

**Pravara Institute of Medical Sciences
(Deemed University)**

Loni Bk - 413 736, Tal. Rahata, Dist. Ahamadanagar (M.S.)

Established Under Section 3 of UGC Act 1956, Vide Govt. of India Notification
No. F.9-11/2000-U.3, dated 29th September, 2003



**Syllabus
M.D. (Community Medicine)**

mail:registrar@pmpims.org, asst.registrar@pmpims.org

Fax: +91-2422-273413 Phone No.: 273600

Homepage : [http:// pravara.com](http://pravara.com)

Department of Community Medicine, RMC Loni Curriculum of M. D. COMMUNITY MEDICINE

Goal:

The overall goal of training program is to produce a competent public health specialist who can function as a leader of health team and is able to provide effective health care at primary, secondary and tertiary levels

Objectives:

I. Teacher/trainer to

1. Plan and conduct an educational session/program. He/she will be able to draw up lesson plan with details of educational objectives, content, process and essential inputs.
2. Assist in development of curriculum, teaching and learning activities and methods of evaluation.
3. Assist in manpower planning and development. He/she should be able to participate in programs for the selection, training and supervision of various cadres of health personnel.

Researcher to

1. Plan and execute a research study including clinical trials. Use/Organize biostatistical analysis using computers and softwares and prepare reports/papers.
2. Critically evaluate research activities.
3. Make recommendations on policy and procedures.

Public Health Specialist to

1. Define and manage the health problems of the community, which he/she serves. He/she should be able to organize epidemiological studies to identify health problems.
2. Plan, implement and evaluate various health programs in his/her area, especially National Health, Family Welfare and disease control / eradication programmes.
3. Select, train, supervise and manage various categories of health personnel working with him/her.
4. Organize health care services, routine and for special groups and during periods of special needs such as disasters/calamities and epidemics.

Pravara Institute of Medical Sciences

Inward No. 336

Date. 8/3/2017

Signature. V. D. Karale

To,
Shri. V. D. Karale

For compilation
& ask for softcopy

[Signature]
9/3/17

Specific Objectives

At the end of the MD program in Community Medicine the student will:

1. Know the structure and functioning of the health system at the National and International levels and its historical perspectives.
2. Know the principles of nutrition, maternal health, and family welfare and put the same into practice.
3. Apply the principles of Epidemiology and Biostatistics to health practice including the design and implementation of health related research studies and clinical preventive medicine trials.
4. Know the principles of Communicable and Non-communicable diseases control and assist in the implementation of National Health programmes at a program level.
5. Identify the socio-cultural dimension in Health and disease and apply this knowledge in the design and implementation of an integrated Health and development program.
6. Apply the principles of environmental and occupational health in the design of health programmes aimed at improving health status.
7. Assess specific health situations in a population, plan, organize, implement and evaluate programs aimed at improving health situations.
8. Should be effective team leader
9. Identify the health needs of the special groups within populations especially the aged, the disabled and the worker and to respond to that need.
10. Know the principles of learning and apply this knowledge in facilitating the learning process in groups of people involved in health.
11. Relate his/her knowledge of curative medicine to the improvement of the health status of a given population.
12. Identify the role of the Government, Private and Voluntary sector in health and understand the principles of innovations in health practices .
13. Should be able to conduct research as per public health needs

COURSE CONTENTS

Health Systems in India and The World-Historical Perspective

1. History of Public Health

- Historical Lessons Learnt from the success and failure of Public Health strategies around the world.
- Historical influence and importance of Indigenous System of Medicines in Health Care in India.
- Historical Review of Implementation of the Bore 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.
- Comparative study of development of Health System models globally and nationally

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.

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

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.
- Large and small scale N.G.O. sector health care system.
- Corporate and Private Health Insurance systems.
- Family Medicine, General Practitioners.
- Indigenous Medicine system.
- Feasibility of Networking the Govt. and NGO sectors 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. Need and importance of 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.
- Gender based issues and its relevance to impact of health care programs.
- Impact of Urbanization and Industrialization on Health.
- Difference between Advising and Counseling

Political Environment

- Impact of Political Will on planning and implementation of Health programs

6. Health Legislation

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

7. City / Town Planning and Health

- 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.
- 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
- 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 and means of overcoming the blocks.
- Communication strategies for facilitating effective implementation of Health 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
- 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
- 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.

