

FINAL PROFESSIONAL MBBS (PART -1)
ENT

Theory Topics

TO INCLUDE ANATOMY, PHYSIOLOGY, & DISEASES OF EAR, NOSE & PARANASAL SINUSES, THROAT & HEAD & NECK & RECENT ADVANCES

(1) OTOLOGY

- SURGICAL ANATOMY OF EXTERNAL, MIDDLE & INNER EAR.
- PHYSIOLOGY OF HEARING AND EQUILIBRIUM.
- FUNCTIONAL ASSESSMENT OF HEARING AND VESTIBULAR SYSTEM.
- DISEASES OF EXTERNAL EAR.
- OTITIS MEDIA - ACUTE/CHRONIC /NON-SUPPURATIVE OTITIS MEDIA.
- OTOSPONGIOSIS.
- COMPLICATION OF OTITIS MEDIA.
- FACIAL NERVE - SURGICAL ANATOMY AND DISORDERS
- TUMOURS OF EAR.
- VERTIGO & MENIERE'S DISEASE.
- DEAFNESS & REHABILITATION.
- TINNITUS.
- PRINCIPALS OF OPERATIONS ON EAR
 - MYRINGOTOMY
 - MASTOIDECTOMY
 - TYMPANOPLASTY
- NATIONAL DEAFNESS CONTROL PROGRAMME

(2) RHINOLOGY

- ANATOMY & PHYSIOLOGY OF NOSE
- DISEASES OF EXTERNAL NOSE & NASAL CAVITY.
- DISEASES OF NASAL SEPTUM.
- INFLAMMATORY & OTHER DISORDERS OF NASAL CAVITY
- NASAL ALLERGY AND ALLIED CONDITIONS.
- NASAL POLYPI.
- EPISTAXIS
- ANATOMY AND PHYSIOLOGY OF PARANASAL SINUSES.
- SINUSITIS - ACUTE & CHRONIC
- FACIO MAXILLARY TRAUMA.
- TUMOURS OF NOSE AND PARANASAL SINUSES.
- SURGICAL PROCEDURES ON NOSE.
 - NASAL PACKING
 - ANTRAL WASH
 - INTRA NASAL ANTROSTOMY.
 - CALDWELL LUC'S OPERATION.
 - POLYPECTOMY
 - FESS.
- SMR / SEPTOPLASTY

(3) ORAL CAVITY & PHARYNX

- SURGICAL ANATOMY OF ORAL CAVITY.
- DISEASES OF ORAL CAVITY.
- DISEASES OF SALIVARY GLANDS.
- SURGICAL ANATOMY AND PHYSIOLOGY OF PHARYNX.
- DISEASES OF PHARYNX.
- DISEASES OF TONSILS AND ADENOIDS.
- DISEASES OF NASOPHARYNX.
- DEEP NECK INFECTIONS.

- TUMOURS OF OROPHARYNX
- TUMOURS OF NASOPHARYNX
- OPERATIONS ON ORAL CAVITY & PHARYNX-
ADENOIDECTOMY
TONSILLECTOMY
- (4) LARYNX AND TRACHEA-**
 - ANATOMY AND PHYSIOLOGY OF LARYNX.
 - LARYNGOTRACHEAL INFECTIONS AND STRIDOR
 - HOARSENESS.
 - NEUROLOGICAL DISORDERS OF LARYNX.
 - LARYNGOTRACHEAL TRAUMA.
 - TUMOURS OF LARYNX
 - SURGICAL ANATOMY OF TRACHEO BRONCHIAL TREE
 - DISEASES OF TRACHEA AND BRONCHI AND FOREIGN BODIES IN AIR PASSAGES
 - OPERATIONS ON LARYNX, DIRECT LARYNGOSCOPY, BRONCHOSCOPY & TRACHEOSTOMY.
 - IN BRIEF ABOUT LARYNGECTOMY & NECK DISSECTION
- (5) OESOPHAGUS**
 - ANATOMY & PHYSIOLOGY OF OESOPHAGUS.
 - DISEASES OF OESOPHAGUS INCLUDING DYSPHAGIA
 - OESOPHAGOSCOPY PROCEDURE.
- (6) HEAD AND NECK (BRIEF UNDERSTANDING)**
 - THE SKULL BASE
 - THE THYROID GLAND
 - CERVICAL SWELLINGS
- (7) RECENT ADVANCES-**
 - RADIOLOGY AND IMAGING IN ENT.
 - AIDS/ HIV/ CLINICAL MANIFESTATIONS WITH SPECIAL REFERENCE TO ENT.
 - RADIOTHERAPY IN HEAD AND NECK CANCERS.
 - CRYOSURGERY
 - LASERS IN ENT
 - OCCUPATIONAL DISEASES IN ENT
- (8) MISCELLANEOUS DISORDERS-**
 - PROPTOSIS
 - CAVERNOUS SINUS THROMBOSIS
 - CSF RHINORRHOEA.
 - CLEFT LIP AND CLEFT PALATE.
 - SLEEP APNOEA SYNDROME AND SNORING
 - SIGNS AND TESTS IN ENT
 - SYNDROMES IN ENT.
 - SPACES AND TRIANGLES OF ENT.

