN4.1.4	Describe the clinical features in a patient presenting with Otagia	Bedside clinic	Skill assessment
EN4.1.5	Choose the correct investigations in a patient presenting with Otagia	Bedside clinic	Viva voce
EN4.1.6	Describe the principles of management of Otagia	Lecture ,Bedside clinic	Viva voce

**EN4.2 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of diseases of the external Ear**

**Domain – K/S**

**Level - SH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.2.1	List the diseases of external ear	Lecture	Written, viva-voce
EN4.2.2	Elicit correct history in patients presenting with disease of the external Ear	Bedside clinic	Skill assessment
EN4.2.3	Document and present correct history in patients with diseases of the external Ear	Bedside clinic	Skill assessment
EN4.2.4	Describe the clinical features in a patient presenting with diseases of the external Ear	Bedside clinic	Skill assessment
EN4.2.5	Choose the correct investigations in a patient presenting with diseases of the external Ear	Bedside clinic	Viva voce
EN4.2.6	Describe the principles of management of diseases of the external Ear	Lecture ,Bedside clinic	Viva voce

**EN4.3 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of ASOM**

**Domain – K/S**

**Level - SH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.3.1	Elicit correct history in patients presenting with ASOM	Bedside clinic	Skill assessment
EN4.3.2	Document and present correct history in patients with ASOM	Bedside clinic	Skill assessment
EN4.3.3	Describe the clinical features in a patient presenting with ASOM	Bedside	Skill

		clinic	assessment
EN4.3.4	Choose the correct investigations in a patient presenting with ASOM	Bedside clinic	Viva voce
EN4.3.5	Describe the principles of management of ASOM	Lecture ,Bedside clinic	Viva voce

EN4.4 Demonstrate the correct technique to hold visualize and assess the mobility of the tympanic membrane and its mobility and interpret and diagrammatically represent the findings

Domain – K/S/A

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.4.1	Describe the normal appearance of Tympanic membrane	Lecture	Viva voce
EN4.4.2	Demonstrate the correct technique to hold & visualize the tympanic membrane	DOAP session	Skill assessment
EN4.4.3	Demonstrate the correct technique to assess the mobility of the tympanic membrane	DOAP session	Skill assessment
EN4.4.4	Interpret and diagrammatically represent the findings of the tympanic membrane assessment	Bedside clinics	Viva voce

EN4.5 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of OME

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.5.1	Elicit correct history in patients presenting with OME	Bedside clinics	Skill assessment
EN4.5.2	Document and present correct history in patients with OME	Bedside clinics	Skill assessment
EN4.5.3	Describe the clinical features in a patient presenting with OME	Lecture, Bedside clinics	Skill assessment
EN4.5.4	Choose the correct investigations in a patient presenting with OME	Bedside clinics	Viva voce
EN4.5.5	Describe the principles of management of OME	Lecture	Written, viva voce

EN4.6 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Discharging ear

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.6.1	List the causes of Discharging ear	Lecture	Written, viva-voce
EN4.6.2	Elicit correct history in patients presenting with Discharging ear	Bedside clinic	Skill assessment
EN4.6.3	Document and present correct history in patients with Discharging ear	Bedside clinic	Skill assessment
EN4.6.4	Describe the clinical features in a patient presenting with Discharging ear	Bedside clinic	Skill assessment
EN4.6.5	Choose the correct investigations in a patient presenting with Discharging ear	Bedside clinic	Viva voce
EN4.6.6	Describe the principles of management of Discharging ear	Lecture ,Bedside clinic	Written, Viva voce

EN4.7 Elicit document and present a correct history demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of mucosal type of CSOM

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.7.1	Elicit correct history in patients presenting with mucosal type of CSOM	Bedside clinic	Skill assessment
EN4.7.2	Document and present correct history in patients with mucosal type of CSOM	Bedside clinic	Skill assessment
EN4.7.3	Describe the clinical features in a patient presenting with mucosal type of CSOM	Bedside clinic	Skill assessment
EN4.7.4	Choose the correct investigations in a patient presenting with mucosal type of CSOM	Bedside clinic	Viva voce, written
EN4.7.5	Describe the principles of management of mucosal type of CSOM	Lecture ,Bedside clinic	Written, Viva voce

EN4.8 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of squamosal type of CSOM

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.8.1	Elicit correct history in patients presenting with squamosal type of CSOM	Bedside clinic	Skill assessment
EN4.8.2	Document and present correct history in patients with squamosal type of CSOM	Bedside clinic	Skill assessment
EN4.8.3	Describe the clinical features in a patient presenting with squamosal type of CSOM	Bedside clinic	Skill assessment
EN4.8.4	Choose the correct investigations in a patient presenting with squamosal type of CSOM	Bedside clinic	Viva voce, written
EN4.8.5	Describe the principles of management of squamosal type of CSOM	Lecture ,Bedside clinic	Written, Viva voce

EN4.9 Demonstrate the correct technique for syringing wax from the ear in a simulated environment

Domain –S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.9.1	Describe the correct technique for syringing wax from the ear	DOAP	Skill assessment
EN4.9.2	Demonstrate the correct technique for syringing wax from the ear in a simulated environment	DOAP	Skill assessment

EN4.10 Observe and describe the indications for and steps involved in myringotomy and myringoplasty

Domain –S

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.10.1	Enumerate the indications for myringotomy	Lecture	Written , viva voce
EN4.10.2	Describe the steps of myringotomy	Lecture, video	Written , viva

