

Preventive and Social Medicine / Community Medicine (PSM)

- A. The teaching of Social & Preventive Medicine shall place throughout the teaching period.
- B. Field experience in rural health is included in pre-clinical as well as during clinical period
- C. During the students attendance at various departments which is now required under medicine and surgery, such as infectious diseases. T.B. Leprosy, V.D. etc. emphasis shall be laid as much on the preventive as on the clinical and Therapeutic aspects of these diseases.
- D. In addition to the teaching undertaken by the department of Social & Preventive Medicine, a joint programme with other departments is essential in order to give the students a comprehensive picture of man, his health and illness.
- E. Stress shall be laid on national programmes, including those of control of communicable diseases and family planning and health education.
- F. An epidemiological units as an integrate part of every hospital in order to achieve a comprehensive study disease by the students should be established.
- G. The objective of the internship shall be clearly defined and that a proper training programme is oriented for this period. Objectives, and the methods by which the internship could be made into a satisfying and fruitful experience. Sharpening and for planning in this phase of education shall be done.
- H. As regards the qualifications of the teachers it is highly important that All teachers in Social and A preventive Medicine should have as far as possible had adequate administrative experience in addition to the teaching experience. They should also be encouraged to acquire skills in clinical subject specially related to community medicine.
- I. Practical Skills: Due stress shall be laid on the students acquiring practical skill in the following procedures.

Community Medicine including Humanities

(Phase I, II and Part 1st of Phase III M.B.B.S.)

GOALS: The broad goal of the teaching of undergraduate students in community medicine is to prepare them to function as community and first level physicians in accordance with the institutional goals.

OBJECTIVES:

Knowledge:

At the end of the course the student shall be able

- Explain the principles of sociology including demographic population dynamics.
- Identify social factors related to health, disease and disability in the context of urban and rural societies.
- Appreciate the impact of urbanization on health and disease.
- Observe and interpret the dynamic of community behaviours.
- Describe the elements of normal psychology and social psychology.
- Observe the principles of practice of medicine in hospital and community settings.
- Describe the health care delivery systems including rehabilitation of the disabled in the country.
- Describe the National Health Programmes with particular emphasis on maternal and child health programmes, family welfare planning and population control.
- List the epidemiological methods and techniques.
- Outline the demographic pattern of the country and appreciate the roles of the individuals, family, community and socio-cultural milieu in health and disease.
- Describe the health information systems.
- Enunciate the principles and components of primary health care and the national health policies to achieve the goal of “Health for all”.
- Identify the environmental and occupational hazards and their control.
- Describe the importance of water and sanitation in human health.
- To understand the principles of health economics, health administration, health education in relation to community.

Skills:-

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

- The principles and practice of medicine in hospital and community settings and familiarization with elementary practices.
- Use the Art of communication with patients including history taking and medico social work.
- Use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient intervention.

- Collect, analyse, interpret and present simple community and hospital base data.
- 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-culture beliefs.
- Diagnose and manage common nutritional problems at the individual and community level.
- Plan, implement and evaluate a health education programme with skill to use simple audio-visual aids.
- Interact with other members of the health care team and participate in the organization of health care services and implementation of national health programmes.

INTEGRATION:

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.

Course Content:

Total hours of teaching in community medicine and Humanities are 376. The distribution of them shall be as follows.

Phase	Semester	Theory	Practical Hours
I	I & II	30	30
II	III & IV	68	132
III Part 1st	VI & VII	50	66

List of theory lectures - Phase I (1st and 2nd semester) 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. Hospital Management.
14. 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.

❖ Examination

Phase II – (3rd and 4th Semester) 68 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 (Theory and Practical)

- 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^2 test. (Chi-square)
- Students “t” test
 - Paired.
 - Unpaired.
- Statistical fallacies.

Computers in Medicine

There use at all the stages to be demonstrated. The students should use computers in analysis and presentation of data

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.

Examinations at the end of 3rd and 4th semester.

(Phase III (6th and 7th Semester) 50 hrs.

(Teaching in 7th semester includes tutorials also.)

