

**MBBS SYLLABUS  
AND  
CURRICULUM**



## **PREFACE**

The MBBS students coming out of this prestigious Medical University should be competent in diagnosis and management of common health problems of the individual and the community at primary, secondary, tertiary levels using the clinical skills based on history, physical examination and relevant investigations.

The Graduate Medical Curriculum has been prepared to fulfill the vision of this University and it is oriented towards training students in an unique environment preparing them to undertake the duties and responsibilities of a physician of first contact who is capable of looking after the preventive, promotive, curative and rehabilitative aspects of medicine. The students pursuing Graduate Medical curriculum will have the necessary competencies (knowledge, skills & attitudes) to assume the role of a quality health care provider to the people of India and across the world.

The curriculum is framed involving many experts in relevant medical fields incorporating especially the **specific learning objectives, Teaching methodology, “must know, desirable to know and nice to know”** as put forth by Medical Council of India and more importantly it includes the vital **Medical Ethics** to practice in patient care, service and research. It also includes the **integrated teaching** using a problem based learning, evidence based approaches starting with clinical or community cases and exploring the relevance of various preclinical disciplines in both understanding and sharp focus on resolving health care problems. Every attempt has been made to de-emphasize compartmentalisation of disciplines so as to achieve both horizontal and vertical integration in different phases with a mission that our Medical Graduates will outshine and match the International standards.

The Introduction of teaching elements, OSCE / OSPE have also been incorporated which are proven to be an important, innovative, reliable and objective modality of assessment for clinical / practical skills in the changing scenario of Medical Sciences.



**Record Book / Log Book** becomes a reflective record of student's learning and achievements and faculty contribution towards learning. Every student will be motivated to document what he/she has learnt in the respective department / specialty in the log book and make it as a permanent record. The **revised Record Book/Log Book** should be followed by all the affiliated Medical colleges of this University to bring uniformity in teaching and training of students.

Internship is a phase of training wherein the graduate is expected to conduct actual practice under the supervision of a trained doctor. The learning methods and modalities have to be done during the MBBS course itself with larger number of hands on session and **practice on simulators**.

The Introduction of a restructured curriculum and training program with emphasis on early clinical exposure, integration of basic and clinical sciences, clinical competence and skills and new teaching – learning methodologies will lead to a new generation of medical graduates of global standards.

I want to thank the Academic Officer and the team of Academic, Experimental Medicine & Examination wing and the team of experts from their relevant Medical Specialties of various Medical Colleges in the State for their enthusiastic and energetic efforts to bring this revised syllabus & curriculum.

**Dr.S.GEETHALAKSHMI,M.D.,Ph.D.,**  
**VICE-CHANCELLOR.**

**Comments/feedback are welcome if any and mail it to [registrar@tnmgrmu.ac.in](mailto:registrar@tnmgrmu.ac.in)**



# **THIRD MBBS**



# OPHTHALMOLOGY



## I. Goal

The goal of teaching of students in ophthalmology is to provide such knowledge and skill to the students that will enable them to

1. Diagnose and manage common ophthalmic diseases, ocular manifestations of systemic diseases and emergencies.
2. Knowledge of using common drugs keeping in mind their adverse reaction.
3. Knowledge of common ophthalmic investigations and interpretation of results.

## II. Objectives

### A. Knowledge

1. Aetiology, Clinical features and treatment of conjunctival infections, allergies, pterygium, xerosis and trachoma.
2. Aetiology, Clinical features, complications and treatment of corneal ulcers, keratomalacia and other inflammations of sclera and cornea.
3. Basic principles of corneal blindness eye donation and corneal transplant (keratoplasty).
4. Aetiopathogenesis and complications of ectropion, entropion, ptosis, lagophthalmos, symblepharon and lid inflammations.
5. Aetiology, clinical features and treatment of lacrimal sac infections and causes of epiphora.
6. Classification, clinical features, diagnosis and treatment of various forms of congenital and senile cataract.
7. Classification, clinical features, diagnosis and treatment of various forms of glaucoma.
8. Classification, etiology, clinical features, complications and management of various diseases of uveal tract.



9. Classification, aetiology, clinical features and treatment of various refractive errors and presbyopia.
10. Types of blindness causes and their management .
11. Objectives of National Program for Control of Blindness, Trachoma control Program and vision 2020.
12. Aetiology, Clinical features and treatment of common retinal disorders including retinopathies vascular occlusions, degenerations, inflammation and detachment.
13. Types of ocular trauma, clinical features, complications and management including sympathetic ophthalmia.
14. Aetiology, Clinical features and management of optic nerve disorders including optic atrophy, differentiation of papilloedema and optic neuritis.
15. Aetiology, clinical features and management of orbital diseases common causes of proptosis.
16. Ocular manifestation of systemic diseases including diabetes, hypertension, tuberculosis, leprosy, anemia, AIDS and pregnancy induced hypertension.
17. Ocular side effects of systemic drugs.
18. Aetiology, Clinical features and principles of treatment of vitreous diseases e.g., haemorrhage, degeneration, endophthalmitis.
19. Recent advances in ophthalmology-lasers, intraocular lens implantation.

## **B     SKILLS**

1. Determine visual acuity
2. Test Colour vision
3. Anterior segment examination using torch light and slit lamp biomicroscope
4. Use of direct ophthalmoscope.



5. Determine field of vision by confrontation method
6. Removal of extra ocular foreign body
7. Perform epilation of eyelashes.
8. Incise and drain lid abscess
9. First aid for chemical injuries.

C. **INTEGRATION**

The Under graduate training in ophthalmology will provide an integrated approach towards other disciplines like Neuro-Sciences, Dermatology, Dental, ENT, Obstetrics & Gynaecology, Pediatrics, General Surgery and General Medicine.

**II TEACHING HOURS - 100**

1. Lectures – 64hours,
2. Theory TESTS-3x2=06 hrs
3. Integrated Lectures – 20 hours
4. Demonstration - 4 hours
5. seminars --6 hours

**III TEACHING METHODOLOGY**

- Didactic lectures,
- Seminars,
- Short lectures,
- Case presentations,
- DEMONSTRATION,**
- Theatre live surgical demonstration,
- Attending ward round,
- Minor theatre- foreign body removal, syringing nasolacrimal duct,
- Visual acuity testing.

**IV THEORY SYLLABUS**

1. Anatomy of orbit, eye ball & adnexa.
2. Anatomy of visual pathway, pupillary pathway
3. Physiology of eye.
4. Bio-chemistry of ocular tissues.
5. Lid swellings, blepharitis
6. Ptosis, Lagophthalmos, ectropion, entropion, symblepheron



7. Anatomy of lacrimal drainage system, dacryocystitis and management
8. DD of limbal nodule,
9. Scleral, Episcleral affections
10. Pterygium, pseudo pterygium and its management
11. Etiology, Clinical features and management of Allergic conjunctivitis, ophthalmia neonatorum, and other conjunctivitis.
12. Etiopathogenesis and clinical features, complications and management of Bacterial, fungal, viral and protozoal corneal ulcer,
13. Etiology and types of cataract, preoperative evaluation, different types of cataract surgery and post operative complications
14. Classification, etiopathogenesis, clinical features and management of various glaucomas.
15. Various types of refractive errors and management. Retinoscopy and pinhole, & Colour vision test
16. Differential Diagnosis of Red eye.
17. Clinical features, Management and complications of uveal tract diseases.
18. Causes and types of blindness. National Program for Control of Blindness(NPCB) District Blindness Control Society(DBCS) VISION 2020, Eye Bank, Hospital corneal Retrieval Program (HCRP) – objectives and functions
19. Aetiology, Clinical features and management of optic neuritis, optic atrophy and papilloedema
20. Diabetic retinopathy, Hypertensive retinopathy, retinal detachment, Retinitis pigmentosa, retinopathy of prematurity, retinal vascular occlusion
21. Signs of thyroid ophthalmopathy.
22. Ocular manifestations of systemic disease.
23. Ocular motor nerve palsies
24. Types of ocular injuries, clinical features and management of chemical, blunt injuries, sympathetic ophthalmia
25. Causes of proptosis, clinical features, complications and management of orbital cellulitis
26. White reflex in pupillary area.
27. Watch incision and curettage for chalazion, incision and drainage for lid and lacrimal abscess, removal of corneal foreign body, epilation, enucleation and evisceration
28. Lasers in ophthalmology
29. Ocular anaesthesia.
30. Types of strabismus, cover uncover test, Hirschberg's test
31. Types of amblyopia and management
32. Dry eyes & thyroid ophthalmopathy.



33. Ocular manifestations of rheumatological diseases.
34. Clinical presentation and discussion of ophthalmic cases
35. Medical ethics- Bioethics
  - Benefits & harm,
  - human dignity & human rights

## V PRACTICAL SYLLABUS

### LIDS;

- Ptosis, lagophthalmos, entropion, ectropion.
- Blepharitis, Chalazion, hordeolum internum, hordeolum externum,
- Pterygium, limbal nodule, bitot's spot, subconjunctival hemorrhage
- Chronic dacryocystitis

•

### LENS:

- Cataract
- Lens induced glaucoma

•

### GLAUCOMA

- Primary glaucoma
- Secondary glaucoma

### UVEITIS

### CORNEA

- Corneal opacities, corneal ulcers (purulent & non purulent)
- Anterior staphyloma

SURGICAL INSTRUMENTS, slides, (microbiology, pathology  
Specimens, Drugs used in ophthalmology

INVESTIGATIVE tools (Fluorescein strips, ophthalmoscope etc)

- Visual Field charts, imaging, (CT, MRI, USG)
- Refraction set, pinhole, maddox rod,
- slit lamp examination
- Tonometry
- Colour vision

## VI - REFERENCE LEARNING BOOKS

- Parson's Diseases of the eye
- Kanski's Text Book of ophthalmology
- Kanski's Atlas in ophthalmology



### VII Theory Examination :

1 . Essay	1 x 10 marks	= 10 marks
1. Brief Answeres	5 x 4 Marks	= 20 marks
2. Short Answers	5 x 2 Marks	= 10 marks
		-----
Total		40 Marks

### VIII Practical Examination & sOSCE examinations

LONG CASE : 1 x 15	30 minutes	15 marks
Presentation-5 marks		
Diagnosis & management-5 marks		
Discussion-5 marks		
SHORT CASES: 2 x 5	30 minutes	10 marks
Presentation -5 marks		
Discussion -5 marks		
OSCE/SPOTTERS 5 X 1 (10 minutes)		5 marks
Display for OSCE		
Investigative tools & microbiology, pathology slides , Clinical Scenario		
		-----
Total		30 marks
		-----

Viva	:	10 marks
I.A.	:	20 marks ( Theory 10, Practical 10)

#### SUGGESTED LONG CASES:

- Cataract, Aphakia,Pseudophakia, Lens induced glaucoma

#### SUGGESTED SHORT CASES;



- Corneal opacity, Corneal ulcers, iritis, Pterygium, Bitots spots, Hordeolum Internum & externum, Subconjunctival hemorrhage, blepharitis, ectropion, entropion, trichiasis.

## IX --VIVA

**VIVA** = **10 marks ( 4 x2.5 )**

- Refraction 2.5 marks
- Community ophthalmology 2.5 marks
- Systemic ophthalmology (includes Basic) 2.5 marks
- Instruments & Pharmacology 2.5 marks
- 

## **X INTERNAL ASSESMENT = 20 Marks**

- *Theory (average of minimum 3 tests)* 10 marks
- *Practical*  
( *Practical 5 marks + Log Book 5 marks*

*10 marks*

- *Log Book to be approved by HOD*

## **FORMATIVE ASSESSMENT-WHEN TO SUBMIT –**

-Formative assessment is an ongoing assessment wherein students in groups are allotted to be with a specific tutor/ consultant in the hospital during OPDs, theatre – everyday for about an hour.

-At the end of the each (3) posting, the tutor/consultant does a formative assessment of the students who are posted with him/her.

## **Schedule for Formative assessment**

PERIOD	POSTING DURATION	TESTS
4th Semester	4 Weeks	One theory test
6th Semester	4 Weeks	Two theory tests and two clinical test
9th Semester	2 Weeks	One theory and one clinical test

Subjects wise Tests: (To be held according to clinical postings)

Test 1- Anatomy,physiology, biochemistry,pharmacology & pathology



Test 2-Cataract, glaucoma, cornea

Test 3-Uvea, Retina, Refraction, Neuro ophthalmology, systemic & community ophthalmology

Test 4-Model examination (Complete Syllabus including recent advances).

### **INTERNAL ASSESSMENT TEST-UNIT WISE – submitted as below**

#### **X INTERNAL ASSESSMENT = 20 Marks**

- |      |   |          |
|------|---|----------|
| III. | Theory (average of minimum 3 tests)   | 10 marks |
| IV.  | Practical   | 10 marks |
| V.   | For practicals – the following can be added- Practical assessment is done by end of posting practical exam and OSCEs similar to the university exams. . |          |

MEDICAL ETHICS-RESPECT OF CADAVER needs to be covered during their induction into MBBS before anatomy dissection and classes.

MEDICAL ETHICS needs to be covered when students are introduced to clinics. Separate medical ethics lecture or classers not required separately in ophthalmology.

INTEGRATED TEACHING – needs to be addressed at a higher pan departmental meeting involving the overall UG curriculum in- charge and all the departments. Not possible by one department alone to decide on integrated teaching.

RECORD / LOG BOOK – submitted- log book approved by the HOD has to be submitted at the time of university practical examination. The formatted log book has already been made and available with the academic officer.

CRRI Orientation programme based on the clinical subjects- once again has to be done by the overall UG curriculum – in – charge during overall orientation sessions. Separate session needed for ophthalmology.

- Foreign body removal
- Syringing of nasolacrimal duct
- Observing IOP recording, perimetry recording,
- Other investigative procedures

## **THEORY SYLLABUS**

### **MUST KNOW:**

1. Anatomy of eye and various structures(parts)
2. Anatomy of visual pathway, pupillary pathway



3. Anatomy of lid - lid swellings, blepharitis, ptosis, lagophthalmos, ectropion, entropion, symblepharon
4. Anatomy of lacrimal drainage system - dacryocystitis and management
5. VITAMIN A -Clinical features and WHO classification and management of Vit A deficiency
6. DD of LIMBAL NODULE  
-vernal,phlycten,episcleritis,scleritis,pterygium,pseudopterygium and its management
7. CONJUNCTIVITIS -Etiology, clinical features and management of Allergic conjunctivitis, ophthalmia neonatorum, and other conjunctivitis.
8. CORNEAL ULCER -Etiopathogenesis and clinical features of Bacterial,fungal,viral and protozoal corneal ulcer and its complications and management
9. CATARACT -Etiology and types of cataract, preoperative evaluation, different types of cataract surgery and post operative complications
10. GLAUCOMA -Classsification, etiopathogenesis, clinical features and management of various glaucomas
11. REFRACTIVE ERRORS -Various types of refractive errors and management. Retinoscopy and pinhole test
12. RED EYE -Differential Diagnosis of Red eye. Clinical features, management.
13. UVEITIS –Iridocyclitis, clinical features and management
14. Causes and types of BLINDNESS. National Programme for Control of Blindness(NPCB), District Blindness Control Society(DBCS),VISION 2020,EYE BANK, Hospital Corneal Retrieval Programme(HCRP) - Objectives and Functions
15. Differentiation of optic neuritis, optic atrophy and papilloedema
16. Layers of retina. Diabetic retinopathy, hypertensive retinopathy, retinal detachment, retinitis pigmentosa, retinopathy of prematurity, central retinal vein occlusion(CRVO) and branch retinal retinal vein occlusion(BRVO)
17. Tests for visual acuity, colour vision, recording IOP, direct ophthalmoscopy
18. FIELD TESTING Confrontation method and Bjerrum screen
19. Medical ethics.

### DESIRABLE TO KNOW:



1. Types of ocular injuries. Clinical features and management of chemical injuries, blunt injuries, sympathetic ophthalmia.
2. Causes of Proptosis. Clinical features, complications and management of Orbital cellulitis
3. Ocular manifestations of Tuberculosis, Leprosy, AIDS, Eclampsia, Anemia
4. Antibiotics, antifungal, antiviral, steroids, mydriatics and cycloplegics. Antiglaucoma drugs- dose, mode of action and side effects
5. Incision and curettage for chalazion. Incision and Drainage for lid and lacrimal abscess. Removal of corneal Foreign body, epilation
6. LASERS in ophthalmology

### NICE TO KNOW:

1. Origin, insertion, nerve supply and actions of Extra ocular muscles
2. Types of strabismus, cover uncover test, Hirschberg's test
3. Types of amblyopia and management



# Practical syllabus

Must know;

1. Basic examination of the eyes
2. Visual acuity recording- presence of refractive error or other ocular pathology
3. Detection of conjunctivitis, presence of extra ocular foreign body, cataract, iritis
4. First aid for ocular trauma-in particular chemical injuries
5. Management of conjunctivitis
6. Referring patients requiring ophthalmic opinion to the eye specialists.
7. Counseling for the patients with diabetes mellitus, hypertension, thyroid disorders, pregnancy induced hypertension for a thorough ophthalmic check by the competent ophthalmologists

Desirable to know;

1. To check for presence of glaucoma
2. Neurological disorders requiring ophthal opinion- papilloedema-raised intra cranial pressure
3. Presence of diplopia – ocular motor nerve palsies= to R/O DM, HT, SOL
4. To give a thorough irrigation of eyes with clean water in the presence of chemical injuries
5. To detect corneal pathology & refer the patients to an ophthalmologist.