		<b>demonstration</b>	<b>voce</b>
EN4.10.3	Observe steps involved in myringotomy	Clinical (OT)	Written , viva voce
EN4.10.4	Enumerate the indications for myringoplasty	Lecture	Written , viva voce
EN4.10.5	Describe the steps of myringoplasty	Lecture, video demonstration	Written , viva voce
EN4.10.6	Observe steps involved in myringoplasty	Clinical (OT)	Written , viva voce

EN4.11 Enumerate the indications describe the steps and observe a Mastoidectomy

Domain – K/S

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.11.1	Enumerate the indications for Mastoidectomy	Lecture	Written , viva voce
EN4.11.2	Describe the steps of Mastoidectomy	Lecture	Written , viva voce
EN4.11.3	Observe steps involved in Mastoidectomy	Clinical (OT)	Written , viva voce

EN4.12 Elicit document and present a correct history demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Hearing loss

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.12.1	List the causes of Hearing loss	Lecture	Written, viva-voce
EN4.12.2	Elicit correct history in patients presenting with Hearing loss	Bedside clinic	Skill assessment
EN4.12.3	Document and present correct history in patients with Hearing loss	Bedside clinic	Skill assessment
EN4.12.4	Describe the clinical features in a patient presenting with Hearing loss	Bedside clinic	Skill assessment
EN4.12.5	Choose the correct investigations in a patient presenting with Hearing loss	Bedside clinic	Viva voce
EN4.12.6	Describe the principles of management of Hearing loss	Lecture ,Bedside clinic	Written, Viva voce

EN4.13 Describe the clinical features, investigations and principles of management of Otosclerosis

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.13.1	Describe the clinical features of Otosclerosis	Lecture	Written
EN4.13.2	Describe the investigations required for patient with Otosclerosis	Bedside clinic	Viva voce
EN4.13.3	Describe the principles of management of Otosclerosis	Lecture ,Bedside clinic	Written, Viva voce

EN4.14 Describe the clinical features, investigations and principles of management of Sudden Sensorineural Hearing Loss

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.14.1	Describe the clinical features of Sudden	Lecture	Written



	<b>Sensorineural Hearing Loss</b>		
EN4.14.2	Describe the investigations required for patient presenting with Sudden Sensorineural Hearing Loss	Bedside clinic	Viva voce
EN4.14.3	Describe the principles of management of Sudden Sensorineural Hearing Loss	Lecture ,Bedside clinic	Written, Viva voce

EN4.15 Describe the clinical features, investigations and principles of management of Noise Induced Hearing Loss

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.15.1	Describe the clinical features of Noise Induced Hearing Loss	Lecture	Written
EN4.15.2	Describe the investigations required for patient presenting with Noise Induced Hearing Loss	Bedside clinic	Viva voce
EN4.15.3	Describe the principles of management of Noise Induced Hearing Loss	Lecture ,Bedside clinic	Written, Viva voce

EN4.16 Observe and describe the indications for and steps involved in the performance of pure tone audiometry

Domain –S

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.16.1	Enumerate the indications for pure tone audiometry	Lecture	Written, viva voce
EN4.16.2	Describe the steps involved in the performance of pure tone audiometry	DOAP	viva voce
EN4.16.3	Observe the steps involved in the performance of pure tone audiometry	DOAP	viva voce

EN4.17 Enumerate the indications and interpret the results of an audiogram

Domain –S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.17.1	Enumerate the indications for an audiogram	Bedside clinics, DOAP	Viva voce
EN4.17.2	Interpret the results of an audiogram	DOAP	Skill assessment

EN4.18 Describe the clinical features, investigations and principles of management of Facial Nerve palsy

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.18.1	Describe the clinical features of Facial Nerve palsy	Lecture	Written, viva voce
EN4.18.2	Describe the investigations required for patient presenting with Facial Nerve palsy	Bedside clinics	Written, viva voce
EN4.18.3	Describe the principles of management of Facial Nerve palsy	Lecture ,Bedside clinic	Written, Viva voce

**EN4.19 Describe the clinical features, investigations and principles of management of Vertigo**  
**Domain – K** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.19.1	Describe the clinical features of patient presenting with Vertigo	Lecture	Written, viva voce
EN4.19.2	Describe the investigations required for patient presenting with Vertigo	Bedside clinics	Written, viva voce
EN4.19.3	Describe the principles of management of Vertigo	Lecture ,Bedside clinic	Written, Viva voce

**EN4.20 Describe the clinical features, investigations and principles of management of Meniere's Disease**  
**Domain – K** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.20.1	Describe the clinical features of patient presenting with Meniere's Disease	Lecture	Written, viva voce
EN4.20.2	Describe the investigations required for patient presenting with Meniere's Disease	Bedside clinics	Written, viva voce
EN4.20.3	Describe the principles of management of Meniere's Disease	Lecture ,Bedside clinic	Written, Viva voce

**EN4.21 Describe the clinical features, investigations and principles of management of Tinnitus**  
**Domain – K** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.21.1	Describe the clinical features of patient presenting with Tinnitus	Lecture	Written, viva voce
EN4.21.2	Describe the investigations required for patient presenting with Tinnitus	Bedside clinics	Written, viva voce
EN4.21.3	Describe the principles of management of Tinnitus	Lecture ,Bedside clinic	Written, Viva voce

