

STUDY GUIDE

Community Medicine

4th Year MBBS, AFM&DC

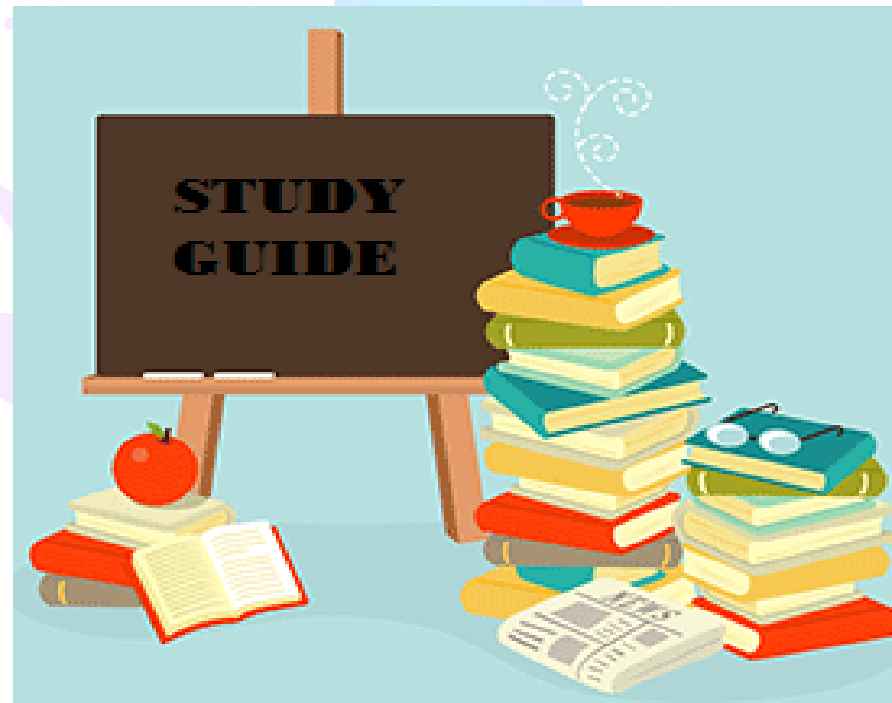


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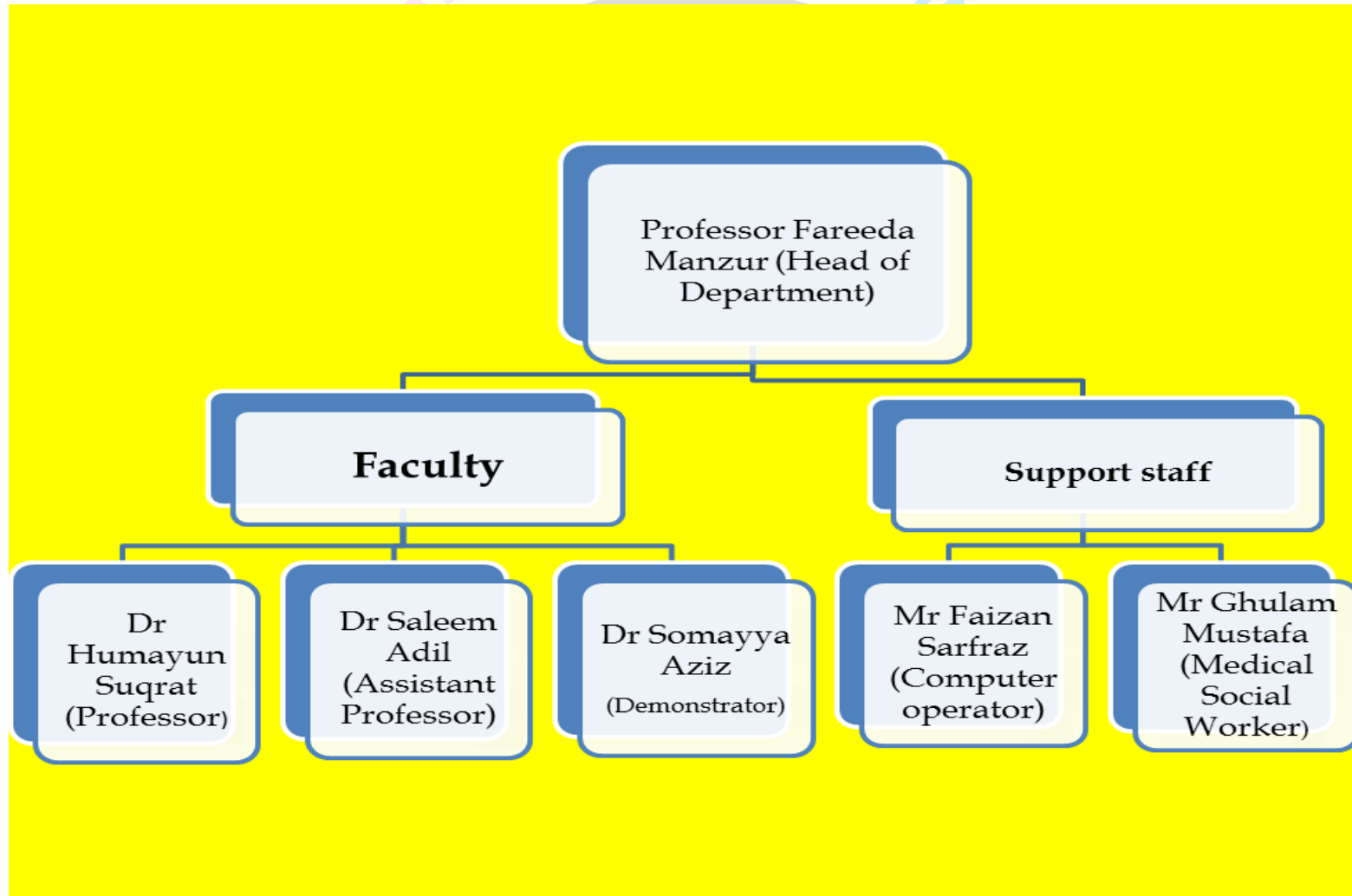
INTRODUCTION