Nice to know;

1. The presence of intra ocular infections
2. The presence of retinopathies
3. To detect papilloedema
4. To remove conjunctival foreign body ( not corneal foreign body)
5. Refer patients with any suspected ophthalmic diseases to the competent ophthalmologist.



# OPHTHALMOLOGY LOG BOOK

## Contents

SL. NO.	CONTENTS	PAGE NO.
1	Particulars of the student	1
2	Statement on the clinical postings of the students	2
3	Introduction to Ophthalmology	2
4	Didactic lectures in Ophthalmology	3,4
5	Operative procedure lectures in Ophthalmology	5
6	Integrated Lectures in Ophthalmology	6
7	Anterior segment Examinations done	7
8	Posterior segment Examination done	8
9	Refraction done	9
10	Slit lamp , Gonioscopy Indirect ophthalmoscopy, Tonometry procedures observed	10
11	OPD cases discussed	11
12	Ward cases discussed	12
13	OPD, treatment room procedures observed	13
14	Operation theatre procedure observed	14
15	Emergency procedures observed	15
16	Investigative procedures like A scan B scan, FFA & radiology. Procedures in eye bank observed	16
17	Participation in out reach activities –Eye camps & Eye donations	17
18	Instruments seen and discussed	18–19
19	Model of a Case sheet	20–22
20	Seminars & Symposiums attended	23
21	Assesment of the candidate	24



PP photo to be attested

by the

Unit Chief

1.Particulars of the student:

Name:

University Registration No.:

Mobile No.:

Email ID:

Signature of Asst. Professor

Signature of Unit Chief

Name:

Name:

Date:

Date:

BONAFIDE CERTIFICATE

This is to certify that this log book is the Bonafide record of \_\_\_\_\_  
whose particulars along with photo is given above.

Signature of HOD with seal

Name:

Name:

Date:

Date:

Approval of examiners:

Internal

External

1.

1.

2.

2.

-/-/-/-/-/-/-/-/-/-/-/-/-/-/-/-/-



## 2. Statement on the clinical postings of the students

First posting

Second posting

Third posting

## 3. Introduction to Ophthalmology

Topic	Date	Name of the teacher
Introduction to Ophthalmology		
History Taking/Vision recording		
Examination of Lid & Adnexa		
Examination of Anterior Segment		
Examination of Posterior segment		
Investigative procedures		
Management		



#### 4. Didactic lectures in Ophthalmology

	TOPICS	Name of the Teacher
	<p>Anatomy of the Eye</p> <p>Lid</p> <p>Adnexa</p> <p>Conjunctiva</p> <p>Cornea</p> <p>Uveal Tract</p> <p>Pupil and visual pathway</p> <p>Lens -1</p> <p>Lens-2</p> <p>Glaucoma -1</p> <p>Glaucoma -2</p> <p>Medical &amp;Surgical management of Glaucoma</p> <p>Retinal detachment</p> <p>Diabetic retinopathy&amp;Hypertensive Retinopathy</p> <p>Retinal vascular occlusions</p> <p>Retinitis pigmentosa &amp; low visual aids</p> <p>FFA&amp; LASER</p> <p>Proptosis</p> <p>Neuro ophthalmology</p> <p>Vision recording and identifying lenses and contact lenses</p>	



	Refractive errors Pathological Myopia and vitreo retinal degeneration Preventable blindness & NPCB Vitamin A deficiency Injuries to eye and its management Endophthalmitis & panophthalmitis Ocular anaesthesia Imaging in Eye Microbiology specimen & slides Ocular Pathology, Specimen & slides Ocular pharmacology and drug interaction Ocular Physiology + Biochemistry	
--	---	--

==/=/=/=/=/=/=/



## 5. Operative procedure lectures

Date	Operative procedure	Name of the Teacher
	Cataract surgery basics and recent advances including Phacoemulsification	
	Glaucoma surgeries and recent advances	
	Retinal detachment surgery	
	Orbit and oculoplasty	
	Enucleation	

=/=/=/=/=/=/=/=/=/=



## 6.Integrated Lectures

Date	Topic	Name of the Teacher
	Diabetes and Eye	
	Hypertension and eye	
	Neurology and Eye	
	Tropical Diseases- TB,Hansen's etc and eye	
	Connective Tissue disorders and Eye	
	Dermatology and Eye	
	ENT and Eye	
	HIV and Eye	
	Community Ophthalmology	
	Facio maxillary surgery and eye	



7..Anterior segment Examinations done:

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Diagram

SIGNATURE OF THE TEACHER

=/=/=/=/=/=/=/=/=/=/



8. Posterior segment Examinations Direct ophthalmoscopy & done:

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Diagram

SIGNATURE OF THE TEACHER



9. Refraction done

Sl.No	Patient Name	Retinoscopy Value	Type of Refractive Errors



### 10.Slit lamp, Gonioscopy Indirect ophthalmoscopy and others observed

Date	Patient name	Age/Sex	Hospital No.	Diagnosis

SIGNATURE OF THE TEACHER

==/==/==/==/==/==/



11 OPD cases Discussed

Date	Name of patient	Age/Sex	Hospital No.	Diagnosis	Presented to/ Discussed with:
Name of Supervisor: Signature:					
Date:					



## 12.Ward cases Discussed

Date	Name of patient	Age/Sex	Hospital No.	Diagnosis	Presented to/ Discussed with:

Name of Supervisor:

Signature:

Date:

==/==/==/==/==/==/==/



13.OPD/Treatment room procedures observed:

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

=/=/=/=/=/=/=/=/=/



#### 14. Operation Theatre procedures observed

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Surgery/Procedure Observed

SIGNATURE OF THE TEACHER

==/=/=/=/=/=/=/



### 15. Emergency procedures observed

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

SIGNATURE OF THE TEACHER

==//==//==//==//==//==//



16 Investigative procedures like Tonometry, A scan B scan, FFA & Procedures in eye bank observed :

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

SIGNATURE OF THE TEACHER

==/==/==/==/==/==/



**17.: Participation in out reach activities –Eye camps &Eye donations**

Date					

SIGNATURE OF THE TEACHER

==/==/==/==/==/==/



18 Instruments seen and discussed:

S.No.	Name of the Instruments	Uses

SIGNATURE OF THE TEACHER



Instruments seen and discussed: (contd..)

S.No.	Name of the Instruments	Uses

SIGNATURE OF THE TEACHER



## 19. MODEL OF A CASE SHEET

Case No. 1: Date:

Name of Patient:

Age/Sex

Hospital No.

Occupation:

Address:

### **History:**

Presenting Complaints:

History of presenting Complaints:

Past History:

Medical History:

Treatment History:

Surgical History:

Personal and Allergic History:

Family History:

Others:

### **Physical Examination:**

General Examination:



## Examination of Eye

RIGHT EYE

LEFT EYE

VISUAL ACUITY

LIDS

OCULAR MOVEMENTS

CONJUNCTIVA

CORNEA

IRIS

ANTERIOR CHAMBER

PUPILS

LENS

NASOLACRIMAL DUCT

INTRA OCULAR PRESSURE

FUNDUS

Summary:

PROVISIONAL DIAGNOSIS:



INVESTIGATIONS

Management Plan:

Signature of Teacher:

Name of Teacher:

=/=/=/=/=/=/=/=/=/=/=/=/=/=/=



20 Symposiums & Seminars attended

Date	Topic	Presented/Attended	Teacher

Name of Supervisor:

Signature:

Date:



## 21. ASSESSMENT OF THE CANDIDATE

Participation in other Competitive examination(s) or any other academic activities like quiz etc., at colleges / inter colleges level (Optional)	
Participation in research activities, CMEs / Guest Lectures, conferences etc., (Optional)	
Academic awards / achievements received	
REMARKS & SIGNATURE	UNIT CHIEF
	HOD OF DEPARTMENT
	DEAN OF INSTITUTION



ENT



**Goal:**

The broad goal of the teaching of undergraduate students in Otorhinolaryngology is to acquire adequate knowledge and skills for optimally dealing with common disorders and emergencies in ENT and principles of rehabilitation of the impaired hearing.

**A. Knowledge**

At the end of the course, the student will be able to

1. Diagnose and manage the common ENT diseases and emergencies.
2. Adopt the rational use of commonly used drugs keeping in mind their adverse reactions.
3. Suggest common investigations and interpret their results.
4. Should be in a position to identify the cases which require specialist care.
5. To identify deaf individuals at the earliest and refer them for proper rehabilitation.
6. To recognise Pre - Malignant & Malignant lesions of Head & neck region at an early stage.

**B. Skills**

At the end of the course the students should be able to

1. Use Head mirror, Nasal Speculum, tongue depressor, otoscope, Tuning Fork.
2. Aural Toilet (Ear Mopping wet & dry, ear suctioning & syringing)
3. Do Siegalisation
4. Ear wick placement
5. Anterior and Posterior nasal packing for epistaxis
6. Foreign body removal from ear, nose and throat
7. Mastoid dressing
8. Conduct CPR (cardio-pulmonary resuscitation) and First Aid in newborn, children & Adults including Endotracheal Intubation.
9. To be familiar with drainage of intra-oral & neck abscesses.
10. Assist Emergency procedures like Tracheostomy and endoscopies.
11. Assist Diagnostic Nasal endoscopy, Video Laryngoscopy.
12. Interpret Clinical Audiometry and Tympanometry findings.

**C. Integration:**

Theory classes should include integrated teaching.

**Horizontal Teaching:**

General Surgery – General principles of surgical management like wound healing, acid-base balance, blood transfusion & sterilisation.

Neurosurgery – Knowledge of intracranial complications caused by diseases of ENT region. (Meningitis, intracranial abscess, cavernous sinus thrombophlebitis.)



Ophthalmology – Knowledge of orbital complications of Sino-nasal disease.

Sino nasal Neoplasm - pathological basis of sinonasal neoplasms, Radiological investigations. Clinical features and management-2 hours (These lectures will be handled by faculty from Otorhinolaryngology, Radio diagnosis, radiotherapy, surgical & medical oncology)

Laryngeal malignancies: Anatomy of larynx, physiology of phonation and swallowing. Pathology of laryngeal malignancy, Etiology, clinical features and management of laryngeal malignancies-2 hours. (These lectures will be handled by faculty from Otorhinolaryngology, radio diagnosis, radiotherapy, surgical & medical oncology)

### **Vertical Teaching:**

Otology: Anatomy of middle ear, physiology of middle ear. Microbiology of CSOM. CSOM mucosal and squamous type, clinical features and management- 2 hours (These lectures will be handled by faculty from anatomy, Physiology, microbiology and otolaryngology). Otosclerosis: Pathology, clinical features, investigations and management -2 hours (These lectures will be handled by faculty from pathology and otolaryngology)

Rhinology: Anatomy of lateral nasal wall, physiology of nose including Mucociliary clearance mechanism. Microbiology of sinus infections. Acute and chronic rhinosinusitis and its management-2 hours (These lectures will be handled by faculty from anatomy, physiology, microbiology and otolaryngology)

Throat – Chronic Tonsillitis: Anatomy, Microbiology, Pathology, Pharmacology, Anaesthesia and Otorhinolaryngology - 2 hours.

Airway management: Anatomy of upper airway. Physiological basis of oxygen transport including nasobronchial reflexes. Acute airway obstruction and its management. Intubation, Tracheostomy, ventilator support in such conditions and biochemical changes in these patients.-2 hours (These lectures will be handled by faculty from anatomy, physiology, anaesthesia and otolaryngology)

### **Teaching Hours – 70 Hours:**

Lectures- 50 hours.

One lecture on Medical Ethics

Integrated lectures-10 hours. (2 hours each.)

Seminars - 10 hours. (2 Hours each.)

### **Teaching methodology**

Theory Teaching -

Theory classes include integrated teaching.



Vertical integration with involvement of anatomy, physiology, bio-chemistry, microbiology & Pharmacology. Horizontal integration with involvement of Ophthalmology, Neuro-surgery, Radiology, Radiotherapy, General Surgery and Oncology. Didactic lectures, seminars and short lectures.

Practical Teaching-

Demonstrations, treatment room and endoscopic procedures observation, case presentations and discussions, theatre live surgical demonstration, attending ward rounds, Audiometry demonstration and OSCE.

## **Theory Syllabus**

### **I. EAR**

#### **MUST KNOW:**

##### **Basic sciences:**

- 1) Anatomy: external, middle and inner ear. Anatomy of facial nerve.
- 2) Anatomy and physiology of Eustachian tube.
- 3) Anatomy and pneumatisation of temporal bone.
- 4) Physiology of hearing and vestibular function.
- 5) Bacterial flora, specific antibiotic therapy of upper respiratory infection
- 6) Common antibiotics used in ear infections; acute and chronic, topical antibiotics, ototoxic and vestibulotoxic drugs

##### **Clinical conditions:**

- 1) Symptoms of ear disease and referred pain in the ear.
- 2) Examination of the Ear: Tuning fork tests: Rinne, Weber and Absolute bone conduction. Caloric test, Positional test. Instruments for ear examination.
- 3) Eustachian tube function tests
- 4) Deafness: types and causes.
- 5) Diseases of the external ear: Perichondritis; otitis externa; cerumen; foreign body, hematoma auris, Malignant otitis externa, Keratosis Obturans, preauricular sinus, Myringitis granulosa
- 6) Diseases of the middle ear: Acute and Chronic suppurative otitis media (Mucosal and squamosal disease); Otitis media with effusion, Tympanosclerosis, Adhesive otitis media, Tuberculous otitis media.
- 7) Audiometry – Pure tone; Impedance Audiometry- basics, Assessment of hearing in Paediatric patients. (Basics)
- 8) Determination of type and degree of hearing loss by pure tone audiogram.
- 9) Facial nerve-anatomy, functions and clinical evaluation. Bell's palsy
- 10) Congenital hearing loss and delayed speech development.
- 11) Complications of otitis media, intratemporal and intracranial: Mastoiditis (acute and chronic); facial palsy, labyrinthitis; petrositis; lateral sinus thrombosis; otogenic meningitis; otogenic brain abscess,
- 12) Vertigo- how to ask basic history, examination. Meniere's disease symptomatology and management, BPPV, Vestibular neuronitis



- 13) X-ray of mastoid; Laws view in normal and in patients with acute or chronic Mastoiditis
- 14) Pseudocyst Pinna
- 15) Ototoxicity
- 16) Sudden hearing loss
- 17) Non organic hearing loss
- 18) Injuries to ear- traumatic, acoustic trauma and barotrauma
- 19) Presbycusis
- 20) Tinnitus
- 21) Myringotomy and grommet insertion
- 22) Surgery: Cortical and Modified Radical Mastoidectomy, Tympanoplasty/ Myringoplasty – Principles and complications. Instruments used.