**EN4.22 Elicit document and present a correct history demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Nasal Obstruction**  
**Domain – K/S** **Level - SH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.22.1	List the causes of Nasal obstruction	Lecture	Written, viva-voce
EN4.22.2	Elicit correct history in patients presenting with Nasal obstruction	Bedside clinic	Skill assessment
EN4.22.3	Document and present correct history in patients with Nasal obstruction	Bedside clinic	Skill assessment
EN4.22.4	Describe the clinical features in a patient presenting with Nasal obstruction	Bedside clinic	Skill assessment
EN4.22.5	Choose the correct investigations in a patient presenting with Nasal obstruction	Bedside clinic	Viva voce
EN4.22.6	Describe the principles of management of Nasal obstruction	Lecture ,Bedside clinic	Written, Viva voce

**EN4.23 Describe the clinical features, investigations and principles of management of DNS**  
**Domain – K** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.23.1	Describe the clinical features of patient presenting with DNS	Lecture	Written, viva voce
EN4.23.2	Describe the investigations required for patient presenting with DNS	Bedside clinics	Written, viva voce
EN4.23.3	Describe the principles of management of DNS	Lecture ,Bedside clinic	Written, Viva voce

**EN4.24 Enumerate the indications observe and describe the steps in a septoplasty**  
**Domain –S** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.24.1	Enumerate the indications for septoplasty	Lecture	Written , viva voce
EN4.24.2	Describe the steps of septoplasty	DOAP - video demonstration	Written , viva voce
EN4.24.3	Observe steps involved in septoplasty	DOAP - Clinical (OT)	Written , viva voce

**EN4.25 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Nasal Polyyps**  
**Domain – K/S** **Level - SH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.25.1	Elicit correct history in patients presenting with Nasal polyyps	Bedside clinic	Skill assessment
EN4.25.2	Document and present correct history in patients with Nasal polyyps	Bedside clinic	Skill assessment
EN4.25.3	Describe the clinical features in a patient presenting with Nasal polyyps	Bedside clinic	Skill assessment
EN4.25.4	Choose the correct investigations in a patient presenting with Nasal polyyps	Bedside clinic	Viva voce
EN4.25.5	Describe the principles of management of Nasal polyyps	Lecture ,Bedside clinic	Written, Viva voce

**EN4.26 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Adenoids**  
**Domain – K/S** **Level - SH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.26.1	Elicit correct history in patients presenting with Nasal polyyps	Bedside clinic	Skill assessment
EN4.26.2	Document and present correct history in patients with Nasal polyyps	Bedside clinic	Skill assessment
EN4.26.3	Describe the clinical features in a patient presenting with Nasal polyyps	Bedside clinic	Skill assessment
EN4.26.4	Choose the correct investigations in a patient presenting with Nasal polyyps	Lecture, DOAP	Viva voce
EN4.26.5	Describe the principles of management of	Lecture ,Bedside	Written, Viva

	Nasal polyps	clinic	voce
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EN4.27 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Allergic Rhinitis

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.27.1	Elicit correct history in patients presenting with Allergic Rhinitis	Bedside clinic	Skill assessment
EN4.27.2	Document and present correct history in patients with Allergic Rhinitis	Bedside clinic	Skill assessment
EN4.27.3	Describe the clinical features in a patient presenting with Allergic Rhinitis	Bedside clinic	Skill assessment
EN4.27.4	Choose the correct investigations in a patient presenting with Allergic Rhinitis	Lecture, DOAP	Viva voce
EN4.27.5	Describe the principles of management of Allergic Rhinitis	Lecture ,Bedside clinic	Written, Viva voce

EN4.28 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Vasomotor Rhinitis

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.28.1	Elicit correct history in patients presenting with Vasomotor Rhinitis	Bedside clinic	Skill assessment
EN4.28.2	Document and present correct history in patients with Vasomotor Rhinitis	Bedside clinic	Skill assessment
EN4.28.3	Describe the clinical features in a patient presenting with Vasomotor Rhinitis	Bedside clinic	Skill assessment
EN4.28.4	Choose the correct investigations in a patient presenting with Vasomotor Rhinitis	Lecture, DOAP	Viva voce
EN4.28.5	Describe the principles of management of Vasomotor Rhinitis	Lecture ,Bedside clinic	Written, Viva voce

EN4.29 Elicit document and present a correct history demonstrate an describe the clinical features, choose the correct investigations and describe the principles of management of Acute & Chronic Rhinitis

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.29.1	Elicit correct history in patients presenting with Acute Rhinitis	Bedside clinic	Skill assessment
EN4.29.2	Document and present correct history in patients with Acute Rhinitis	Bedside clinic	Skill assessment
EN4.29.3	Describe the clinical features in a patient presenting with Acute Rhinitis	Bedside clinic	Skill assessment
EN4.29.4	Choose the correct investigations in a patient presenting with Acute Rhinitis	Lecture, DOAP	Viva voce
EN4.29.5	Describe the principles of management of Acute Rhinitis	Lecture ,Bedside clinic	Written, Viva voce
EN4.29.6	Elicit correct history in patients presenting with Chronic Rhinitis	Bedside clinic	Skill assessment
EN4.29.7	Document and present correct history in patients with Chronic Rhinitis	Bedside clinic	Skill assessment
EN4.29.8	Describe the clinical features in a patient presenting with Chronic Rhinitis	Bedside clinic	Skill assessment
EN4.29.9	Choose the correct investigations in a patient presenting with Chronic Rhinitis	Lecture, DOAP	Viva voce
EN4.29.10	Describe the principles of management of	Lecture ,Bedside	Written, Viva

