# RGUHS- MD Community Medicine Course contents

# 1. History of Public Health

- Historical Lessons Learnt from the success and failure of Public Health strategies in India.
- Historical influence and importance of Indigenous System of Medicines in Health Care in India.
- Historical Review of Implementation of the Bhore committee's and other Committee Reports on Health Services, Health Care and Health Professional Education in India.
- Historical Review of the development of National Health Policies.
- The trend of achievements of the country vis-à-vis the Health for All concept.
- Study of development of Health System models in India
- Contribution of Important scientists for public health

# 2. Concepts in Public Health

- Concept of Disease control strategies.
- Public Health importance of the Health Promotion Approach.
- Concept of Health for All, Millenium development goals.
- Multi-sector approach in Health care programs.
- Health Care as part of Community Development
- Advantages of Community Participation in health care programs.
- Changing patterns of diseases.

# 3. Primary Health Care

- Need and importance for prioritizing of Primary Health Care
- Principles of Primary Health Care
- Elements of Primary Health Care
- Models of Delivery of Primary Health Care & Public health care in UK, USA

# 4. The Health Care Systems in India -

- Organizational Structure and Functions of the Govt. Health care System at the Central, State, district, Primary Health centre, Community Health Centre, Peripheral areas as also the urban areas.
- Health Care systems for Factories / Mines / Plantations.
- Role of N.G.O. sector in health care system.
- Corporate and Private Health Insurance systems.
- Family Medicine, General Practitioners.
- Indigenous Medicine system.
- Feasibility of Networking the Govt. and NGO sectors (Public Private Partnership) for better coverage of health programs.

#### 5. Role of Social sciences in Health

- Need and Importance and Role of Medico- Social work in Public Health
- Behavioral sciences Health Seeking Behavior in implementing Health care programs.
- Meaning and relationship of Behavioral Sciences to Health.
- Principles of Social Psychology as applicable to Health.
- Principles of social Anthropology as applicable to Health

# Sociology

- Relevance and use of Social structures, social organizations and cultural factors in addressing problems in Health as part of Community Development.
- Influence of social & cultural factors in Health & disease
- Social problems in health & disease
- Gender based issues and its relevance to impact of health care programs.
- Impact of Urbanization and Industrialization on Health.
- Difference between Advising and Counseling
- Importance of Motivation in Health care.

## 6. Health Legislation

- Review of provisions available under the various Acts related to health. This covers MCH, Industries, Mines, hospitals, plantations, labor, adoption, rail I /road /air travel, waste treatment, child labor, handicapped, food safety, housing and public utilities, pollution, reporting of notified diseases, quarantine, medical negligence, etc.

# 7. <u>Urban Health</u>

- Accessibility of health care Facilities.
- Health advisory Role on Water and Waste Treatment planning Boards.
- Recommendations on Pollution control planning and monitoring systems, as related to Health.
- Urban Ecology such as housing, slum formations, social issues, road safety, urban stress factors, micro-climatic changes, etc which impact all dimensions of health.

# 8. Principles of Educational Science and Technology

- Curriculum Planning, Educational Objectives.
- Principles of Learning.
- Teaching / Learning methods.
- Teaching skills including Micro Teaching.
- Pedagogy Skills
- Preparation and Use of Teaching Aids and Learning Research Materials.
- Methods of Evaluation

# 9. Principles and Practice of Information, Education and Communication

- Principles of IEC / Health Education / communication for behavioral change
- Objectives of Health Education
- Content of Health Education.
- Relevance of using Communication Methods in the implementation of Health care.

- Meaning of Communication.
- Principles of effective Communication, relevant to health.
- Communication Blocks/ barriers and means of overcoming the blocks.
- Communication strategies for facilitating effective implementation of Heath programs at individual and community levels.
- The use and influence of Mass Media for IEC.
- Practice (Methods) of IEC and its application in Community Health.
- Quantitative and Qualitative Evaluation of impact of IEC programs.