- 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.
- Introduction of “ Brain Death and Organ Donation”
- Introduction Of “Bio-Medical Waste”
- Introduction of “Integrated Management of Neonatal and Childhood Illness”
- Tutorials.

Examination at the end of 6th and 7th semester.

PRACTICALS

Phase I (Ist And 2nd semester) - 30 hours.

Field visit-

Every Medical College should have adequate transport facilities to take medical undergraduate for field visits. In the phase I total 15 visits, each of 2 hours duration or total 10 visits – each of 3 hours duration (depending on distances) are to be planned by the departments of community medicine. The broad outline of place for educational field visits is given below.

- Hospital visits (O.P.D., Casualty, Immunization clinic, different wards, Kitchen, FW Centre, PPP, Blood Bank, Sterilization section, Infectious disease ward, Minor operation theatre, etc.)
- Rural Health Training Centre.
- Primary Health Centre.
- Urban Health Centre.
- District Health Office (DHO).
- District Training Team (DTT)/IEC Bureau.
- District Tuberculosis Centre.
- Public Health Laboratory.

- District Malaria Office.
- Remand Home.
- Rehabilitation Centre.

IIIrd Semester, Ist Clinical Posting - 66 hours.

Lecture – Cum – Demonstration, at appropriate places

SN	Topic	Demonstration
1	Visit to Urban / Rural health Training Centre.	Functions of UHC/ RHTC Manpower & Duty arrangements
2	Immunization Programme	I (demonstration)
3	Immunization Programme	II (Cold Chain)
4	Care of ANC mother	Demonstration of Antenatal case
5	Care of Infant	Demonstration of case
6	Post-natal case of mother/child.	Demonstration of case
7	Contraceptive devices	Situation to be given and sex education.
8	Exclusive breast feeding	Visit to Baby Friendly Hospital
9	Weaning foods	Demonstration
10	Nutritional demonstration	Explain nutritive values of Indian foodstuff
11	Nutritional assessment	Demonstration
12	Anthropometric measurements	Demonstration
13	Nutritional deficiency disorders	With A/V aids or case, Road to Health Chart
14	Protein Energy Malnutrition	With A/V aids or case, ORS preparation
15	Diarrhoea as a community health problem	With A/V aids or case
16	ARI as a community health problem	With A/V aids or case
17	Elementary essential drugs	Visit to drug store, Inventory control
18	Examination	

4th Semester 2nd Clinical Posting - 66 hours.

The board guidelines for planning programmes are as follows.

- 1) Posting for family care study - 6 days
 - Principle of clinical epidemiology
 - Morbidity Survey.
 - Data analysis and presentation.
- 2) Posting for School Health - 6 days
 - Health check-up of school children.
 - Data analysis and presentation.
 - Health education activities in the school by the students
- 3) Visit to anganwadi and ICDS scheme block- 2 days

- 4) Visit to Home for aged and discussion on geriatric health problems - 2 days
- 5) Students seminars on topics like - 5 days
- Disaster management
 - Road traffic accidents
 - Population explosion etc.
- 6) Examinations - 3 days

Phase III (6th and 7th Semester)

3rd Clinical Posting - 66 hours.

Posting: Clinical case presentation by students

1. Introduction to infectious diseases – history taking
2. Exanthematous fever.
3. Diarrhoea / Cholera / Dysentery.
4. Tuberculosis
5. Leprosy.
6. Dog – bite case.
7. Tetanus.
8. PUO / Enteric fever / Malaria.
9. S.T.D. / AIDS.
10. Hepatitis
11. Introduction to non- communicable diseases.
 - Rheumatic heart disease.
 - Cancer.
 - Obesity / diabetes.

Examinations.

Record Book:

- 1) The case records will have to be entered in a record book separately.
- 2) The certificate of satisfactory completion of all Clinical postings will be entered based on similar certificates from all postings.
- 3) In addition, details of the marks secured in the posting ending examination shall be entered on the second page on which the calculations of the internal assessments shall also be stated. Record book will not carry any marks but its satisfactory completion will be a prerequisite for appearing in examination.