	<b>Chronic Rhinitis</b>	<b>clinic</b>	<b>voce</b>
<b>EN4.30 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Epistaxis</b>			
<b>Domain – K/S</b>		<b>Level - SH</b>	

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.30.1	Enumerate the causes of Epistaxis	Lecture	Written, Viva voce
EN4.30.2	Elicit correct history in patients presenting with Epistaxis	Bedside clinic	Skill assessment
EN4.30.3	Document and present correct history in patients with Epistaxis	Bedside clinic	Skill assessment
EN4.30.4	Describe the clinical features in a patient presenting with Epistaxis	Bedside clinic	Skill assessment
EN4.30.5	Choose the correct investigations in a patient presenting with Epistaxis	Lecture, DOAP	Viva voce
EN4.30.6	Describe the principles of management of Epistaxis	Lecture ,Bedside clinic	Written, Viva voce

**EN4.31 Describe the clinical features, investigations and principles of management of trauma to the face & neck**  
**Domain – K/S** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.31.1	Describe the clinical features in a patient presenting with trauma to face	Lecture	Written, Viva voce
EN4.31.2	Choose the correct investigations in a patient presenting with trauma to face	Lecture, DOAP	Viva voce
EN4.31.3	Describe the principles of management of trauma to face	Lecture ,Bedside clinic	Written, Viva voce
EN4.31.4	Describe the clinical features in a patient presenting with trauma to neck	Lecture	Written, Viva voce
EN4.31.5	Choose the correct investigations in a patient presenting with trauma to neck	Lecture, DOAP	Viva voce
EN4.31.6	Describe the principles of management of trauma to neck	Lecture ,Bedside clinic	Written, Viva voce

**EN4.32 Describe the clinical features, investigations and principles of management of nasopharyngeal Angiofibroma**  
**Domain – K** **Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.32.1	Describe the clinical features in a patient presenting with nasopharyngeal Angiofibroma	Lecture	Written, Viva voce
EN4.32.2	Choose the correct investigations in a patient presenting with nasopharyngeal Angiofibroma	Lecture, DOAP	Viva voce
EN4.32.3	Describe the principles of management of nasopharyngeal Angiofibroma	Lecture ,Bedside clinic	Written, Viva voce

EN4.33 Elicit document and present a correct history demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Acute & Chronic Sinusitis

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.33.1	Elicit correct history in patients presenting with Acute Sinusitis	Bedside clinic	Skill assessment
EN4.33.2	Document and present correct history in patients with Acute Sinusitis	Bedside clinic	Skill assessment
EN4.33.3	Describe the clinical features in a patient presenting with Acute Sinusitis	Bedside clinic	Skill assessment
EN4.33.4	Choose the correct investigations in a patient presenting with Acute Sinusitis	Lecture, DOAP	Viva voce
EN4.33.5	Describe the principles of management of Acute Sinusitis	Lecture ,Bedside clinic	Written, Viva voce
EN4.33.6	Elicit correct history in patients presenting with Chronic Sinusitis	Bedside clinic	Skill assessment
EN4.33.7	Document and present correct history in patients with Chronic Sinusitis	Bedside clinic	Skill assessment
EN4.33.8	Describe the clinical features in a patient presenting with Chronic Sinusitis	Bedside clinic	Skill assessment
EN4.33.9	Choose the correct investigations in a patient presenting with Chronic Sinusitis	Lecture, DOAP	Viva voce
EN4.33.10	Describe the principles of management of Chronic Sinusitis	Lecture ,Bedside clinic	Written, Viva voce

EN4.34 Describe the clinical features, investigations and principles of management of Tumors of Maxilla

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.34.1	Describe the clinical features in a patient presenting with Tumors of Maxilla	Lecture	Written, Viva voce
EN4.34.2	Choose the correct investigations in a patient presenting with Tumors of Maxilla	Lecture, DOAP	Viva voce
EN4.34.3	Describe the principles of management of Tumors of Maxilla	Lecture ,Bedside clinic	Written, Viva voce

EN4.35 Describe the clinical features, investigations and principles of management of Tumors of Nasopharynx

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.35.1	Describe the clinical features in a patient presenting with Tumors of Nasopharynx	Lecture	Written, Viva voce
EN4.35.2	Choose the correct investigations in a patient presenting with Tumors of Nasopharynx	Lecture, DOAP	Viva voce
EN4.35.3	Describe the principles of management of Tumors of Nasopharynx	Lecture ,Bedside clinic	Written, Viva voce

EN4.36 Describe the clinical features, investigations and principles of management of diseases of the Salivary glands

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.36.1	Describe the clinical features in a patient presenting with Diseases of salivary glands	Lecture	Written, Viva voce
EN4.36.2	Choose the correct investigations in a patient presenting with Diseases of salivary glands	Lecture, DOAP	Viva voce
EN4.36.3	Describe the principles of management of Diseases of salivary glands	Lecture ,Bedside clinic	Written, Viva voce

EN4.37 Describe the clinical features, investigations and principles of management of Ludwig's angina

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.37.1	Describe the clinical features in a patient presenting with Ludwig's angina	Lecture	Written, Viva voce
EN4.37.2	Choose the correct investigations for a patient presenting with Ludwig's angina	Lecture, DOAP	Viva voce
EN4.37.3	Describe the principles of management of Ludwig's angina	Lecture ,Bedside clinic	Written, Viva voce