List of Books for MBBS Syllabus

Name of Book	Author
1. Diseases of Ear, Nose & Throat	Logan Turner
2. Diseases of Ear, Nose & Throat	P.L. Dhingra
3. Diseases of Ear, Nose & Throat	Dr. B.S. Tuli
4. Diseases of Ear, Nose & Throat	Dr. Hazarika

DEPARTMENT OF OPHTHALMOLOGY

2. *DETAILED SYLLABUS FOR MBBS FINAL

Part-A

Theory Topics

Anatomy, physiology and detailed study of diseases of:

ANTERIOR SEGMENT

CONJUNCTIVA

- Conjunctivitis
 - Bacterial conjunctivitis
 - Chlamydial conjunctivitis
- Allergic conjunctivitis
 - Vernal keratoconjunctivitis
 - Phlyctenular conjunctivitis
- Ophthalmia neonatorum
- Degenerative conditions
 - Pinguecula
 - Pterygium
- Xerosis Of Conjunctiva
- D/D Of Nodules At The Limbus

CORNEA

- Corneal Ulcer
 - Bacterial
 - Fungal
 - Viral
- Herpes Zoster Ophthalmicus
- Atrophic Corneal Ulcer
- Neuroparalytic Keratitis
- Exposure Keratitis
- Mooren's Keratitis

- Superficial Punctate Keratitis³
- Photo-Ophthalmia
- Interstitial Keratitis
- Corneal Degenerations
 - Arcus Senilis
 - Band Keratopathy
- Corneal Dystrophies
 - Keratoconus
 - Keratoglobus
- Corneal Opacities
- Vascularisation Of Cornea
- Effects Of Corneal Perforation
- Keratoplasty
 - Types
 - Indications
 - Methods Of Corneal Preservation

SCLERA

- Episcleritis
- Scleritis
- Staphylomas

UVEAL TRACT

- Congenital Anomalies
- Anterior Uveitis
- Sympathetic Ophthalmitis
- D/D Of Red Eye

ERROR OF REFRACTION

- Causes Of Eye Strain
- Hypermetropia
- Myopia
- Astigmatism
- Accommodation And Its Anomalies

Part-B

Anatomy, physiology and detailed study of the diseases of:

LIDS

- Congenital Anomalies
- Blepharitis
- Hordeolum Externum
- Hordeolum Internum

- Chalazion
- Trichiasis
- Entropion
- Ectropion
- Ptosis
- Tumours

ORBIT

- Proptosis
- Orbital Cellulitis
- Cavernous Sinus Thrombosis

LACRIMAL APPARATUS

- Dry Eye
- Epiphora
- Dacryocystitis

LENS

- Cataract
 - Congenital
 - Developmental
 - Acquired
 - Senile
 - Metabolic
 - Complicated
 - Toxic
 - Radiational
 - Traumatic
- Investigations, operative procedures and complications of cataract
- Aphakia, its handicaps and management

GLAUCOMA

- Congenital glaucoma
- Primary open angle glaucoma
- Narrow angle glaucoma
- Secondary glaucoma

MUSCULAR ANOMALIES

- Heterophoria
- Esotropia
- Exotropia
- Paralytic squint

RETINA AND OPTIC NERVE

- Hypertensive retinopathy
- Diabetic retinopathy
- Retinal detachment
- Retinoblastoma
- Papilloedema
- Optic neuritis
- Optic atrophy