# 10. Principles of Nutrition and Applied Nutrition

- Nutrients and their daily Requirements.
- Classification of Foods
- Balanced Diet
- Nutritional Profiles of Major Foods
- Nutritional Deficiencies & Nutritional disorders
- Protein Energy Malnutrition
- Nutritional Importance of Trace elements
- Assessment of an individual's Nutritional Status
- Assessment of Community Nutritional Status
- Nutritional Problems in India including Food Borne Diseases
- Community\_Nutritional Programmes in India
- Methods and impact of nutritional Surveillance
- Social Problems in Nutrition
- Food Hygiene domestic and commercial levels
- Food Adulteration including PFA Act review of implementation
- Primordial Prevention of Lifestyle related nutritional diseases.
- National Nutritional policy, Food security

#### 11. Environmental Health

- a) Water
  - Applied importance of Sources of water
  - Water Pollution and review of control and monitoring methods
  - Purification of water and its storage and distribution
  - Water quality standards its implementation and monitoring
  - Epidemiology and Control of Water borne diseases
  - Epidemiological Investigation of outbreak of water borne disease
  - Rain water harvesting / water conservation.
- b) Air
  - Indices of thermal comfort and their applied importance
  - Air Pollution including monitoring, control and prevention
  - Ventilation and its applied importance
- c) Importance of domestic and industrial Housing standards
- d) Impact and control of Noise Pollution
- e) Radiation Hazards from natural, industrial, hospital, communication devices
- f) Meteorological Environment and its Health impact
- g) Domestic and industrial Lighting Standards
- h) Disposal of Waste and Sanitation
  - Disposal of Solid Wastes
  - Excreta Disposal
  - Sewage treatment and safe recycling guidelines
  - Health Care and Hospital Waste Management
- i) Guidelines on Industrial Toxic wastes, nuclear wastes disposal.
- j) Role & importance of pollution control boards.

# 12. Medical Entomology

- Identification of the arthropods as classified below:
  - a) Insecta: Mosquito, Flies, Lice, Fleas, and other insects.
  - b) Arachnida: Ticks and Mites
  - c) Crustacea: Cyclops
  - Diseases transmitted and Modes of Transmission of diseases by arthropods

- Control of Arthropods and diseases borne by them
- Integrated Vector Control
- Types, Mode of application and effectivity of Insecticides & Rodenticides.
- Types and mechanism of Insecticide Resistance and modes of Resistance prevention

# 13. Communicable diseases : Epidemiology, prevention & control of Diseases

# **Respiratory Infections**

- Small pox
- Chicken pox
- Measles
- Mumps
- Rubella
- Influenza
- Diphtheria

# **Intestinal Infections**

- Poliomyelitis
- Viral Hepatitis
- Cholera
- Acute Diarrhoeal
  - diseases
- Typhoid fever
- Food Poisoning

# **Arthropod-borne Infections**

- Dengue syndrome
- Malaria
- Lymphatic filariasis
- Others

### Zoonoses

#### Viral

- Rabies
- Yellow fever
- Japanese encephalitis
- KFD
- Others

## Rickettsial diseases

- Rickettsial Zoonoses
- Scrub typhus
- Murine typhus
- Tick typhus
- Q fever
- Others

- Whooping cough
- Meningococcal meningitis
- Acute respiratory infections
- SARS
- Tuberculosis
- Others
  - Amoebiasis
  - Ascariasis
  - Hookworm infection
  - Dracunculiasis
  - Others

#### Bacterial

- Brucellosis
- Leptospirosis
- Plague
- Human salmonellosis
- Others

## Parasitic Zoonoses

- Taeniasis
- Hydatid disease
- Leishmaniasis

### **Surface Infections**

TrachomaTetanusLeprosyTetanusYaws

- Others

# **Emerging and Re-emerging infectious diseases Hospital Acquired Infections**

## 14. Epidemiology of Chronic Non communicable diseases and Conditions

Cardiovascular diseases
 Coronary Heart disease
 Hypertension
 Stroke
 Cancer
 Diabetes
 Obesity
 Blindness

Rheumatic heart disease
 Accidents and Injuries

Others

# 15. Principles of Tropical Medicine

Present problem statement of diseases of public health importance.

- Descriptive epidemiological factors of specific diseases of public health importance.
- Causes and factors related to increasing or decreasing trends of these diseases.
- Factors responsible for emergence of new diseases.
- Review of changing disease control strategies for specific diseases of public health importance.
- Accessibility and availability of Health Care services in Desert and Tribal areas

## 16. Maternal and Child Health Care

- Meaning and relevance of Risk Approach to Maternal and Child Health
- Review of the public health relevance of Maternal and Child health physical, mental, social and behavioral problems
- Rationale, Components and Implementation of Antenatal, Intranatal and Postnatal Care
- Rationale, Components and Implementation of Child Health Care
- Maternal and Childhood Disease control strategies
- Indicators of MCH care and their interpretation

# 17. Organizational and Functional components of the Maternal and Child Health Services Program in India

- Review of MCH related programmes in India. Eg. RCH, ICDS, Integrated Management of Neonatal & Childhood Illness (IMNCI) etc.

