

The Draft CBME Curriculum for PG Paraclinical is being Circulated for Comments and Suggestions. The Suggestions are to be sent to RGUHS. And to be mailed to dcd.rguhs@gmail.com

**Rajiv Gandhi University of Health Sciences,
Bangalore, Karnataka**

Community Medicine

V-3

PREAMBLE

Community Medicine plays a key role in the making of an Indian Medical Graduate going by the goals and role attributes envisaged by Medical Council of India. The sheet anchor nature of this speciality in moulding the IMG across the MBBS course provides scope and opportunity for us to train the student in preventive, promotive, curative, and rehabilitative aspects with seamless integration with other disciplines.

Community medicine is the umbrella of medicine which connects the dots together. It is the enterprise of responsibility, a living embodiment of what it means to be human and watch the true face of human suffering in all its fullness. This branch has evolved to a great extent with the addition of many interdisciplinary components and is now conferred the status of 'clinical speciality' by medical council of India which was long overdue.

Community medicine equips the IMG in 'community-oriented health care' encompassing community education, networking, advocacy, policy, research, and of course clinical care at primary and secondary level. This myriad nature of our speciality requires holistic training at the undergraduate level. With more specific and objective training in community medicine as per competency framework will bolster the philosophy and practice of 'holistic care' which will help bridge the changing paradigm of 'health for all' to 'universal health coverage'.

The new Graduate Medical Education Regulations provides for an outcome driven undergraduate curriculum, to provide the orientation and the skills necessary for life-long learning, to enable proper care of the patient. The undergraduate medical curriculum has thus evolved from being teacher-centered to student centered, from discipline-based to integrated core and options-based and from passive acquisition of knowledge imparted by teachers to active problem-based learning. Skill acquisition is an indispensable component of the learning process in modern medicine. However, the need for development of professional

attitude, behaviour and communication skills befitting a medical practitioner is well perceived and emphasized by the new curriculum with incorporation of AETCOM sessions.

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GOALS AND OBJECTIVES

i) **GOAL:**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.

ii) **OBJECTIVES**

a) **KNOWLEDGE** At the end of the course, the student should be able to: -

- (1) Describe the health care delivery system including rehabilitation of the disabled in the country;
- (2) Describe the National Health Programmes with particular emphasis on maternal and child health programmes, family welfare planning and population control.
- (3) List epidemiological methods and describe their application to communicable and non-communicable diseases in the community or hospital situation.
- (4) Apply biostatistical methods and techniques.
- (5) Outline the demographic pattern of the country and appreciate the roles of the individual, family, community and socio-cultural milieu in health and disease.
- (6) Describe the health information systems.
- (7) Enunciate the principles and components of primary health care and the national health policies to achieve the goal of 'Health for All'.
- (8) Identify the environmental and occupational hazards and their control.
- (9) Describe the importance of water and sanitation in human health.
- (10) To understand the principles of health economics, health administration, health education in relation to community.

b) SKILLS At the end of the course, the student should be able to: -

- (1) Use epidemiology as a scientific tool to make rational decisions relevant to community and individual patient intervention.
- (2) Collect, analyse, interpret, and present simple community and hospital-based data.
- (3) Diagnose and manage common health problems and emergencies at the individual, family and community levels keeping in mind the existing health care resources and in the context of the prevailing socio-cultural beliefs.
- (4). Diagnose and manage maternal and child health problems and advise a couple and the community on the family planning methods available in the context of the national priorities.
- (5) Diagnose and manage common nutritional problems at the individual and community level.
- (6) Plan, implement and evaluate a health education programme with the skill to use simple audio-visual aids.
- (7) Interact with other members of the health care team and participate in the organisation of health care services and implementations of national health programmes.

c). 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.

EXPLANATION OF TERMS USED IN THE MANUAL

1. LECTURE

Any instructional large group method including traditional lecture and interactive lecture.

2. SMALL GROUP DISCUSSION

Any instructional method involving small groups of students in an appropriate learning context.

3. SELF DIRECTED LEARNING

A process in which individuals take the initiative, with or without the help of others in diagnosing their learning needs, formulating learning goals, identifying human and material sources for learning, choosing, and implementing appropriate learning methods.

4. FIELD VISIT

Any visit to an organization of public health importance to observe its functioning. It may also include visits to community for family study / clinicosocial case discussion.

5. SKILL ASSESSMENT

A session that assesses the skill of the student including those in the practical laboratory, skills lab, skills station that uses mannequins/ paper case/simulated patients/real patients or **in the community/ field** as the context demands.

6. CORE

A competency that is necessary in order to complete the requirements of the subject (traditional must know)

7. NON – CORE

A competency that is optional in order to complete the requirements of the subject (traditional nice (good) to know/ desirable to know)

SUGGESTED GUIDELINES FOR THE TEACHING AND LEARNING METHODS

LECTURE: Suggested topics for didactic and interactive lectures have been included along with specific learning objectives linked to each competency. Lectures should cover the core competencies with appropriate pictures, charts, or diagrams.

SMALL GROUP DISCUSSION: The topics for small group discussion that have been suggested, these topics included are those where more intensive and interactive learning sessions are required.

SELF DIRECTED LEARNING: Non-core competencies are suggested to be taken as topics for self-directed learning. At the end of the session, the teacher moderates the discussion and the learning is recorded in the logbook.

PRACTICAL DEMONSTRATION

Practical classes will include demonstration and discussion on topics of public health importance. All sessions will have specific learning objectives which are linked to the relevant competencies and are assessed as described in the assessment module.