MARKS OF INTERNAL ASSESSMENT:-

Theory –20 marks and practical 20 marks.

I) Theory

1) 3rd Semester -50 Marks

2) 4th Semester -50 Marks

3) 6th Semester -50 Marks

Total -150 Marks (Convert it to out of 10 marks)

4) Pre-university exam. Theory Paper I - 60 Marks

Paper II - 60 Marks

Total -120 Marks (Convert it to out of 10 marks)

Total Theory Internal Assessment marks will be 20.

II) Practical's -

1) 1st Clinical rotation exam. - 3rd Semester - 50 Marks

2) 2nd Clinical rotation exam. - 4th Semester - 50 Marks

3) 3rd Clinical rotation exam. - 6th Semester - 50 Marks

Total 150 Marks (Convert it to out of 10 marks)

4) Prelim exam.

- 40 Marks

10 Marks for Journals

Total 50 Marks (Convert it to out of 10 marks)

Total Practical Internal Assessment marks will be 20.

BOOKS RECOMMENDED.

1. Text book of Community Medicine, Kulkarni A.P. and Baride J.P.

2. Park's Textbook of Preventive and Social Medicine, Park

3. Principles of Preventive and Social Medicine, K. Mahajan

4. Textbook of Community Medicine, B. Shridhar Rao.

5. Essentials of Community Medicine, Suresh Chandra.

6. Textbook of Biostatistics, B. K. Mahajan

7. Review in Community Medicine, V.R. Sheshu Babu.

8. Reference Book for Community Medicine: "Principles and practice of Biostatistics",

Author: Dr. J.V. Dixit

FURTHER READINGS.

Epidemiology and Management for health care for all P.V. Sathe and A.P. Sathe. Essentials of Preventive Medicine O.P. Ghai and Piyush Gupta.

Evaluation Methods:

Theory, Practical's and Viva

Theory 2 papers of 60 marks each	120 marks
Oral (Viva)	10 marks
Practical /Project evaluation	30 marks
Internal Assessment	40 marks (Theory 20 Marks, Practical 20 Marks)
Grand Total	200 marks

Passing: A candidate must obtain 50% in aggregate with a minimum of 50% in Theory including oral and minimum of 50% in practical's

University Examinations Scheme

PATTERN:

THEORY: TWO PAPERS OF 60 MARKS EACH 120 MARKS:-

- **Paper I** - include Concepts in Health & Disease, Sociology / Humanities, Epidemiology, Biostatistics, Communicable and non- communicable diseases, Genetics and Environmental Health.
- **Paper II** - includes Demography & Family Planning, Maternal and child health Nutrition, Occupational Health, Mental Health, Health Education, Health Planning & Management, Health Care Delivery System , National Health Programmes, International Health,
- These are broad divisions. There are some chances of overlapping.

NATURE OF THEORY QUESTION PAPERS:

Pattern of Theory Examination including Distribution of Marks, Questions, Time.

Nature of Question Paper

Faculty with Year: MBBS Final Part-I

Subject: Preventive and Social Medicine

Paper: I

Total Marks: 60 Time: 3 Hours

Instructions:

- 1) All questions are compulsory
- 2) MCQ question paper should be conducted and completed in first 30 min. written question paper must be given only after taking back the MCQ answer sheet
- 3) Fill (dark) the appropriate empty circle below the question number once only.
- 4) Use blue/black ball point pen only.
- 5) Each MCQ carries half mark.
- 6) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked on MCQ.
- 7) For Question no. 2, 3 and 4 time duration is 2.30 hour
- 8) Draw diagrams wherever necessary for Question no. 2, 3 and 4.

9) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper.

10) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Question No.	Question Description	Division of Marks	Total Marks
1	Total MCQs : 20	20 X1/2	10
2	Long answer question four a) b) c) d)	4 X5	20
3	short answer questions four a) b) c) d)	4X3	12
4	very short answer questions nine a) b) c) d) e) f) g) h)i)	9 X 2	18

Faculty with Year: MBBS Final Part-I
Subject: Preventive and Social Medicine
Paper: II
Total Marks: 60 Time: 3 Hours

Instructions:

- 1) All questions are compulsory
- 2) MCQ question paper should be conducted and completed in first 30 min. written question paper must be given only after taking back the MCQ answer sheet
- 3) Fill (dark) the appropriate empty circle below the question number once only.
- 4) Use blue/black ball point pen only.
- 5) Each MCQ carries half mark.
- 6) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked on MCQ.
- 7) For Question no. 2, 3 and 4 time duration is 2.30 hour
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OPHTHALMOLOGY

These guidelines are based on MCI recommendations.

Teaching has to be done keeping in mind the goals and objectives to be achieved by medical student

(i) GOAL

The broad goal of the teaching of students in ophthalmology is to provide such knowledge and skills to the student that shall enable him/her to practice as a clinical and as a primary eye care physician and also to function effectively as a community health leader to assist in the implementation of National Programme for the prevention of blindness and rehabilitation of the visually impaired.

(II) OBJECTIVES

(A) KNOWLEDGE

At the end of the course, student shall have the knowledge of

1. Common problems affecting the eye,
2. Principles of management of major ophthalmic emergencies,
3. Main systemic diseases affecting the eye;
4. Effects of local and systemic diseases on patient's vision and the necessary action required to minimize the sequelae of such diseases;
5. Adverse drug reactions with special reference to ophthalmic manifestations;
- 6, Magnitude of blindness in India and its main causes;
7. National programme for control of blindness and its implementation at various levels.
8. Eye care education for prevention of eye problems
9. Role of primary health center in organization of eye camps;
10. Organization of primary health care and the functioning of the ophthalmic assistant;
11. Integration of the national programme for control of blindness with the other national health Programmes.
12. Eye bank organization

(B) SKILLS

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

1. Elicit a history pertinent to general health and ocular status;
2. Assist in diagnostic procedures such as visual acuity testing, examination of eye, Schiotz tonometry, Staining of Corneal pathology, confrontation perimetry, Subjective refraction

including correction of presbyopia and aphakia, direct ophthalmoscopy and conjunctival smear examination and Cover test;

3. Diagnose and treat common problems affecting the eye;
4. Interpret ophthalmic signs in relation to common systemic disorders,
5. Assist/observe therapeutic procedures such as subconjunctival injection, corneal conjunctival foreign body removal, carbolic cautery for corneal ulcers, Nasolacrimal duct syringing and tarsorrhaphy;
6. Provide first aid in major ophthalmic emergencies;
7. Assist to organize community surveys for visual check-up;
8. Assist to organize primary eye care service through primary health centers.
9. Use effective means of communication with the public and individual to motivate for surgery in cataract and for eye donation.
10. Establish rapport with his seniors, colleagues and paramedical workers, so as to effectively function as a member of the eye care team.

(C) INTEGRATION

The undergraduate training in Ophthalmology will provide an integrated approach towards other disciplines especially Neuro-sciences, ENT, General Surgery and Medicine.

LEARNING METHODS

Total teaching hours: 100

Theory lectures: 70(4th, 6th, 7th term.) Tutorials: 30(7th term)

Clinical Postings Two clinical postings of 4weeks

First in 4th semester and second in 6th semester and 3rd posting of 2 weeks in 7th term

Bedside clinics 10 weeks of three hours per day 180 hours

SYLLABUS OF III MBBS IN OPHTHALMOLOGY

INTRODUCTION ANATOMY & PHYSIOLOGY OF THE EYE

1) COMMON DISEASE OF EYE.

A) Conjunctiva.

Symptomatic conditions : -Hyperemia, Sub conjunctival Haemorrhage.