EN4.38 Elicit document and present a correct history demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of type of dysphagia

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.38.1	Enumerate the causes of Dysphagia	Lecture	Written, Viva voce
EN4.38.2	Elicit correct history in patients presenting with Dysphagia	Bedside clinic	Skill assessment
EN4.38.3	Document and present correct history in patients with Dysphagia	Bedside clinic	Skill assessment
EN4.38.4	Describe the clinical features in a patient presenting with Dysphagia	Bedside clinic	Skill assessment
EN4.38.5	Choose the correct investigations for a patient presenting with Dysphagia	Lecture, DOAP	Viva voce
EN4.38.6	Describe the principles of management of Dysphagia	Lecture ,Bedside clinic	Written, Viva voce

EN4.39 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Acute & Chronic Tonsillitis

Domain – K/S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.39.1	Elicit correct history in patients presenting with Acute Tonsillitis	Bedside clinic	Skill assessment
EN4.39.2	Document and present correct history in patients with Acute Tonsillitis	Bedside clinic	Skill assessment
EN4.39.3	Describe the clinical features in a patient	Bedside clinic	Skill

	<b>presenting with Acute Tonsillitis</b>		<b>assessment</b>
EN4.39.4	Choose the correct investigations in a patient presenting with Acute Tonsillitis	Lecture, DOAP	Viva voce
EN4.39.5	Describe the principles of management of Acute Tonsillitis	Lecture ,Bedside clinic	Written, Viva voce
EN4.39.6	Elicit correct history in patients presenting with Chronic Tonsillitis	Bedside clinic	Skill assessment
EN4.39.7	Document and present correct history in patients with Chronic Tonsillitis	Bedside clinic	Skill assessment
EN4.39.8	Describe the clinical features in a patient presenting with Chronic Tonsillitis	Bedside clinic	Skill assessment
EN4.39.9	Choose the correct investigations in a patient presenting with Chronic Tonsillitis	Lecture, DOAP	Viva voce
EN4.39.10	Describe the principles of management of Chronic Tonsillitis	Lecture ,Bedside clinic	Written, Viva voce

EN4.40 Observe and describe the indications for and steps involved in a tonsillectomy / adenoidectomy

Domain – S

Level – KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.40.1	Enumerate the indications for tonsillectomy	Lecture, Bedside clinic	Written, Viva voce
EN4.40.2	Observe the steps involved in a tonsillectomy	Video demonstration, DOAP (OT)	Viva voce
EN4.40.3	Describe the steps involved in a tonsillectomy	DOAP (OT), Bedside clinic	Viva voce
EN4.40.4	Enumerate the indications for adenoidectomy	Lecture, Bedside clinic	Written, Viva voce
EN4.40.5	Observe the steps involved in an adenoidectomy	Video demonstration, DOAP (OT)	Viva voce
EN4.40.6	Describe the steps involved in an adenoidectomy	DOAP (OT), Bedside clinic	Viva voce

EN4.41 Describe the clinical features, investigations and principles of management of Acute & chronic abscesses in relation to Pharynx

Domain – K/S

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.41.1	List the abscesses in relation to pharynx	Lecture, Bedside clinic	Written, Viva voce
EN4.41.2	Describe the clinical features of acute abscesses in relation to pharynx	Bedside clinic	Viva voce
EN4.41.3	Choose the correct investigations in a patient presenting with an acute abscess related to the pharynx	DOAP, Bedside clinic	Viva voce
EN4.41.4	Describe the principles of management of a patient presenting with an acute abscess related to the pharynx	Lecture, DOAP	Viva voce
EN4.41.5	Describe the clinical features of chronic abscesses in relation to pharynx	Bedside clinic	Viva voce
EN4.41.6	Choose the correct investigations in a patient presenting with chronic abscess related to the pharynx	DOAP, Bedside clinic	Viva voce
EN4.41.7	Describe the principles of management of a patient presenting with chronic abscess related to the pharynx	Lecture, DOAP	Viva voce



EN4.42 Elicit, document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of hoarseness of voice

Domain – K/S

Level – SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.42.1	Enumerate the causes of hoarseness of voice	Lecture	Written, Viva voce
EN4.42.2	Elicit correct history in patients presenting with hoarseness of voice	Bedside clinic	Skill assessment
EN4.42.3	Document and present correct history in patients with hoarseness of voice	Bedside clinic	Skill assessment
EN4.42.4	Describe the clinical features in a patient presenting with hoarseness of voice	Bedside clinic	Skill assessment
EN4.42.5	Choose the correct investigations for a patient presenting with hoarseness of voice	Lecture, DOAP	Viva voce
EN4.42.6	Describe the principles of management of a patient with hoarseness of voice	Lecture ,Bedside clinic	Written, Viva voce

EN4.43 Describe the clinical features, investigations and principles of management of Acute & Chronic Laryngitis

Domain – K

Level - KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.43.1	Describe the clinical features in a patient presenting with Acute Laryngitis	Lecture ,Bedside clinic	Written, Viva voce
EN4.43.2	Choose the correct investigations in a patient presenting with Acute Laryngitis	Lecture, DOAP	Viva voce
EN4.43.3	Describe the principles of management of Acute Laryngitis	Lecture ,Bedside clinic	Written, Viva voce
EN4.43.4	Describe the clinical features in a patient presenting with Chronic Laryngitis	Lecture ,Bedside clinic	Written, Viva voce
EN4.43.5	Choose the correct investigations in a patient presenting with Chronic Laryngitis	Lecture, DOAP	Viva voce
EN4.43.6	Describe the principles of management of Chronic Laryngitis	Lecture ,Bedside clinic	Written, Viva voce