## 18. Family Welfare Services in India

- Meaning and relevance of Family Planning, Family welfare and Population Control
- Methods of Family Planning Review of mechanism, effectivity, factors for non-compliance of usage, contraindications and side-effects.
- Formulation and Evaluation of Implementation strategies of Family planning programs.
- National population policy.
- Legislations

# 19. Demography

- Significance of Demography in public health
- Interpretation and implications of Demographic Cycles on global and Indian context.
- Demographic trends in India and its application in the planning of Health programmes
- Fertility indicators

#### 20. Genetics and Health

- Relevance and Impact of population Genetics
- Preventive and Social Measures in Genetics
- Implication of Gene therapy, Stem-cell research on future disease control program strategies.

## 21. School Health Services

- Objectives of school health services
- Planning for components of school health service and their implementation strategies (including child – parent – teacher and community roles)

- School level counseling for chronic absenteeism, drug abuse, and gender based issues, behavioral and learning problems.
- Monitoring Health of school children and school staff

## 22. Social Paediatrics

- Interventional strategies for Juvenile Delinquency, Child Abuse, Child Labour, Street Children, Child Marriage.
- Child Guidance Clinic
- Child Placement
- Disabled / Handicapped children

### 23. Biostatistics

- Collection / Organization of data / Measurement scales
- Presentation of data and Record keeping
- Measures of central tendency
- Measures of variability
- Sampling and Planning of health survey
- Probability, Normal distribution and inductive statistics
- Estimating population values
- Tests of significance (Parametric / Non-parametric )
- Analysis of variance
- Multi-variate Analysis and Meta analysis
- Association and correlation and Regression
- Vital Statistics & Registration
- Evaluation of health and measurement of morbidity / mortality
- Life table and its uses
- Use of computers (SPSS, Epi-info etc)
- Census, SRS

- Qualitative Research methodologies
- Evaluation methodologies

# 24. Principles and Application of Epidemiology.

- Principles of Epidemiology
- Types and detailed methodologies of Epidemiological studies such as Descriptive, Analytical, Experimental and importance of Multi-Centric studies.
- Appropriate choice of epidemiologic approach for given situations.
- Interpretation of Epidemiological studies.
- Screening for diseases, Evaluation of screening tests.

# 25. Research Methodology

- Preparing dissertation synopsis
- Identifying need for research study
- Problem statement
- Formulating Objectives
- Methods of Literature Review ( References and Bibliography )
- Conceptual framework of study
- Research design choice
- Choice of Methodologies
- Analysis and discussion and presentation

# 26. National Health Programs

- Components of individual National health Programs
- Review of factors associated with the success / failure / stagnation of the present status of these National Health Programs.
- Needs Assessments for New Programmes

## 27. Community Mental Health

- Principles of Community Mental Health
- Epidemiological factors associated with the current and emerging mental disorders of public health importance.
- Emerging mental health issues of marital, family based problems, travel related, migration, resettlement and urbanization problems.
- Planning and Intervention strategies for community based mental health programs
- Drug Abuse, Tobacco and Alcohol Addiction and its Prevention.

## 28. Occupational Health

- Relevance of Occupational Environment to Health Hazards
- Surveying for identifying Industrial Health hazards
- Surveying for identifying Health Hazards in Home based cottage Industries.
- Basic Principles of Ergonomics and Work- Physiology and their application in Occupational Health Intervention Programs.
- Relevance and meaning of Industrial Toxicology in the management of Health hazards.
- Understanding the Basic Scope of Occupational health Legislation such as ESI Act, Factories Act, Mines Safety Act, etc.
- Causes, consequences and Intervention Strategies for occupation related diseases of public health importance.
- Principles of Industrial Safety measures and Industrial house-keeping.
- Causes and reduction of Sickness Absenteeism.
- Principles of Industrial Psychology including work related stress management.
- Gender Issues in work environment.
- Providing Social security for industrial workers by the Industrial
- Corporate Sector in view of Globalization and Outsourcing of work.

## 29 Health care of the Aged

- Public health implications of increasing trends in longevity of life.
- Health planning strategies for enhancing quality of life of senior citizens.
- Need, relevance and components of Community Based Geriatrics care Programs.
- Social Security for the Aged.