#### DESIRABLE TO KNOW:

- 1) Otosclerosis: Diagnosis and management; basics of Stapedectomy
- 2) Vestibular function tests, caloric test, positional test.
- 3) Meniere's disease –detailed evaluation.
- 4) Brainstem Audiometry, Electrocochleography, OAE.
- 5) Tests for recruitment
- 6) Cochlear implants basics.
- 7) Tumours of the Ear, Glomus jugulare and tympanicum and squamous cell carcinoma -Clinical features, diagnosis and management.
- 8) Epidemiology of otitis media and hearing loss in India
- 9) Hearing aids
- 10) Acoustic neuroma
- 11) Deaf mutism
- 12) Middle ear risk index (MERI)

#### NICE TO KNOW:

- 1) Surgery for vertigo
- 2) Surgery for facial palsy
- 3) Surgery for tumours of the ear
- 4) High resolution CT of Temporal bone
- 5) Temporomandibular joint disorders
- 6) Implantable hearing aids including bone anchored hearing aids
- 7) CP angle tumours
- 8) National programme of prevention and control of deafness. NPPCD
- 9) Congenital ear disorders

## **II. NOSE AND PARANASAL SINUSES**

#### MUST KNOW:

##### Basic Sciences:

- 1) Anatomy and physiology of the nose and paranasal sinuses including olfaction. Nasal cycle and nasal resistance



- 2) Viruses and bacteria causing acute and chronic rhinitis and sinusitis
- 3) Antibiotics used in acute and chronic sinusitis, nasal furunculosis
- 4) Mechanism of sinonasal allergy (basics)
- 5) Mucociliary clearance mechanism

#### Clinical Conditions:

- 1) Symptoms of nasal diseases; causes of nasal obstruction, and nasal discharge
- 2) Methods of examination of the nose and paranasal sinuses. Instruments used.
- 3) Diseases of the nasal septum: deviation of nasal septum and principles of Management
- 4) Types of Septal surgery- basics and instruments used
- 5) Diagnosis and management of nasal bone fracture
- 6) Epistaxis; anterior and posterior, common causes and emergency management
- 7) Foreign bodies in nose including Rhinolith.
- 8) CSF Rhinorrhoea: diagnosis and causes
- 9) Nasal allergy – Diagnosis, evaluation and management, Vasomotor rhinitis
- 10) Nasal Polyposis; types and management.
- 11) Inflammation of the nose: Furunculosis of vestibule of the nose, acute rhinitis.
- 12) Inflammatory diseases of paranasal sinuses: acute and chronic maxillary sinusitis, frontal sinusitis, Ethmoidal sinusitis and complications of sinusitis.
- 13) Atrophic rhinitis,
- 14) Types of fungal sinusitis- invasive and non-invasive; Rhino cerebral Mucormycosis- clinical features, diagnosis and management ( Broad outline)
- 15) Nasal Septum Perforations, Septal haematoma and Septal Abscess.
- 16) Juvenile Nasopharyngeal Angiofibroma clinical features, diagnosis and management
- 17) Granulomatous diseases of the nose, Rhinoscleroma, Rhinosporidiosis
- 18) Rhinitis Medicamentosa
- 19) X-ray of paranasal sinuses and its indications
- 20) Rigid nasal endoscopy; basic steps and indications
- 21) Endoscopic sinus surgery(FESS): indications and basic steps and complications
- 22) Outline of management of benign tumors of nose and paranasal sinuses – Inverted Papilloma & Osteoma
- 23) Outline of management of Malignant tumors of nose and paranasal sinuses – Squamous cell carcinoma.
- 24) Nasal Myiasis
- 25) Caldwell Luc surgery

#### DESIRABLE TO KNOW:

- 1) Maxillectomy: indications and brief steps
- 2) Maxillofacial trauma types and management, blow out fracture
- 3) CT scan of paranasal sinuses basics
- 4) Tests for nasal allergy
- 5) Choanal Atresia
- 6) Mucocele of paranasal sinuses
- 7) Craniopharyngioma
- 8) Proptosis

#### NICE TO KNOW:



- 1) Rhinomanometry
- 2) Balloon sinuplasty
- 3) Navigation techniques
- 4) Endoscopic skull base surgeries (hypophysectomy, orbital decompression and optic nerve decompression)
- 5) Microdebrider uses
- 6) Endoscopic DCR
- 7) Septorhinoplasty

### **III. PHARYNX**

#### **MUST KNOW:**

##### **Basic Sciences:**

- 1) Anatomy and physiology of the Oropharynx, Nasopharynx and Laryngopharynx
- 2) Commensals of the oral cavity and Oropharynx, Organisms causing acute and chronic tonsillitis.
- 3) Antibiotics used in acute and chronic tonsillitis

##### **Clinical Conditions:**

- 1) Symptoms of diseases of Nasopharynx, Oropharynx and Laryngopharynx  
Methods of examination – Nasopharynx Oropharynx and Laryngopharynx.  
Instruments used.
- 2) Diseases of the pharynx: adenoids including x rays; acute and chronic pharyngitis; Diphtheric pharyngitis;
- 3) Acute follicular tonsillitis and differential diagnosis of membranous tonsillitis: chronic tonsillitis; tonsillectomy and adenoidectomy – indication; Peritonsillar abscess. Including instruments
- 4) Dysphagia including acid ingestion emergency management.
- 5) Ludwig's angina; causes, presentation and management
- 6) Premalignant lesions of the oral cavity and differential diagnosis of white patch over tonsil, Oral Candidiasis.
- 7) Acute and Chronic Retropharyngeal abscess
- 8) Plummer Vinson's syndrome
- 9) Laryngopharyngeal reflux
- 10) Snoring and obstructive sleep apnoea: basics
- 11) Stertor
- 12) Foreign body oesophagus
- 13) Dysphagia
- 14) Tongue tie
- 15) Nasopharyngeal carcinoma
- 16) Pharyngeal pouch

#### **DESIRABLE TO KNOW:**

- 1) Broad outline of management of malignant tumors of Oropharynx.



- 2) Submandibular gland sialolithiasis
- 3) 1st and 2nd branchial arch anomalies
- 4) Eagle's syndrome
- 5) Lingual thyroid
- 6) Post Cricoid malignancy
- 7) Pan- endoscopy including laryngoscopy, bronchoscopy, oesophagoscopy
- 8) Polysomnography and UVPP
- 9) Corrosive Stricture – Oesophagus.
- 10) Achalasia Cardia

NICE TO KNOW:

- 1) Oesophageal Diverticulum.
- 2) Drooling
- 3) Robotic surgeries,
- 4) Thyroid gland diseases
- 5) Salivary gland diseases
- 6) Functional evaluation of swallowing disorders
- 7) Parapharyngeal tumours

**IV. LARYNX**

MUST KNOW:

Basic sciences:

- 1) Anatomy and physiology of the larynx.
- 2) Organisms causing acute laryngotracheal bronchitis.

Clinical Conditions:

- 1) Symptoms of diseases of the larynx
- 2) Methods of examination of the larynx. Instruments used
- 3) Hoarseness of voice
- 4) Etiology and Management of Stridor in Children and Adults.
- 5) Paralysis of Vocal cords including bilateral abductor palsy.
- 6) Laryngocele
- 7) Puberphonia and functional aphonia
- 8) Inflammatory lesions of the larynx. eg: acute laryngitis, acute Epiglottitis
- 9) Vocal cord nodules, contact ulcer and polyps and Reinke's edema
- 10) Benign tumors of larynx (including Papilloma Larynx.)
- 11) Premalignant lesions of the Larynx.
- 12) Malignant tumors of larynx: etiology, clinical presentation, classification and broad management.
- 13) FB larynx, trachea and bronchus presentation and management.
- 14) Tracheostomy: Indications, techniques and complications. Types of Tracheostomy tubes.
- 15) Gastroesophageal reflux disease
- 16) X ray neck; views and indications
- 17) Flexible laryngoscopy; basic steps and indications.
- 18) Laryngomalacia



- 19) Microlaryngoscopy and surgery and direct laryngoscopy: Indications and basic steps.  
Including instruments.

**DESIRABLE TO KNOW:**

- 1) Tuberculosis of the larynx.
- 2) Basic speech disorders including stuttering
- 3) Cricothyrotomy
- 4) Subglottic stenosis, tracheal stenosis
- 5) Percutaneous dilatation Tracheostomy
- 6) Laser
- 7) Stuttering and stammering

**NICE TO KNOW:**

- 1) Laryngocele
- 2) Total laryngectomy; indications and steps
- 3) Post laryngectomy rehabilitation
- 4) Phonosurgery
- 5) Thyroplasty
- 6) Co- ablation, cryosurgery
- 7) Stroboscopy.

**IV. HEAD AND NECK**

**MUST KNOW:**

**Basic Sciences:**

Broad anatomy of neck nodes, levels or groups

**Clinical Conditions:**

- 1) TB of neck nodes: diagnosis and management.
- 2) Secondaries in the neck: common sites of primary, diagnosis and broad management.
- 3) Neck Space infections - causes and management.

**DESIRABLE TO KNOW:**

- 1) Thyroglossal cyst, Sistrunk's operation
- 2) Neck dissection: basic types and indications

**NICE TO KNOW:**

- 1) Neck trauma

**Practical syllabus**

Includes attending out-patient department, observing the treatment protocol followed in the OPD by the consultants, Proper history taking & clinical examination of



patients and case presentation to the teaching faculty. They should maintain log book regarding the theory, clinical, ward and OT activities.

Must Know:

1. Use of head mirror.
2. Anterior Rhinoscopy.
3. Nasal airway patency tests.
4. Paranasal sinuses examination.
5. Use of tongue depressor and throat examination.
6. Neck node examination.
7. Use of Otoscope, Siegalisation.
8. Aural toileting.
9. Eliciting Mastoid tenderness.
10. Tuning Fork tests (Rinne, Weber & ABC).
11. Fistula Test.
12. Clinical examination of the Facial Nerve.

Desirable to Know:

1. Post – nasal Examination.
2. Indirect Laryngoscopy.
3. Cranial Nerves Examination.
4. Bi-digital Palpation for Sub-mandibular Salivary gland.
5. Laryngeal Crepitus.

Nice to Know:

1. Vestibular Function Tests (Romberg, Tandem Walking)
2. Eustachian Tube Tests. (Valsalva)

Each student should present minimum 3 cases (Ear, Nose & Throat) in the clinical postings.

Long case:

1. Chronic suppurative otitis media mucosal disease
2. Chronic adenotonsillitis
3. Deviated nasal septum with sinusitis
4. Nasal polypi

Short cases:

1. Bilateral Ethmoidal polypi
2. Antrochoanal polyp
3. Atrophic rhinitis
4. Rhinosporidiosis
5. Facial palsy
6. Thyroglossal cyst



7. Tongue tie
8. Preauricular sinus
9. Deviated nasal septum

Observation in OPD:

1. Foreign Body removal in Ear, nose & throat.
2. Diagnostic Nasal Endoscopy.
3. Videolaryngoscopy.
4. Anterior nasal packing.
5. Cautery for Epistaxis.
6. Caloric Tests.
7. Positional Tests and Epley's manoeuvre.
8. Pure tone Audiogram and Tympanometry and OtoAcoustic Emissions.

Observation in the Ward:

1. Ward rounds and case discussion.
2. Tracheostomy care.
3. Mastoid dressing.
4. Post- laryngectomy rehabilitation.
5. Nasal Douching.

Observation in the OT:

Observe the following surgeries.

Must Observe:

1. Adenoidectomy and tonsillectomy.
2. Septal Correction. (SMR & Septoplasty.)
3. Myringotomy and Grommet insertion.
4. Myringoplasty.
5. Cortical Mastoidectomy and Tympanoplasty.
6. Endoscopic Nasal Polypectomy.
7. Functional Endoscopic Sinus Surgery.
8. Tongue tie release.
9. Tracheostomy.

Desirable to observe:

1. Modified Radical Mastoidectomy and Tympanoplasty.
2. Stapedectomy.
3. Micro-laryngeal Surgeries.
4. Pre-auricular sinus excision.
5. Thyroglossal cyst excision – Sistrunk Procedure.
6. Young 's operation.

Nice to observe:



1. Thyroidectomy.
2. Total Laryngectomy.
3. Total Maxillectomy.

### **Reference learning resources**

1. Diseases of ear, nose and throat-Dhingra current edition
2. Short practice of Otolaryngology-Prof. KK Ramalingam
3. Logan Turner-Otolaryngology
4. Diseases of ear, nose throat- Mohan Bansal
5. Textbook of ear nose and throat –SS Tuli
6. Textbook of ear, nose and throat and head and neck surgery- Hazarika
7. Scott Brown Otolaryngology, 7th edition

### **Theory examination**

1. Essay	1 x 10 marks = 10 marks
2. Brief Answers	5 x 4 marks = 20 marks
3. Short Notes	5 x 2 marks = 10 marks
<b>Total marks =</b>	<b>40 marks</b>

### **Practical Examination**

Long case: 1	30 minutes	15 marks
Short case: 2	30 minutes	10 marks

OSCE: 5 stations one mark each      5 marks (3 minutes per station : total 15 minutes.)

<b>Total</b>	<b>30 marks</b>
--------------	-----------------

Viva : 10 marks (Radiology, Instruments, Specimen, Operative surgery)  
 Internal Assessment : 20 marks (Theory 10, Practical 5 + Log Book 5)

### **VIVA:**

1. Radiology including X-ray and CT images, contrast radiology on various ENT disorders.
2. Common instruments used in otolaryngology:

OPD instruments  
 Tonsillectomy and adenoidectomy instruments  
 Mastoidectomy instruments  
 Tracheostomy instruments  
 Septal surgery instruments  
 FESS instruments  
 Rigid Bronchoscope  
 Rigid Oesophagoscope



### Direct laryngoscope

3. Specimens: Laryngectomy specimen, Maxillectomy specimen & Thyroidectomy specimen.
4. Operative Surgery: Common ENT Surgeries.

### **OSCE:**

Observer station (ENT Clinical Examination, Tuning Fork Tests, Neck Swelling etc...), Recent advances, Investigation chart (Audiograms), Osteology, Microbiology & Pathology slides

1. Microbiology slides (streptococci, staphylococci, pneumococci, mycobacterium tuberculi)
2. Pathology slides: Inverted papilloma, squamous cell carcinoma, rhinosporidiosis, Juvenile nasopharyngeal angiofibroma
3. Osteology: Temporal bone, Base of Skull.

### **FORMATIVE ASSESSMENT**

Should be submitted at the end of the posting.

<b>Clinical posting</b>	<b>Written test</b>	<b>Practical Test</b>
Fourth Semester	Two: 1. Surgical Anatomy of ear nose & throat. 2. Basic ENT clinical examination.	One: Case Presentation
Sixth Semester	Three: Common Diseases and Their Management in: 1. Nose 2. Throat 3. Ear.	One: include Presentation of 1 Long case & 2 Short cases + OSCE.

Theory: (Pre-final Postings)

Unit –I: Diseases of the Nose & Paranasal Sinuses and their management.

Unit – II: Diseases of the Throat & Neck and their management.

Unit – III: Diseases of the Ear and their management.

Unit - IV: Model Theory Examination of entire syllabus including recent advances.

### **INTERNAL ASSESSMENT TEST**

Practical examination should be held at the end of the final posting. 1 long case and 2 short cases including OSCE.

Theory exam (Unit IV) should be based on integrated lectures and short lectures and held at the end of the teaching schedule.

OSCE and viva should be held at the end of each clinical posting

### **MEDICAL ETHICS**



The formal medical ethics class should be attended by all MBBS students as per general curriculum. The introductory class in ENT should address medical ethics and code of conduct in the classrooms and clinics.

### **INTEGRATED TEACHING**

As per “C”

### **RECORD / LOG BOOK**

This should be followed as recommended by the University. This will ensure uniformity among various colleges and hence better to standardise.

### **CRRI Orientation**

Common CRRI orientation programme at the beginning of the CRRI posting where ENT is specifically addressed to 1. Examine and diagnose common ENT problems 2. To assist and carry out minor surgical procedures like ear syringing, dressing, nasal packing etc, 3. To assist emergency ENT surgeries such as Tracheostomy, endoscopies and removal of foreign bodies.



# ENT LOG BOOK

## Contents

SL. NO.	CONTENTS	PAGE NO.	No. Achieved
1	Particulars of the student	1	
2	Statement on the clinical postings of the students	2	
3	Introduction to ENT	3	
4	Integrated Lectures ENT posting	4	
5	Short lectures during 1st ENT posting	5-6	
6	Operative procedure lectures during 1st ENT posting	7-8	
7	OPD cases worked up 1st ENT posting	9-10	
8	Anterior Rhinoscopic Examinations done	11-12	
9	Oral Examinations done	12-13	
10	Rigid nasal endoscopy procedures observed	14	
11	OPD cases worked up 1st ENT posting	15-17	
12	Ward cases worked up 1st ENT posting	18	
13	OPD/Treatment room procedures observed	19	
14	Operation Theatre procedures observed	20-221	
15	Emergency procedures observed	22	
16	Audiology Lab procedures observed	23	
17	Radiological images seen and discussed	24-25	
18	ENT Instruments seen and discussed	26-27	
19	Case history	28-39	
20	Seminars	40	
21	Participation in other Competitive examination(s) or any	41	



	<b>other academic activities like quiz etc., at colleges / inter colleges level (Optional)</b>		
<b>22</b>	<b>Participation in research activities, CMEs / Guest Lectures, conferences etc., (Optional)</b>		
<b>23</b>	<b>Academic awards / achievements received</b>		
<b>24</b>	<b>Participation in out reach activities</b>		
<b>25</b>	<b>Details of leave taken</b>		
<b>26</b>	<b>Any other as desired and approved by the unit chief/ Prof. and Head or Dean/University</b>		



## **1.Particulars of the student:**

Name:

University Registration No.:

Mobile No.:

Email ID:

Photo attested by Unit Chief with seal.

Particulars of Mentor/ Faculty in-charge

Name:

Designation:

Mobile No.:

Email ID:

### **Statement for Total Number of Pages in this Log Book**

This log book carries \_\_\_\_\_pages and the pages are serially numbered

Signature of Asst. Professor

Signature of Unit Head

Name:

Name:

Date:

Date:



## BONAFIDE CERTIFICATE

This is to certify that this log book is the Bonafide record of \_\_\_\_\_  
whose particulars along with photo is given above.

Signature of HOU with seal

Signature of HOD with seal

Name:

Name:

Date:

Date:

Approval of examiners:

Internal

External

1.

1.

2.

2.

-/-/-/-/-/-/-/-/-/-/-/-

**2. Statement on the clinical postings of the students**



### 3.Introduction to ENT

Category	Date	Name of the teacher
Introduction to ENT		
History Taking		
Examination of Ear		
Examination of Nose		
Examination of Throat		

### 4.Integrated Lectures

Date	Topic	Teacher



### 5.Short lectures during 1st ENT posting


### Short lectures during IInd ENT posting

Date	Short lecture topics	Teacher




==/=/=/=/=/=/



6.Operative procedure lectures during 1st ENT posting

Date	Operative procedure	Teacher

==/==/==/==/==/==/==/==/==/



### 7. OPD cases worked up 1st ENT posting

Date	Name of patient	Age/Sex	Hospital No.	Diagnosis	Presented to/ Discussed with:

Name of Supervisor:

Signature:

Date:

---



---



### 8. Anterior Rhinoscopic Examinations done:

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Diagram

==/==/==/==/==/==/==/



9. Oral Examinations done:

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Diagram

=/=/=/=/=/=/=/=/



### 9. Otological Examinations done:

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Diagram

=/=/=/=/=/=/=/=/



### 10. Rigid nasal endoscopy / video laryngoscopy procedures observed

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Signature of Teacher

=/=/=/=/=/=/



## 11. OPD cases worked up IInd ENT posting

Date	Name of patient	Age/Sex	Hospital No.	Diagnosis	Presented to/ Discussed with:

Name of Supervisor: \_\_\_\_\_ Signature: \_\_\_\_\_

Date: \_\_\_\_\_

=/=/=/=/=/=/=/=/=/=/=/



**12. Ward cases worked up IInd ENT posting**

Date	Name of patient	Age/Sex	Hospital No.	Diagnosis	Presented to/ Discussed with:
Name of Supervisor: _____ Signature: _____					
Date: _____					

==/==/==/==/==/==/

**13. OPD/Treatment room procedures observed:**



Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

==/==/==/==/==/==/

14. Operation Theatre procedures observed



Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

==/=/=/=/=/=/=/



### 15. Emergency procedures observed

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

==/=/=/=/=/=/=/



**16. Audiology Lab procedures observed:**

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Procedure Observed

==/=/=/=/=/=/=/



**17. Radiological images seen and discussed:**

Date	Patient name	Age/Sex	Hospital No.	Diagnosis	Radiological Image seen

==/=/=/=/=/=/=/



**18. ENT Instruments seen and discussed:**

Date	Instrument name	Uses	Signature of Teacher

=/=/=/=/=/

**19.CASE HISTORY**



Case No. :

Date:

Name of Patient:

Age/Sex

Hospital No.