All sessions will be done with the faculty as facilitator.

The students will be encouraged to observe the demonstrations and perform the requisite skills either independently or with assistance as required. Emphasis will be on acquiring relevant skills at the field level and clinically. Thus, case-based learning and discussions will be encouraged.

FIELD VISIT

Any visit to an organization of public health importance to observe its functioning. These may include visit to PHC, Anganwadi, DOTS Centre, Hospital Waste Management Facility, Water Treatment Plant, ART / ICTC Centre

It may also include visits to community for family study / clinic social case discussion.

MINIMUM TEACHING HOURS

SI No	Topic	Number of competencies	Lecture	SGD/ Tutorial DOAP	SDL
6	Epidemiology	9 (47 SLOs)	8	8	2
7	Occupational Health	5 (19 SLOs)	4	0	1
8	Nutrition	5 (16 SLOs)	2	4	1
9	Disaster Management	4 (10 SLOs)	2	0	2
10	International Health	2	2	0	0
11	Environmental Health Problems	8 (55 SLOs)	2	14	2
12	Mental Health	3 (6 SLOs)	0	2	1
13	Essential Medicines	3 (12 SLOs)	0	2	1
14	AETCOM Module 2.1&2.3		8		
	Total		20	38	10

Competencies to be covered in 2nd Professional year with Specific Learning Objectives

No.	COMPETENCY The student should be able to	Domain K/S/A /C	Level K/KH/S H/P	Core (Y/N)	SLOs	Teaching- Learning Methods	Assess-ment Method
NUTRITION							
CM 5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc. in a simulated environment	S	SH	Y	<ol style="list-style-type: none"> 1. Plan a diet chart for individuals of different age groups and gender based on the requirement, availability of foods and economic status in a simulated environment 2. Plan a comprehensive dietary guideline for families belonging to various socio economic status using the principles of primary prevention in a simulated environment 	SGD – P (Practical)	Skill assessment – OSPE
CM 5.5	Describe the methods of nutritional surveillance, principles of nutritional education and rehabilitation in the context of socio-cultural factors.	K	KH	Y	<ol style="list-style-type: none"> A. Define nutritional surveillance B. Describe methods of nutritional surveillance <ol style="list-style-type: none"> 1. List the types of nutritional surveillance and their uses 2. Describe the various nutritional surveillance activities under national health programmes 3. Describe the principles of nutritional education and rehabilitation programmes 	Lecture Lecture Lecture Lecture	WRITTEN

					<p>4. Plan a nutritional education programme for special groups (antenatal and post-natal women, school children, elderly people etc.,) at community level/institute level in a simulated environment</p> <p>5. Chart a plan for nutritional rehabilitation of a malnourished child in a simulated environment</p>	<p>SGD</p> <p>SGD</p>	
CM 5.6	Enumerate and discuss the National Nutrition Policy, important national nutritional Programs including the Integrated Child Development Services Scheme (ICDS) etc.	K	KH	Y	<p>1. List important nutritional programs in India</p> <p>2. Evaluate the ICDS programme</p> <p>3. Summarise the strategies under National Nutrition policy</p>	Lecture	Written
CM 5.7	Describe food hygiene	K	KH	Y	<p>1. Define and classify food hygiene.</p> <p>2. Define pasteurization of milk.</p> <p>3. Explain the method of pasteurization.</p> <p>4. Able to demonstrate the test use to check the pasteurization of milk.</p> <p>5. Discuss the standards prescribed for slaughterhouses under model public health act.</p> <p>6. Summarise the standards suggested for restaurants and eatery houses in India</p>	<p>lecture</p> <p>lecture</p> <p>lecture</p> <p>DOAP</p> <p>lecture</p> <p>lecture</p>	<p>WRITTEN</p> <p>OSPE</p> <p>WRITTEN</p>
CM 5.8	Describe and discuss the importance and method of food fortification and effect of	K	KH	Y	<p>1. Define food fortification</p> <p>2. Describe the criteria to qualify food</p>	Lecture	WRITTEN

	additives and adulteration				<p>fortification</p> <ol style="list-style-type: none"> Describe the method of food fortification. Describe the importance of food fortification. Define food additive. Describe the category of food additive. Enumerate the harmful effects of food additives. Define adulteration of food. Describe the disadvantage of adulteration of food. Enlist the types of adulteration of food in India. Describe the Food Adulteration Act, 1954. Enumerate the food standards in India. 		
ENVIRONMENTAL HEALTH							
CM 3.1	Describe the health hazards of air, water, noise, radiation and pollution	K	KH	Y	<ol style="list-style-type: none"> Describe the health hazards of air and noise pollution Explain prevention and control of air pollution. Define water pollution and describe health hazards of water pollution Enumerate biological effects of radiation 	Lecture, SGD	Written, Viva Voce