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

b) Air

- Indices of thermal comfort and their applied importance
- Air Pollution including monitoring, control and prevention
- Ventilation and its applied importance

Importance of domestic and industrial Housing standards

- c) Impact and control of Noise Pollution
- d) Radiation Hazards from natural, industrial, hospital, communication devices
- e) Meteorological Environment and its Health impact
- f) Domestic and industrial Lighting Standards
- g) Disposal of Waste and Sanitation
 - Sources and Classification of wastes
 - Disposal of Solid Wastes
 - Excreta Disposal
 - Sewage treatment and safe recycling guidelines
 - Health Care and Hospital Waste Management
- h) Guidelines on Industrial Toxic wastes and Nuclear wastes.

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
- Types and mechanism of Insecticide Resistance and modes of Resistance prevention

13. Rodents and Anti-Rodent Measures

14. Types, Causes and Control of Zoonotic Diseases

15. Isolation / Quarantine methods

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. Reproductive & Child Health (RCH – I & II), Integrated Child Development Scheme (ICDS), Integrated Management of Neonatal & Childhood illnesses (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.

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

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, 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

23. Biostatistics

- Collection / Organisation 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
- Evaluation of health and measurement of morbidity / mortality
- Life table and its uses
- Use of computers
- Census
- 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 epidemiological approach for given situations.
- Interpretation of Epidemiological studies.

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. 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.
27. **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.
28. **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, urbanisation problems.
 - Planning and Intervention strategies for community based mental health programs
29. **Occupational Health**
- Relevance of Occupational Environment to Health Hazards
 - Surveying for identifying Industrial Health hazards
 - Surveying for identifying Health Hazards in Agricultural / Plantation / Mining area settings.
 - 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.
 - Health Hazards due to Industrial Pollution of air, water and land.
 - Elements of Industrial waste treatment.
 - 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.
30. **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.

31. Health care for the Challenged

- Vulnerability factors in health, for the Physically and Socio-economically 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

32. Reaching Health Care for the Unreached

- *Adaptations in Health Care Programs Methodologies for Inaccessible Terrain and Extreme climates.*

33. 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

34. 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.

35. 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.

36. 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.
- Organising 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

COURSE CONTENTS FOR PRACTICALS

1. Microbiology applied to Public Health (Dept. of Microbiology)
Hand on experience in staining techniques and interpretation of:
 - Leishmann stain, Grams Stain, JSB Stain, Alberts 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. Case Studies (including 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 organisation, 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, and Specialist Camp, Immunisation 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

10. Industrial Health Survey and recommendation reports for Industrial and home-based 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
 - Meteorology department
 - Any large NGO
 - - Family Welfare Camps
 - Infectious disease hospital
 - Malaria/DTC units
 - National Tuberculosis Institute / DOTS centre
 - Leprosorium
 - 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
- Disinfections 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 up to 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:

1. Assignment writing.
2. 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
8. 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

MONITORING LEARNING PROGRESS

Log book

- The logbook 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 / organisational work / recommendation by student / intersectoral work/ self assessment done.
 - Internal assessment should be based on the evaluation of the logbook review. Collectively, logbooks 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
 3. 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)

- | | |
|--------|--------------------------------|
| Step 1 | Identifying guide and co guide |
| Step 2 | 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 finalisation of the topic and submission of protocol
- Step 6 Preparation and submission of synopsis six months after the date of admission and as notified by the University
- Step 7 Preparation of study instrument
- Step 8 Pilot survey
- Step 9 Finalising 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 Three long essay questions each question carrying 20 marks and 4 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 *.

Theory paperwise distribution:

Paper I -100 marks

- History of Public Health, Concepts of Health & disease
- Social Sciences
- Health education
- Medical Entomology, and Zoonotic diseases
- Environmental health
- Epidemiology
- Biostatistics & vital statistics; Research methodology
- Recent advances

Paper II 100 marks

- Genetics
- Occupational health, industrial toxicology
- Communicable diseases and non-communicable diseases.
- Parasitology & entomology
- Recent advances

Paper III 100 marks

- Maternal health and Child health Care.
- Nutrition
- Demography and Family welfare.
- Recent advances

Paper IV 100 marks

- Public health chemistry
- National health programs
- Health planning & management.
- Rehabilitation
- Recent advances

** There cannot be water tight compartment distribution. Eg topic like disaster management can appear in any paper as per different aspect. The topics assigned to the different papers*

are generally evaluated under those sections. However a strict division of the subject may not be possible and some overlapping of topics is inevitable. Students should be prepared to answer overlapping topics.