# 30. Health care for the Challenged

- Vulnerability factors in health, for the physically and Socioeconomically challenged people.
- Intervention strategies for desired Behavioral change in the community, towards the physically challenged.
- Multi-disciplinary approach in the health care of the physically challenged.
- Community Based Rehabilitation for the physically challenged

# 31. Voluntary Sector in Health

- Understanding the Supplementary, Complementary and Substitution Roles of the Voluntary Sector in Health Care.
- Case Studies of Health care strategies adopted by NGOs.
- Networking strategies for Govt. and NGO sectors in Health Program implementation

## 32. Health Care Management

- Relationship of Planning to Management
- Situational Analysis Methods
- Vision, Mission, Goal setting and objective formulation
- Criteria setting for Prioritization
- Resource Generation Methods
- Strategies Formulation

- Participatory Approaches to plan execution
- Monitoring and Evaluation Parameters selection and implementation
- Project Report Writing and Reporting
- Selected Management Techniques relevant to Health care.
- Relevance of Qualitative methods in Health Management
- Basics of Health Economics
- Importance of Operation Research Methods in Health care Management.
- Basis of Health Systems Research.

# 33. Health Information System.

- Uses of Health Information System in Health planning including Situational analysis, Prioritization, Monitoring and Evaluation.
- Sources and methods of data acquisition.
- Applications of health information on National and International Notification of Diseases.
- Use of Internet and Intranets including NICNET, etc.

# 34. Disaster Management and public health emergencies

- Brief Review of definition, types and causes of Disaster.
- Understanding the short and long term Health Impact of Disasters
- Assessing priorities for Disaster Response.
- Planning for Administrative, Operational, Technical Intervention for Disaster Relief program including Multi-Sectoral Co-ordination.
- Community Disaster Preparedness training needs for Health Providers and Beneficiaries.
- Post Disaster Follow up care

## RECENT ADVANCES AND TOPICS OF CURRENT INTEREST

(Topics may be extracted from individual area of Syllabus content above.)

- Components of National Health Policy
- Importance of Health seeking Behavior
- Basis of formulating rational drug policy
- Relevance of Evidence Based Medicine in the planning of Disease control Programs
- Use of Computers in Public Health
- Principles of Counseling
- Role of Clinical Specialists in Community Health Care Programs
- Writing of a Research Protocol.
- Nosocomial infection and Hospital Infection Control
- Impact of Macro-Climatic changes (eg: Global Warming, etc) on Health.
- Organizing health component of Relief camps during war, mass migration.
- Setting up and Implementing Quality Control of Health care programs.
- Planning of public Health measures during pandemics of new diseases.
- Selected Methods in Operation Research.

## **Other Free Topics**

Insurance and Health

Development of Appropriate Technologies which is Cost Effective

National Rural Health Mission (NRHM)

Concept of Hospital Management / System

Modern Management Approaches. Human Resource Management

Problem Solving Approaches and Managerial Decision Making.

Material Management,

#### COURSE CONTENTS FOR PRACTICALS

1. Microbiology applied to Public Health ( Dept. of Microbiology)

Hand on experience in staining techniques and interpretation of:

- Grams Stain
- JSB Stain
- Ziehl-Neilson Stain
- Peripheral blood examination of Thick and Thin Smears and Reporting
- Microscopic examination of stools and interpretation
- Demonstration of Collection, storage and Dispatch of water, stools, body fluids Samples to Laboratory
- Interpretation of commonly used serological tests such as Physical / Biological / Chemical water analysis reports / Widal / HIV / Hepatitis B/ VDRL/ Viral Antibody Titres

# 2. Medical Entomology

- Demonstration of Collection and transportation of Entomological specimens
- Identification of mosquitoes/fleas/ticks/others
- Demonstration of mounting entomological specimens and reporting
- Interpretation of Entomological Survey findings and Vector indices calculation
- 3. Epidemiological (including outbreaks of disease) and Statistical Exercises
- 4. Clinico Social Case Studies and family studies to illustrate principles and practice of Community Health
- 5. Investigation of an Outbreak of a disease and suggested control Measures.
- 6. Field and simulated Exercises in
  - PRA Techniques and Interpretive Reporting
  - IEC Field Exercises organization, execution and evaluation
  - Planning for simulated public health intervention programs including disaster relief measures.