CM 3.2	Describe concepts of safe and wholesome water, sanitary sources of water, water purification processes, water quality standards, concepts of water conservation and rainwater harvesting	K	KH	Y	<ol style="list-style-type: none"> 1. Discuss safe and wholesome water along with the sources of water 2. Describe the Purification of water on the large scale. 3. Describe the Purification of water on the small scale. 4. Discuss the drinking water quality-criteria standards water conservation and rainwater harvesting. 	Lecture, SGD/ Field Visit/ DOAP session	Written Viva Voce
CM 3.3	Describe the aetiology and basis of water borne diseases /jaundice/hepatitis/ diarrheal diseases	K	KH	Y	1. Classify the water borne diseases.	Lecture, SGD, DOAP	Written, Viva voce
CM 3.4	Describe the concept of solid waste, human excreta, and sewage disposal	K	KH	Y	<ol style="list-style-type: none"> 1. List the types of solid waste and the hazards due to each type. 2. Describe various scientific methods of sewage/liquid waste and solid waste disposal 3. Discuss hazards due to human excreta and open defaecation 4. Explain the principles behind functioning of sanitary latrines and other methods of human excreta disposal 	Lecture, SGD, Practical	Written, Viva voce
CM 3.5	Describe the standards of housing and the effect of housing on health	K	KH	Y	<ol style="list-style-type: none"> 1. Explain and differentiate the housing standards of Urban and rural area. 2. Assess over crowding 3. Explain hazards of overcrowding. 4. List and explain the indicators of housing. 5. Explain the effects of poor housing on the health. 	SGD/ Practical	Written, Viva voce

CM 3.6	Describe the role of vectors in the causation of diseases. Also discuss National Vector Borne Disease Control Program	K	KH	Y	1. Describe medical entomology – arthropods 2. Classify vectors of medical importance 3. List various diseases transmitted by vectors and its modes 4. Describe various vector control measures 5. Describe the national vector borne disease control program	Practical	Written, Viva voce
CM 3.7	Identify and describe the identifying features and life cycles of vectors of Public Health importance and their control measures	S	SH	Y	1. List vectors of public health importance 2. Identify different vectors of public health importance 3. Describe lifecycle and control measures of different vectors of public health importance	SGD/ Practical/ Lecture	Written, Viva Voce, Skill assessment
CM 3.8	Describe the mode of action, application cycle of commonly used insecticides and rodenticides	K	KH	Y	1. Define insecticides and rodenticides and Classify with examples 2. Explain mode of action and application of commonly used insecticides and rodenticides 3. List hazards of injudicious use of insecticides.	SGD/ Lecture	Written, Viva voce
EPIDEMIOLOGY							
CM 7.1	Define Epidemiology and describe and enumerate the principles, concepts, and uses	K	KH	Y	1. Define the term epidemiology 2. List various components and approaches of epidemiology 3. Describe the aims of epidemiology 4. Enumerate various uses of epidemiology	SGD, Lecture	Written/ Viva Voce
CM 7.2	Enumerate, describe, and discuss the modes of transmission and measures for prevention and control of communicable and non-communicable diseases	K	KH	Y	1. Define infection, contamination, and infestation 2. Classify modes of transmission of zoonotic diseases 3. Differentiate between concept of disease control, elimination and eradication	SGD, Lecture	Written/ Viva Voce

					4. Define Incubation period, secondary attack time, generation time and serial interval 5. Classify and describe adverse events following immunization (AEFI) 6. Explain cold chain system and its uses		
CM 7.3	Enumerate, describe, and discuss the sources of epidemiological data	K	KH	Y	1. Enlist various sources of epidemiological data 2. Describe the advantages and disadvantages of various sources of epidemiological data 3. Discuss the uses of epidemiological data 4. Describe SRS Classify health surveys 5. Enlist the uses of hospital records	SGD, Lecture	Written/ Viva Voce
CM 7.4	Define, calculate, and interpret morbidity and mortality indicators based on given set of data	S	SH	Y	1. List the uses of morbidity and mortality indicators 2. Classify morbidity and mortality indicators of public health importance with examples. 3. Comment of the impact of national health programmes based on the given set of data on morbidity and mortality indicators	Lecture/ SGD, DOAP sessions	Written/ Skill assessment
CM 7.5	Enumerate, define, describe, and discuss epidemiological study designs	K	KH	Y	1. Classify the epidemiological study designs 2. Explain the steps of different epidemiological study designs (Cross sectional, case control, cohort and RCT) 3. List the advantages and limitations of various epidemiological study designs. 4. Select the appropriate study design for a given research question	Lecture/ SGD	Written, Viva Voce
CM 7.6	Enumerate and evaluate the need of screening tests	S	SH	Y	1. Define screening test and list the types of screening tests 2. List the differences between screening and diagnostic test 3. List the criteria for screening of a disease 4. Enumerate and explain the uses of screening tests 5. List and explain the evaluation indicators for a screening test	SGD, Lecture	Written/ Skill assessment
CM	Describe and demonstrate the steps in the Investigation of an	S	SH	Y	1. Know the objectives and steps in investigation of epidemic	Lecture/ SGD	Written/ Skill