EN4.44 Describe the clinical features, investigations and principles of management of benign lesions of the vocal cord

Domain – K

Level – KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.44.1	Enumerate the benign lesions of the vocal cord	Lecture ,Bedside clinic	Written, Viva voce
EN4.44.2	Describe the clinical features in a patient presenting with benign lesions of the vocal cord	Lecture ,Bedside clinic	Written, Viva voce
EN4.44.3	Choose the correct investigations for a patient presenting with benign lesions of the vocal cord	Lecture, DOAP	Viva voce
EN4.44.4	Describe the principles of management of benign lesions of the vocal cord	Lecture ,Bedside clinic	Written, Viva voce

EN4.45 Describe the clinical features, investigations and principles of management of Vocal cord palsy

Domain – K

Level – KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.45.1	Enumerate the causes of Vocal cord palsy	Lecture ,Bedside clinic	Written, Viva voce
EN4.45.2	Describe the clinical features in a patient presenting with Vocal cord palsy	Lecture ,Bedside clinic	Written, Viva voce
EN4.45.3	Choose the correct investigations for a patient presenting with Vocal cord palsy	Lecture, DOAP	Viva voce
EN4.45.4	Describe the principles of management of Vocal cord palsy	Lecture ,Bedside clinic	Written, Viva voce

EN4.46 Describe the clinical features, investigations and principles of management of Malignancy of the Larynx & Hypopharynx

Domain – K

Level – KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.46.1	Describe the clinical features in a patient presenting with Malignancy of the Larynx	Lecture ,Bedside clinic	Written, Viva voce
EN4.46.2	Choose the correct investigations for a patient presenting with Malignancy of the Larynx	Lecture, DOAP	Viva voce
EN4.46.3	Describe the principles of management of Malignancy of the Larynx	Lecture ,Bedside clinic	Written, Viva voce
EN4.46.4	Describe the clinical features in a patient presenting with Malignancy of the Hypopharynx	Lecture ,Bedside clinic	Written, Viva voce
EN4.46.4	Choose the correct investigations for a patient presenting with Malignancy of the Hypopharynx	Lecture, DOAP	Viva voce
EN4.46.4	Describe the principles of management of Malignancy of the Hypopharynx	Lecture ,Bedside clinic	Written, Viva voce

EN4.47 Describe the clinical features, investigations and principles of management of Stridor

Domain – K

Level – KH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.47.1	Enumerate the causes of Stridor	Lecture ,Bedside clinic	Written, Viva voce
EN4.47.2	Describe the clinical features in a patient presenting with Stridor	Lecture ,Bedside clinic	Written, Viva voce
EN4.47.3	Choose the correct investigations for a patient presenting with Stridor	Lecture, DOAP	Viva voce
EN4.47.4	Describe the principles of management of Stridor	Lecture ,Bedside clinic	Written, Viva voce

EN4.48 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of Airway Emergencies

Domain –S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.48.1	Enumerate the causes of Airway emergencies	Bedside clinic, DOAP	Viva voce
EN4.48.2	Elicit correct history in patients presenting with Airway emergencies	Bedside clinic	Skill assessment
EN4.48.3	Document and present correct history in patients with Airway emergencies	Bedside clinic	Skill assessment
EN4.48.4	Describe the clinical features in a patient presenting with Airway emergencies	Bedside clinic	Skill assessment
EN4.48.5	Choose the correct investigations for a patient presenting with Airway emergencies	DOAP	Viva voce
EN4.48.6	Describe the principles of management of Airway emergencies	Bedside clinic	Viva voce

EN4.49 Elicit document and present a correct history, demonstrate and describe the clinical features, choose the correct investigations and describe the principles of management of foreign bodies in the air & food passages

Domain –S

Level - SH

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.49.1	Elicit correct history in patients presenting with foreign bodies in the air passages	Bedside clinic	Skill assessment
EN4.49.2	Document and present correct history in patients presenting with foreign bodies in the air passages	Bedside clinic	Skill assessment
EN4.49.3	Describe the clinical features in a patient presenting with foreign bodies in the air passages	Bedside clinic	Skill assessment
EN4.49.4	Choose the correct investigations in a patient presenting with foreign bodies in the air passages	DOAP	Viva voce
EN4.49.5	Describe the principles of management of foreign bodies in the air passages	Bedside clinic	Viva voce
EN4.49.6	Elicit correct history in patients presenting with foreign bodies in the food passages	Bedside clinic	Skill assessment
EN4.49.7	Document and present correct history in patients presenting with foreign bodies in the food passages	Bedside clinic	Skill assessment
EN4.49.8	Describe the clinical features in a patient presenting with foreign bodies in the food passages	Bedside clinic	Skill assessment
EN4.49.9	Choose the correct investigations in a patient presenting with foreign bodies in the food passages	DOAP	Viva voce
EN4.49.10	Describe the principles of management of foreign bodies in the food passages	Bedside clinic	Viva voce

**EN4.50 Observe and describe the indications for and steps involved in tracheostomy****Domain – S****Level - KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.50.1	Enumerate the indications for Tracheostomy	Bedside clinics	Viva voce
EN4.50.3	Observe steps involved in Tracheostomy	DOAP - Clinical (OT), video demonstration	Viva voce
EN4.50.3	Describe the steps of Tracheostomy	DOAP - video demonstration	Viva voce