Community Medicine is that branch of medicine, which deals with the study of provision of preventive, promotive, curative, rehabilitative, and evaluative services to the community at large, through an organized comprehensive healthcare delivery system.

The Department of Community Medicine, Aziz Fatima Medical and Dental College is involved in teaching and training of 4th year MBBS students through lectures, tutorials, presentations and field visits in the subject. Field visits of places of public health importance, household survey and research work are being arranged regularly. The department has a lecture hall which can accommodate more than 100 students, 3 offices and a beautiful museum for practical training of students. The Department also has computer facility to maintain department records and to prepare lectures, slides and demonstrations. The Department Museum is well equipped with required models, specimens and equipment for practical demonstrations and tutorials.

Close and excellent student-teacher relationship is maintained. The teaching is done using the most modern methods i.e. with the help of latest audiovisual aids like multimedia & projectors, achieving excellent results. Since teaching is ongoing process, the faculty members participate in various workshops and seminars which are supervised by experts of national repute to refresh and update their knowledge. Research has already been made compulsory for the students of 4th Year MBBS by UHS, so the students are trained for actively writing research papers by giving them regular assignments having reference from most modern journals under supervision of our staff members.

DEPARTMENT ORGANOGRAM





Day	Weekly Break up of Lectures and Tutorials				
	1	2	3	4	5
	8:00 am - 8:45 am	8:45 am - 9:30 am	9:30 am - 0:15 am	10:30 am - 1:300 pm	1:30 pm - 3:00 pm
Monday		Lecture		Practical/ Tutorial	
Tuesday				Practical/ Tutorial	Lecture
Wednesday		Lecture		Practical/ Tutorial	
Thursday				Practical/ Tutorial	Lecture
Friday			Lecture	Practical/ Tutorial	

Gantt's Chart for syllabus completion

Topics	Dec 2018	Jan 2019	Feb	Mar	Apr	May	JUN S U M M E R V A C A T I O N S	Jul	Aug	Sep
Welcome & Introduction	■									
Nutrition	■									
Research	■									
Communicable diseases	■	■	■	■	■	■		■	■	■
Concept of health and disease	■	■								
Primary health care		■								
Epidemiology			■	■						
Non-communicable diseases				■						
Demography					■					
Screening						■				
Mental Health						■				
Disaster & Accidents						■				
Geriatric Med						■				
Biostatistics							■			
Maternal and child health								■		
Immunology										■

Community Medicine (SEQs and MCQs) TABLE OF SPECIFICATIONS

Table of specifications for the MCQ examination:

Total marks: 65.

Total number of questions: 65

Sr. #	Topics	C1	C2	Weighting	% of items and marks per content
1	Concept of health and disease, natural history of the disease, levels of prevention, control, elimination, eradication and surveillance, Sterilization and Disinfection	✓	✓	3MCQs	5% (3 MCQs = 3 Marks)
2	Introduction to public health and health systems in Pakistan, primary health care, leadership and motivation, national and international health agencies	✓	✓	3 MCQs	5% (3 MCQs = 3 Marks)
3	Epidemiology				
	3.a General Epidemiology and research methodology, dynamics of infectious disease Transmission	✓	✓	5 MCQs	8% (5MCQs = 5 Marks)
	3.b: Epidemiology, control and prevention of communicable diseases,	✓	✓	4 MCQs	6% (4 MCQs = 4Marks)
	3.c: Epidemiology, control and prevention of non communicable diseases	✓	✓	2 MCQs	3% (2 MCQs = 2 Marks)
	3.d: Immunology	✓	✓	5 MCQs	8% (5 MCQs = 5 Marks)
4	Biostatistics + HMIS + Sampling	✓	✓	4 MCQs	6% (4 MCQs =4 Marks)
5	Demography and Population dynamics	✓	✓	3 MCQs	5% (3 MCQs = 3 Marks)
6	Food and nutrition	✓	✓	5 MCQs	8% (5 MCQs = 5 Marks)