MISCELLANEOUS

- Medical ophthalmology
- Blindness and its causes
- Community ophthalmology
- Vision 2020

OCULAR INJURIES

- Mechanical injuries
 - Penetrating injuries
 - Penetrating injuries with retained
 - Intra-ocular foreign bodies
 - Blunt trauma
- Chemical injuries
 - Acid, alkali burns

SUGGESTED BOOKS

- ✓ PARSONS DISEASES OF THE EYE, 1992, 18TH. EDITION: CHURCHILL LIVINGSTONE
- ✓ COMPREHENSIVE OPHTHALMOLOGY 2000: A.K. KHURANA

Final Professional M.B.B.S – (Part - 1)

3. COMMUNITY MEDICINE

DISTRIBUTION OF SYLLABUS INTO THEORY PAPERS

- Paper – A: Part - I** Introduction to Medicine with special reference to Community Medicine.
Concept of Health & Disease.
Social sciences.
Behavioral sciences, Mental Health.
Biostatistics methods & techniques.
Genetics.
Health Education (Information, Education and Communication)
- Part – II** General Epidemiology.
Immunity & Immunization.
Environmental Health, Hospital Waste Management
Research Methodology.
Human Nutrition & Dietetics.
Medical Entomology.
Occupational Health.
- Paper – B: Part - I** Specific Epidemiology of Communicable & Non-Communicable diseases.
Health management, health administration & Health care delivery system in Govt. & other sector.
Demography & Family Welfare.
Maternal & Child health
- Part - II** National health programme & National health policies.
International health: International health regulations & International classification of diseases etc.
Adolescent health.
Geriatrics.
Disaster management.
Health information system.
Recent Advances in Community Medicine

NOTE:- *These are the broad guidelines of syllabus for paper-A and paper-B, but questions can appear in any paper from any part of the syllabus.*

Paper - A

- I Introduction to Medicine and Concepts of Health and Disease.**
History of Medicine.
Definition of health.
Dimensions and determinants of health.
Indicators of health
Epidemiological triad
Theories of disease causation
Natural history of disease

Risk factor concept
Concept of control of disease
Levels of prevention
Modes of intervention
Primary health Care- Introduction.
Medical Ethics

II Introduction to Social Sciences including Behavioral Sciences.

Elementary Course in Sociology

Definition: Family, Community.
Role of family in health and disease
Cultural factors influencing health and disease in urban, rural and slum settings
Social organization and community participation
Measurement of the socio-economic status of a family and its importance in health and disease
Impact of urbanization on health and disease
Interview techniques
Methods of social research in relation to health
To develop a good doctor – patient relationship
Role of Medical Social Worker in health care.
Mental Health.

III Biostatistics

Introduction
Biostatistics in Medicine
Statistical Methods
Frequency distribution
Measures of Central tendency
Proportions
Presentation of statistical data
Tables: Simple and frequency distribution tables
Charts and diagrams: Bar, histogram, Frequency polygon, Line diagram, Pie- charts, Pictogram etc.
Probability
Normal Distribution
Estimation of standard error
Confidence interval
Tests of significance
Bias and random error
Sample size calculation
Sampling
Variability
Use of computer in health and disease

IV Environment and Health

Concepts of ecology: air, ventilation, atmospheric, heat, light, sound, pressure, radiation etc.
Sources of water, sanitary well, water borne diseases, water purification, storage and distribution, standards of purity, bacteriological tests, swimming pool sanitation.
Disposal of wastes: Excreta, refuse, sludge, waste water, animal dung etc, methods and appliances suitable for urban and rural areas.