7.7	epidemic of communicable disease and describe the principles of control measures				2. Know the principle of control measures 3. With problem-based case scenario, enumerate the steps in the investigation of epidemic able to list at least five steps of epidemic investigation		assessment
CM 7.8	Describe the principles of association, causation, and biases in epidemiological studies	K	KH	Y	1. Explain the principle of association and causation 2. List different types of biases in epidemiological studies 3. Identify the biases in various epidemiological studies 4. Enlist 3 biases in epidemiological studies	Lecture/SGD	Written/Viva voce
CM 7.9	Describe and demonstrate the application of computers in epidemiology	S	KH	Y	1. Describe the application of computers in epidemiology 2. Hands on training by using computers in epidemiology 3. List out the 3 uses of computer in epidemiology	Lecture/DOAP	Written
OCCUPATIONAL HEALTH							
CM 11.1	Enumerate and describe the presenting features of patients with occupational illness including agriculture	K	KH	Y	1. List the most common occupations in India 2. List the most common occupational illnesses suffered by workers in these occupations 3. List and describe the clinical features of the occupational illnesses experienced by workers, including those in agriculture	Lecture, SGD	Written, Viva Voce
CM 11.2	Describe the role, benefits and functioning of the employees state insurance scheme	K	KH	Y	1. List two important acts related to Occupational Health in India. 2. Describe in brief the benefits to employees under the Employees State Insurance Act (ESI Act).	Lecture, SGD	Written, Viva Voce
CM 11.3	Enumerate and describe specific occupational health hazards, their risk factors and preventive measures	K	KH	Y	1. Distinguish between hazard and risk 2. List and classify the hazards faced employees in common occupations 3. Draw the triangle depicting the Hierarchy of Control 4. List preventive interventions under the different levels of the hierarchy of controls	Lecture/SGD	Written, Viva Voce
CM	Describe the principles of	K	KH	Y	1. Define "Ergonomics"	Lecture,	Written, Viva

11.4	ergonomics in health preservation				2. List the common ergonomic problems seen among employees in different occupations 3. List the risk factors implicated in the causation of common ergonomic problems 4. List the measures to be taken to ensure ergonomic safety	SGD	Voce
CM 11.5	Describe occupational disorders of health professionals and their prevention & management	K	KH	Y	1. List the categories of healthcare workers employed in the healthcare industry 2. List and describe the clinical features of the occupational illnesses experienced by healthcare workers. 3. List and classify the hazards faced employees in different departments in a hospital setting 4. List preventive interventions to prevent and manage occupational hazards and illnesses in the hospital setting	Lecture, SGD	Written, Viva Voce
DISASTER MANAGEMENT							
CM 13.1	Define and describe the concept of Disaster management	K	KH	Y	1. DEFINE the terms Hazard, Disaster. 2. CLASSIFY different disaster types with examples 3. DESCRIBE the response of a given institution during past disasters	Lecture, SGD	Written, Viva voce
CM 13.2	Describe disaster management cycle	K	KH	Y	1. LIST the phases of disaster management 2. DESCRIBE Triaging, Tagging and Identification of Dead 3. LIST the steps of Epidemiological surveillance and disease control in disasters 4. Describe the role of disaster preparedness and personal protection in various disasters	Lecture, SGD	Written, Viva Voce
CM 13.3	Describe manmade disasters in the world and in India	K	KH	Y	1. LIST the various manmade disasters in the world and in India 2. LIST the responses in manmade disasters	Lecture, SDG	Written, Viva Voce
CM	Describe the details of the	K	KH	Y	1. DESCRIBE the role of the National Disaster Management	Lecture,	Written,

13.4	National Disaster management Authority				Authority in Disaster Management	SGD	Viva Voce
MENTAL HEALTH							
CM 15.1	Define and describe the concept of mental Health	K	KH	Y	1. To list the common mental health problems among the population 2. To classify psychiatric ailments- Common Mental Health Disorders (CMDs) and Severe Mental Health Disorders (SMDs)	Lecture, SGD	Written, Viva voce
CM 15.2	Describe warning signals of mental health disorder	K	KH	Y	1. To understand the factors that contribute to the burden of the mental health problems among women in the rural areas 2. To describe the warning signs of mental health	Lecture, SGD	Written, Viva voce
CM 15.3	Describe National Mental Health program	K	KH	Y	1. To be able to state the roles and the functions of community health workers in a rural mental health programme	Lecture, SGD	Written, Viva voce
INTERNATIONAL HEALTH							
CM 18.1	Define and describe the concept of International health	K	KH	Y	1. Define health 2. Define the concept of International health 3. Describe the concept of International health	Lecture, SGD	Written, Viva voce
CM 18.2	Describe roles of various international health agencies	K	KH	Y	1. Describe roles of various international health agencies 2. Explain the health work of bilateral health organization	Lecture, SGD	Written, Viva Voce
ESSENTIAL MEDICINE							

CM 19.1	Define and describe the concept of Essential Medicine List (EML)	K	KH	Y	1. Define NLEM 2. State the rationale for NLEM 3. Name atleast 10 categories of drugs under NLEM 4. List 5 potential uses of NLEM	Lecture, SGD	Written, Viva voce
CM 19.2	Describe roles of essential medicine in primary health care	K	KH	Y	1. Define primary health care 2. Explain the roles of essential medicine in primary health care	Lecture, SGD	Written, Viva voce
CM 19.3	Describe counterfeit medicine and its prevention	K	KH	Y	1. Enlist the different types of counterfeit drugs which can be seen in healthcare settings 2. Discuss the medico-social consequences of prescription of counterfeit drugs to population 3. Demonstrate understanding of various legal, social, and medical measures to prevent availability of counterfeit drugs in Indian healthcare system	Lecture, SGD	Written, Viva Voce

SAMPLE TIMETABLE
BLOCK 1: 15 WEEKS(OCT-JAN)

8-11		11.30-12.30	12.30-1.30	2-4
Monday	Postings	PH-L	OBG-L	PH-A,CM-B
Tuesday	Postings	PH-L	FM-L	FM-A,
Wednesday	Postings	MIC-L	PA-L	PA-A, MIC-B
Thursday	Postings	CM-L	PH-SGD	PA-B, MIC-A
Friday	Postings	MIC-L	PA-L	PH-B,CM-A
Saturday	Clinical training and Skills	G.MED-L	SUR-L	FM-B,