Sr. #	Topics	C1	C2	Weighting	% of items and marks per content
7	MCH + reproductive health + family planning	✓	✓	6 MCQs	9% (6 MCQs = 6 Marks)
8	School health	✓	✓	3 MCQs	5% (3 MCQs = 3Marks)
9	Environmental Health 9.a: Air, b: Water, c: Radiation, d: Climate, e: Noise, f: Housing, g: Waste disposal	✓	✓	6 MCQs	9% (6 MCQs = 6 Marks)
10	Occupational health	✓	✓	4 MCQs	6% (4 MCQs = 4 Marks)
11	Entomology and arthropod bone diseases	✓	✓	2 MCQs	3% (2 MCQs = 2 Marks)
12	Parasitology and parasitic diseases	✓	✓	2 MCQs	3% (2 MCQs = 2 Marks)
13	Snake bite	✓	✓	1 MCQ	2% (1 MCQ = 1 Mark)
14	Mental health / Medical Ethics	✓	✓	1 MCQ	2% (1 MCQ = 1 Mark)
15	Behavioural sciences and life style 15.a: Drug abuse 15.b: Addiction 15.c: Smoking 15.d: Personal hygiene 15.e: Child abuse / Child labor	✓	✓	4 MCQs	6% (4 MCQs = 4 Marks)
16	Information, Education and Communication (IEC)	✓	✓	1 MCQ	2% (1 MCQ = 1 Mark)
17	Accidents / Disasters	✓	✓	1 MCQ	1% (1 MCQ = 2 Mark)

Table of specifications for the SEQ examination:

Total marks allocated: 70.

Total questions: 14

Sr. #	Topics	C1	C2	Weighting	% of items and marks per Content
1	Concept of health and disease, natural history of the disease, levels of prevention, control, elimination, eradication and surveillance. 1.a: General Epidemiology and research methodology, dynamics of infectious disease transmission. 1.b: Epidemiology, control and prevention of Communicable and non-communicable diseases	✓	✓	2 SEQs	14% (2 SEQs = 10 Marks)
2	Introduction to public health and health systems in Pakistan, primary health care, leadership and motivation, national and international health agencies	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
3	Immunology	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
4	Biostatistics / HMIS	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
5	Demography and Population Control	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
6	Food + Nutrition	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
7	MCH / Reproductive Health	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)

Sr. #	Topics	C1	C2	Weighting	% of items and marks per Content
8	Environment 8.a: Air pollution 8.b: Water 8.c: Radiation 8.d: Housing 8.e: Waste disposal 8.f: Climate 8.g: Noise	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
9	Occupational Health	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
10	Parasitology + Entomology + Snake Bite	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
11	Mental health + Behavioral Sciences	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
12	Dental Health / School Health / Health Education	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)
13	Accidents / Disasters	✓	✓	1 SEQ	7% (1 SEQ = 5 Marks)



Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Medical Ethics	Introduction to Ethics	Define ethics	C1	1	Lectures	Lecture Hall	45 minutes	SEQS, MCQs, Class tests, Send up, Questioning
			Differentiate between different branches of ethics	C2	3				
			Describe 4 principles of medical ethics	C1	2				
		Development of medical ethics	Describe Nuremberg code	C1	2				
			Describe Helsinki declaration	C1	3				
			Describe code of medical ethics	C1	2				
		Guidelines by Pakistan Medical and Dental Council	Describe Guidelines by Pakistan Medical and Dental Council	C1	2				

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Community Mental Health	Mental health,	Define mental health	C1	1	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
			Describe etiology of mental health						
			Discuss magnitude of mental health problems (local and international)	C2	3				
		Types of mental health	Describe common mental health problems in Pakistan	C2	1				
		Evolution of mental health	Discuss historical evolution of mental health	C2	3				
		Prevention against mental illness	Discuss ways to improve mental health issue and principles of preventing mental illnesses	C2	1				
		Behaviour Sciences	Substance abuse	Be able to define basics concepts insubstance abuse,	C1	1	Lectures	Lecture Hall	45 minutes
		differentiate between drug addiction, drug abuse and drug misuse.	C2	2					
		briefly describe the magnitude of the problem	C3	3					
		Describe the types of drugs abused in Pakistan.	C2	3					
		discuss the etiology of drug addiction.	C2	2					
		Discuss Prevention (at all levels) against drug addiction	C2	1					
		Tobacco control	Describe Commonly used forms and routes of tobacco intake,	C1	2				