Diseases : -Classification of Conjunctivitis

- :- Mucopurulent Conjunctivitis
- :- Membranous Conjunctivitis Spring Catarrh.
- :- Degenerations :- Pinguecula and Pterigium
- B) Cornea: - Corneal Ulcers: Bacterial, Fungal, Viral, Hypopyon.
- :- Interstitial Keratitis.
- :- Keratoconus.
- :- Pannus
- :- Corneal Opacities.
- :- Keratoplasty.
- C) Sclera : :- Episcleritis.
- :- Scleritis.
- :- Staphyloma.
- D) Uvea :- Classification of Uveitis
- :- Gen. Etiology, Investigation and Principles Management of Uveitis.
- :- Acute & Chronic Iridocyclitis.
- :- Panophthalmitis.
- :- End Ophthalmitis.
- :- Choroiditis.
- E) Lens : Cataract – Classification & surgical management of cataract.
- :- Including Preoperative Investigation.
- :- Anaesthesia.
- :- Aphakia.
- :- IOL Implant
- F) Glaucoma : :- Aqueous Humor Dynamics.
- :- Tonometry.
- :- Factors controlling Normal I.O.P.
- :- Provocative Tests.
- :- Classifications of Glaucoma.
- :- Congenital Glaucoma.
- :- Angle closure Glaucoma.
- :- Open Angle Glaucoma.
- :- Secondary Glaucoma

- G) Vitreous : :- Vitreous. Opacities.
:- Vitreous. Haemorrhage.
- H) Intraocular Tumours : :- Retinoblastoma.
:- Malignant Melanoma
- I) Retina : :- Retinopathies : Diabetic, Hypertensive Toxaemia of
Pregnancy.
:- Retinal Detachment.
:- Retinitis Pigmentosa, Retinoblastoma
- J) Optic nerve : :- Optic Neuritis.
:- Papilloedema.
:- Optic Atrophy.
- K) Optics : :- Principles : V.A. testing Retinoscopy, Ophthalmoscopy.
:- Ref. Errors.
:- Refractive Keratoplasty.
:- Contact lens, Spectacles
- L) Orbit : :- Proptosis – Aetiology, Clinical Evaluation, Investigations &
Principles of Management
:- Endocrinal Exophthalmos.
:- Orbital Haemorrhage.
- M) Lids : :- Inflammations of Glands.
:- Blepharitis.
:- Trichiasis, Entropion.
:- Ectropion.
:- Symblepharon.
:- Ptosis.
- N) Lacrimal System :- Wet Eye.
:- Dry Eye
:- Naso Lacrimal Duct Obstruction
:- Dacryocystitis
- O) Ocular Mobility :- Extrinsic Muscles.
:- Movements of Eye Ball.
:- Squint : Gen. Aetiology, Diagnosis and principles of
Management.

:- Paralytic and Non Paralytic Squint.

:- Heterophoria.

:- Diplopia.

P) Miscellaneous :- Colour Blindness.

:- Lasers in Ophthalmology – Principles.

Q) Ocular Trauma :- Blunt Trauma.

:- Perforating Trauma

:- Chemical Burns

:- Sympathetic Ophthalmitis

2) Principles of Management of Major Ophthalmic Emergencies :

- :- Acute Congestive Glaucoma.
- :- C. Ulcer.
- :- Intraocular Trauma.
- :- Chemical Burns.
- :- Sudden Loss of vision
- :- Acute Iridocyclitis.
- :- Secondary Glaucomas

3) Main Systemic Diseases Affecting the Eye :

- :- Tuberculosis.
- :- Syphilis.
- :- Leprosy.
- :- Aids.
- :- Diabetes.
- :- Hypertension

4) Drugs :

- :- Antibiotics
- :- Steroids.
- :- Glaucoma Drugs.
- :- Mydriatics.
- :- Visco elastics.
- :- Fluoresceine.

5) Community Ophthalmology :

- :- Blindness : Definition Causes & Magnitude
 - N.P.C.B. – Integration of N.P.C.B. with other health
 - :- Preventable Blindness.
 - :- Eye care.
 - :- Role of PHC"s in Eye Camps.
 - :- Eye Banking.
- 6) Nutritional :- Vit. A. Deficiency.

Clinical Ophthalmology cases To Be Covered

History taking & Eye examination

Assessment of visual function.

Conjunctiva

- :- Pterigium.
- :- Pinguecula
- :- Conjunctivitis.
- :- Sub Conj. Haemorrhage.