SECOND BLOCK 15 WEEKS(FEB-MAY)

8-11		11.30-12.30	12.30-1.30	2-4
Monday	Postings	MIC-L	PA-SGD	PH-A, PA-B-SGD
Tuesday	Postings	PH-L	MIC-SGD	PH-SGD
Wednesday	Postings	PA-L	MIC-L	PA-A, MIC-B
Thursday	Postings	PH-L		PH-B,PA-A SGD
Friday	Postings	PA-L	MIC-SGD	PA-B,MIC-A
Saturday	Clinical training and Skills	AETCOM	AETCOM	

THIRD BLOCK 10 WEEKS (JUN-AUG)

8-11		11.30-12.30	12.30-1.30	2-4	4-5
Monday	Postings	PA-L	MIC-L	PH-SGD	PA-SDL
Tuesday	Postings	PA-L	MIC-L	PA-A, MIC-B	PH-SDL
Wednesday	Postings	PH-L		PH-A,PA-B SGD	MIC-SDL
Thursday	Postings	PH-L		PH-B,PA-A SGD	CM-SDL
Friday	Postings	CM-L		PA-B, MIC-A	AETCOM- SDL
Saturday	Clinical training and Skills	SUR-L	OBG	G.M-L	

Timetable for Second Professional Year

	TERM-1-OCT-JAN (15 WK)			TERM-2-FEB-MAY (15 WK)			TERM-3- JUN-AUG (10 WK)			TOTAL		
	THEORY	PRACT	SGT/ TUTORIAL	THEORY	PRACT	SGT/ TUTORIAL	THEORY	PRACT	SGT/ TUTORIAL	THEORY	PRACT	SGT/ TUTORIAL
PATH	30	30	0	30	30	45	20	20	20	80	80	65
PHARM	30	30	15	30	30	30	20	20	20	80	80	65
MICRO	30	30	0	30	30	30	20	20	0	80	80	30
CM	15	0	30	0	0	0	10	0	0	25	0	30
FM	15	0	30	0	0	0	0	0	0	15	0	30
G.MED	15	0	0	0	0	0	10	0	0	25	0	0
G.SUR	15	0	0	0	0	0	10	0	0	25	0	0
OBG	15	0	0	0	0	0	10	0	0	25	0	0
AETCOM				AETCOM 30						AETCOM 30		

NOTE: Can be prepared at the convenience of the respective institutions.

COMPETENCY DISTRIBUTION IN EACH BLOCK

FIRST BLOCK

SI.NO		TOPIC
LECTURES TO BE COVERED IN FIRST BLOCK		
1.	CM 3	Describe the health hazards of air, water, noise, radiation and pollution
2.		<i>Describe concepts of safe and wholesome water, sanitary sources of water, water purification processes, water quality standards, concepts of water conservation and rainwater harvesting</i>
3.		Describe the aetiology and basis of water borne diseases /jaundice/hepatitis/ diarrheal diseases
4.		Describe the concept of solid waste, human excreta, and sewage Disposal
5.		Describe the standards of housing and the effect of housing on Health
6.		<i>Describe the role of vectors in the causation of diseases. Also discuss National Vector Borne Disease Control Program</i>
7.		Identify and describe the identifying features and life cycles of vectors of Public Health importance and their control measures
8.		Describe the mode of action, application cycle of commonly used insecticides and rodenticides
9.	CM 7	Define Epidemiology and describe and enumerate the principles, concepts, and uses
10.		Enumerate, describe, and discuss the modes of transmission and measures for prevention and control of communicable and non-communicable diseases
11.		Enumerate, describe, and discuss the sources of epidemiological data
12.		<i>Define, calculate, and interpret morbidity and mortality indicators based on given set of data</i>
13.		<i>Enumerate, define, describe, and discuss epidemiological study designs</i>
14.		<i>Enumerate and evaluate the need of screening tests</i>
15.		<i>Describe and demonstrate the steps in the Investigation of an epidemic of communicable disease and describe the principles of control measures</i>
16.		Describe the principles of association, causation, and biases in epidemiological studies
17.		Describe and demonstrate the application of computers in epidemiology

18.	CM 11	Enumerate and describe the presenting features of patients with occupational illness including agriculture
19.		Describe the role, benefits and functioning of the employees state insurance scheme
20.		Enumerate and describe specific occupational health hazards, their risk factors, and preventive measures
21.		Describe the principles of ergonomics in health preservation
22.		Describe occupational disorders of health professionals and their prevention & management
PRACTICAL / DOAP TOPICS TO BE COVERED IN FIRST BLOCK		
1	C M 3.2	<i>Describe concepts of safe and wholesome water, sanitary sources of water, water purification processes, water quality standards, concepts of water conservation and rainwater harvesting</i>
	3.6	Describe the role of vectors in the causation of diseases. Also discuss National Vector Borne Disease Control Program
		<i>Demonstration of mosquito and other vectors</i>
2	C M 5.2	Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families, and the community by using the appropriate method
	5.4	Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment
3	7.4	Define, calculate, and interpret morbidity and mortality indicators based on given set of data
	7.7	<i>Problems on Investigation of epidemic</i>
	7.9	Describe and demonstrate the application of computers in epidemiology
4	11.4	Describe the principles of ergonomics in health preservation
	11.3	<i>Occupational hazards and diseases, Measures of health protection and prevention of occupational diseases, Personal protective devices</i>

