

# STUDY GUIDE OF ENT

## MBBS COURSE

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# INTRODUCTION

## EDUCATIONAL HOURS

Year	Theory	Practical	Total
3rd year	25 hours	25 hours (4 weeks clinical rotation)	50
4th year	50 hours	50 hours (6 weeks clinical rotation)	100
Total	75 hours in 36 weeks/year	75 hours	150 hours
Strategy	Lectures Problem based learning Small group discussion Case based discussion	Clinical Rotation & ward visit Seminars & CPC Audio video sessions Tutorial / PBL Skills Lab Practice	

# LEARNING OUTCOMES

## AT THE END OF CURRICULUM STUDENT WILL BE ABLE TO

To equip doctors with essential knowledge, skill and attitude in order to enable them to:

- Identify ENT diseases including emergencies, provide primary health care, refer to appropriate center and provide follow-up to the patients.
- Perform essential minor ENT procedures.
- Communicate effectively with the patient, the family and the community regarding disease and its relevant issues.
- Understand medical ethics and its application pertaining to ENT and maintain the confidentiality of the patient.
- To understand the prevalence and prevention of the common Public Health Problem related to ENT in the community
- Understand the principles of medical research including fundamentals of Information Technology

# EDUCATION STRATEGIES

The educational strategies in this curriculum are multiple and aligned with domain of learning and according to the desired outcome

## **Interactive lectures**

One-third of the curriculum will be delivered in a traditional didactic format including PowerPoint presentations and case discussions. Didactic education is considered to be a one-way transmission of material from teacher to learner, we cannot overlook the possibility of meaningful interaction between experts and learners during live lectures. This type of interaction, which allows for immediate clarification of concepts and extension of knowledge, may be particularly important for novice learners who have relatively little exposure to the subject matter, such as our study population.

## **Problem based learning**

A lot of emphasis is on case based discussion. Problem-based learning (PBL) is complex and heterogeneous. A wide variety of educational methods are referred as PBL. These include Lecture-based case, Case based lecture, Case based discussions, Problem or inquiry based and Closed loop or reiterative. Incorporation of case based discussion in teaching enhances the critical thinking and problem-solving skills. It also helps in developing a broader prospective of clinical case scenarios.

## **Case based Discussion**

A lot of emphasis is on case based discussion during ward placement. Problem-based learning (PBL) is complex and heterogeneous. A wide variety of educational methods are referred as PBL. These include Lecture-based case, Case based lecture, Case based discussions, Problem or inquiry based and Closed loop or reiterative. Incorporation of case based discussion in teaching enhances the critical thinking and problem-solving skills. It also helps in developing a broader prospective of clinical case scenarios (5).

## **Small Group Discussion**

Small group discussion provides a unique environment to achieve high standards in medical education. Activation of prior knowledge, exchange of ideas, and engagement at a higher cognitive level are assumed to result in deeper learning and better academic achievements by students (6).

## **Clinical Skills Sessions**

Clinical skills session are important part of curriculum to achieve psychomotor and affective outcomes. Learning manual skills is a fundamental part of health care education, and motor, sensory and cognitive learning processes are essential aspects of professional development. Simulator training has been shown to enhance factors that facilitate motor and cognitive learning. Students learned manual skills, how to perform the procedure, and professional behaviour. They learned by preparing, watching, practising and reflecting. The simulator contributed by providing

opportunities for students to prepare for the skills training, to see anatomical structures, to feel resistance, and to become aware of their own performance ability (7).

### **Video sessions**

Pathology is a subject which involves visual learning and formulating concepts. Video assisted learning sessions also provides opportunities to learn gross anatomy.

### **Clinical Sessions**

Clinical sessions are important as they provide opportunity for experiential learning in terms of clinical skills and dealing with patients.

# ASSESSMENT

## MCQ's and SEQ's

Multiple choice question and short essay question test will be used at the end of part of curriculum to assess the learning of knowledge. These all assessment exercises will be formative. The written tests like Multiple-Choice Questions (MCQs) and Short-Essay Questions (SEQs) test formats are used for the assessment of cognitive domain. The MCQs are more objective and essentially select type of item response format. MCQs have a cueing effect, which promotes guessing and leads to higher scores. In addition, writing MCQs of higher cognitive level of problem solving is challenging. On the contrary, the SEQs are more subjective and have a supply or construct type item response format, which does not have any cueing effect and can effectively assess problem solving skills.

## Clinical exam and OSCE

Short case and OSCE will be used to evaluate clinical skills and procedural skills at the ward end of placement. The OSCE is a method of clinical skill assessment, and it has been reported to be appropriate for assessing learning achievement levels in the psychomotor and emotional domains, which are difficult to evaluate with written examinations.

## Viva Voce

Viva voce is used for assessment of knowledge and problem solving ability of students. This method is useful evaluating cognitive domain.