Cornea

- :- Corneal Opacity .
- :- Corneal Ulcer.
- :- Corneal Abscess.
- :- Corneal Transplant

Sclera

- :- Scleritis, Epi Scleritis.
- :- Staphyloma.

Uvea :- Iridocyclitis.

Lens

- :- Cataract.
- :- Aphakia
- :- IOLs
- :- Complications

Glaucoma – Types, Signs, Symptoms & Management

Squint

Lids

: - Entropion

: - Ectropion

: - Ptosis.

OPHTHALMOLOGY - MBBS **TUTORIALS TOPICS (Total 30 Hours)**

SURGICAL TECHNIQUES

-Cataract

: - ECCE

: - ICCE

: - IOL Implantation

: - Phaco-emulsification.

- Pterigium

- Chalazion

- Glaucoma

- Foreign Body Removal

- Enucleation

- Keratoplasty

- Basic of squint, L 10

Instruments

- OPD

- Operative

- Basic Examination and Diagnostic instruments

Tonometer, Sac Syringing, Slip Lamp.

Optics

- **Lenses – Spheres, Cylinders, Prisms**, Pinhole, Slit, Maddox Rod & Maddox wing,
Red & Green Glasses.

- IOLs

- Ophthalmoscopy

- Retinoscopy

- Contact Lenses

- Colour Vision

Drugs

- Miotics
- Antibiotics
- Steroids
- Anti-Fungal
- NSAIDS
- Anti virals
- Antiglaucoma
- Mydriatics
- Viscoflastics
- Pre-Op. & Post – Op.

Lecture held each term for VII and VIII term : Topics	Under graduate Theory Lectures: (No.of)
1. Anatomy & Physiology	4
2. Optics	6
3. Conjunctiva	4
4. Cornea	6
5. Sclera	1
6. Uvea	4
7. Cataract	6
8. Glaucoma	6
9. Optic Nerve	4
10. Retina	1
11. Vitreous	4
12. Squint	4
13. Community Ophthalmology	2
14. Lids	4
15. Orbit	2
16. Lacrimal Appartus and Dry Eye	4

17. Miscellaneous & Others	2
Total Lectures	70
Tutorials	30
	100

FINAL MBBS EXAMINATION IN OPHTHALMOLOGY

Evaluation

Internal assessment: 20 (Theory 10 + Practical 10)

Plan of Internal assessment in Ophthalmology

- Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- Combined theory and practical of internal assessment will be considered for passing in internal assessment.

Internal assessment in Theory -

1. Examinations during semesters: This will be carried out by conducting two theory examinations during 4th and 6th semesters (50 marks each).

Total of 100 marks to be converted into 5 marks. (A/5)

2. Preuniversity examination: This shall be carried out during 7th semester.

One theory papers of 40 marks as per university examination.

Total of 40 marks to be converted into 5 marks. (B/5)

Total marks of internal assessment- Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

1. There will be practical examination at the end of each clinical posting of Ophthalmology.,4th and 6th semester.
2. Each examination will be of 50 marks. Total of 2 examinations – 100 marks , will be converted to 5 marks.(C/5)
3. Preuniversity examination: This will be conducted for 40 marks as per university pattern and marks will be converted to 5 (D/5).

Total marks of Internal of-of Practical will be addition of C and D.

Evaluation Methods:

Theory, Practical's and Viva

Theory 1 papers of 40 marks	40 marks
Oral (Viva)	10 marks
Practical	30 marks
Internal Assessment	20 marks (Theory 10 Marks, Practical 10 Marks)
Grand Total	100 marks

Passing: A candidate must obtain 50% in aggregate with a minimum of 50% in Theory including oral and minimum of 50% in practical

University Examinations Scheme

NATURE OF THEORY QUESTION PAPERS:

Pattern of Theory Examination including Distribution of Marks, Questions, Time.