- VED Analysis etc.
- Assessment of Health Needs.
- Simulated exercises in Preparation of Budgeting at the PHC level
- Demonstration of Supervisory methods and Performance Appraisal at PHC/SC and field level.
- Simulated calculation of Requirement of Vaccines, Medicines, transport schedules, lab supplies, equipment, staff deployment, stationary, etc. at the PHC level
- Simulated exercises for Organization of field and centre based camps for Family Welfare, MCH, IEC, Specialist Camp, Immunization camps.
- 7. Diet and Nutritional Survey of a Community
- 8. Collection and Dispatch of Food Samples for Lab Investigations
- 9. Situational analysis of selected potentially health hazardous Environments and its influence on health
- Industrial Health Survey and recommendation reports for Industrial and homebased Work places. Include interpretation of reports quantifying air pollution, noise pollution, temperature, humidity and other meteorological factors and their effect on health.
- 11. Socio-Economic surveys in Urban and Rural areas and their interpretation on direct and indirect health care needs and usage.
- 12. School Health Surveys with recommendations.
- 13. Observation of Family Counseling by MSW
- 14. Situational status (organizational structure and functioning with feasible recommendations) Reporting on Visits/Postings to the following institutions
  - District Health Office
  - District Hospital
  - Taluk Hospital
  - PHC/SC/CHC
  - Field Publicity Office
  - ICDS office/ Anganwadi Centre

- Public Health Laboratory
- Sewage Treat Plant
- Vector control centre (Hosur)
- -- Any large NGO
- UFWC
- Family Welfare Camps
- Infectious disease hospital
- Malaria/DTC/ Filaria units
- National Tuberculosis Institute / DOTS centre
- Leprasorium
- Cancer Hospital
- Malaria Research Centre
- Polio Surveillance Office
- Visit to factory / inspectorate of factories
- Home for the aged
- Blindness Rehabilitation schools
- Deaf and Dumb schools
- Spastic society
- Physically Handicapped Centre
- Market place
- Slaughter House
- Hotel food storage, cooking and food waste disposal zones.
- Milk Dairy
- Water supply and water treatment plant
- Food and Beverages Processing Units

# 15. Postings to Urban and Rural Health Centres with emphasis on:-

- Observing and participation in Antenatal care
- High risk pregnancy identification
- Registration and participation in care of Antenatal and under-fives
- Nutrition Status calculation, Growth and Development monitoring through analysis of cumulative under-five and Antenatal cards and follow-up programs for drop-outs, etc.
- Records design, recording procedures, data compilation and Reporting procedures for National health programs
- Disinfection and Infection control methods
- Field visits with peripheral health care staff to review problems associated with Implementation of Health programs.
- Participation in organization and management of health camps.
- Observation and reviewing methods of motivating for Family welfare.
- Health Information preparation using MCH indicators and their interpretation.
- Measuring Health care service Utilization rates for the centre.
- Observation and participation in the Laboratory work with emphasis on result interpretation.
- Medical Waste management observation and review report.
- Immunization coverage calculation and follow up.
- Cold Chain observation upto vaccine administration at field level.
- Collection and dispatching and follow-up for Vaccine Potency testing.

#### TRAINING ACTIVITIES

The entire training and the facilitation of the learning process will be aided through the following methods of learning:

- Assignment writing.
- Presentation for joint discussions of Field and centre activity Review reports and Work- diary analysis
- 3. Lecture discussions
- 4. Practical Demonstrations
- 5. Field visits Family Studies / Clinico-Social Case Studies / Site Visits
- 6. Institutional visits
- 7. Seminars
- Journal Clubs
- 9. Epidemiological Exercises
- 10. Supervised Training of undergraduates including Lesson Planning
- 11. Involvement in Specific Departmental Project works
- 12. Conducting of Surveys / epidemiological projects

## Log book

- The log book is a record of the important activities and their critical review by the candidates during his training.
- The log book entries record includes academic activities, the presentations and procedures and feed-back, carried out by the candidate as well as encountered Problems/Alternative solutions/innovation / organizational work / recommendation by student / Intersectoral work/ self assessment done.
- Internal assessment should be based on the evaluation of the log book review. Collectively, log books are a tool for the evaluation of the training programme of the institution by the University.
- 1. Self Evaluation--Through daily Work Diary
- 2. Faculty Evaluation -- Through scrutiny of work diary by Head of Dept and staff
- Technique of skills in Pedagogy Through lesson plans and supervised taking of classes for undergraduates
- 4. Skill evaluation through demonstration and Practicals and field reports
- 5. Knowledge Evaluation-- through journal clubs, seminars and tests. Please see Model Check Lists in Chapter IV.