## Assignments

Students of different year will be given assignment of different nature such as research and literature search and surveys

## INTERNAL ASSESSMENT

- i. The weightage of internal assessment shall be 10% of totals marks.
- ii. Continuous internal assessment shall consist of evaluation at the end of each assignments, e.g. stages/sub-stage, class tests etc., attitudinal assessment from educational supervisors.
- iii. Assessment of knowledge, Skills and Attitude shall contribute toward internal assessment. Methods used to assess these domains shall include Multiple Choice Questions of one-best type, Short essay questions, Oral/Viva, and Practical/Clinical examinations.
- iv. The score of internal assessment shall contribute to the score in the final examination, Final university examination of each subject shall contribute 90 to total score, and the candidate shall pass in aggregate.
- v. Proper record of continuous internal assessment shall be maintained.

## **LEARNING RESOURCES**

The department of ENT will require following resources for implementation resources:

- Human resource
- Instructors (faculty members)
- Curriculum coordinator curriculum secretary
- Infrastructure
- Lecture hall with AV aids
- Tutorial room with AV aids
- Skills Lab
- Simulated patients and simulated manikins
- Computers

## **LISTS OF CONTENT RESOURCES**

- Text book of ENT by Logan Turner. Latest Ed.
- Diseases of ENT by Dhengra. Latest Ed.
- Text Book of ENT by Masud.
- Oxford Hand Book of ENT by Prescott.
- Online Journals and Reading Materials through HEC Digital Library Facility.





## IMPLEMENTATION

The curriculum will be spread over 2 year with 36 working weeks each year. During this period student will be exposed to various education strategies to achieve the learning objectives.

### 3rd Year.

In this year student will be exposed to do clinical rotation, ward visit and skills lab to develop understanding of ENT and its applied aspects.

Theory (Lecture, SGD and PBL)	Practical (Clinical rotation, CPC, Skill Lab)
25 Hours (36 Weeks)	25 Hours

### 4th Year.

In this year student will be exposed to do clinical rotation, ward visit and skills lab to develop understanding of ENT and its applied aspects.

Theory (Lecture, SGD and PBL)	Practical (Clinical rotation, CPC, Skill Lab)
50 Hours (36 Weeks)	50 Hours

Third Year			
	First term	Second term	Third term
1st Term			
2nd Term			
3rd Term			
Assessment			

Fourth Year			
	First term	Second term	Third term
1st Term			
2nd Term			
3rd Term			
Assessment			

### THIRD YEAR WARD ROTATION IN EYE

Duration: 4 weeks (25 hours)

Location: ward, OPD, Tutorial room

Tutors: Assistant professor, associate Professor, Professor

	Ward	C	P	A	% age	Assessment
Week 1						
Week 2						
Week 3						
Week 4						
Week 5						
Week 6						

#### Evaluation:

- Attendance of 75% is mandatory
- 15 clinical histories must be completed on history register
- Every Saturday will be formative assessment for course work of that week
- End of course work will be ward test
- Ward test will be OSPE and 2 short cases

## FOURTH YEAR WARD ROTATION IN EYE

Duration: 6 weeks (50 hours)

Location: Ward, OPD, Tutorial room

Tutors: Assistant Professor, Associate Professor, Professor

	Ward	C	P	A	% age	Assessment
Week 1						
Week 2						
Week 3						
Week 4						
Week 5						
Week 6						

### Evaluation:

- Attendance of 75% is mandatory
- 15 clinical histories must be completed on history register
- Every Saturday will be formative assessment for course work of that week
- End of course work will be ward test
- Ward test will be OSPE and 2 short cases

# PROGRAMME EVALUATION

## Purpose of Evaluation

The major goals of the evaluation are to provide information that the students can use to achieve curricular objectives and that the faculty can use to monitor quality of and improve curriculum.

## Design of Evaluation

The evaluation design as only posttest.

## Users of evaluation: students, curriculum faculty, Principal Office

Resources: Curriculum faculty and departmental secretaries. No additional funding

## Evaluation question:

- What percentage of students achieved 75% mandatory attendance?
- What percentage of students achieved pass marks in university exam?
- What are the strengths of the curriculum? What are the weaknesses? How can the curriculum can be improved?

Because of limited resources, the evaluation was kept simple. Data Collection was integrated into the curriculum schedule. The major goals of the evaluation are to provide information that the students can use to achieve curricular objectives and that the faculty can use to monitor quality of and improve curriculum. The evaluation design as only posttest.

## End of curriculum evaluation form:

This will be filled by students and faculty members for evaluation of adequacy with each content was covered, whether they would recommend the curriculum to others and written comments on curriculum strengths, weaknesses and suggestions for improvements.

## Annual Report:

Based on evaluation of the educational programe report will be generated annually and submitted to Medical Educational Department.