Nature of Question Paper

Faculty with Year: MBBS Final Part-I

Subject: Ophthalmology

Total Marks: 40 Time: 2.30 Hours

Instructions:

- 1) All questions are compulsory
- 2) MCQ question paper should be conducted and completed in first 30 min. written question paper must be given only after taking back the MCQ answer sheet
- 3) Fill (dark) the appropriate empty circle below the question number once only.
- 4) Use blue/black ball point pen only.
- 5) Each MCQ carries half mark.
- 6) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked on MCQ.
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- 8) Draw diagrams wherever necessary for Question no. 2, 3
- 9) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper.
- 10) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Question No.	Question Description	Division of Marks	Total Marks
1	Total MCQs : 20	20 X 1/2	10
2	Long answer question four a) b) c) d)	2X5	10
3	short answer questions ten a) b) c) d) e) f) g) h) i) j)	10 X 2	20

PRACTICAL: 30 marks Clinical: One long case :30 marks :30 min. for taking case and 10 minutes for assessment

Oral (viva voce): 10 marks: 10 min. duration

1. Dark Room 5 marks
2. Instruments 5 marks

OTORHINOLARYNGOLOGY

These guidelines are based on MCI recommendations.

Teaching has to be done keeping in mind the goals and objectives to be achieved by medical student

1. GOAL

The basic idea of undergraduate students teaching and training in otolaryngology is that he /she should have acquired adequate knowledge and skills for optimally dealing with common disorders, emergencies in E.N.T .and basic principles of impaired hearing rehabilitation.

2. OBJECTIVES

(a) **KNOWLEDGE** At the end of course the student shall be able to:

- (1) Describe the basic pathophysiology and common Ear, Nose, Throat diseases and emergencies.
- (2) Adopt the rationale use of commonly used drugs,keeping in mind their side effects
- (3) Suggest common investigative methods and their interpretation.

(b)**SKILLS** At the end of course ,the student shall be able to:

1. Examine and diagnose common ear, nose ,throat problems including premalignant and malignant diseases of head and neck.
2. Manage ear ,nose ,throat (E.N.T)problems at the first level of care and be able to refer whenever and wherever necessary.
3. Assist/do independently basic E.N.T. procedures like ear syringing, Ear dressings, nasal packing removal of foreign bodies from nose, ear, throat.
4. Assist in certain procedures like tracheostomy, endoscopies.
5. Conduct CPR (cardiopulmonary resuscitation).
6. Be able to use auroscope, nasal speculum, tongue depressor, tuning fork and head mirror.

INTEGRATION

The undergraduate training in E.N.T. will provide an integrated approach towards other disciplines especially neurosciences, ophthalmology and general surgery.

LEARNING METHODS

1. Total teaching hours : 70
2. Theory lectures : 48(4th,6th,7th term.)
3. Tutorials : 22(7th term)

4. Clinical Postings Two clinical postings of 4weeks

First in 4th semester and second in 6th semester

Bedside clinics – 8 weeks of three hours per day 144 hours

Course distribution and Teaching Programme

This is suggested programme and can vary at institute

Total 70 hours of teaching has to be done in ENT including Tutorials

Details of syllabus is given separately below after distribution as per semester

Theory lectures will be taken once a week and their distribution will be as below:

1. 4th term :16(nose and Paranasal sinuses/throat)

a. NOSE AND P.N.S. : 10

b. THROAT AND NECK: 6

2. 6th term :16 (Remaining topics of throat, head and neck and / ear)

a. THROAT AND NECK: 8

b. EAR : 8

3. 7 th term : 16 lectures

a. RECENT ADVANCES AND OTHERS: 4

b. EAR 12

Total Theory lectures 48

Tutorials 7th Term 22 hours teaching

THEORY LECTURES: 4th, 6th, 7th term (one hour per week)

Topics	No.of lectures
Throat	
Anatomy/physiology	1
Diseases of buccal cavity	1
Diseases of pharynx	2
Tonsils and adenoids	2
Pharyngeal tumours and related Topics (trismus, Plummer.Vinson Syndrome etc.)	1
Anatomy /physiology/examination	2
Methods/symptomatology of larynx	

Stridor /tracheostomy	2
Laryngitis /laryngeal trauma/ Laryngeal paralysis/ foreign body larynx/ Bronchus, etc.	2
Laryngeal tumours	1