SMALL GROUP DISCUSSION TOPICS TO BE COVERED IN FIRST BLOCK

1	CM 7.4	Mortality rates including standardisation and morbidity measurements
2	CM7.5	Study designs- Descriptive studies, case-control study, cohort study
3	CM 7.5	Study designs- Experimental studies and RCT exercises
4	CM 7.6	Screening and exercises on screening
5	CM 11.4, 11.5	Ergonomics+ Health of the health care workers
6	CM 3.7	Exercises on vector borne disease
7	CM 7.4	Mortality rates including standardisation and morbidity measurements
8	CM7.5	Study designs- Descriptive studies, case-control study, cohort study
9	CM 7.5	Study designs- Experimental studies and RCT exercises
10	CM 7.6	Screening and exercises on screening

SECOND BLOCK

Community Medicine has no teaching hours in 2nd Block

THIRD BLOCK

SI NO		TOPIC
LECTURES TO BE COVERED IN THIRD BLOCK		
1.	CM 13	Define and describe the concept of Disaster management
2.		Describe disaster management cycle
3.		Describe manmade disasters in the world and in India

4.		Describe the details of the National Disaster management Authority
5.	CM 15	Define and describe the concept of mental Health
6.		Describe warning signals of mental health disorder
7.		Describe National Mental Health program
8.	CM 18	Define and describe the concept of International health
9.		Describe roles of various international health agencies
10.	CM 19	Define and describe the concept of Essential Medicine List (EML)
11.		Describe roles of essential medicine in primary health care
12.		Describe counterfeit medicine and its prevention
DOAP TOPICS TO BE COVERED IN THIRD BLOCK		
		NIL

ASSESSMENT IN COMMUNITY MEDICINE

Summative Assessment - An assessment conducted at the end of instruction to check how much the student has learnt.

Formative Assessment - An assessment conducted during the instruction with primary purpose of providing feedback for improving learning.

Internal assessment – Range of assessments conducted by the teacher teaching a particular subject with the purpose of knowing what is learnt. Internal assessment can have both formative and summative functions.

Note - Assessment requires specification of measurable and observable entities. This could be in the form of whole tasks that contribute to one or more competencies or assessment of a competency per se. Another approach is to break down the individual competency into learning objectives related to the domains of knowledge, skills, attitudes, communication etc. and then assess them individually.

Scheduling of Internal Assessment - done once at the end of each professional year

Theory IA can include: Written tests should have essay questions, short notes, and creative writing experiences.

Practical IA can include: Spotters, Problem solving exercises, Objective Structured Practical / Clinical Examination (OSPE / OSCE), Clinicosocial case discussion, and records maintenance and logbook assessment.

Assessment of Log-book- Log book should record all academic and curricular activities like seminar, symposia, and quizzes. It should be assessed regularly and submitted to the department. Marks should be allotted for logbook assessment and should be included as a part of formative assessment marks under practical's

Assessment of Practical Record book- Practical book should record all skills and other practical exercises done during the academic programme. It should be assessed regularly and submitted to the department. Marks should be allotted for practical record and should be included as a part of formative assessment marks under practical's

Assessment for AETCOM will include: - Written tests comprising of short notes and creative writing experiences only in internal assessment.

INTERNAL ASSESSMENT

1. There will be 3 internal assessment examinations in Community Medicine. The structure of the internal assessment examinations should be like the structure of University examinations.
2. It is mandatory for the students to appear for all the internal assessment examinations.
3. First internal assessment examination will be held at the end of 1st professional, second internal assessment examination will be held at the end of 2nd professional and third internal assessment examination will be held at the end of 3rd professional.

4. Pattern of first and second Internal Assessment are left to the discretion of the individual institute. However, third internal assessment has to be conducted in the same pattern of the University exam
 5. Additional internal assessment examination for absent students can be considered due to genuine reason after approval by the head of the department. It should be taken before the submission of internal assessment marks to the University.
 6. Internal assessment marks allotment for theory and practical for the first and second internal assessment are left to the discretion of the respective institutes. Marks allotted in the third (final) Internal Assessment should be preferably for 100 marks each for Theory and Practical.
 7. 20% of the internal assessment marks should be from Formative Assessment in Practical internal assessment
 8. Feedback in Internal Assessment - Feedback should be provided to students throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks need to be structured and the faculty and students must be sensitized to giving and receiving feedback.
 9. The results of IA should be displayed on notice board within two weeks of the test and an opportunity provided to the students to discuss the results and get feedback on making their performance better.
 10. It is also recommended that students should sign with date whenever they are shown IA records in token of having seen and discussed the marks.
 11. Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination.
 12. Internal assessment should be based on competencies and skills.
 13. Criteria for appearing in University examination: Learners must secure at least 50% marks of the total marks (combined in theory and practical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in order to be eligible for appearing at the final University examination.
 14. A candidate who has not secured requisite aggregate in the internal assessment may be subjected to remedial assessment by the institution. If he/ she successfully complete the same, he/she is eligible to appear for University Examination. Remedial assessment shall be completed before submitting the internal assessment marks online to the University.
- 20% of marks in theory and practical planning formative feedback document formative can be any of the

Annexures

Blueprint for Theory and Practical assessment

GENERAL INSTRUCTIONS

- Questions in each paper should be as per distribution of competencies in each professional year.
- Please refer to the SLO while setting the question paper
- Repetition of questions from the same SLO should be avoided
- Please adhere to the marks allotted to the different topics & sections
- There should be at least one question on AETCOM in the theory papers.
- Internal assessment would be for 40 marks in theory and 40 marks for Practical
- Internal assessment for theory may constitute Long essay, Short essay, and short answers
- Twenty percent of the internal assessment marks would be contributed by formative assessment in both theory i.e. 8 marks in theory and 8 marks in practical.
- Total internal assessment marks of 40 would be 32 for internal assessment and 8 for formative assessment conducted. (32+8=40)
- Marks allocated for record and logbook maintenance would be added to practical internal assessment marks.

