DPU
Dr. D. Y. PATIL VIDYAPEETH, PUNE
(DEEMED UNIVERSITY)

SYLLABUS
for
III - MBBS
(Part - 1)

2014-15
A. The teaching of Social & Preventive Medicine shall take place throughout the teaching period.

B. Field experience in rural health is included in pre-clinical as well as during clinical period.

C. During 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 unit should be established as an integral part of every hospital in order to achieve a comprehensive study of disease by the students.

G. The objective of the internship shall be clearly defined and a proper training programme be oriented for this period. Objectives and the methods by which the internship could be made into a satisfying and fruitful experience should be laid down. 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 Preventive and Social Medicine should as far as possible have 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 various procedures.

**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 to
- 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 dynamics of community behaviour.
- 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 reproductive and child health programmes 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.
• 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.
• Collect, analyse, interpret and present simple community and hospital based data.
• Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources in the context of the prevailing socio-culture beliefs.
• Diagnose and manage common nutritional problems at the individual, family 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.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Semester</th>
<th>Theory</th>
<th>Practical Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>I &amp; II</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>II</td>
<td>III &amp; IV</td>
<td>68</td>
<td>132</td>
</tr>
<tr>
<td>III Part 1st</td>
<td>VI &amp; VII</td>
<td>50</td>
<td>66</td>
</tr>
</tbody>
</table>
Community Medicine (P.S.M.)

List of theory lectures

Phase I (1st and 2nd semester) 30 Hours

1. Introduction – Evolution of Community Medicine.
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 and National Population Policy.
13. Hospital Management.
   - 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.
15. 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 including effects of global warming.
- Effects of heat and cold
- Solid and Liquid waste disposal
- Disposal of hospital waste.

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 mean and difference between two means.
  - SE of proportion and difference between two proportions
  - $X^2$ test. (Chi-square)
  - Students ‘t’ test – Paired and Unpaired.
- Statistical fallacies.

Computers in Medicine

Their 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 for eradication of small pox.
  - Influenza and ARI.
  - Diphtheria, Pertussis, meningococcal meningitis, mumps
  - Tuberculosis.
- Faeco-oral infections.
  - Poliomyelitis.
  - Hepatitis.
  - Enteric Fever, Cholera and Food poisoning
  - Acute diarrhoeal diseases including Bacillary and Amoebic dysentery.
- Soil transmitted and other Helminths.
- Tetanus
- Rabies and other Viral Zoonotic disease.
- Leprosy.
- Malaria
- Filariasis.
- Arthropod borne diseases.
- Sexually transmitted diseases and their control.
- AIDS
- Emerging and Re-emerging Infections.

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 cooperation
- Comprehensive medical care and Primary health care.
- National Health Policy (to date).
- Reproductive and Child Health care.
- Epidemiology of Non-communicable diseases.
- Occupational health.
- Problems of adolescence including Drug dependence.
- Geriatrics and problems of ageing population
- Management information system.
- Mental health.
- Genetics in public health.
- Health planning and management.
- National Health Programmes including rural health mission.
- Millenium development goals
- International health and Voluntary Health Agencies.
- Disaster Management
- Pre-Conception and Prenatal Diagnostic Technique Act Tutorials.
  Examination at the end of 6th and 7th semester.
Practicals

**Phase I (1st 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, 1st Clinical Posting - 66 hours.**
Lecture – Cum – Demonstration, at appropriate places

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Topic</th>
<th>Demonstration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Visit to Urban / Rural health Training Centre.</td>
<td>Functions of UHC/ RHTC Manpower &amp; Duty arrangements</td>
</tr>
<tr>
<td>2</td>
<td>Immunization Programme</td>
<td>I (demonstration)</td>
</tr>
<tr>
<td>3</td>
<td>Immunization Programme</td>
<td>II ( Cold Chain)</td>
</tr>
<tr>
<td>4</td>
<td>Antenatal care</td>
<td>Demonstration of Antenatal case</td>
</tr>
<tr>
<td>5</td>
<td>Care of Infant</td>
<td>Demonstration of case</td>
</tr>
<tr>
<td>6</td>
<td>Post-natal case of mother/child.</td>
<td>Demonstration of case</td>
</tr>
<tr>
<td>7</td>
<td>Contraceptives</td>
<td>Situation to be given and sex education.</td>
</tr>
<tr>
<td>8</td>
<td>Exclusive breast feeding</td>
<td>Visit to Baby Friendly Hospital</td>
</tr>
<tr>
<td>9</td>
<td>Weaning foods</td>
<td>Demonstration</td>
</tr>
<tr>
<td>10</td>
<td>Nutritional demonstration</td>
<td>Explain nutritive values of Indian foodstuff</td>
</tr>
<tr>
<td>11</td>
<td>Nutritional assessment</td>
<td>Demonstration</td>
</tr>
<tr>
<td>12</td>
<td>Anthropometric measurements</td>
<td>Demonstration</td>
</tr>
<tr>
<td>13</td>
<td>Nutritional deficiency disorders</td>
<td>With A/V aids or case, Road to Health Chart</td>
</tr>
<tr>
<td>14</td>
<td>Protein Energy Malnutrition</td>
<td>With A/V aids or case</td>
</tr>
<tr>
<td>15</td>
<td>Diarrhoea as a community health problem</td>
<td>With A/V aids or case, ORS preparation and composition</td>
</tr>
<tr>
<td>16</td>
<td>ARI as a community health problem</td>
<td>With A/V aids or case</td>
</tr>
<tr>
<td>17</td>
<td>Elementary essential drugs</td>
<td>Visit to drug store, Inventory control</td>
</tr>
<tr>
<td>18</td>
<td>Examination</td>
<td></td>
</tr>
</tbody>
</table>
4th Semester 2nd Clinical Posting - 66 hours.