- Housing and health, village and town planning, sanitation in camps
Importance of personal hygiene
- V Hospital Waste Management.**
- VI Occupational Health**
Working environment: Health hazards of industrial and agricultural workers
Common occupational diseases
Industrial toxic substances
Principles of control of occupational diseases
Legal aspects: Factory Act.
Employees State Insurance scheme (ESI)
- VII Information, Education & Communication (Health Education)**
- VIII General Epidemiology**
Definition of epidemiology
Uses of epidemiology in hospital, community and health planning.
Basic measures in epidemiology e.g. Rate, Ratio and Proportion
Mortality: Concepts of Crude, Specific and Standardized death rates
Morbidity: Concepts of Incidence and Prevalence of disease
Significance of Time, Place and Person distribution in epidemiology
Sources of epidemiology data
Concept of causation of disease
Epidemiological studies: Descriptive, analytical and experimental
Basic concept about transmission of infectious agents
Principles of control of communicable disease
Investigation and control of an epidemic
Epidemiological Principles underlying screening.
Distinction between screening and diagnostic tests
Calculate sensitivity, specificity, positive predictive value etc. for screening tests
Immunity and Immunization.
Research Methodology.
- IX Applied genetics**
- X Human Nutrition and Dietetics**
Nutrition: Sources and functions, nutritive value of common foodstuffs,
Nutritional requirement at different periods of life, balanced diet, common.
Deficiency diseases, assessment of nutritional status, food poisoning and food-borne diseases.
Milk, meat hygiene
Magnitude of nutritional problems in India
National nutritional policy
National nutritional programmes.
- XI Medical Entomology**
Life history of insects of medical importance, diseases spread by them, and their
Integrated control.
Disinfection: Principles, methods.

Paper – B

I Specific Epidemiology

a) Communicable diseases

Water – borne and intestinal diseases
Arthropod borne diseases
Zoonoses
Surface/contact diseases including STD and AIDS
Respiratory diseases
Worm Infestation

b) Non- Communicable diseases

Epidemiology and prevention of Coronary heart disease
Hypertension
Rheumatic fever and Rheumatic heart disease
Accidents
Cancers
Diabetes
Blindness

Smoking and Alcohol in health and disease

(Extent of the problem, epidemiology and natural history of the disease Relative public health importance of a particular disease in a given area Influence of social, cultural and ecological factors on the epidemiology of the disease).

Control of communicable and non-communicable disease by diagnosing and treating a case and in doing so demonstrate skill in:

1. Clinical methods
2. Use of essential laboratory techniques
3. Selection of appropriate treatment regimes
4. Follow-up of cases

Principles of planning, implementing and evaluating control measures for the diseases at the community level bearing in mind the relative importance of the disease.

Institution of programmes for the education of individuals and Communities.

Investigating a disease epidemic Awareness of National Disease Control Programmes.

II Health Management, Health administration

Administration: Public health administration, comprehensive health care, delivery of health care.

Planning, management and evaluation.

National Health Policy

Explain the process of health infrastructure at centre state and district levels.

The inter-relationship between community development block and primary health centre.

The organization, functions and staffing pattern of community health centres, primary health centre and sub-centre.

The job descriptions of medical officer, health supervisor (Male and Female), health worker (male and female) villages health guide, Anganwadi workers.

The activities of the health team at the primary health centre.

Primary health care

Voluntary agencies in health care.

Health Economics.

III Demography and Family Welfare

a) Demography

Importance of demography

Demography cycle

World population trends: Regional differences

Birth and death rates, Growth rates etc.

Sex ratio, Density of population, family size,

Urbanization, Literacy,

Life expectancy etc.

Fertility: Determinants of fertility: biological and behavioral determinants

Fertility related statistics

Effect on population of changes in birth, death and growth rates

Vital statistics and their method of collection. Census, Registration of vital events,

Hospital records, population surveys.

Standardization of death rates

Life Table

Introduction to International Classification of Diseases.

b) Family Welfare

Definition and concept

Reasons of rapid growth of population in India

Need for population control measures and national population policy

Family planning methods – Type, advantages and short-comings

Medical Termination of Pregnancy Act

National Family Welfare Programme in India

IV Maternal and Child Health

Maternal Health

Magnitude of the problem

Maternal morbidity- definition, causes and factors, rate

Maternal mortality

Antenatal, natal, and post-natal care

Concept of high risk approach

Local customs, practices, beliefs during pregnancy, childbirth and lactation

Child Health

Magnitude of problem

Morbidity and mortality- causes and factors

Under Five clinics

Breast-feeding

Indicators of MCH

School health

Child survival and safe motherhood programme

Reproductive and child health programme

National rural health mission.

Decentralized participating planning in family welfare

V National Health Programmes and National health Policies.

VI International Health: International Health Regulations and Classification of Diseases etc.

- VII **Adolescent Health**
- VIII **Geriatrics**
- IX **Disaster Management**
- X **Health Information System.**
- XI **Recent Advances in Community Medicine**

PRACTICAL

(A) I-Prof.