Occupation:

Address:

**History:**

Presenting Complaints:

History of presenting Complaints:

Past History:



Medical History:

Treatment History:

Surgical History:

Personal and Allergic History:

Family History:

Others:

**Physical Examination:**



General Examination:

Examination of Ears:

Examination of Nose:

Examination of Oral cavity:

Examination of Neck:



**Summary:**

**Diagnosis:**

**Management Plan:**

**Signature of Teacher:**

**Name of Teacher:**

=/=/=/=/=/=/=/=/=/=/=/=/=



## CASE HISTORY

Case No. :

Date:

Name of Patient:

Age/Sex

Hospital No.

Occupation:

Address:

### **History:**

Presenting Complaints:

History of presenting Complaints:

Past History:



Medical History:

Treatment History:

Surgical History:

Personal and Allergic History:

Family History:

Others:



**Physical Examination:**

General Examination:

Examination of Ears:

Examination of Nose:

Examination of Oral cavity:

Examination of Neck:



**Summary:**

**Diagnosis:**

**Management Plan:**

**Signature of Teacher:**

**Name of Teacher:**

=/=/=/=/=/=/=/=/=/=



## CASE HISTORY

Case No. :

Date:

Name of Patient:

Age/Sex

Hospital No.

Occupation:

Address:

### **History:**

Presenting Complaints:

History of presenting Complaints:

Past History:



Medical History:

Treatment History:

Surgical History:

Personal and Allergic History:

Family History:

Others:



**Physical Examination:**

General Examination:

Examination of Ears:

Examination of Nose:

Examination of Oral cavity:

Examination of Neck:



**Summary:**

**Diagnosis:**

**Management Plan:**

**Signature of Teacher:**

**Name of Teacher:**

=/=/=/=/=/=/=/=/



## 20. Seminars in ENT

Date	Topic	Presented/Attended	Teacher

**Name of Supervisor:**

**Signature:**

**Date:**



## **OTHERS**

21.	<b>Participation in other Competitive examination(s) or any other academic activities like quiz etc., at colleges / inter colleges level (Optional)</b>	
22.	<b>Participation in research activities, CMEs / Guest Lectures, conferences etc., (Optional)</b>	
23.	<b>Academic awards / achievements received</b>	
24.	<b>Participation in out reach activities</b>	
25.	<b>Details of leave taken</b>	
26.	<b>Any other as desired and approved by the unit chief/ Prof. and Head or Dean/University</b>	



# COMMUNITY MEDICINE



## **GOAL**

The broad goal of teaching in Community Medicine is to prepare the student to function effectively as a community physician and an efficient public health leader.

## **OBJECTIVES**

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

1. Understand the concepts of health and disease describe the levels of prevention and modes of intervention.
2. Describe the epidemiological methods and apply appropriate epidemiological methods to study and manage communicable and non-communicable diseases in the hospital and community situations.
3. Define vital statistics and describe the various methods that are used to collect data, apply bio-statistical methods and techniques to make inferences and describe the health information systems.
4. Outline the demographic pattern of the country and appreciate the roles of the individual, family, community and socio-cultural milieu in health and disease.
5. Diagnose and manage maternal and child health problems and advise couples and the community on the family planning methods available.
6. Describe the methods of nutritional assessment to diagnose and manage common nutritional problems at the individual and community levels.



7. Enunciate the principles and elements of primary health care, describe the organization and functions of the health care team at Primary Health Centre, Community Health Centre and District levels.
8. Describe and evaluate the various National Health Programmes with particular emphasis on maternal and child health programmes, family welfare and population control, communicable and non communicable disease prevention and its implementation in the community.
9. Describe the importance of water and sanitation in human health; identify and investigate the environmental and occupational hazards, disaster, disease outbreak and apply management techniques for their control.
10. Describe the principles and practice of health education and to apply appropriate communication skills to bring about behavioural change in the community.
11. Capacity to plan and implement the measures for disaster.



## **TEACHING HOURS**

### **I MBBS**

- (i) Theory, Seminars, Practicals - 30 Hours (2 hours /week for 1<sup>st</sup> 15 weeks)
- (ii) Visits to Institutions of Health\* - 30 Hours (Field Visit – 6 hrs /day /month in 5 months)

### **II MBBS**

- i. Theory – 56 hours (1 hour/week)
- ii. Practicals\* – 144 hours (in two Block postings(each for 72 hours in 4 weeks in 3<sup>rd</sup> and 4<sup>th</sup> semester)

### **Final MBBS Part 1**

- i. Theory -50 hours
- ii. Practicals \* – 72 hours(Block Posting for 4 weeks in the 6<sup>th</sup> semester)

\* Includes Block Postings, Field Visits, Demonstrations, Family Care Study, School Health and Problem Solving Exercises



## **TEACHING SYLLABUS**



TOPIC	MUST KNOW	DESIRABLE TO KNOW	NICE TO KNOW
<b>CONCEPT OF HEALTH AND DISEASE</b>	<ul style="list-style-type: none"> <li>• Definition of health.</li> <li>• Concept of wellbeing.</li> <li>• Dimensions and determinants of wellbeing.</li> <li>• Indicators of health.</li> <li>• Spectrum of health.</li> <li>• Levels of Health care.</li> <li>• Concepts of causation, prevention and control of diseases.</li> <li>• Natural history of diseases.</li> <li>• Modes of Intervention.</li> </ul>	<ol style="list-style-type: none"> <li>1. Changing pattern of disease.</li> <li>2. Disease classification. Changing concepts of health.</li> <li>3. Hospital and community.</li> <li>4. Health service philosophies.</li> </ol>	<ol style="list-style-type: none"> <li>1. Ecology of health.</li> <li>2. Right to health.</li> <li>3. Responsibility for health.</li> <li>4. Population medicine.</li> </ol>
<b>PRINCIPLES OF EPIDEMIOLOGY</b>	<ol style="list-style-type: none"> <li>1. Definition, Aims, uses and Basic measurements in Epidemiology. International death certification.</li> <li>2. Incidence and Prevalence of diseases.</li> <li>3. Epidemiological methods.</li> <li>4. Association and causation.</li> <li>5. Infectious disease epidemiology.</li> <li>6. Diseases prevention and control.</li> <li>7. Investigating an epidemic.</li> <li>8. Immunization concept and schedule. Cold chain and vaccine vial monitor.</li> <li>9. Adverse events following immunization and investigating it.</li> </ol>	<ol style="list-style-type: none"> <li>1. Additional criteria for judging causality. Empiriatrics.</li> <li>2. Immunizing agents.</li> <li>3. Disinfection.</li> </ol>	<ol style="list-style-type: none"> <li>1. Standardization of rates</li> </ol>
<b>SCREENING FOR DISEASE</b>	<ol style="list-style-type: none"> <li>1. Concept, Aims, uses, types and criteria for screening,</li> <li>2. validity of Screening tests.</li> </ol>	<ol style="list-style-type: none"> <li>1. Combined tests.</li> </ol>	<ol style="list-style-type: none"> <li>1. Problem of borderline.</li> <li>2. Evaluation of screening programmes.</li> </ol>
<b>EPIDEMIOLOGY OF</b>	Epidemiology, clinical features prevention, control and treatment of :	<ol style="list-style-type: none"> <li>1. Communicable diseases. (SARS, meningococcal</li> </ol>	<ol style="list-style-type: none"> <li>1. Communicable diseases</li> </ol>







## TEACHING LEARNING METHODS TO BE ADOPTED IN COMMUNITY MEDICINE

1. Lecture – 64hours
2. Seminar-30hours
3. Symposium-30hours
4. Group discussion-20 hours
5. Guest lectures-20 hours
6. Project work -30hours
7. Problem based learning -20hours
8. Demonstration -40hours
9. Field visits -90 hours
10. Integrated teaching classes with Medicine, OG, Pediatrics, Dermato-Venereology,

Microbiology – 40hours

### PHASE 1 : I<sup>st</sup> MBBS

Objectives	Content (topics)	Method of teaching & Duration	
		Theory	Practical
a) KNOWLEDGE The student shall be able to :			
1. Introduction to the evolution of Community Medicine ,Health Definition and factors affecting it	<ul style="list-style-type: none"> <li>• History of Medicine and evolution of Community Medicine</li> <li>• History of public Health in India</li> <li>• Changing concepts in Public Health</li> <li>• Definition of health.</li> <li>• Concept of wellbeing.</li> <li>• Dimensions and determinants of wellbeing.</li> </ul>	Lectures/seminar/ group discussion  5 hours	



	<ul style="list-style-type: none"> <li>• Indicators of health.</li> <li>• Spectrum of health.</li> </ul>		
2. Describe the health care delivery system	<ul style="list-style-type: none"> <li>• Primary health care-</li> <li>• Levels of health care-</li> <li>• Health care delivery system</li> </ul>	Lectures /Seminars/ Group Discussion 3 hours	Visit to PHC/Subcentre 6hours
3. The demographic pattern of the country and the roles of the individual, family, community and socio-cultural milieu in health and disease.	Demographic cycle and demographic gap, demographic trends - sex ratio -Role of family in health and disease -Cultural factors in health and disease -Socioeconomic status scales -Fertility and factors affecting it -Family welfare and population control	Lectures /Seminars/Group Discussion  4 hours	
4. Social factors related to health, disease and disability in the context of urban and rural societies;	Principles of sociology Social and cultural factors in health, disease and disability	Lectures/seminar/gr oup discussion  4 hours	Community visit  4 hours
5. Appreciate the impact of urbanization on health and disease;	Impact of urbanization on health and disease	Lectures/seminar/gr oup discussion 2 hours	Visit to UHC  4 hours
6. Observe and interpret the dynamics of community behavior;			Community visit 4 hours
7. Describe the elements of normal psychology and social psychology;	1. Elements of normal psychology and social psychology 2. Group behavior, Motivation personality 3. Learning and types 4. Personality and development Intelligence and mental age.	Lectures/seminar/gr oup discussion  4 hours	
8. The principles of practice of medicine in hospital and community Setting including Medical ethics	Hospital sociology Art of interviewing Doctor patient relationship Ethics in medical practice	Lectures/seminar/gr oup discussion  2 hours	Visit to community and hospital  4 hours



9. Health education	5. Communication process. Types of communication. 6. Barriers of communication. 7. Health education- Approach, models, contents, principles of health education. 8. Various methods of health education.	Lectures/seminar/ group discussion 2 hours	Visit to PHC/ Sub centre/ Community  4 hours
10. Nutrition and health	8. Nutrients - Classification, dietary sources, requirements 9. Various form of deficiency of nutrients 10. Diet planning and Recommended dietary allowances 11. Balanced diet 12. Nutritional problems in India 13. Assessment of nutritional status 14. Toxins in the food	Lectures/seminar/ group discussion  3 hours	Visit to PHC/ Sub centre/ Community  4 hours
11. Health economics	Introduction to Health economics	Lecture 1 hour	

### B). Skills

At the end of the course, the student should be able to make use of:

1. Principles of practice of medicine in hospital and community settings and familiarization with elementary nursing practices.			Visit to community and hospital
2. Art of communication with patients including history taking and Medico-social work			Interaction with patients in hospital and community
<b>INTERGRATION</b>	Topics	Departments	
1. Describe the elements of normal psychology and social psychology;	1. Elements of normal psychology and social psychology	Community Medicine, Psychiatry	



	2. Learning and types 3. Personality and development 4. Intelligence and mental age.		
2. Hospital organization	1. Administrative structure of the hospital 2. Functioning of the hospital 3. Job responsibilities of Health personnel	Community Medicine, Resident Medical officer, Nursing Superintendent	

**PHASE II : IInd MBBS (3<sup>rd</sup> and 4<sup>th</sup> semester)**

Objectives	Content (topics)	Method of teaching	
		Theory	Practical
1. CONCEPT OF HEALTH AND DISEASE	<ul style="list-style-type: none"> <li>• Concepts of causation, prevention and control of diseases.</li> <li>• Natural history of diseases.</li> <li>• Epidemiological triad</li> <li>• Dynamics of Disease transmission</li> <li>• Modes of Intervention. Changing pattern of disease.</li> <li>• Disease classification.</li> <li>• Changing concepts of health.</li> </ul>	Lectures/seminar/group discussion  3 hours	
2. EPIDEMIOLOGY AND ITS PRINCIPLES	<ul style="list-style-type: none"> <li>• Definition, Aims, uses and Basic measurements in Epidemiology. International death certification.</li> <li>• Incidence and Prevalence of diseases.</li> <li>• Epidemiological methods.</li> <li>• Association and causation. Additional criteria for judging causality.</li> <li>• Immunizing agents.</li> <li>• Disinfection</li> </ul>	Lectures/seminar/group discussion  10 hours	Solving various models of exercises/ writing the protocol research methods  15 hours



	<ul style="list-style-type: none"> <li>• Infectious disease epidemiology.</li> <li>• Diseases prevention and control.</li> <li>• Investigating an epidemic.</li> <li>• Immunization concept and schedule.</li> <li>• Cold chain and vaccine vial monitor.</li> <li>• Adverse events following immunization and investigating it.</li> <li>• Emporiatics</li> </ul>		<p>Visit to CSSD</p> <p>2 hours</p>
3. SCREENING FOR DISEASE	<p>3. Concept, aim, uses, types and criteria for screening,</p> <p>4. Validity of Screening tests.</p>	<p>Lectures/seminar/group discussion</p> <p>2 hours</p>	<p>Solving exercises</p> <p>3 hours</p>
4. ENVIRONMENTAL HEALTH	<p>3. Water- sources, requirements, purification, disinfection,</p> <p>4. Water pollution and water related diseases.</p> <p>5. Quality- criteria and standards, surveillance and distribution.</p> <p>6. Hardness of water and its removal</p> <p>7. Swimming pool sanitation</p> <p>8. Air-Comfort. Sources, effects, prevention of air pollution.</p> <p>9. Monitoring of air pollution</p> <p>10. Requirements of good lighting, biologic effects of light.</p> <p>11. Noise – community noise level,</p> <p>12. Effects of noise exposure and its control</p> <p>13. Heat stress indices.</p> <p>14. Effects of heat and cold stress.</p> <p>15. Effects of Radiation on human health</p> <p>16. Social goals of housing.</p> <p>17. Housing standards-</p> <p>18. Rural and urban standards and overcrowding.</p> <p>19. Methods of solid waste disposal</p> <p>20. Methods of sewage disposal</p>	<p>Lectures/seminar/group discussion</p> <p>12hours</p>	<p>Visit to</p> <ul style="list-style-type: none"> <li>• Water treatment plant</li> <li>• Milk Dairy</li> <li>• Sewage and solid waste</li> <li>• Water analysis lab</li> <li>• Food analysis lab</li> <li>• Metereriological department</li> <li>• Community</li> </ul> <p>Team activities</p> <p>24 hours</p>



5.MEDICAL ENTOMOLOGY	<ul style="list-style-type: none"> <li>Entomology – public health importance and control of :</li> <li>Mosquitoes</li> <li>House flies</li> <li>Lice</li> <li>Fleas</li> <li>Itch mite</li> <li>Ticks and mites</li> <li>Principles of arthropod control</li> <li>Integrated vector control</li> <li>Climate change and health</li> </ul>	Lectures/seminar/group discussion  5 hours	Visit to Central Malaria laboratory  Visit to PHC/UHC to know about vector control activities  6 hours
6.BASIC MEDICAL STATISTICS INCLUDING RESEARCH ETHICS	<ol style="list-style-type: none"> <li>Definition of data, Information and intelligence</li> <li>Sources and uses of health information</li> <li>Collection and representation of data, Data types, Sampling methods.</li> <li>Elementary statistical methods</li> <li>Measures of central tendency and dispersion.</li> <li>Tests of significance</li> <li>Ethics in Research</li> </ol>	Lectures/seminar/group discussion  8 hours	Solving exercises  10 hours
7.EPIDEMIOLOGY OF COMMUNICABLE DISEASES.	Epidemiology, clinical features prevention, control and treatment of : <ol style="list-style-type: none"> <li>Respiratory infections(chicken pox, measles, mumps, rubella, influenza, diphtheria, whooping cough, ARI, TB,)</li> <li>Intestinal infections(polio, hepatitis, ADD, Cholera, Typhoid, Food poisoning, amoebiasis, ascariasis, hook worm)</li> <li>Arthropod-borne infections(Dengue, Malaria, Filariasis)</li> <li>Zoonoses(Rabies, Yellow fever, JE, KFD, chikungunya, Leptospirosis,</li> </ol>	Lectures/seminar/group discussion  16 hours	Visit to Infectious disease hospital/ TB sanatorium  8 hours  Clinico Social Case Discussion with related to the communicable diseases ( Factors predisposing like