**EN4.51 Observe and describe the care of the patient with a tracheostomy****Domain – S****Level – KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.51.1	Observe steps involved in care of the patient with a tracheostomy	DOAP - Clinical (OT), video demonstration	Viva voce
EN4.51.2	Describe the steps involved in care of the patient with a tracheostomy	DOAP - video demonstration	Viva voce

**EN4.52 Describe the Clinical features, Investigations and principles of management of diseases of Oesophagus****Domain – K****Level – KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.52.1	Enumerate the Diseases of Oesophagus	Lecture ,Bedside clinic	Written, Viva voce
EN4.52.2	Describe the clinical features in a patient presenting with Disease of Oesophagus	Lecture ,Bedside clinic	Written, Viva voce
EN4.52.3	Choose the correct investigations for a patient presenting with Disease of Oesophagus	Lecture, DOAP	Viva voce
EN4.52.4	Describe the principles of management of Diseases of Oesophagus	Lecture ,Bedside clinic	Written, Viva voce

**EN4.53 Describe the clinical features, investigations and principles of management of HIV manifestations of the ENT (vertical integration- General Medicine)****Domain – K****Level – KH**

Number	Specific Learning objective	Teaching-Learning methods	Assessment methods
EN4.53.1	Enumerate the HIV manifestations of the ENT	Lecture ,Bedside clinic	Written, Viva voce
EN4.53.2	Describe the clinical features in a patient presenting with HIV manifestations of the ENT	Lecture ,Bedside clinic	Written, Viva voce
EN4.53.3	Choose the correct investigations for a patient presenting with HIV manifestations of the ENT	Lecture, DOAP	Viva voce
EN4.53.4	Describe the principles of management of HIV manifestations of the ENT	Lecture ,Bedside clinic	Written, Viva voce

## Summary of course content, teaching and learning methods and student assessment for the undergraduate (MBBS) Curriculum in Otorhinolaryngology

### Teaching-Learning methods and Time allotted -Otorhinolaryngology

Lectures	Small group discussion	Self-directed learning	Total hours	Clinical postings
25 hours	40 hours	5 hours	70 hours	Two postings of 4 weeks each. First posting in II MBBS(15hours/week) and Second posting II MBBS Part I(18hours/week)

**Teaching-learning methods** shall be learner centric and shall predominantly include small group learning, interactive teaching methods and case-based learning. Didactic lectures not to exceed one-third of the total teaching time. The teaching learning activity focus should be on application of knowledge rather than acquisition of knowledge.

The curricular contents shall be vertically and horizontally **aligned and integrated** to the maximum extent possible to enhance learner's interest and eliminate redundancy and overlap. Acquisition and certification of skills shall be through experiences in patient care, diagnostic and skill laboratories.

The **clinical postings** in the second professional shall be 15 hours per week (3 hrs per day from Monday to Friday)

The clinical postings in the third professional part II shall be 18 hours per week (3 hrs per day from Monday to Saturday)

Newer T-L method like Learner-doctor method (Clinical clerkship) should be mandatorily implemented, from 1<sup>st</sup> clinical postings in Otorhinolaryngology itself. The goal of this type of T-L activity is to provide learners with experience in longitudinal patient care, being part of the health care team, and participate in hands-on care of patients in outpatient and inpatient setting. During the 1<sup>st</sup> clinical postings, the students are oriented to the working of the department. During the second clinical posting the students are allotted patients, whom they follow-up through their stay in the hospital, participating in that patients care including case work-up, following-up on investigations, presenting patient findings on rounds, observing surgeries if any till patient is discharged.

**AETCOM module.** The purpose is to help the students apply principles of bioethics, systems based care, apply empathy and other human values in patient care, communicate effectively with patients and relatives and to become a professional who exhibits all these values.

## Assessment

Eligibility to appear for University examinations is dependent on fulfilling criteria in two main areas – attendance and internal assessment marks

### Attendance

Attendance requirements are 75% in theory and 80% in clinical postings for eligibility to appear for the examinations in Otorhinolaryngology.

75% attendance in AETCOM Module is required for eligibility to appear for final examination in 3<sup>rd</sup> professional year 3 part 1.

### Internal Assessment

Formative and summative assessments should be carried out periodically. Log book of skill-based training shall be also maintained.

There shall be no less than three internal assessment examinations (Theory and Clinical) in Otorhinolaryngology. Learners must secure at least 50% marks of the total marks (combined in theory and clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in Otorhinolaryngology in order to be eligible for appearing at the final University examination.

Learners must have completed the required certifiable competencies for that phase of training and Otorhinolaryngology log book entry completed to be eligible for appearing at the final university examination.

### University examinations

Third Professional Part I shall be held at end of third Professional part 1 of training (12 months) in the subjects of Ophthalmology, Otorhinolaryngology, Community Medicine and Forensic Medicine and Toxicology

### Marks allotted

Otorhinolaryngology	Theory	Clinical examination
Total marks	100	100
	Long essay 2X10= 20	Two cases x40marks=80mar
	Short essay 8x5=40 marks	Viva voce 2x10=20marks
	Short answer question 10x3=30marks	
	MCQs 10x1=10marks	

The theory paper should include different types such as structured essays, short essays, Short Answers Questions (SAQ) and MCQs (Multiple Choice Questions). Marks for each part should be indicated separately.