The broad 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.
   ➢ Socioeconomic, ethical issues on brain death & organ donation
   ➢ Introduction of statistical package

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 fevers.
4. Tuberculosis
5. Leprosy.
7. Tetanus.
8. PUO / Enteric fever / Malaria.
9. STD / AIDS.
10. Hepatitis
   - CHD, RHD, hypertension.
   - Cancer.
   - Obesity / diabetes.

Examination.

MARKS OF INTERNAL ASSESSMENT: -

Theory –20 marks and practical 20 marks. The students must secure at least 50% marks of the total marks fixed for internal assessment in the subject in order to clear the subject.

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) Prelim 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) Practicals -

1) 1st Clinical rotation exam. - 3rd Semester - 50 Marks
   1st Term End Practical - 3rd Semester - 50 Mark
2) 2nd Clinical rotation exam. - 4th Semester - 50 Marks
   2nd Term End Practical - 4th Semester - 50 Mark
3) 3rd Clinical rotation exam. - 6th Semester - 50 Marks
   Total 150 Marks*

*Three Best of above five Practical Examinations will be considered.

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. Principles of Preventive and Social Medicine; K. Mahajan
3. Textbook of Community Medicine; Sunderlal, Adarsh and Pankaj
4. Park’s Textbook of Preventive and Social Medicine, Park
5. Textbook of Biostatistics; B. K. Mahajan

FURTHER READING.

1. Epidemiology and Management for health care for all   P.V. Sathe and A.P. Sathe.

Record Book :
Following journals have to be maintained by students
1. Environmental Sanitation
2. Community Health Service and Family health advisory services record book
3. Biostatistics
4. Communicable and no communicable diseases

University Examinations in Community Medicine :-

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
Criteria of passing in various subjects at III MBBS Examination

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Subject</th>
<th>Theory Paper / Oral/ Practical / Internal Assessment</th>
<th>Maximum Marks in each of the subject</th>
<th>Minimum marks required to pass in each part of any subject</th>
<th>Minimum marks required to pass in each subject out of</th>
</tr>
</thead>
<tbody>
<tr>
<td>01)</td>
<td>Community Medicine</td>
<td>a) Theory Paper - I 60</td>
<td></td>
<td>60</td>
<td>100</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>65</td>
<td>200</td>
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<td></td>
<td></td>
<td>b) Oral  10</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>c) Practical 30</td>
<td></td>
<td>15</td>
<td></td>
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<td></td>
<td></td>
<td>d) Internal Assessment Theory 20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practical 20</td>
<td></td>
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</tbody>
</table>

It is compulsory to obtain 50% marks in theory.

It is mandatory to obtain 50% marks in theory+viva/oral.

The Frequency & other details of Internal Assessment Examinations shall be as laid down. Students must secure minimum 35% marks in theory and practical to be eligible for appearing in university examination. The preliminary examination shall be carried out in a pattern similar to final University examination.

**University (Final) Exam : Community Medicine**

The distribution of marks at final examination

<table>
<thead>
<tr>
<th>Theory : two papers of 60 marks each</th>
<th>120 Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral (Viva)</td>
<td>10 Marks</td>
</tr>
<tr>
<td>Practicals</td>
<td>30 Marks</td>
</tr>
<tr>
<td>Internal assessment</td>
<td>40 Marks</td>
</tr>
<tr>
<td>- (Theory 20 Marks)</td>
<td></td>
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<tr>
<td>- (Practical 20 Marks)</td>
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<td>--------------------------------------</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>200 Marks</strong></td>
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</tbody>
</table>
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:

Final MBBS Examination of subject-Community Medicine

**Theory**

<table>
<thead>
<tr>
<th>Paper –I ( Duration- 3hrs.)Total = 60 Mark</th>
<th>Paper-II ( Duration- 3hrs.)Total = 60 Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Sec-A- (30) Mark</td>
<td>a) Sec-A- (30) Mark</td>
</tr>
<tr>
<td>i. One line answer questions 12x1=12</td>
<td>i. One line answer questions 12x1=12</td>
</tr>
<tr>
<td>Answer any 12 out of 14</td>
<td>Answer any 12 out of 14</td>
</tr>
<tr>
<td>ii. Structural long answer question 2x9=18</td>
<td>ii. Structural long answer question 2x9=18</td>
</tr>
<tr>
<td>Answer any 2out of 3</td>
<td>Answer any 2out of 3</td>
</tr>
<tr>
<td>b) Sec-B- (30) 6x5=30</td>
<td>b) Sec-B- (30) 6x5=30</td>
</tr>
<tr>
<td>i. Short answer question</td>
<td>i. Short answer question</td>
</tr>
<tr>
<td>Answer any 6 out of 8</td>
<td>Answer any 6 out of 8</td>
</tr>
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### PATTERN AT PRACTICAL EXAMINATION

<table>
<thead>
<tr>
<th></th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orals (Viva)</td>
<td>10</td>
</tr>
<tr>
<td>Practical</td>
<td>30</td>
</tr>
</tbody>
</table>

The distribution of 30 marks of practical shall be:

1. Spots - 10 Marks (5 spots of 2 marks each) Time 10 min.
2. Exercises - 10 Marks (6 marks for Epidemiological and 4 marks for Biostatistical exercises) Time 30 min.
3. Clinical case - 10 Marks Time 45 min.

Presentation

Total 30 Marks

It is compulsory to obtain 50% marks in theory.
It is mandatory to obtain 50% marks in theory+viva/oral.