## OPHTHALMOLOGY

TABLE OF SPECIFICATION (ToS)		
Sr. No.	Topic Specification	SEQ's
1	Espistaxis	01
2	Nasal Septum	01
3	Stridor	01
4	Larynx / infection	01
5	Tracheostomy	01
6	Deafness	01
7	Middle Ear	01
8	Ext. ear canal	01
9	Oropharynx	01
	TOTAL	09



## ENT

TABLE OF SPECIFICATION (ToS)		
Sr. No.	Topic Specification	MCQ's
1	Nasal polyp	02
2	Oral cavity	02
3	Nasal septum	03
4	Middle ear	07
5	Tumor Larynx	02
6	Larynx	05
7	Nose	04
8	Salivary gland	02
9	External ear	04
10	F/B Bronchus	01
11	Otosclerosis	02
12	CSF Rhinorrhea	01
13	Nose Sinuses	01
14	Vertigo	01
15	Oropharynx	03
16	Teacheostomy	01
17	Granulomatus disease	01
18	Tumor NPC	01
19	Tumour - Nose	01
20	Tumors	01
	Total	45



## ENT

<b>FORMAT</b>		
<b>Sr. No.</b>	<b>COMMENTS</b>	<b>MARKS</b>
1	<b>OSPE</b> 12 Stations (06 non-observed stations related to practicals (each of 04 marks)	<b>90</b>
2	<b>THEORY</b>	<b>90</b>
3	<b>INTERNAL ASSESSMENT</b>	<b>20</b>
	<b>Total</b>	<b>200</b>

Contents	Objectives	Domain	Strategy	Assessment
<b>Module 1: Nose</b>				
<ul style="list-style-type: none"> <li>Anatomy and physiology</li> <li>History taking and examination</li> </ul>		C3 C3P2A2	LEC/SGD WARD/CBD	MCQ/SEQ OSPE
<b>Module 2: Diseases of external nose</b>				
<ul style="list-style-type: none"> <li>Congenital lesions, choanal atresia, meningoencephalocele, trauma, cut nose, fractures, external deformities.</li> </ul>		C3	LEC/SGD	MCQ/SEQ
<b>Module 3: Diseases of septum</b>				
<ul style="list-style-type: none"> <li>Epistaxis</li> <li>DNS</li> <li>Haematoma</li> <li>Septal abscess</li> <li>Perforation</li> </ul>		C3 C3 C3 C3 C3	LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ
<b>Module 4: Rhinitis</b>				
<ul style="list-style-type: none"> <li>Allergic</li> <li>Atrophic</li> <li>Hyper-trophic</li> <li>Foreign bodies.</li> <li>V.M.R.</li> </ul>		C3 C3 C3 C3 C3	LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ
<b>Module 5: Polyps</b>				
<ul style="list-style-type: none"> <li>Mucous</li> <li>Ethmoidal</li> <li>Antrochoanal</li> <li>Bleeding polypus</li> </ul>		C3 C3 C3 C3	LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ
<b>Module 6: Foreign body nose</b>				
<ul style="list-style-type: none"> <li>Rhinolith</li> <li>Maggots</li> </ul>		C3 C3	LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ
<b>Module 7: Sinusitis</b>				
<ul style="list-style-type: none"> <li>Acute sinusitis</li> <li>Chronic sinusitis, complications</li> <li>Fungal infection of nose and paranasal sinuses</li> <li>CSF rhinorrhea</li> </ul>		C3 C3 C3 C3	LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ

Contents	Objectives	Domain	Strategy	Assessment
<b>Module 8: Tumours</b>				
<ul style="list-style-type: none"> <li>Basal cell carcinoma</li> <li>Squamous cell carcinoma</li> <li>Papilloma</li> <li>Osteoma</li> <li>Headache and its ent causes</li> </ul>		C3 C3 C3 C3 C3	LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ
<b>Module 9: BUCCAL CAVITY, ORAL CAVITY, OROPHARYNX</b>				
<ul style="list-style-type: none"> <li>Anatomy and physiology</li> <li>History and examination</li> <li>ORAL CAVITY ULCERS: Traumatic, Aphthous, Vincents angina, Agranulocytic, Tuberculous, Malignant ulcers, Thrush, Leukoplakia, Behcet's disease, Ulcerative lesions of oral cavity, OROPHARYNX</li> <li>Acute tonsillitis, Chronic tonsillitis, Peri tonsillitis and abscess, Diphtheria, Differential diagnosis of white patch on the tonsil, Tonsil/oral cavity</li> <li>Tumours of tonsil</li> <li>Retropharyngeal abscess</li> <li>Pharyngeal abscess acute/chronic</li> <li>Sleep apnea syndrome</li> <li>AIDS</li> <li>Ludwig's angina</li> </ul>		C3 C3P2A2 C3 C3 C3 C3 C3 C3 C3	LEC/SGD WARD/CBD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD LEC/SGD	MCQ/SEQ OSPE MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ MCQ/SEQ











Domain	Level
Knowledge	<b>C1</b> Knowledge <b>C2</b> Comprehension <b>C3</b> Application <b>C4</b> Analysis <b>C5</b> Synthesis <b>C6</b> Evaluation
Psychomotor	<b>P1</b> Observe <b>P2</b> Practice <b>P3</b> Adjust <b>P4</b> Master <b>P5</b> Develop <b>P6</b> Construct
Affect	<b>A1</b> Receiving <b>A2</b> Responding <b>A3</b> Valuing <b>A4</b> Organization <b>A5</b> Characterization