A minimum of **80%** of the marks should be from the **must know** component of the curriculum. A maximum of **20%** can be from the **desirable to know** component. All **main essay questions** to be from the **must know component** of the curriculum.

**One main essay question** to be of the **modified variety** containing a clinical case scenario. At least 30% of questions should be clinical case scenario based. Questions to be constructed to test higher cognitive levels.

Clinical examinations will be conducted in the hospital wards. Clinical cases kept in the examination must be common conditions that the learner may encounter as a physician of first contact in the community. Emphasis should be on candidate's capability to elicit history, demonstrate physical signs, write a case record, analyze the case and develop a management plan.

Viva/oral examination should assess approach to patient management, emergencies, and attitudinal, ethical and professional values. Candidate's skill in interpretation of common investigative data, X-rays, identification of specimens, etc. is to be also assessed.

### **Pass criteria**

Internal Assessment: 50% combined in theory and practical (not less than 40% in each) for eligibility for appearing for University Examinations

University Examination: Mandatory 50% marks separately in theory and clinicals (clinicals = clinical + viva)

## Sample Otorhinolaryngology Question Paper

### Otorhinolaryngology Paper

Time: 3 hours

Marks: 100

Your answers should be specific to the questions asked.

Draw neat, labelled diagrams wherever necessary.

#### Long essays (2 X 10 = 20 marks)

1. A 14 year old adolescent boy presents with left nasal obstructions and recurrent episodes of spontaneous, profuse and self limiting epistaxis. On examination pinkish mass was found in left nasal cavity along with fullness of left cheek
  - a) What is the most likely diagnosis?
  - b) Describe the etiopathogenesis of this condition?
  - c) Discuss the laboratory investigations for diagnosing the above condition.
  - d) Write a note on various modalities of treatment.

(1+3+2+4)
2. A 35 year old woman complaints of bilateral hearing loss for 5 years, which had worsened during her pregnancy 1 year back. She does not give any past history of ear discharge.
  - a) What is the most likely disease she is suffering from?
  - b) Discuss the etiopathogenesis & types of this disease?
  - c) Describe the investigations for confirming the diagnosis?
  - d) Discuss the treatment modalities along with their contraindications?

(1+3+3+3)

#### Short essays (8x5=40marks)

3. A 38 year old female complains of fever, sore throat and pain during swallowing Since 3 days. On examination, the left tonsil is congested and enlarged and bulge in the soft palate on left side, and uvula pushed to the right.
  - a) What is the diagnosis of this condition?
  - b) What are the symptoms and signs of this condition?
  - c) How do you manage this patient?

(1+2+2)
4. Write a note on Graft materials for tympanoplasty.
5. Discuss Vocal rehabilitation following total laryngectomy.
6. Describe the Clinical features & management of acute Epiglottitis.
7. Discuss the Causes & management of nasal septal perforation.
8. Write a note on Corticosteroids in ENT.
9. Discuss the Clinical features & management of Post Covid-19 mucormycosis -.



10. A 27 year old male patient who met with a road traffic accident was seen in the emergency room with complaint of clear watery nasal discharge.

- a) What are the bed side clinical tests to diagnose this condition?
- b) What are the investigations that need to be done for this patient?
- c) What is the treatment for this condition?

(1+2+2)

**Short answer questions (10x3=30)**

11. Write a note on Siegles speculum.
12. Enumerate three causes for Bell's palsy.
13. Write three Topodiagnostic tests for facial nerve palsy.
14. Constrictions of Oesophagus.
15. Write a note on Objective tests of hearing.
16. Blood supply of Adenoids.
17. Three causes for Referred Otagia
18. Removal of Ear foreign body.
19. Stylalgia.
20. Informed consent for tracheostomy.

**MCQ's (10 x 1=10)**

21.(i) Cart wheel appearance of tympanic membrane is seen in

- a) ASOM
- b) Glomus tumor
- c) OME
- d) CSOM

(ii) Cricothyroid muscle is supplied by :

- a) External laryngeal nerve
- b) Recurrent laryngeal nerve
- c) Internal laryngeal nerve
- d) Glossopharyngeal nerve

(iii) Which of the following is known as gateway of tears

- a) Killian's dehiscence
  - b) Rathke's pouch
  - c) Waldeyer ring
  - d) Sinus of Morgagni
- (iv)** Bony septal perforation is seen in :
- a) TB
  - b) Syphilis
  - c) Leprosy
  - d) Sarcoidosis
- (v)** Which of the following is not the component of Gradenigotriad :
- a) Involvement of Vth and VIth cranial nerve
  - b) Persistent otorrhea
  - c) Palatal palsy
  - d) Retro- orbital pain
- (vi)** Laryngocele arises from
- a) Anterior commissure
  - b) True cords
  - c) Sacculae of ventricle
  - d) False cords
- (vii)** Woodruff's plexus is located at :
- a) Posterior end of middle turbinate
  - b) Posterior end of inferior turbinate
  - c) Posterior end of superior turbinate
  - d) None of the above
- (viii)** Steeple sign is seen in :
- a) Quinsy
  - b) Larngomalacia
  - c) Acute epiglottitis
  - d) Croup
- (ix)** Grommet insertion with myringotomy is done at

- a) Antero-inferior quadrant
  - b) Postero- inferior quadrant
  - c) Antero superior quadrant
  - d) Postero superior quadrant
- (x) Caldwell view is done for :
- a) Sphenoid sinus
  - b) Ethmoid sinus
  - c) Maxillary sinus
  - d) Frontal sinus

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