- 1 To visit rural slum areas to get familiar with their living conditions.
- 2 To get familiar with demographic pattern of rural and slum areas by conducting a survey.
- 3 Visit to social establishment like old age home, rehabilitation for blind, deaf & dumb etc.
- 4 Simulated exercise in class room eg. Role play, PBLs, PSEs.
- 5 To familiarize with health care delivery system by visiting sub centre, PHC and anganwari.
- 6 Calculate various statistical measures using data from hospital or community.

(B) II-Prof.

I Field Visits / Observations visits / Demonstration.

To study water supply & water disinfection sewage disposal, drainage, sanitation of dairies, milk pasteurization plant, factories & ESI, Bakeries, abattoirs, housing conditions, hotels and restaurants, village sanitation, registration of birth and death etc. visit to a public health laboratory, a rehabilitation centre, medical record section of a hospital demonstrations of various immunizing agents and cold chain equipments.

Contraceptives

Disinfectants and insecticides

Insects of medical importance

Various food items

Demonstrations of sanitary well, health education material

Iodine testing in salt

II Family health Care

To study social culture, economic, ecological factors affecting the health in the family.

Family as a unit in the community

Multifactor approach in causation of diseases.

To assess the health knowledge of the family and to prepare health education material to guide the family.

To assess the nutritional status of the family

Preventive health check – up of individual member, its importance and follow-up of the member.

(C) Final Prof.

I Continuation of family health care

II Clinico – psycho-social case review in hospital, out patient and in family

III Visit to Public Health Institution: Sub-centre, Primary Health Centre, Community Health Centre, District Hospital, District Tuberculosis Centre, Malaria Clinic.

IV Visit and involvement in providing health care to under five and antenatal clinic.

V To get familiarize in immunization services, health check-up camps, school health activities.

Skills:

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

- (1) Plan, Collect, Analyze, Interpret and present data from a hospital/ community survey.
- (2) Select and utilize simple statistical methods for the analysis, interpretation and presentation of data.
- (3) Define, calculate and interpret bio-statistical measures
- (4) Describe the demographic pattern of the country
- (5) Plan, implement & the use of simple audio-visual (A-V) aids.
- (6) Describe environmental hazards: inside and outside the home
- (7) Define and analyze the importance of water and sanitation in human health
- (8) Suggest feasible methods of environmental control
- (9) Describe common occupational hazards in industries, agriculture and other occupational levels.
- (10) Describe feasible methods of control of occupational hazards.
- (11) Describe the epidemiological methods
- (12) Use epidemiological tools to make rational decisions relevant at the individual and community level.
- (13) Describe the health information system in India with reference to the management information system, Census and Vital Statistics Registration.
- (14) Diagnose and manage common nutritional problems at the individual and community levels.
- (16) Describe the school health programme.
- (17) Describe the principles of Primary health Care and other related concepts.
- (18) List the goals/targets set to achieve health For All 2000 AD.
- (19) Describe the health care delivery system in India.
- (20) Plan and implement an intervention programme with community participation.
- (21) Interact with other members of the health care team and participate in the organization of health care services and implementation of National Health Programme.
- (22) Describe and analyze the roles of individual, family, community and socio-cultural milieu in health.
- (23) Apply epidemiological methods to control communicable and non-communicable diseases in the hospital and community set up.
- (24) Describe the important/ common health problems of India.
- (25) Describe and evaluate the National Health Programmes.
- (26) Plan and implement measures for disaster management.
- (27) Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources, prevailing socio-cultural beliefs and family resources.

MBBS (Recommended Books)

1. Park JE & K. Park, "Text book of Preventive and Social Medicine", M/S Banarsidasm Bhanot, Jabalpur
2. Mahajan B.K. and M.C. Gupta, "Text book of Preventive and Social Medicine" Jaypee Publications.
3. K.R. Sundaram, S.N. Dwivedi and V. Sreenivas, "Medical Statistics Principal & Methods", published by B.I. Publications Pvt. Ltd. Chennai.
4. A.H. Suryakantha, "Community Medicine with Recent Advances", published by Jaypee Brothers Medical Publishers.
5. G.M. Dhaar & I. Robbani, "Foundations of Community Medicine", published by Elsevier.