FORMATIVE ASSESSMENT

- CBME mandates conduct of formative assessments, institutions can conduct formative assessments as per their convenience however the formative assessment would contribute towards the internal assessments.
- Institutions can select from the suggested methods of formative assessment that are given below however the institutions can adapt methods that comply with that of the MCI regulations.
- Feedback to students regarding formative assessment have to be documented and should be the basis for mark allocation.
- The logbook in community medicine is a record of all activities of the students. All competencies at a “Shows How” level in the Miller’s pyramid should be documented in the logbook. In addition, logbook also contains documentation of attendance, involvement in departmental academic and extracurricular activities and feedback given to the student. The logbook should be signed by faculty on a regular basis. A total of 10 marks should be allotted to logbook in the second

professional year. This should be reduced and added to formative assessment marks.

- The practical record in community medicine contains documentation of the practical sessions held during the course. A total of 10 marks should be allotted to practical record and should be reduced and added to formative assessment marks in the second professional year.
- Suggested methods for Formative Assessments are:
 - MCQs
 - Essays
 - Assignments
 - Seminar presentations
 - Project work
 - OSCE
 - OSPE

TOPIC-WISE MARKS DISTRIBUTION FOR THEORY EXAMINATION

<u>Sl. No.</u>	<u>TOPICS</u>	<u>Percentage Weightage</u>	<u>Nature of question</u>
1	Epidemiology	5 – 30%	LA, SE, SA
2	Occupational Health	3 -10%	LA, SE, SA
3	Disaster Management	3- 4%	SE, SA
4	International health	3- 4%	SE, SA
5	Environmental health problems	5- 35%	LA, SE, SA
6	Mental Health	3- 4%	SE, SA
7	Essential Medicine	3- 3%	SA
8	AETCOM	3- 12%	SE, SA

*LA-LONG ANSWER, SE-SHORT ESSAY, SA-SHORT ANSWER

PRACTICALS

Total Marks – 40

Respective institutions can conduct practical examinations by the following suggested methods

Exercise 1- Spotters

Spotters can be chosen from among the following topics covered in the second professional year including Entomology. Disinfectants, insecticides, environment health models, instruments, occupational health

Note: Students need to identify the spotter and write two relevant points

Exercise 2– Problem solving exercises

Three problems from a list of problems on topics covered in the second professional year including epidemiology, biostatistics, environmental health, occupational health and AETCOM

Exercise 3: OSPE / OSCE

Two OSPE / OSCE stations will be set up based on topics covered in the second professional year of which at least one station should be a counselling station.

Exercise 4: Family study

One clinic-social case / family study will be allotted per student based on problems of public health importance. The clinic-social case may be allotted from the community or the hospital.

Exercise 5: Viva Voce

Division of the topics can be at the discretion of the institution.

NOTE:

- 1. The spotters, exercises and OSPE depends on the portion covered in the respective block.**
- 2. Certifiable competencies/AETCOM should be completed in Formative/Internal assessment**

ATTITUDE ETHICS AND COMMUNICATION SKILLS (AETCOM)

SI NO	MODULE	TOPIC	DEPARTMENT				
			PA	MI	PH	CM	FM
1	2.1	Foundation of communication				✓	
2	2.2	Foundation of bioethics					✓
3	2.3	Health care as a right				✓	
4	2.4	Working in a health care team	✓				
5	2.5	Bioethics- case studies on patient autonomy and decision making (patient rights and shared responsibility in health care)			✓		
6	2.6	Bioethics-Case studies on patient autonomy and decision making (refusal of care including do not resuscitate and withdrawal of lifeSupport)			✓		
7	2.7	Bioethics- Case studies on patient autonomy and decision making (consent for surgical procedures)		✓			
8	2.8	What does it mean to be a family member of sick patient					✓

****PA-Pathology; MI- Microbiology; PH- Pharmacology; CM- Community medicine; FM- Forensic medicine.**

INTEGRATION CLASSES – SECOND PROFESSIONAL YEAR

TOPIC	TOPIC CODE	VERTICAL INTEGRATION	HORIZONTAL INTEGRATION	T O T
Epidemiology				
Define Epidemiology and describe and enumerate the principles, concepts, and uses	CM7.1	GENERAL MEDICINE		8
Enumerate, describe, and discuss the modes of transmission andmeasures for prevention and control of communicable and non-communicablediseases	CM 7.2			
Enumerate, describe, and discuss the sources of epidemiologicaldata	CM 7.3			
Define, calculate, and interpret morbidity and mortality indicatorsbased on given set of data	CM 7.4			
Enumerate, define, describe, and discuss epidemiological studydesigns	CM 7.5			
Enumerate and evaluate the need of screening tests	CM 7.6			
Describe and demonstrate the steps in the Investigation of anepidemic of communicable disease and describe the Principles ofcontrol measures	CM 7.7		MICRO	
Describe the principles of association, causation, and biases inepidemiological studies	CM 7.8			
Environmental Health Problems				
Describe the health hazards of air, water, noise, radiation, andpollution	CM 3.1	GM, ENT		5
Describe the aetiology and basis of water borne diseases /jaundice/hepatitis/ diarrheal diseases	CM 3.3	MICRO, GM, PAED		
Describe the role of vectors in the causation of diseases. Alsodiscuss National Vector Borne Disease Control Program	CM 3.6	MICRO		
Identify and describe the identifying features and life cycles ofvectors of Public Health importance and their	CM 3.7	MICRO		