	Plague) 5. Surface infections (all) Communicable diseases.(SARS, meningococcal meningitis, Brucellosis, Salmonellosis, Leishmaniasis) 6. Emerging and reemerging diseases. 7. Nosocomial infections. 8. Anti microbial resistance 9. Eradication of diseases like smallpox, Guinea worm, Polio 10.National Health Programmes (NVBDGP,NLEP, RNTCP, NACP, NPCB, UIP, IDD, NHM, NPCDCS, national water supply and sanitation programme.) 11.Universal precautions.		vector,environment ,nutrition, family, society, health care system, levels of prevention etc ) 76 hours
<b>B) SKILLS</b> At the end of the course, the student should be able to :-			
(1) Use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient intervention.	Basic measurements in epidemiology		Epidemiologic exercises
(2) Collect, analyse, interpret and present simple community and hospital based data.	-Community diagnosis -Research projects		II year posting -Community survey
(3) Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources and in the context of the prevailing socio-cultural beliefs.	-Clinico social case Study -Family health appraisal -Community survey		II year posting



<b>C). INTEGRATION ;</b> Develop capabilities of synthesis between cause of illness in the environment or community and individual health and respond with leadership qualities to institute remedial measures for this.			
	Topics	Deaprtments	
Communicable Diseases	Communicable diseases covered under national health programme,	Community Medicine, Pediatrics, Medicine, Venerology, Microbiology	

### **PHASE III : IIIrd MBBS**

<b>1.DEMOGRAPHY AND FAMILY PLANNING</b>	7. Eligible couple, target couple, couple protection rate, Family planning methods available in Public health sector, MTP methods and Act, 8. Pearl index, 9. Unmet need for family planning, 10. Community needs assessment approach 11. National family welfare programme	Lectures/seminar/group discussion  2 hours	Solving exercises 2 hours
<b>2.SOCIAL OBSTETRICS</b>	4. Ante-natal care – Objectives, visits, history taking and examination, antenatal investigation, Nutritional services, Immunization services, IFA supplementation, Health education, Specific health protection, Risk approach 5. Intranatal care – Objectives,	Lectures/seminar/group discussion  10 hours	<b>Visit to PHC/ UHC</b>  3 hours  Clinico-Social Case Discussion  14 hours



	Prevention of infection, Danger signals, Rooming in 6. Postnatal care – Objectives, advice during PN care , PN visits, Breast feeding – checking for adequacy		
<b>3.SOCIAL PAEDIATRICS</b>	1. Neonatal care-Early neonatal care, Objectives, Immediate care, Neonatal examination, Low birth weight 2. Feeding of infants – Breastfeeding 3. Growth monitoring and growth chart 4. MCH indicators 5. RCH 6. IMNCI 7. RMNCH+A 8. ICDS 9. BFHI 10. School health services 11. Gender bias	Lectures/seminar/group discussion  10 hours	<b>Visit to ICDS</b>  3 hours  Clinico Social Case Discussion  14 hours
<b>4.NUTRITION AND HEALTH</b>	1. Protein Energy Malnutrition 2. Nutritional problems in India 3. Food additives food adulterants 4. Community nutrition programmes. 5. Food safety and standards act 6. Methods of dietary survey	Lectures/seminar/group discussion  5 hours	<b>Visit to ICDS</b> Clinico Social Case Discussion  3 hours
<b>5.EPIDEMIOLOGY OF NON COMMUNICABLE DISEASES</b>	Epidemiology, clinical features prevention, control and treatment of <ul style="list-style-type: none"> <li>• Hypertension , obesity</li> <li>• Diabetes</li> <li>• Cancer</li> <li>• Road traffic accidents</li> <li>• Coronary, cardiovascular diseases</li> </ul>	Lectures/seminar/group discussion  5 hours	<b>Visit to NCD clinic</b> 2 hours  Clinico Social Case Discussion  8 hours



	<ul style="list-style-type: none"> <li>• Rheumatic heart disease</li> <li>• Blindness</li> </ul>		
<b>6.HEALTH CARE OF COMMUNITY.</b>	1. Health care- 2. Concept, Levels, changing concepts. 3. Primary health care. 4. Health for All. 5. Health care systems. 6. Job responsibilities of various health personnel	Lectures/seminar/group discussion  2 hours	
<b>7.OTHER SPECIAL GROUPS</b>	5. Tribal health 6. Adolescent health 7. Person with disabilities 8. Community based rehabilitation	Lectures/seminar/group discussion  2 hours	<b>Visit to Institute of Rehabilitation</b>  3 hours
<b>8.COMMUNITY GERIATRICS</b>	2. Health problems of the elderly 3. Risk reduction of elderly	Lectures/seminar/group discussion  1 hours	Clinico Social Case Discussion 2 hours
<b>9.OCCUPATINAL HEALTH</b>	7. Ergonomics , 8. Occupational hazards, diseases and prevention of occupational diseases. 9. Measures of health protection of workers. 10.Health problems due to industrialization. 11.Accidents, sickness absenteeism. 12.ESI Act	Lectures/seminar/group discussion  3 hours	<b>Visit to industry</b>  3 hours
<b>10.GENETICS AND HEALTH</b>	3. Population genetics 4. Prevention and social control measures of genetic problems. 5. Role of genetic predisposition in common disorders	Lectures/seminar/group discussion  1 hours	
<b>11.INTERNATIONAL</b>	1. WHO, UNICEF, International	Lectures/seminar/group	



<b>HEALTH</b>	<p>health regulations.</p> <p>2. Redcross society, UN, NGO, Health work of bilateral agencies</p>	<p>discussion</p> <p>1 hours</p>	
<b>12.DISASTER MANAGEMENT</b>	<p>5. Definition, types of disaster.</p> <p>6. Principles and elements of disaster management.</p> <p>7. Health problems during disaster.</p> <p>8. Public health aspects of disaster management.</p>	<p>Lectures/seminar/group discussion</p> <p>1 hours</p>	<p>Mock up exercise</p> <p>1 hours</p>
<b>13. HOSPITAL WASTE MANAGEMENT</b>	<p>3. Definition, sources, classification, generation, segregation, hazards and disposal of health care wastes.</p> <p>4. Categories ,colour coding and containers used in biomedical waste management.</p>	<p>Lectures/seminar/group discussion</p> <p>2 hours</p>	<p>Visit to Bio medical waste management</p> <p>2 hours</p> <p>Demonstration and other skills in BMWM</p> <p>2 hours</p>
<b>14.HEALTH INFORMATION AND VITAL STATISTICS</b>	<p>1. Definition of data, Information and intelligence</p> <p>2. Sources and uses of health information</p> <p>3. Components and requirements of HMIS</p> <p>4. Vital statistics</p> <p>5. Census, Birth and Death registration, Fertility statistics</p>	<p>Lectures/seminar/group discussion</p> <p>2 hours</p>	<p>Visit to birth and Death registrar officer</p> <p>3 hours</p>
<b>15.HEALTH MANAGEMENT</b>	<p>1. Health planning, Planning cycle.</p> <p>2. National health policies.</p> <p>3. Millennium Development Goals</p> <p>4. Sustainable Development Goals</p> <p>5. Health Planning in India.</p> <p>6. Health system in India.</p> <p>7. Health management methods and techniques</p>	<p>Lectures/seminar/group discussion</p> <p>2 hours</p>	



	8. Health committees and Five year plans		
<b>16.MENTAL HEALTH</b>	4. Warning signs of mental illness, Types, causes and prevention of mental illness. Drug abuse, dependence, addiction-definitions. 5. Alcoholism. 6. Drug dependence 7. National Mental health programme 8. Mental health services.	Lectures  1 hours	Visit to Institute of Mental health  3 hours
<b>17.HEALTH ECONOMICS, HEALTH ADMINISTRATION,</b>	Definition of Health Economics Various methods of analysis based on health economics	Lectures 1 hours	
<b>18.MEDICAL ETHICS</b>	8. Professional conduct 9. Consent 10. Professional secrecy and privileged communication 11. Research ethics 12. Health education ethics	Lectures 1 hours	
<b>B) SKILLS</b>			
At the end of the course, the student should be able to :-			
1. Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources and in the context of the prevailing socio-cultural beliefs.	-Clinico social case Study -Family health appraisal -Community survey		
2. Diagnose and manage maternal and child health	Clinico social case Study -Family health appraisal		



problems and advise a couple and the community on the family planning methods available in the context of the national priorities.			
3.Diagnose and manage common nutritional problems at the individual and community level.	Clinico social case Study -Family health appraisal		
4.Interact with other members of the health care team and participate in the organization of health care services and implementations of national health programmes.	Visit to PHC and sub centre		
C). <b>INTEGRATION</b> ; Develop capabilities of synthesis between cause of illness in the environment or community and individual health and respond with leadership qualities to institute remedial measures			
	<b>Topics</b>	<b>Departments</b>	
1. To understand the family/ society	1.Family health appraisal – Community Survey	Community Medicine, Pediatrics, Obstetrics, Medicine	III year posting
2. Social Pediatrics and Nutrition	1. Nutritional assessment 2. Nutritional disorders of the child 3. Management of sick child and infant 4. Measures to reduce Infant Mortality 5. Immunization, AEFI	Community Medicine, Pediatrics,	



3. Non Communicable and Communicable Diseases	Non Communicable diseases covered under national health programme,	Community Medicine, Pediatrics, , Medicine,	
4. Social Obstetrics	1. Care of antenatal women 6. Measures to reduce the maternal mortality	Community Medicine, Obstetrics,	
5. National Mental Health Programme	Objectives and goals of National Mental Health programme, implementation Alcoholism and its dependence	Community Medicine, Psychiatry	



## **PRACTICAL SKILLS TO BE ACQUIRED**

### **AT THE END OF THE COURSE**

At the end of the year, the student should be able to:

#### **I MBBS**

##### **FIELD VISITS**

1. Sub centre
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
2. Primary Health Centre
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
3. Cold chain system
  - a. Inventory of vaccines
  - b. Storage and pattern of utilization of vaccine
  - c. Registers
  - d. Adverse events following immunization
4. Taluk hospital
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
5. District hospital
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers



- d. Inventory maintenance
- 6. Urban Health Post
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
- 7. ICDS centre
  - a. Job responsibilities of the personnel
  - b. Beneficiaries and benefits
- 8. Visit to the Tertiary hospital
  - a. Administration setup
  - b. Job Responsibilities

## **PRACTICAL SKILLS**

1. Advise the mother on exclusive breast feeding practice
2. Advise on immunization schedule for the child



## **II MBBS ( 3 & 4 SEMESTER)**

### **FIELD VISITS**

1. Water treatment plant
  - a. Sources of water
  - b. Various method in water treatment like sedimentation, flocculation, chlorination etc.
  - c. The method of distribution of water to public
2. Sewage treatment plant
  - a. Sources of Sewage
  - b. Various method in sewage treatment
  - c. The method of distribution of effluent
3. Solid waste management
  - a. Sources of solid waste
  - b. Segregation of solid waste
  - c. Various methods in solid waste treatment
  - d. The method of disposal
4. ICDS centre
  - a. Job responsibilities of the personnel
  - b. Beneficiaries and benefits
5. Slaughter house
  - a. Types of animal
  - b. Sanitation measures
  - c. Disposal of waste
6. Milk Dairy
  - a. Collection, pasteurization, packaging and dispersion of milk
  - b. Estimation of milk quality standards
  - c. Adulteration of milk
  - d. Maintenance of safety of milk and milk products
9. Cold chain system
  - a. Inventory of vaccines
  - b. Storage and pattern of utilization of vaccine
  - c. Registers
  - d. Adverse events following immunization



10. Water & Food analysis Laboratory
  - a. Water and food analysis parameters
  - b. Standards of water quality
  - c. Find out food adulteration
11. Institute/Department of Mental Health
  - a. Common mental health illness
  - b. Factors contributing
12. Institute of Rehabilitation
  - a. Various types and mode of rehabilitation
  - b. Pattern of people utilizing the centre
13. Community survey to identify the prevailing health problems
  - a. To collect the data on prevailing problems
  - b. Calculate the various indicators
  - c. Interpretation of the health problems
  - d. Suggesting the solution
14. Vector control measures in a PHC
  - a. Various vector control measures adopted in the PHC
15. TNMSC -Drug warehouse– inventory management
  - a. Inventory management of the drug and surgical items
16. Meteorology department
  - a. Monitoring and usage of various meteorological parameters
  - b. Usage of various meteorological instruments
17. Home for aged
  - a. Common geriatric problems, social factors
18. DE addiction centre
  - a. Types of various therapy offered in the centre
19. Prison
  - a. Prisoners health
20. Borstal
  - a. Health and social problems of the inmate

## **PRACTICAL SKILLS**



1. Advise a mother on proper nutrition during and after pregnancy
2. Advise a mother on appropriate family planning methods
3. Advise the mother on exclusive breast feeding practice
4. Advise the mother on weaning
5. Advise on immunization schedule for the child
6. Record the weight of a child
7. Measure the anthropometric measurements of a child
8. Plot anthropometry in a growth chart and interpret it
9. Demonstrate kangaroo mother care
10. Categorize and segregate the waste generated in a hospital and dispose it appropriately
11. Calculate measures of central tendency and dispersion in given data
12. Analyze and interpret graphical representation of a given data
13. Plan a diet survey
14. Record the weight of a child
15. Demonstrate ORS preparation
16. Estimate the chlorine demand
17. Measure the residual chlorine
18. Categorize and segregate the waste generated in a hospital and dispose it appropriately.



## FIELD VISITS

1. Sub centre
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
2. Primary Health Centre
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
3. Cold chain system
  - a. Inventory of vaccines
  - b. Storage and pattern of utilization of vaccine
  - c. Registers
  - d. Adverse events following immunization
4. Taluk hospital
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
5. District hospital
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
6. Urban Health Post
  - a. Administration setup
  - b. Job Responsibilities
  - c. Registers
  - d. Inventory maintenance
7. Institute/Department of Mental Health
  - a. Common mental health illness



- b. Factors contributing
- 8. Community survey to identify the prevailing health problems
  - a. To collect the data on prevailing problems
  - b. Calculate the various indicators
  - c. Interpretation of the health problems
  - d. Suggesting the solution
- 9. Nutrition Rehabilitation Centre
  - a. Types of nutrition rehabilitation
  - b. Beneficiaries under various nutrition programmes
- 10. IVCZ, Hosur
  - a. Mosquito collection, dissection
  - b. Flea collection
  - c. Various vector control measures
- 11. Industry
  - a. Industrial safety
  - b. Ways to monitor Health of the workers
- 12. CENTRAL Leprosy training and Research Institute
  - a. Various facilities provided in the institute
- 13. Community survey to identify the prevailing health problems
  - a. To collect the data on prevailing problems
  - b. Calculate the various indicators
  - c. Interpretation of the health problems
  - d. Suggesting the solution

## **PRACTICAL SKILLS**

- 1. Plan a diet survey
- 2. Classify a child based on IMNCI for ARI , ADD
- 3. Recognize an adverse event following immunization
- 4. Categorise a patient with TB/Leprosy/Dog bite
- 5. Advise appropriate treatment based on national programmes
- 6. Plan and recommend a suitable diet for special groups.
- 7. Calculate the demographic indicators and compare it with national data
- 8. Calculate the entomological indicators and interpret it
- 9. Certify the cause of death



10. Usage of Statistical packages like epiinfo, SPSS, etc.



### INTERNAL ASSESSMENT TESTS SCHEDULE :

#### TEST AT THE END OF 4<sup>TH</sup> SEMESTER :

1. Basics of nutrition
2. Concept of health & disease
3. Environment & health

#### TESTS FOR 6<sup>TH</sup> & 7<sup>TH</sup> SEMESTERS :

Theory Test	Month	Topics
1	April	Concepts of health & disease , Environment & health , Sociology
2	June	Epidemiology , screening, epidemiology of non-communicable diseases and related programmes
3	July	Epidemiology of communicable diseases and related programmes
4	September	MCH , special groups, Nutrition and related programmes
5	October	Demography & family planning, hospital waste management, disaster management & occupational health
6	November	Genetics, mental health, health information & basic medical statistics, health education, health planning and management, health care of community, international health , medical ethics
7	December	Terminal evaluation – Whole portion <b>II<sup>nd</sup> Model practical as per the university pattern *</b>

\* I<sup>st</sup> Model practical should be conducted at the end of block posting during 6 & 7<sup>th</sup> semester



## **THEORY EXAMINATION**

**Two papers each carrying 60 marks**

<b>Essay</b>	<b>2 x 10marks = 20</b>
<b>Brief Answers</b>	<b>6 x 5marks = 30</b>
<b>Short Notes</b>	<b>5x 2 marks = 10</b>
<b>Total</b>	<div style="border-top: 1px dashed black; text-align: right;"><b>60 marks</b></div> <div style="border-top: 1px dashed black;"></div>

### **Paper 1**

1. Concepts in health
2. Epidemiology
3. Epidemiology of communicable and non communicable diseases and national health programmes
4. Screening for diseases
5. Environmental health
6. Occupational health
7. Health information and basic medical statistics



## **Paper 2**

1. Nutrition and health
2. Genetics and health
3. Sociology in health
4. Health education
5. Demography and family planning
6. Social obstetrics
7. Social pediatrics
8. Community geriatrics
9. Other special groups
10. Disaster management
11. Hospital waste management
12. Mental health
13. Health planning and management
14. Health care delivery system
15. International health



## **EVALUATION**

### **PRACTICALS**

Clinico Social Case	45 minutes	1 X 12 marks = 12
Epidemiological Exercise	45 minutes	2 X 4 marks = 8
Spotters	10 minutes	5 X 1 marks = 5
OSPE	20 minutes	5 X 1 marks = 5
TOTAL		----- 30 marks -----

**VIVA : 10 marks**

**FOUR EXAMINERS EACH 2.5 MARKS**

**The topics will be divided as follows**

### **TOPICS FOR EXAMINER – I**

- Health Policy
- Health Administration
- Primary Health Care
- Health Programs In India
- Health Planning And Management
- Basic Medical Statistics
- Health Education and Communication
- International Health



### **TOPICS FOR ORAL EXAMINER – II**

- Epidemiology of Non Communicable Diseases
- Maternal and Child Health
- Family Welfare
- Demography
- Population Dynamics
- Preventive Geriatrics

### **TOPICS FOR ORAL EXAMINER – III**

- Epidemiology of Communicable Diseases
- Tropical Medicine
- Tropical Public Health
- Environmental Health
- Occupational Health
- Concept of Health and Disease

### **TOPICS FOR ORAL EXAMINER – IV**

- General Epidemiology
- Principles of Epidemiology
- Epidemiological Methods
- Screening
- Mental Health
- Genetics
- Nutrition

**INTERNAL ASSESSMENT : 40 marks**

(Theory 20 & Practical 15 + Record/PROJECT/LOGBOOK 5)

### **LOG BOOK**

Log Book should be followed as recommended by the University.