B. Practicals: 200 marks

1. Cases

a) Family case in community: (One) (60 marks)

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.

b) Clinico-social case study in hospital (One Long case) (60 marks)

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.

c) Two short cases in hospital (30x2) total 60 marks

2. Public Health Laboratory (Two) (40 marks)

Staining of smears, interpretation of common serological diagnostic tests, water, & milk analysis or interpretation of given results of any above tests.

3. Exercises Epidemiology and Biostatistics (60 marks)

Based on situation analysis from communicable or non-communicable diseases, MCH & FP including demography. Environmental health including Entomology and Occupational Health.

4. Spotters () (40 marks)

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.

5. Viva-Voce: 80 marks

1) Viva-Voce Examination: (80 Marks)

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

Max. Marks in M. D. Community Medicine	Theory	Practicals	Total
	400	400	800

RECOMMENDED BOOKS and JOURNALS

1. Maxcy 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 Preventive & Social Medicine**, M/S Banarsidasm Bhanot, Jabalpur
5. Mahajan B K and M.C.Gupta, **Text Book of Preventive & Social Medicine** 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. 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.
6. **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

1. Compendium of recommendations of various committees on Health and Development (1943-1975). DGHS, 1985 Central Bureau of Health Intelligence, Directorate General of Health Services, min. of Health and Family Welfare, Govt. of India, Nirman Bhawan, New Delhi. P - 335.
2. National Health Policy, Min. of Health & Family Welfare, Nirman Bhawan, New Delhi, 1983.
3. Santosh Kumar, The elements of Research, writing and editing 1994, Dept. of Urology, JIPMER, Pondicherry
4. Srinivasa D K etal, Medical Education Principles and Practice, 1995. National Teacher Training Centre, JIPMER, Pondicherry
5. Indian Council of Medical Research, "Policy Statement of Ethical considerations involved in Research on Human Subjects", 1982, I.C.M.R, New Delhi.
6. Code of Medical Ethics framed under section 33 of the Indian Medical Council Act, 1956. Medical Council of India, Kotla Road, New Delhi.
7. Francis C M, Medical Ethics, J P Publications, Bangalore, II edn, 2004.

8. Indian National Science Academy, Guidelines for care and use of animals in Scientific Research, New Delhi, 1994.
 9. International Committee of Medical Journal Editors, Uniform requirements for manuscripts submitted to biomedical journals, N Engl J Med 1991; 424-8
 10. Kirkwood B R, Essentials of Medical Statistics , 1st Ed., Oxford: Blackwell Scientific Publications 1988.
 11. Mahajan B K, Methods in Bio statistics for medical students, 5th Ed. New Delhi, Jaypee Brothers Medical Publishers, 1989.
 12. Raveendran and B Gitanjali, A Practical approach to PG dissertation, New Delhi, J P Publications, 1998.
-
1. Hunter (Donald), **Diseases of the Occupations**, 6th edition, Hodder and Stoughton (1978)
 2. Schilling (1978), **Occupational Health Practice**, Butterworth & Company, Great Britain
 3. Plunkett (E.R), **Occupational Diseases**, Barret Book Company, Stanford (1977)
 4. Johnstone (R.T), **Occupational Diseases and Industrial Medicine**, Saunders, Philadelphia (1960)
 5. French (Geoffrey), **Occupational Health**, Medical Technical Publishers, Lancaster
 6. Mayers (May R), **Occupational Health etc.**, Williams and Wilkins, Baltimore (1969)
 7. Government of India, Ministry of HRD, **Occupational Health : issues of women in the unrecognised sector**, New Delhi (1988)
 8. Plunkett (E.R), **Handbook of Industrial Toxicology**, 3rd Edition, Arnold Publishers, USA (1987)

9. Charles Wn Sharp and L Thomas Carroll, **Voluntary Inhalations of Industrial Solvents**, U.S. Department of Health, Education and Welfare, National Institute on Drug abuse, U.S.A. (1978)

10. Patrick Kinnersly (1979), **The Hazards of Work, How to fight Them**, Pluto Press, U.K.

11. Plunkett (E.R) (1977), **Occupational Diseases, A Syllabus of Signs and Symptoms**, Barret Book Company, Stamford, Connecticut (1977)

12. Edited by Robert J.Mc Cunney, **Handbook of Occupational Medicine**, Little Brown and Company, Boston/Toronto (1988)

13. WHO (1986) Geneva, **Early detection of Occupational Diseases.**

14. **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

15. Carl Zenz (1994), **Occupational Medicine**, 3rd Edition Mosby, U.S.A.

16. ILO Publications Geneva, **Encycloperia of Occupational Health & Safety**, (1983) 3rd Edition Vol. 122