control measures				
Describe the mode of action, application cycle of commonly used insecticides and rodenticides	CM 3.8	PHARMA		
Nutrition				
Describe the common sources of various nutrients and special nutritional requirements according to age, sex, activity, physiological conditions	CM5.1	General Medicine, Pediatrics		
Describe and demonstrate the correct method of performing a nutritional assessment of individuals, families, and the community by using the appropriate method	CM5.2	General Medicine, Pediatrics		
Define and describe common nutrition related health disorders (including macro-PEM, Micro-iron, Zn, iodine, Vit. A), their control and management	CM5.3	General Medicine, Pediatrics		
Plan and recommend a suitable diet for the individuals and families based on local availability of foods and economic status, etc in a simulated environment	CM5.4	General Medicine, Pediatrics		
Describe the methods of nutritional surveillance, principles of nutritional education and rehabilitation in the context of sociocultural factors.	CM5.5	General Medicine, Pediatrics		
Enumerate and discuss the National Nutrition Policy, important national nutritional Programs including the Integrated Child Development Services Scheme (ICDS) etc	CM5.6	Pediatrics		
Describe food hygiene	CM5.7		Microbiology	
Describe and discuss the importance and methods of food fortification and effects of additives and adulteration	CM5.8	Pediatrics		
Disaster Management				
Define and describe the concept of Disaster management	CM13.1	GEN MED & GEN SURG		4
Describe disaster management cycle	CM13.2			
Describe man-made disasters in the world and in India	CM13.3			
Describe the details of the National Disaster	CM13.4			

management Authority				
Mental Health				
Define and describe the concept of mental Health	CM15.1	PSYCHIATRY		3
Describe warning signals of mental health disorder	CM15.2			
Describe National Mental Health program	CM15.3			
Essential Medicine				
Define and describe the concept of Essential Medicine List (EML)	CM19.1		PHARMA	3
Describe roles of essential medicine in primary health care	CM19.2			
Describe counterfeit medicine and its prevention	CM19.3			

FAMILY STUDY/ CLINICAL POSTING IN SECOND PROFESSIONAL YEAR

Duration - one month

SLOs

1. To assess socioeconomic status of given family
2. To assess housing condition and presence of overcrowding in a given family
3. To do anthropometric measurement of individuals in given family
4. To explain effect of socio-environmental conditions on the health of the family
5. To plan and recommend suitable diet for family
6. To do nutritional assessment of under five children in anganwadis
7. To assess the socio environmental conditions of anganwadis
8. To describe maternal and child health services at PHC/UHC.

Sl.no	Topic
1.	Family health study-Introduction (CM 2.2)
2	Spot mapping and Assessment of Housing standards (CM3.4 and 3.5)
3	Family visit - Anthropometric measurement & Dietary assessment (CM 5.2)
4	Family visit – Dietary assessment
5	Family visit – Dietary assessment
6	Family visit – Dietary assessment
7	Diet calculation

8	Introduction of Health education principles (CM 1.6)
9	Preparation of presentation
10	Presentation of family health study
11	Presentation of family health study
12	Feedback to family
13	Health education activity in family
14	Nutritional education
15	Planning and recommending diet for family from the locally available food
16	Health education activity in community (CM 1.6, 1.9)
17	Health education activity in community
18	Health education activity in community
19	Follow up visit to studied family
20	Presentation of follow up visit
21	Data analysis (CM 7.9)
22	Anganwadi visit -
23	Anganwadi visit
24	Anganwadi visit
25	Anganwadi visit
26	Presentation
27	Observation of maternal child health services at PHC/UHC
28	Observation of maternal child health services at PHC/UHC
29	Writing reports of family study, Anganwadi visit and PHC
30	Presentation of Family study activity

REFERENCE BOOK

1. K. Park, Park's textbook of preventive and social medicine, M/s Banarasidas Bhanot Publishers, Jabalpur. -
2. B.K. Mahajan & M. Gupta Textbook of preventive and social medicine, Jaypee Brothers.
3. Mahajan's Methods in Biostatistics for Medical Students and Research Workers. Jaypee Publishers
4. D.K Mahabalaraju., Essentials of Community Medicine, Practicals.

Level II

- 1) A M Kadri.IAPSM's Textbook of Community Medicine.
- 2) J Kishore.Kishore's National Health Programs of India
- 3) Rajvir Bhalwar ,Textbook of Public Health and Community Medicine, Published in Collaboration with WHO.
- 3) Principles of Medical Education: Dr. T Singh
- 4) A H Suryakanth Community Medicine with Recent Advances.
- 5) P S S Sundar Rao.Introduction to biostatistics and research methods

Level-III

1. Donald Hunter, (2018) The Disease of Occupations, Latest Edition, Hodder & Stoughton London, Sydney, Auckland, Toronto.
2. International Labour Organization, Encyclopaedia of Occupational Health and Safety, Volume 1 & 2. ILO, Geneva, Switzerland
3. Jallifee, Clinical Nutrition, WHO., Geneva