Nose and paranasal sinuses

Anatomy /physiology/ exam. Methods /symptomatology	2
Diseases of ext. nose/cong. Conditions	1
Trauma to nose/p.n.s/Foreign Body. / Rhinolith	1
Epistaxis	1
Diseases of nasal septum	1
Rhinitis	1
Nasal polyps/nasal allergy	1
Sinusitis and its complications	1
Tumours of nose and Para nasal sinuses	1

EAR

Anatomy /physiology	2
Methods/methods of examination	1
Cong.diseases/ ext.ear /middle ear	1
Acute/chronic supp. otitis media Aetiology, clinical features and its Management/complications	6
Serous/adhesive otitis media	1
Mastoid/middle ear surgery	1
Otosclerosis/tumours of ear	2
Facial paralysis/Meniere"s disease	2
Tinnitus /ototoxicity	2

FINAL MBBS EXAMINATION IN OTORHINOLARYNGOLOGY

Evaluation

Internal assessment: 20 (Theory 10 +Practical 10)

Plan of Internal assessment in Ophthalmology

- Marks of Internal Assessment should be sent to University before the commencement of Theory examination.
- Combined theory and practical of internal assessment will be considered for passing in internal assessment.

Internal assessment in Theory -

1. Examinations during semesters: This will be carried out by conducting two theory examinations during 4th and 6th semesters (50 marks each).

Total of 100 marks to be converted into 5 marks. (A/5)

2. Preuniversity examination: This shall be carried out during 7th semester.

One theory papers of 40 marks as per university examination.

Total of 40 marks to be converted into 5 marks. (B/5)

Total marks of internal assessment- Theory will be addition of A and B.

Internal assessment in Practical

Examinations at end of Clinical postings:

4. There will be practical examination at the end of each clinical posting of Ophthalmology.,4th and 6th semester.
5. Each examination will be of 50 marks. Total of 2 examinations – 100 marks , will be converted to 5 marks.(C/5)
6. Preuniversity examination: This will be conducted for 40 marks as per university pattern and marks will be converted to 5 (D/5).

Total marks of Internal of-of Practical will be addition of C and D.

Evaluation Methods:

Theory, Practical's and Viva

Theory 1 papers of 40 marks	40 marks
Oral (Viva)	10 marks
Practical	30 marks
Internal Assessment	20 marks (Theory 10 Marks, Practical 10 Marks)
Grand Total	100 marks

Passing: A candidate must obtain 50% in aggregate with a minimum of 50% in Theory including oral and minimum of 50% in practical

University Examinations Scheme

NATURE OF THEORY QUESTION PAPERS:

Pattern of Theory Examination including Distribution of Marks, Questions, Time.

Nature of Question Paper

Faculty with Year: MBBS Final Part-I

Subject: Otorhinolaryngology

Total Marks: 40 Time: 2.30 Hours

Instructions:

- 1) All questions are compulsory
- 2) MCQ question paper should be conducted and completed in first 30 min. written question paper must be given only after taking back the MCQ answer sheet
- 3) Fill (dark) the appropriate empty circle below the question number once only.
- 4) Use blue/black ball point pen only.
- 5) Each MCQ carries half mark.
- 6) Students will not be allotted mark if he/she overwrites strikes or put white ink on the cross once marked on MCQ.
- 7) For Question no. 2, and 3 time duration is 2 hour
- 8) Draw diagrams wherever necessary for Question no. 2, 3
- 9) Answers of Questions and Sub questions must be written strictly according to the serial order of question paper.
- 10) Do not write anything on the blank portion of the question paper. If written anything, such type of act will be considered as an attempt to resort to unfair means.

Question No.	Question Description	Division of Marks	Total Marks
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3	short answer questions ten a) b) c) d) e) f) g) h) i) j)	10 X 2	20

PRACTICAL: 30 marks:

1. One long case :20 marks :30 min. For examination and 10 minutes for assessment
2. One short case :10 marks :15 min. for examination and 5 minutes for assessment

Oral (viva voce):10 marks: 10 min. duration (Instruments, x-rays, specimens, audiograms)