# Dissertation (guidelines to student) (Please see also Sl.No.9, Chapter - I)

Step 1	Identifying guide and co guide				
Step 1	Review of available literature				
Step 3	Short listing of topic of interest				
Step 4	Workup in detail on few topics keeping in mind the feasibility and discussion at the dept level				
Step 5	Selection and finalization of the topic and submission of protocol				
Step 6	Preparation and submission of synopsis six months after the date o admission and as notified by the University				
Step 7	Preparation of study instrument				
Step 8	Pilot survey				
Step 9	Finalizing the study				
Step 10	Data collection				
Step 11	Data entry, compilation and processing				
Step 12	Analysis and interpretation				
Step 13	Presentation and Discussion at the Dept level				
Step 14	Preparation and submission of dissertation to Registrar Evaluation six months prior to university examination as notified by the University				

## **SCHEME OF EXAMINATION**

## A. Theory written Examination

There shall be four question papers, each of three hours duration. Each paper shall consist of two long essay questions each question carrying 20 marks and 6 short essay questions each carrying 10 marks. Total marks for each paper will be 100. Questions on recent advances may be asked in any or all the papers.

## Paper I:

- History of Public Health and Community Medicine.
- The Role of Social Sciences health in concepts of Public Health, Primary Health Care.
- Information, Education, Communication and Counseling.
- Microbiology including Entomology, Parasitology, Immunology and Zoonotic diseases.
- Environmental health and Ecology.
- Epidemiology, Biostatistics and Research methodology.

### Paper II:

- Principles of Nutrition and Applied Nutrition.
- Epidemiology of communicable diseases and non-communicable diseases.
- Occupational health.
- National Health Programmes.
- Public Health emergencies and Disaster management.

## Paper III:

- Maternal health and Child health Care.
- Demography and Family welfare.
- Cares of special groups viz. school health, adolescent health, and Health care of the Aged.
- Care of challenged, Community based Rehabilitation
- Tribal health, Reaching health care for the unreached.
- Public Health emergencies and calamities.
- Social Pediatrics
- Community Mental Health.
- Genetics and Health

#### Paper IV:

- Health Care systems in India.
- Health care delivery.
- Health legislation.
- International Health.
- Voluntary Health Organizations, NGOs.
- City/Town planning and Health.
- Health care management.
- Health information system.

# B. PRACTICALS 200 marks

- 1. Family Study : (One) (50 marks) (60 min)
  - One family will be allotted in rural/urban field practice area. Presentation and discussion will be on the health status of the family and of any case/individual in the family and on factors that contributed towards maintenance of health and occurrence of disease; management at individual, family, and community levels.
- 2. Clinico-social case study (One case) (50 marks) (60 min)
  Basic clinical presentation and discussion of diagnosis, treatment and
  management of common communicable or non-communicable
  diseases/conditions with emphasis on social and community aspects.
- Public Health Laboratory (Two) (30 marks) (30 min)
   Staining of smears, interpretation of common serological diagnostic tests,
   water, & milk analysis or interpretation of given results of any above tests.
- 4. Problem on Epidemiology and Biostatistics (One) (50 marks) (60 min)
  Based on situation analysis from communicable or non-communicable diseases, MCH & FP including demography. Environmental health including Entomology and Occupational Health.
- 5. Spotters (Five) (20 marks) (30 min) Identification and description of relevant public health aspects of the spotters/specimen by the student. Spotters shall be from Nutrition, Environmental health including Entomology & Occupational health, MCH & FP; Microbiology including parasites; vaccines, sera and other immunobiologicals.

#### VIVA-VOCE: 100 marks

# 1) Viva-Voce Examination: (80 Marks) (30 min)

Students will be examined by all the examiners together about student's comprehension, analytical approach, expression and interpretation of data. Student shall also be given case reports, charts for interpretation. It includes discussion on dissertation.

# 2) Pedagogy Exercise: (20 Marks) (30 min)

A topic be given to each candidate along with the Practical Examination question paper on the first day. Student is asked to make a presentation on the topic on the second day for 20 minutes.

D.