## **ETHICS RELATED TO COMMUNITY MEDICINE**

1. Doctor patient relationship
2. Professional conduct
3. Consent
4. Research ethics
5. Health education ethics



## OSPE/ OSCE QUESTIONS

### OSPE 1: PARTOGRAPH

(1) Mark the following findings in the Partograph:

To give time of cervical dilatation of 4 cms.

<b>Time</b>	<b>No of contractions in 10 minutes</b>	<b>Duration of each contraction (seconds)</b>
5am	3	18
9am	4	32
10am	5	45

(2) Mark the following findings in the Partograph:

<b>Time</b>	<b>Cervical dilatation( cm)</b>	<b>Descent of head</b>
9 am	4 cm	3/5
1pm	5 cm	3/5
3 pm	5 cm	3/5

(3). Mark the following findings in the Partograph:

To give time of cervical dilatation of 4 cms.



<b>Time</b>	<b>Descent of head</b>	<b>No of contractions in 10 minutes</b>	<b>Duration of each contraction (seconds)</b>
5 pm	3/5	3	15
9 pm	1/5	4	35
10 pm	0/5	5	44

## **OSPE 2: DEATH CERTIFICATE**

1. While crossing the road an adult male pedestrian was hit by a truck at around 10pm on 14-3-2008 and was brought to the emergency department of a hospital at 10.30 pm. Clinical examination revealed significant tachycardia, hypotension, oliguria, altered sensorium and cold clammy skin. Type III pelvic fracture was diagnosed and confirmed radio logically. Airway, Breathing and Circulation was established. Blood grouping and cross matching was done. 1 hour later patient became unresponsive and resuscitation efforts were unsuccessful and the patient died.
2. An elderly male farmer in a rural village was admitted to a hospital with complaints of difficulty in swallowing for past 3 days. 1 week back he had an injury on the right index finger. Suturing and TT injection were given. Sutures were removed. He was a known case of hypertension for the past 10 years. Later, the patient had intermittent muscle spasm, trismus, risus sardonicus, muscle rigidity of jaw, neck and trunk. Treatment: Airway maintenance, Tetanus antitoxin, Penicillin, diazepam, were given. Spasms became more frequent and patient developed laryngeal spasm and sudden respiratory arrest and died.
3. A male infant born to a 20 year primiparous woman at 32 weeks gestation weighing 1480 grams. New born screening found elevated levels of immuno-reactive trypsinogen in the blood. The new born developed



respiratory distress syndrome and was in mechanical ventilation for 7 days. Despite adequate calories infant had poor weight gain, and had persistent diarrhoea with steatorrhea for past 2 weeks. Elevated sweat chloride concentration (85 mmols / l). 37day of birth - infant lethargic, poor cry, feed refusal. CSF-culture - E.coli, total serum protein low. Infant died at 45 days of age despite life saving efforts

### **OSPE 3: PUT THE HOSPITAL WASTE IN THE APPROPRIATE BIN**

**Categorise the various bio medical waste**

<b>Hospital Waste</b>	<b>Waste Bin</b>	<b>Biomedical Waste</b>	<b>Waste Bin</b>
Discarded medicine		Blood soaked cotton	
Soiled wound dressing		Cytotoxic drugs	
General paper waste		Scalpel	
Butterfly needle		Placenta	
Amputated limb		Incineration ash	

### **EPIDEMIOLOGY**

Interpret the given chart-study design to be given as chart

Eg:

1. What is the type of chart? What is your inference? e.g. spotting the radiation and anemia.



## **ENTOMOLOGY**

Identify the various vectors and assess environment and advise control measures

Eg: 1 PISTIA WATER PLANT

- A. a. Identify the picture
- b. Write the Public Health Importance
- c. How will you avoid this source for breeding of mosquito?
- d. What type of disease you expect and where?
- e. What is the significance of this source?

Eg: 2 TYRES SHED

- A. a. Identify the picture
- b. Write the Public Health Importance
- c. How will you avoid this source for breeding of mosquito?
- d. What type of disease you expect and where?
- e. What is the significance of this source?
- f. In which area you find this source?

### **Communicable Diseases examples:**

1. (a) What is your identification and mention the disease transmitted?



(b) Write the control measures that led to its elimination?

2. (a) What is your diagnosis?

(b) Write down the immunization schedule followed for its prevention?

3. (a) What is your diagnosis?

(b) Write down the Mass drug regimen followed?

4. (a) What is your identification and the test used to find out?

(b) Steps of tourniquet test:

(c) Mention the communicable disease in which it is seen?

5. (a) What is your diagnosis?

(b) Measures to prevent neonatal tetanus?

6. (a) What is your identification ?

(b) Treatment of Paucibacillary leprosy?

7. (a) What is your identification?

(b) Write down the treatment schedule for MB leprosy in adults?

### **PICTURES- IMNCI**

#### PICTURE

1. Write your observations for H1, H2 and H3?



2. What is the diagnosis, treatment and advice?

**ENVIRONMENT**

Estimate the residual chlorine in the given water sample?

**OSCE for SOCIAL PADIATRICS/ OBSTETRICS / diseases**

1. Measure the weight of the newborn/infant/ child
2. Measure the length/height of the newborn/infant/ child
3. Plot the given parameters in the growth chart and interpret
4. Advise the mother about the immunization dates for her child
5. Demonstrate ORS
6. Demonstrate usage of Condom
7. Advise on the usage of various contraceptive methods
8. Demonstrate the abdominal examination of Ante natal mother
9. Enumerate the high risk factors for the given mother
10. Measure the Blood pressure
11. Measure the various anthropometric measurements of newborn/infant/ child
12. Diagnose and Advice on drug regimen for various categories of leprosy
13. Diagnose and Advice on drug regimen for various categories of tuberculosis
14. Diagnose and Advice on treatment for Hypertension as per NCD guidelines
15. Diagnose and Advice on treatment for Diabetes as per NCD guidelines
16. Demonstrate steps in Breast self examination
17. Demonstrate the steps in nerve examination for leprosy

**LIST OF SPOTTERS**

LIST OF SPOTTERS	
GROUP I - Entomology and Parasitology	
<b><u>ENTOMOLOGY</u></b>	
ANOPHELES	EGG



AEDES	EGG
CULEX	EGG
MANSONIA	EGG
ANOPHELES	LARVA
AEDES	LARVA
CULEX	LARVA
ANOPHELES	ADULT MALE
ANOPHELES	ADULT FEMALE
CULEX	ADULT MALE
CULEX	ADULT FEMALE
AEDES	ADULT MALE
AEDES	ADULT FEMALE
SAND FLY	MALE
SAND FLY	FEMALE
CHEOPIS	MALE
CHEOPIS	FEMALE
HOUSE FLY	LARVA
CYCLOPS	MALE
CYCLOPS	FEMALE
LOUSE	NIT
HEADLOUSE	MALE, FEMALE
SOFT TICK	
HARD TICK	MALE, FEMALE



<b><u>PARASITOLOGY</u></b>	
MALARIAL PARASITE - PLASMODIUM FALCIPARUM	
MALARIAL PARASITE - PLASMODIUM VIVAX	
MICROFILARIA	
<b>GROUP II – MCH and family welfare</b>	
<b><u>M.C.H. &amp; FAMILY WELFARE</u></b>	
CONDOM	GROWTH CHART
ORAL PILLS	O.R.S.
COPPER-T	Emergency Pills
<b><u>VACCINES</u></b>	
BCG	BCG SYRINGE AND NEEDLE
OPV	VACCINE CARRIER
DPT	MMR
MEASLES	HEPATITIS B VACCINE
DT	ARV
TETANUS TOXOID	ICE PACKS
VVM	
<b>GROUP III – Insecticides,disinfectant and Public health engineering</b>	
B.H.C.	BLEACHING POWDER
D.D.T	DETTOL
PARIS GREEN	ALUM
M.L.O (MOSQUITO REPELLANT OIL)	PHENOL
PYRETHRUM	COPPER SULPHATE
<b><u>PUBLIC HEALTH ENGINEERING SPOTTERS</u></b>	
HORROCK'S APPARATUS	
CHLOROSCOPE	
IODINE SPOT TESTING KIT	
Kata thermometer	
<b>GROUP IV – Drugs related National health Programmes</b>	



<b><u>DRUGS</u></b>	
DOTS - CAT I - INTENSIVE PHASE	
DOTS - CAT I - CONTINUATION PHASE	
DOTS - CAT II - INTENSIVE PHASE	
DOTS - CAT II - CONTINUATION PHASE	
MDT - MULTIBACILLARY ADULT	
MDT - PAUCIBACILLARY ADULT	
CHLOROQUINE	Streptomycin
PRIMAQUINE	Benzathine penicillin
FST SMALL	
VITAMIN A SOLUTION	
<b><u>GROUP V -NUTRITION SPOTTERS</u></b>	
BENGAL GRAM	WHEAT
GREEN GRAM	SOYABEEN
RED GRAM	ORANGE
ORID DHAL	MANGO
GROUND NUT	MILK
RICE - BOILED	GREEN LEAVES
RICE - RAW	BANANA
RAGI	LEMON
CARROT	PAPAYA



## **CRRI ORIENTATION**

1. Brief introduction about the National Immunization programme, National Health Mission
2. To know - the implementation and monitoring of National Health programmes related to Communicable and Non Communicable Diseases.
  - a. Leprosy
  - b. Tuberculosis
  - c. Malaria
  - d. STI/ RTI
  - e. Infectious disease
  - f. Filaria
  - g. Maternal and Child Health
  - h. School Health programme
  - i. Iodine deficiency disorders
3. Details about
  - a. How to organize a camp
  - b. How to study the environmental sanitation
  - c. How to assess the nutritional status of the mother
  - d. How to assess the nutritional status of the child
  - e. How to conduct the health education/health awareness activities in PHC,UHC
4. Describe about the implementation of various acts like
  - a. Food Safety and Standards Act
  - b. Public Health in the Sub centre
  - c. Birth and Death Registration act
  - d. Pre Natal Diagnosis and Techniques Act
  - e. Medical Termination of Pregnancy act
5. Describe the various first aid measures for accidents , snakebite, poisoning
6. To treat minor ailments, identifying the various deficiency disorders
7. To prescribe the treatment for Hypertension , Diabetes as per the NCD guidelines
8. Identify the High risk mothers, infants, children
9. To Know the functioning and Job responsibilities of the various health personnel working in the PHC, Urban Health centre, Sub centre, and District Hospital
10. To know the methods of investigation of epidemic, infant deaths, maternal deaths, adverse events following immunization



11. To enumerate the various demographic profile and to make interpretation
12. To know the administrative structure of the PHC, Urban Health centre, Sub centre, and District

#### Hospital

13. To know the inventory procedure with regard to the vaccines, drugs etc
14. To know - various registers pertaining to the
  - a. Leprosy
  - b. Tuberculosis
  - c. Malaria
  - d. STI/ RTI
  - e. Infectious disease
  - f. Filaria
  - g. Maternal can Child Health
  - h. School Health programme
  - i. Iodine deficiency disorders
  - j. Immunization programme
15. Introduction to various statistical analysis

### **LEARNING UNITS AND ACTIVITIES AREA**

1. To Create awareness about statistical logic & Technique
  - a. Data collection
  - b. Data Handling
  - c. Data interpretation
  - d. Use of various statistical methods
  - e. Health indicators –vital statistics
  - f. Demography, population Dynamics and population trends
  - g. Birth and Death Registration
2. To Create awareness about role of nutrition as a Health determinant in Mother and Children
  - a. Nutritional assessment
  - b. Health monitoring, malnutrition and Deficiency disorders
  - c. Diet planning
  - d. Nutrition education
  - e. Food customs
3. Public Health administration and management



- a. Planning and conducting community health survey
  - b. Management of Maternal and child health problems identified
- 4. Environmental sanitation
  - a. Manage at family level, maternal and child Health problems related with the environment
- 5. Health education
  - a. Knowing the individual and community
  - b. Community involvement
  - c. Identifying the suitable media and its implantation in health education
  - d. Evaluation of the effectiveness of Health education
- 6. National Immunization Programme – Universal Immunization Programme
  - a. Disease surveillance
  - b. Conduct immunization session
  - c. Ensure community participation
  - d. Cold chain management
  - e. Adverse reaction following immunization and management
  - f. Coverage evaluation
- 7. National Health Mission – Non Communicable diseases
  - a. Disease surveillance
  - b. Conduct camps
  - c. Ensure community participation
- 8. Maternal health
  - a. Antenatal care
  - b. Intra partum care
  - c. Post natal care
  - d. Management of obstetric case and emergencies
  - e. Management of common gynecological problems
  - f. Management of termination of pregnancy
  - g. Various contraception and its usage
  - h. Care of the newborn
  - i. Diagnosis and management of Nutritional disorder and infection in children

## Reference books

1. Parks textbook of Preventive and social medicine, K. Park
2. Community medicine with Recent advances, AH Suryakantha



3. Textbook of community medicine, Rajvir Balwar
4. Textbook of community medicine, Piyush Gupta
5. Methods in Bio statistics by B.K.Mahajan
6. Basic concepts in epidemiology – Beaglehole
7. Government of India modules for various national health programmes.



# **COMMUNITY MEDICINE LOG BOOK**

**GOVERNMENT \_\_\_\_\_ MEDICAL  
COLLGE**

---

**AFFILIATED TO  
THE TAMILNADU Dr. MGR MEDICAL UNIVERSITY**

## **LOG BOOK**

NAME OF THE STUDENT : \_\_\_\_\_

UNIVERSITY REGISTRATION NO: \_\_\_\_\_

YEAR OF ADMISSION : \_\_\_\_\_



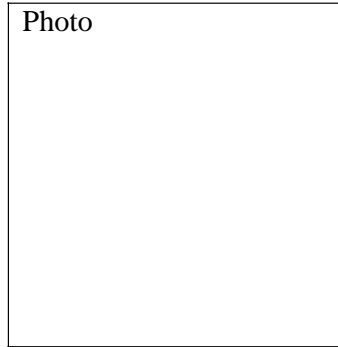
## Table of Contents

---

S.NO.	Topic	Page
1.	Student Identification	
2.	Introduction	
3.	Department Certificate	
4.	Course Content	
5.	Didactic Lectures	
6.	Activity Schedule 1 <sup>st</sup> MBBS	
7.	Activity Schedule 2 <sup>nd</sup> MBBS	
8.	Activity Schedule 3 <sup>rd</sup> MBBS	
9.	Integrated teaching	
10.	Field visits	
11.	Demonstrations / OSPE	
12.	Family Care Study	
13.	School Health	
14.	Clinic Social case presentations	
15.	Problem Solving exercises	
16.	Seminars	
17.	Research Project	
18.	Other Medical Related Activities	
19.	Extracurricular activities	
20.	Overall Assessment of Student	
21.	Consolidated of Assessments	
22.	Annexures	



Photo



Name of the Student :

Gender :

DOB :

Mobile Number :

Email ID :

Local address :

Permanent Address :

Name of Teacher Guide :

Enrolment Number :

Signature of Teacher Guide

Signature of HOD

Signature of Examiners

1.

2.

3.



# INTRODUCTION

---

The Community Medicine course in MBBS is designed to familiarize medical students with some basic health promotion concepts and practices. The general learning objectives of the course to be achieved at the end of 3<sup>rd</sup> MBBS Part - 1 medical training will be:

- Define and explain health in a holistic manner
- Develop an understanding of local health care delivery system
- Identify important determinants of health, risk factors of disease and epidemiological characteristics of indigenous population.
- Seek, facilitate and promote community participation in provision of healthcare (i.e. encourage patients and public to take interest in their health)
- Create awareness and disseminate through available and appropriate means information to individuals and community regarding development/adaptation of healthy life style behaviours/healthy social environment
- Identify, develop and support local partnership with workforce from allied sectors and with relevant stakeholders to broaden the local response to health inequalities.
- Create awareness and demand for services like immunization, prenatal and postnatal care, family planning, good hygienic practices and health education regarding communicable and non communicable diseases.
- Create awareness and sensitivity to provide health care to underserved populations.
- Know the steps of basic Research Methodology and importance of dissemination of evidence based knowledge.

This logbook is a record of your experience in relation to the concepts of community medicine during the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> MBBS. It is a record of your satisfactory attendance and performance and should also be used for your reflection. The log book will also help towards preparing you for the MBBS University examinations in which you will be assessed on your performance of the skills described in both the log book and the Text books. All activities must be documented in the appropriate section. It is acceptable for the logbook entries to be signed by Moderators, Instructors, In charge Faculty, Teacher Guide, HOD and Examiners.



**CERTIFICATE**  
**DEPARTMENT OF COMMUNITY MEDICINE**

---

Name:

Admission Batch:

Roll No.:

This is to certify that ..... is a bonafide student of the III MBBS course and that he /she has satisfactorily completed the postings of the subject of Community Medicine with attendance and marks as noted below.

MBBS	Attendance %	Internal Assessment Theory Marks	Internal Assessment Practical Marks	Internal Assessment Total Marks	Overall Grade
I MBBS					
II MBBS					
III MBBS Part 1					
Final Total					

Signature of Teacher Guide

Signature of HOD



## COURSE CONTENT

---

Phase	Theory	Practical Hours **
1 <sup>st</sup> MBBS	30	30
2 <sup>nd</sup> MBBS	56	144
3 <sup>rd</sup> MBBS	50	72

\*\* Includes Block Postings, Field Visits, Demonstrations, Family Care Study, School Health and Problem Solving Exercises.



### COMMUNITY MEDICINE 1<sup>st</sup> MBBS

#### Theory - 30 Hours

1. Introduction – Evolution of Community Medicine.
2. Health – Definition, spectrum of health and factors affecting – indicators of health.
3. Health Problem of World – Urban and Rural – Indian Health.
4. Health Care Delivery system in India – Urban and Rural.
5. Demography, Demographic cycle, Population trends – World and India.
6. Fertility and factors affecting it.
7. Family welfare and Population control.
8. Medical ethics and Doctor – patient relationship – Consumer Protection Act.
9. Sociology and Social factors effecting health.
10. Social Psychology – introduction, Group Behaviour, Motivation Personality.
11. Economics and health.
12. Health Education and Communication.
13. Nutrition and Health.
  - Constituents of food.
  - Food and food groups.
  - Diet planning and recommended dietary allowances.
  - Nutritional diseases.
  - Iodine deficiency disorders.
  - Diseases due to vitamin and mineral imbalance
  - Toxins in the food.
  - Assessment of Nutritional status.



## **COMMUNITY MEDICINE 2<sup>nd</sup> MBBS**

**Theory– 56 Hours**

### **General Epidemiology**

- The concepts of disease.
- Natural history of disease.
- Epidemiological triad.
- Dynamics of diseases transmission.
- Concept of disease control.

### ***Epidemiology***

- Definition, types, measurements in epidemiology, epidemiological studies, and clinical trial, investigation of an epidemic.
- Uses of epidemiology.
- Screening for disease.
- Disinfection, sterilization and control of Hospital acquired infections.
- Immunity.

### **Environmental health**

- Introduction to environment health.
- Water in relation to health and disease.
- Air pollution and ecological balance.
- Housing and health.
- Effects of radiation on human health ( Ionizing, Non-ionizing & Nuclear warfare)
- Effects of Noise on human health.
- Meteorological environment.
- Solid waste disposal.
- Disposal of hospital waste.
- Liquid waste disposal

### **Medical entomology**

- Arthropods of medical importance and their control.

### **Biostatistics**

- Introduction and uses.
- Data- Types, Collection and Presentation.
- Centering constants.
- Measures of Variation.
- Normal distribution.



- Sampling methods and Sampling variability.

### **Tests of significance.**

- SE of difference between two means.
- SE of difference between two proportions
- X<sup>2</sup> test. ( Chi-square)
- Students „t“ test
  - Paired .
  - Unpaired.
- Statistical fallacies.

### **Epidemiology of communicable diseases.**

- Air borne infections.
- Exanthematous fevers.
- Chicken pox, Rubella, and Measles
- Factors responsible to eradicate small pox.
- Influenza and ARI.
- Diphtheria and Pertussis
- Tuberculosis.
- Faeco-oral infections.
- Poliomyelitis.
- Hepatitis.
- Enteric Fever and Cholera
- Bacillary and Amoebic dysentery.
- Soil transmitted Helminths.
- Tetanus
- Rabies and other Viral Zoonotic disease.
- Leprosy.
- Malaria
- Filariasis.
- Arthropod borne viral diseases.
- Sexually transmitted diseases and their control.
- A.I.D.S.



**COMMUNITY MEDICINE 3<sup>rd</sup>**  
**MBBS Theory- 50 hrs**

- Community development programmes and multisectoral development.
- Comprehensive medical care and Primary health care.
- National Health Policy.
- Maternal and Child Health care.
- Epidemiology of Non-communicable diseases.
- Occupational health.
- Problems of adolescence including Drug dependence.
- Geriatrics
- Vital statistics – sources and uses, Census, Fertility statistics. ○ Management information system.
- Mental health.
- Genetics in public health.
- Health planning and management.
- National Health Programmes.
- International health and Voluntary Health Agencies.



## ACTIVITY SCHEDULE – IST MBBS

---

S.No.	Date	Hours	Activity	Your Role	Teacher's Remarks and Signature
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>10.</b>					
<b>11.</b>					
<b>12.</b>					
<b>13.</b>					
<b>14.</b>					
<b>15.</b>					
<b>16.</b>					
<b>17.</b>					
<b>18.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>19.</b>					
<b>20.</b>					
<b>21.</b>					
<b>22.</b>					
<b>23.</b>					
<b>24.</b>					
<b>25.</b>					
<b>26.</b>					
<b>27.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>28.</b>					
<b>29.</b>					
<b>30.</b>					
<b>31.</b>					
<b>32.</b>					
<b>33.</b>					
<b>34.</b>					
<b>35.</b>					
<b>36.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>37.</b>					
<b>38.</b>					
<b>39.</b>					
<b>40.</b>					
<b>41.</b>					
<b>42.</b>					
<b>43.</b>					
<b>44.</b>					
<b>45.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>46.</b>					
<b>47.</b>					
<b>48.</b>					
<b>49.</b>					
<b>50.</b>					
<b>51.</b>					
<b>52.</b>					
<b>53.</b>					
<b>54.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>55.</b>					
<b>56.</b>					
<b>57.</b>					
<b>58.</b>					
<b>59.</b>					
<b>60.</b>					
<b>61.</b>					
<b>62.</b>					



## ACTIVITY SCHEDULE –IIND MBBS

---

S.No.	Date	Hours	Activity	Your Role	Teacher's Remarks and Signature
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>10.</b>					
<b>11.</b>					
<b>12.</b>					
<b>13.</b>					
<b>14.</b>					
<b>15.</b>					
<b>16.</b>					
<b>17.</b>					
<b>18.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>19.</b>					
<b>20.</b>					
<b>21.</b>					
<b>22.</b>					
<b>23.</b>					
<b>24.</b>					
<b>25.</b>					
<b>26.</b>					
<b>27.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>28.</b>					
<b>29.</b>					
<b>30.</b>					
<b>31.</b>					
<b>32.</b>					
<b>33.</b>					
<b>34.</b>					
<b>35.</b>					
<b>36.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>37.</b>					
<b>38.</b>					
<b>39.</b>					
<b>40.</b>					
<b>41.</b>					
<b>42.</b>					
<b>43.</b>					
<b>44.</b>					
<b>45.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>46.</b>					
<b>47.</b>					
<b>48.</b>					
<b>49.</b>					
<b>50.</b>					
<b>51.</b>					
<b>52.</b>					
<b>53.</b>					
<b>54.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>55.</b>					
<b>56.</b>					
<b>57.</b>					
<b>58.</b>					
<b>59.</b>					
<b>60.</b>					
<b>61.</b>					
<b>62.</b>					
<b>63.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>64.</b>					
<b>65.</b>					
<b>66.</b>					
<b>67.</b>					
<b>68.</b>					
<b>69.</b>					
<b>70.</b>					
<b>71.</b>					
<b>72.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>73.</b>					
<b>74.</b>					
<b>75.</b>					
<b>76.</b>					
<b>77.</b>					
<b>78.</b>					
<b>79.</b>					
<b>80.</b>					
<b>81.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>82.</b>					
<b>83.</b>					
<b>84.</b>					
<b>85.</b>					
<b>86.</b>					
<b>87.</b>					
<b>88.</b>					
<b>89.</b>					
<b>90.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>91.</b>					
<b>92.</b>					
<b>93.</b>					
<b>94.</b>					
<b>95.</b>					
<b>96.</b>					
<b>97.</b>					
<b>98.</b>					
<b>99.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>100.</b>					
<b>101.</b>					
<b>102.</b>					
<b>103.</b>					
<b>104.</b>					
<b>105.</b>					
<b>106.</b>					
<b>107.</b>					
<b>108.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>109.</b>					
<b>110.</b>					
<b>111.</b>					
<b>112.</b>					
<b>113.</b>					
<b>114.</b>					
<b>115.</b>					
<b>116.</b>					
<b>117.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>118.</b>					
<b>119.</b>					
<b>120.</b>					
<b>121.</b>					
<b>122.</b>					
<b>123.</b>					
<b>124.</b>					
<b>125.</b>					
<b>126.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>127.</b>					
<b>128.</b>					
<b>129.</b>					
<b>130.</b>					
<b>131.</b>					
<b>132.</b>					
<b>133.</b>					
<b>134.</b>					
<b>135.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>136.</b>					
<b>137.</b>					
<b>138.</b>					
<b>139.</b>					
<b>140.</b>					
<b>141.</b>					
<b>142.</b>					
<b>143.</b>					
<b>144.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>145.</b>					
<b>146.</b>					
<b>147.</b>					
<b>148.</b>					
<b>149.</b>					
<b>150.</b>					



## ACTIVITY SCHEDULE – IIIRD MBBS PART 1

---

S.No.	Date	Hours	Activity	Your Role	Teacher's Remarks and Signature
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>10.</b>					
<b>11.</b>					
<b>12.</b>					
<b>13.</b>					
<b>14.</b>					
<b>15.</b>					
<b>16.</b>					
<b>17.</b>					
<b>18.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>19.</b>					
<b>20.</b>					
<b>21.</b>					
<b>22.</b>					
<b>23.</b>					
<b>24.</b>					
<b>25.</b>					
<b>26.</b>					
<b>27.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>28.</b>					
<b>29.</b>					
<b>30.</b>					
<b>31.</b>					
<b>32.</b>					
<b>33.</b>					
<b>34.</b>					
<b>35.</b>					
<b>36.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>37.</b>					
<b>38.</b>					
<b>39.</b>					
<b>40.</b>					
<b>41.</b>					
<b>42.</b>					
<b>43.</b>					
<b>44.</b>					
<b>45.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>46.</b>					
<b>47.</b>					
<b>48.</b>					
<b>49.</b>					
<b>50.</b>					
<b>51.</b>					
<b>52.</b>					
<b>53.</b>					
<b>54.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>55.</b>					
<b>56.</b>					
<b>57.</b>					
<b>58.</b>					
<b>59.</b>					
<b>60.</b>					
<b>61.</b>					
<b>62.</b>					
<b>63.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>64.</b>					
<b>65.</b>					
<b>66.</b>					
<b>67.</b>					
<b>68.</b>					
<b>69.</b>					
<b>70.</b>					
<b>71.</b>					
<b>72.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>73.</b>					
<b>74.</b>					
<b>75.</b>					
<b>76.</b>					
<b>77.</b>					
<b>78.</b>					
<b>79.</b>					
<b>80.</b>					
<b>81.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>82.</b>					
<b>83.</b>					
<b>84.</b>					
<b>85.</b>					
<b>86.</b>					
<b>87.</b>					
<b>88.</b>					
<b>89.</b>					
<b>90.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>91.</b>					
<b>92.</b>					
<b>93.</b>					
<b>94.</b>					
<b>95.</b>					
<b>96.</b>					
<b>97.</b>					
<b>98.</b>					
<b>99.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>100.</b>					
<b>101.</b>					
<b>102.</b>					
<b>103.</b>					
<b>104.</b>					
<b>105.</b>					
<b>106.</b>					
<b>107.</b>					
<b>108.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>109.</b>					
<b>110.</b>					
<b>111.</b>					
<b>112.</b>					
<b>113.</b>					
<b>114.</b>					
<b>115.</b>					
<b>116.</b>					
<b>117.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>118.</b>					
<b>119.</b>					
<b>120.</b>					
<b>121.</b>					
<b>122.</b>					
<b>123.</b>					
<b>124.</b>					
<b>125.</b>					
<b>126.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>127.</b>					
<b>128.</b>					
<b>129.</b>					
<b>130.</b>					
<b>131.</b>					
<b>132.</b>					
<b>133.</b>					
<b>134.</b>					
<b>135.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>136.</b>					
<b>137.</b>					
<b>138.</b>					
<b>139.</b>					
<b>140.</b>					
<b>141.</b>					
<b>142.</b>					
<b>143.</b>					
<b>144.</b>					



<b>S.No.</b>	<b>Date</b>	<b>Hours</b>	<b>Activity</b>	<b>Your Role</b>	<b>Teacher's Remarks and Signature</b>
<b>145.</b>					
<b>146.</b>					
<b>147.</b>					
<b>148.</b>					
<b>149.</b>					
<b>150.</b>					



### Community Medicine Department as Participant Topics

1. Introduction to public health
2. Introduction to epidemiology (History and definition of epidemiology, classification, infectivity, control, methods of infection spreading, measurement of disease)
3. Introduction to biostatistics
4. Levels of prevention
5. Environmental health
6. Infection Control
7. Nutrition
  - Iron deficiency anemia
8. Communicable diseases with National Health Programmes like
  - -HIV/AIDS
  - -Tuberculosis
  - -Malaria
  - -Polio
  - -Diarrheal diseases
  - -Leprosy
  - -Zoonotic diseases
9. Lifestyle related diseases with preventive aspects like
  - Diabetes
  - Hypertension
  - Stroke
  - Obesity
  - Cancers
  - Jaundice
10. Alcoholism Death and Dying
11. Geriatric Medicine
12. Adolescent Health
13. Rational Drug Use
14. Contraception
15. Industrial health
16. Ethical issues



INTEGRATED TEACHING

---

S.NO.	Date	Integrated Teaching Topics	Departments	Attended/ Presented	Learning Points	Signature
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						



<b>10.</b>						
<b>11.</b>						
<b>12.</b>						
<b>13.</b>						
<b>14.</b>						
<b>15.</b>						
<b>16.</b>						
<b>17.</b>						
<b>18.</b>						
<b>19.</b>						



20.						
21.						
22.						
23.						
24.						
25.						



## FIELD VISITS

---

1. Urban Health Training Centre
2. Rural health Training Centre
3. Anganwadi Centre
4. Health Subcentre
5. Primary Health Centre
6. Community Health Centre
7. First Referral Units
8. District Headquarters Hospital
9. Integrated Counselling and Testing Centre
10. Hospital Waste Management Facility
11. State and District Cells of National Health Programmes
12. Water Filtration Plant
13. Sewage Treatment Plant
14. Food and Water Analysis
15. Home for aged
16. DE addiction centre
17. Rehabilitation centre
18. Leprosy vocational rehabilitation
19. Mental Health Centre
20. Prison
21. Brostal



## FIELD VISITS

---

S.NO.	Date	Place of Visit	Learning Points	Faculty Incharge Signature
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				



<b>9.</b>				
<b>10.</b>				
<b>11.</b>				
<b>12.</b>				
<b>13.</b>				
<b>14.</b>				
<b>15.</b>				
<b>16.</b>				
<b>17.</b>				
<b>18.</b>				



<b>19.</b>				
<b>20.</b>				
<b>21.</b>				
<b>22.</b>				
<b>23.</b>				
<b>24.</b>				
<b>25.</b>				



1. Immunization Programme
2. Cold Chain Equipment
3. Antenatal Case
4. Postnatal Case
5. Contraceptive Devices
6. Exclusive Breastfeeding
7. Weaning foods
8. Diet chart
9. Nutritive values of foodstuff
10. Nutritional assessment
11. Nutritional deficiency disorders
12. Anthropometric measurements
13. Road to health
14. ORS preparation
15. Water purification at local level
16. Elementary essential drugs
17. Case management in low cost settings
18. Entomology Specimens
19. Health Promotion
20. Communication skills
21. Writing a research article
22. Statistical packages



## DEMONSTRATIONS / OSPE

---

S.NO.	Date	Demonstrations	Learning Points	Faculty In charge Signature
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				



<b>10.</b>				
<b>11.</b>				
<b>12.</b>				
<b>13.</b>				
<b>14.</b>				
<b>15.</b>				
<b>16.</b>				
<b>17.</b>				
<b>18.</b>				
<b>19.</b>				



20.				
21.				
22.				
23.				
24.				
25.				