Max. Marks in M. D.	Theory	Practicals	Vive-Voce	Total
Community Medicine				
	400	200	100	700

# RECOMMENDED BOOKS and JOURNALS (latest editions / issues)

- **1.** Maxy Roseman John M.Last, Maxcy-Roseman Public Health and Preventive Medicine, Appleton-Century-Crofts, Newyork
- 2. Hobson W, The Theory and Practice of Public Health, Oxford Med.Publication
- **3.** Barker D J P, Practical Epidemiology, Churchill Livingstone
- 4. Park J E & K.Park, Text Book of P & S.M., M/S Banarsidas Bhanot, Jabalpur
- 5. Mahajan B K and M.C.Gupta, Text Book of P & S.M., Jaypee Publications
- **6.** Bradford Hill, Principles of Medical Statistics, The Lancet Ltd. No. 7 Adam Street, Adelphine, London, 1967
- 7. John J. Hanlon, Public Health Administration and Practice, MOSBY
- **8.** Mac, Mahon & Pugh, Epidemiology-Principles and Methods, Little Brown & Co.Boston, U.S.A.
- **9.** Robert S.Goodheart Maulice E.Shills, Modern Nutrition in Health, K.M.Varghese & Co.,

- 10. Mawner & Kramer, Epid: An Introductory Text, 1985, W.B. Sanuders Co.,
- **11.** Hunter's Diseases of Occupations, Edited by P.A.B Raffle, P.H. Adams, P.J.Baxter and W.R.Lee Edward Arnold Publishers (1994), Great Britain
- **12.** Indraya A, Satyanaryana L, Biostatistics for MBBS, PG Entrance and USMLE. 1<sup>st</sup> Editon, Academa Publishers, Delhi, 2003.
- **13.** Last J M. A Dictionary of Epidemiology, 4<sup>th</sup> Edition, Oxford University Press, New York
- **14.** Kishore J, A Dictionary of Public Health, Century publications, New Delhi, 2003.
- **15.** Beaglehole R, Bonita R and Kjellstrom T. Basic Epidemiology, World Health Organization, Geneva, 1993.
- **16.** Taneja D K. Health Policies and Programmes in India. 5<sup>th</sup> Ed, Doctors Publication Delhi, 2005.
- **17.** COMMITTEE REPORTS AND POLICY DOCUMENTS MEDICAL EDUCATION AND HEALTH POLICY:
- 1. Bhore Committee Report (1946) Health Survey and Development Committee, Govt. of India, Delhi.
- 2. Mudaliar Committee Report (1961) Health Survey and Planning Committee, Govt. of India, Delhi.
- 3. Shrivastav Report (1974), Health Services and Medical Education A programme for immediate action, Group on Medical Education and Support Manpower, Ministry of Health and Family Welfare, Govt. of India, New Delhi.
- 4. ICSSR/ICMR (1981), Health for All An alternative strategy Report of a Joint study group of ICSSR/ICMR, Indian Institute of Education, Pune.
- 5. National Health Policy, (1982) Ministry of Health and Family Welfare, Government of India, New Delhi.
- Compendium of Recommendations of various committees on Health and Development (1943 - 1975), Central Bureau of Health Intelligence (1985) Directorate General of Health Services, Ministry of Health and Family Planning, New Delhi.
- 7. Bajaj, J.S. et al (1990) Draft National Education Policy for Health Sciences, I.J.M.E. Vol. 29, No. 1 & 2 (Jan August 1990)

# **Journals**

- 1. Indian Journal of Community Medicine.
- 2. Indian Journal of Public Health.
- 3. Indian Journal of Community Health.
- 4. Journal of Communicable Diseases.
- 5. Indian Journal of Maternal & Child Health.
- 6. Indian Journal of Preventive and Social Medicine.
- 7. Indian Journal of Occupational Health & Industrial Medicine.
- 8. Indian Journal of Medical Research.
- 9. National Medical Journal of India.
- 10. Indian Journal of Malariology.
- 11. Indian Journal of Environmental Health.
- 12. Indian Journal of Medical Education.
- 13. Journal of Indian Medical Association.
- 14. Journals of Medicine, Paediatrics, OBG, Skin & STD, Leprosy, Tuberculosis & Chest Diseases (For Reference).

# **International journals**

- 1. WHO Publications All
- 2. Journal of Epidemiology & Community Health.
- 3. Tropical Diseases Bulletin.
- 4. Vaccine.
- 5. American Journal of Public Health.
- 6. Lancet.
- 7. New England Journal of Medicine.

## ADDITIONAL READING

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