## FAMILY CARE STUDY

---

1. Posting for family care study - 6 days
2. Apply Principles of clinical epidemiology
3. Demographic Assessment
4. Morbidity Survey.
5. Nutritional Survey
6. Socioeconomic Survey
7. Environmental Health survey
8. Health System availability and utilisation survey
9. Health knowledge, Beliefs and Practices Survey
10. Community Diagnosis
11. Data analysis and presentation.



**COMMUNITY DIAGNOSIS – FAMILY**

<b>Family No.</b>	<b>Health Problems in the Family</b>	<b>Social &amp; Environmental Factors Contributing to this Health Problem</b>
<b>1.</b>		
<b>2.</b>		
<b>3.</b>		
<b>4.</b>		
<b>5.</b>		
<b>6.</b>		
<b>7.</b>		



## COMMUNITY PLAN - FAMILY

S.No	Health Problems – Main contributing Factors	Level of Prevention Failed	Solutions for the Problem (Individual/Family/Community/State/National/International Level)	Who has to Provide the Solutions
1.				
2.				
3.				
4.				
5.				
6.				
7.				

Signature of Teacher Guide



**SCHOOL HEALTH**

---

- 1. Posting for School Health - 6 days
- 2. Health check-up of school children.
- 3. Data analysis and presentation.
- 4. Health education activities in the school by the students.

S.NO.	Name of the School	Health Problems in the School	Social & Environmental Factors Contributing to this Health Problem
1			
2			
3			
4			
5			



## COMMUNITY PLAN - SCHOOL

S.No	Health Problems – Main Contributing Factors	Level of Prevention Failed	Solutions for the Problem (Individual/Family/ Community/ State/ National/International Level)	Who will Provide the Solutions
1				
2				
3				
4				
5				

Signature of Teacher Guide



## CLINICO- SOCIAL CASE PRESENTATION

---

1. Introduction to infectious diseases – history taking
2. Exanthematous fever
3. ARI
4. Acute Diarrhoea
5. Tuberculosis
6. Leprosy.
7. Dog – bite case.
8. 8. PUO / Enteric fever / Malaria.
9. S.T.D. / AIDS.
10. Hepatitis
11. Rheumatic heart disease.
12. Introduction to non- communicable diseases.
13. Hypertension
14. Diabetes
15. Cancer.
16. Obesity
17. Antenatal mother
18. Postnatal mother
19. Under 5 child
20. Adolescent
21. Geriatrics



CLINICO- SOCIAL CASE PRESENTATION

---

S.No.	Date	Clinico-Social Case study	Learning Points	Faculty Signature
1.				
2.				
3.				
4.				
5.				
6.				



<b>7.</b>				
<b>8.</b>				
<b>9.</b>				
<b>10.</b>				



## PROBLEM SOLVING EXERCISES

---

1. Biostatistics
2. Epidemiology
3. Community needs assessment
4. National health programme Indices
5. Health Management
6. Public Health Engineering
7. Behavior Change Communication
8. Health Skills in low resource Setting
9. Feedback and Evaluation
10. SPSS and EXCEL

S.No	Date	Problem Solving Exercises	Learning Points	Faculty Signature
1.				
2.				
3.				
4.				
5.				



<b>6.</b>				
<b>7.</b>				
<b>8.</b>				
<b>9.</b>				
<b>10.</b>				
<b>11.</b>				
<b>12.</b>				
<b>13.</b>				



<b>14.</b>				
<b>15.</b>				
<b>16.</b>				
<b>17.</b>				
<b>18.</b>				
<b>19.</b>				
<b>20.</b>				



SEMINARS

---

S.No	Date	Seminar Topics	Attended/ Presented	Learning Points	Signature
1.					
2.					
3.					
4.					
5.					
6.					
7.					



<b>8.</b>					
<b>9.</b>					
<b>10.</b>					
<b>11.</b>					
<b>12.</b>					
<b>13.</b>					
<b>14.</b>					
<b>15.</b>					



## Abstract

Title:

Author Information:

Introduction:



Methodology:



Results:



Conclusion:

Signature of Research Guide



### Other Related Activities For Learning

---

1. Quiz
2. CME
3. Discussions
4. Workshops
5. Conferences
6. Health promotion Camps
7. Trainings
8. Health day Celebrations
9. Disaster management
10. Others specify

S.No	Date	Activity	Attended/ Participated	Learning Points	Signature
1.					
2.					
3.					
4.					



<b>5.</b>					
<b>6.</b>					
<b>7.</b>					
<b>8.</b>					
<b>9.</b>					
<b>10.</b>					



## EXTRACURRICULAR ACTIVITIES

---

1. Performing Arts
2. Clubs/Student Groups
3. Student Governance
4. College Journalism
5. Public Speaking
6. Hobbies
7. Media
8. NSS
9. Police/Military
10. Music
11. Sports
12. Volunteerism/community Outreach Service
13. Social Initiatives
14. Technology Initiatives

S.No	Date	Activity	Outcome/Learning Points	Signature
1.				
2.				
3.				
4.				



<b>5.</b>				
<b>6.</b>				
<b>7.</b>				
<b>8.</b>				
<b>9.</b>				
<b>10.</b>				
<b>11.</b>				
<b>12.</b>				



## OVERALL ASSESSMENT OF STUDENT

---

S.No.	Criteria	Score ( 1-10)	Remarks
1.	Regularity		
2.	Academic Ability		
3.	Analytical Skills		
4.	Practical Skills		
5.	Leadership Quality		
6.	Teamwork Ability		
7.	Communication Skills		
8.	Teaching Ability		
9.	Innovation willingness		
10.	Research Aptitude		
<b>Total Score</b>			

S.No.	Grade Descriptor	Grade Boundaries	Letter Grade Equivalent
1.	Excellent	91-100	A
2.	Very Good	76-90	B
3.	Good	61-75	C
4.	Satisfactory	51-60	D
5.	Poor	26-50	F1
6.	Very Poor	21-40	F2

OVERALL GRADE : \_\_\_\_\_

Signature of Teacher Guide

Signature of HOD



## CONSOLIDATION OF ASSESSMENTS

---

S.No	Activities	Number Presented/ Participated	Number Attended
1.	Teachings		
2.	Seminars		
3.	Clinico-Social Case presentations		
4.	Demonstrations/OSPE		
5.	Field Visits		
6.	Problem solving exercises		
7.	Family care study		
8.	School health		
9.	Other medical related activities		
10	Extracurricular Activities		

Signature of Teacher Guide

Signature of HOD



## Annexure I

### Clinico-Social Case Presentation format

#### 1. Demographic Data

- Name
- Age
- Sex
- Education
- Religion
- Occupation
- Residence
- Type of Family
- No. of Family Members

#### 2. Chief Complaint

#### 3. History of Present Illness

#### 4. Family History & Past History

#### 5. Family Composition

S.No.	Name	Age/Sex	Relation to Index Case	Education	Occupation	Monthly Income	Immunisation
1.			Index Case				
2.							
3.							
4.							
5.							

Type of Family: \_\_\_\_\_

Family Size: \_\_\_\_\_

Total Family Income: Rs. \_\_\_\_\_/ month

Per-capita Income:Rs.\_\_\_\_\_

Monthly Expenditure: Rs. \_\_\_\_\_

Savings: Rs. \_\_\_\_\_



## 6. Socio-Economic Status :

Area of Residence: Urban / Rural

SES Scale Used:

Score: Class: I / II / III / IV / V

## 7. Socio-Environmental Factors

Housing

Ownership: Own/Rented

Type: Pucca/Semi-Pucca/Katcha(serviceable)/Katcha(non-serviceable)

Floor

Number of Rooms:

S.No.	Type of Room	Floor Area	Area Windows/Doors	Proportion of Windows/Doors to floor area

Ventilation: Adequate /Not adequate

Cross Ventilation: 1. Yes 2. No

Lighting:

Water Supply

- Source : \_\_\_\_\_
- Protection : \_\_\_\_\_
- Potability : \_\_\_\_\_
- Adequacy : \_\_\_\_\_
- Storage : \_\_\_\_\_

Kitchen

- Type of Fuel
- Methods of Cooking
- Smoke Vent
- Storage of Food Articles
- Food hygiene practices
- Disposal of Sullage



## Sanitation

- Type of Toilet
- Location of Toilet
- Type of Drainage
- Excreta Disposal
- Disposal of night soil
- Solid waste disposal
- Animal wastes disposal
- Waste water disposal

## Vector Breeding Sites

## Personal hygiene

## Pet Animals

## 8. Socio-Cultural Factors

### Lifestyle

- Personality – Type A/ Type B
- Physical exercise
- Stress management
- Motivation and state of mind
- Tobacco
- Alcohol
- Substance abuse
- Sleep habits
- Family Planning Practices
- Sexual promiscuity
- Knowledge, attitude and practices about common diseases
- Health Seeking Behaviours and knowledge of healthcare system
- Myths, Misconceptions and Social Aberrations

## 9. Nutritional Factors

- Type of Diet
- Food Fad
- Food Taboo

### Dietary intake assessment - 24-hr recall method

1. Breakfast					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)



2. lunch					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

3. Dinner					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

4. Snacks					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

5. Breastfeeding					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

S.No.		Total Energy(Kcal)	Total Protein(gm)
1.	Breakfast		
2.	Lunch		
3.	Dinner		
4.	Snacks		
5.	Breastfeeding		
Grand Total			
Recommended Dietary allowance			
Deficit			

## 10. History in special cases

### Females

- Menstrual history
- Age at marriage
- Duration of marriage
- Parity/Gravida/Abortion
- Previous obstetric history, Gap between pregnancies, Birth weight of child
- Antenatal registration
- Antenatal visits
- Postnatal visits
- Vaccination
- IFA tablets consumption
- Knowledge regarding dangers of pregnancy , clean delivery, institutional delivery, child rearing practices and breastfeeding



## Infant and Child

- Birth history
- Birth weight
- Place of delivery
- Birth order
- Living order
- APGAR score
- Breastfeeding details
- Compliment feed details
- Weaning details
- Immunisation
- Congenital abnormality
- Development of milestones
- History of illness and hospitalisation

### **11. Clinical Examination**

General Examination

Systemic Examination

### **12. Clinical Diagnosis**

### **13. Epidemiological Triad of the condition under study**

- Agent Factors
- Host Factors
- Environmental factors
- Vectors/Fomites/Behaviour Factors

### **14. Clinico-Social Diagnosis**

### **15. Levels of Prevention that has failed in this condition**

### **16. Remedial actions to be taken**

- Individual level
- Family level
- Community level

### **17. Relevant National Programmes**



## **Annexure II**

### **Student Research protocol**

1. Title of the Project:
2. Name of the Primary Investigator
3. Name of the Guide
4. Introduction / Background
5. Definition of the problem
6. Research Question
7. Review of Literature (Review 3 international and 3 national KEY references and give a brief summary of each, HIGHLIGHTING how these references justify your work)
8. Objectives of the Study
9. Methodology of the study
  - a. Type of Study
  - b. Study Design
  - c. Data Collection Tool
  - d. Data Collection Methods
  - e. Study Population
  - f. Study location
  - g. Sample Size
  - h. Sample Size Estimation
  - i. Inclusion/Exclusion Criteria
10. Statistical Analysis Plan
11. Ethical Considerations
12. Duration of Study in months (Gantt chart)
13. Resources for undertaking the study(Budget plan)
14. References (To be formatted adhering Vancouver style of referencing)



## Annexure III

### Family Care Study format

#### 1. Demographic Data

- Name( Head of family)
- Door Number
- Street Name
- Localiuty

#### 2. Ground Plan of House

#### 3. Family Composition

S.No.	Name	Age/Sex	Relation to Head of Family	Education	Occupation	Monthly Income	Immunisation
1.			Head of Family				
2.							
3.							
4.							
5.							

Type of Family:

Family Size:

Total Family Income:

Per-capita Income:

Monthly Expenditure:

Savings:

General Health Status

S.No	Member 1	Member 2	Member 3	Member 4	Member 5	Member 6
Weight						
Height						
BMI						
Head circumference						



Chest circumference						
Pulse rate						
Respiratory rate						
Blood pressure						
Present illness						
Past illness						
General examination						
Systemic examination						
Immunisation status						
Nutritional status						
Addiction						
Diagnosis						
Laboratory findings						
Management						
Referral						
Outcome						
Remarks						

#### 4. Socio-Economic Status of the Family

Area of Residence: Urban / Rural

SES Scale Used:

Score:

Class:

#### 5. Socio-Environmental Factors

Housing

Ownership: Own/Rented

Type: Pucca/Semi-Pucca/Katcha(serviceable)/Katcha(non-serviceable)

Floor

Number of Rooms:

S.No.	Type of Room	Floor Area	Area Windows/Doors	Proportion of Windows/Doors to floor area




Ventilation:

Cross Ventilation:

Lighting:

Water Supply

- Source
- Protection
- Potability
- Adequacy
- Storage

Kitchen

- Type of Fuel
- Methods of Cooking
- Smoke Vent
- Storage of Food Articles
- Food hygiene practices
- Disposal of Sullage

Sanitation

- Type of Toilet
- Location of Toilet
- Type of Drainage
- Excreta Disposal
- Disposal of night soil
- Solid waste disposal
- Animal wastes disposal
- Waste water disposal

Vector Breeding Sites

Personal hygiene

Pet Animals

## 6. Socio-Cultural Factors

- Knowledge, attitude and practices about common diseases
- knowledge of healthcare system
- Myths, Misconceptions and Social Aberrations
- Physical activity practices
- Social Problems
  - Addiction
  - Unemployment
  - Criminal Activities
  - Unmarried daughter
  - Unmarried mother
  - Orphan



- Divorcee
- Transgender
- Out of school children
- More than 2 elderly
- More than 2 children per couple
- Financial difficulty
- Physically or mentally challenged person
- Chronically ill person

## 7. Health Seeking Behaviour

- For Antenatal Care
- For Intranatal Care
- For Postnatal Care
- Infant Care
- Child Care
- Adolescent Care
- Family Planning
- Immunisation
- Infectious Disease
- Non Communicable Diseases
- Nutritional Counselling
- 

## 8. Nutritional Factors

- Type of Diet
- Food Fad
- Food Taboo

Dietary intake assessment of the family - 24-hr recall method

1. Breakfast					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

2. lunch					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

3. Dinner					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)



4. Snacks					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

5. Breastfeeding					
S.No	Food Item	Food Group	Dry Weight	Energy(Kcal)	Protein(gm)

S.No.		Total Energy(Kcal)	Total Protein(gm)
6.	Breakfast		
7.	Lunch		
8.	Dinner		
9.	Snacks		
10.	Breastfeeding		
Total Nutrition Consumption			
Total Nutrition Requirement			
Nutrition Deficit/Excess			

## 9. History in special cases

### Females

- Menstrual history
- Age at marriage
- Duration of marriage
- Parity/Gravida/Abortion
- Previous obstetric history, Gap between pregnancies, Birth weight of child
- Antenatal registration
- Antenatal visits
- Vaccination
- IFA tablets consumption
- Postnatal visits
- Family planning practices
- Knowledge regarding dangers of pregnancy , clean delivery, institutional delivery, child rearing practices and breastfeeding

### Infant and Child

- Birth history
- Birth weight
- Place of delivery
- Birth order
- Living order
- APGAR score
- Breastfeeding details



- Compliment feed details
- Weaning details
- Immunisation
- Congenital abnormality
- Development of milestones
- History of illness and hospitalisation

#### **10. Summary of Health of the Family**

#### **11. Community Diagnosis – Family**

#### **12. Community Plan - Family**

#### **13. Remedial actions to be taken**

#### **14. Relevant National Programmes**



## **Annexure IV**

### **School Health Checklist**

#### **1. Health checkup**

- **Health appraisal of school children and teachers**
- **Dental health**
- **Mental health**
- **Eye health**

#### **2. Health education**

- **Personal hygiene**
- **Sexual hygiene**
- **Environmental health**
- **Nutrition**
- **Life skills**

#### **3. Other services**

- **First aid and emergency care**
- **vaccination**
- **Role of teacher**
- **Health corner**
- **Health room**
- **Classroom lighting and ventilation**
- **Furniture ergonomics**
- **Disaster management**

#### **4. Community Diagnosis – School**

#### **5. Community Plan - School**



## **Annexure IV**

### **Field Visit Checklist**

1. General information
2. Facility map
3. Organisational set-up
4. Physical infrastructure
5. Manpower
6. Services provided
7. Field activities
8. Beneficiaries
9. Records
10. Learning points
11. Suggestions



## **ORIENTATION FOR CRRIS :**

The following is expected of a CRRI and will be assessed at the end of Community Medicine posting for issuing completion:

1. Implementation and monitoring of National Health Programmes
2. Case management and referral of health conditions covered by national health programmes
3. Cold chain monitoring and administration of vaccines
4. Familiarize with the process of birth and death registration
5. Active participation in epidemic control as a team member.

The CRRI will be reviewed every week .



This syllabus and curriculum is applicable for the Third MBBS Part - I students admitted from the academic year 2014-15 and appearing for the examination from February 2018 Session onwards.