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Non-Communicable Diseases (NCDs)	Burden of NCDs,	Understand the burden of NCDs worldwide and Pakistan	C2	2	Lectures	Lecture Hall	45 minutes	Class test, Send up, MCQs, SEQs, OSPE
		Risk factors of NCDs	Describe the role of different risk factors of NCDs	C2	2				
		Common NCDs in Pakistan	List common NCDs in Pakistan, their causes, impact and prevention	C1	1				

Topic	Sub-topic	Learning Objective	Domain	Level	Mode of instr	Venue of instr	Time alloca	Assessment
Nutrition	Definitions	Definitions of nutrition	C1	1	Lecture	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning
	Macronutrients	Definitions sources and uses of macronutrients. Requirements and effects of deficiencies	C1, C2	2	Lecture	lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning
	Micronutrients	Definitions sources and uses of micronutrients. Requirements and effects of deficiencies	C1, C2	2	Lecture	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning
	Nutritional assessment	Methods of assessment of nutritional status	C3	2	Lecture	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning
	Food processing and Preservation	Pasteurization and other methods of food and milk preservation	C1, C2	2	Lecture	lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning
	Health problems related to nutrition	LBW, PEM, obesity, food poisoning	C2, C3	1	Lecture	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Occupational Health	Background, aims and objective of occupational health	Describe the background aims and objective of occupational health	C2	1	Tutorial and visit to an industry	Tutorial room, industry	2 hours 30 minutes.	Viva, OSPE, SEQs, MCQs, questioning, log book
		Functions of occupational health services and practices	Describe the functions of occupational health services and practices	C2	1				Viva, OSPE, SEQs, MCQs, questioning, log book
		Ergonomics	Define ergonomics	C1	2				Viva, OSPE, SEQs, MCQs, questioning, log book
			Describe the application of ergonomics	C2/C3					
		Occupational diseases	Enlist various occupational diseases	C1	2				MCQs,,SEQ,Vi va
			Explain the etiology of occupational diseases	C2	2				MCQs,,SEQ,Vi va
			Explain the etiology of occupational diseases	C2	2				MCQs,,SEQ,Vi va
			Ensit differential diagnosis of occupational diseases	C1	2				MCQs,,SEQ,Vi va
			Describe preventive strategies for occupational diseases	C2	2	Field trip	Industry	2 hours	OSPE,Log book

Primary health care	Introduction	Define Primary health care	C1	1	Lectures,	Lecture Hall	45 minutes	MCQs,,SEQ,Viva
		Describe fundamentals principles of PHC	C2	1				MCQs,,SEQ,Viva
		Describe essential components of PHC	C2	1				MCQs,,SEQ,Viva
		Explain key concepts of PHC	C2	1	Field trip	BHU and RHC,	2 hours 30 minutes	OSPE,Log book
	Community Problems	Define community health problems	C1	2	Lectures, field visits to HF (BHU and RHC)	BHU and RHC, Lecture Hall	2 hours 30 minutes + 45 minutes	Viva, OSPE, SEQs, MCQs, questioning, log book
		Enlist community health problems	C1					
		prioritise community health problems	C3	2				
		Describe the solution to the given Community health problem.	C3	2				
	PHC in Pakistan	Define PHC in Pakistan	C1	2	Lectures, field visits to HF (BHU and RHC)	BHU and RHC, Lecture Hall	2 hours 30 minutes + 45 minutes	Viva, OSPE, SEQs, MCQs, questioning, log book
	Integrated Rural health complex	Describe the concept of integrated of rural health complex,	C2	3	Lectures, field visits to HF (BHU and RHC)	BHU and RHC, Lecture Hall	2 hours 30 minutes + 45 minutes	Viva, OSPE, SEQs, MCQs, questioning, log book
	comprehensive health care	Discuss comprehensive and selective health care	C2	2				

Course	Topic	Sub-topic	Learning Objective	Domain	Level	Mode of ins	Venue of ins	Time allocat	Assessment
Community Medicine	Reproductive and child health	Safe motherhood	Define woman health, Define safe motherhood and its components.	C1	1	Lecture	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning
		Reproductive health and its components	Define reproductive health its components	C2	1				
		Maternal mortality	Define maternal mortality. Calculate Maternal mortality ration. Describe causes of maternal mortality. Define risk factors and prevention against maternal mortality. Tell the maternal mortality of Pakistan	C1, C3	1			45 minutes	
		perinatal, neonatal, Infant, post-neonatal, peri neonatal mortalities	Define perinatal mortality, neonatal mortality, infant mortality, post-neonatal mortality, formulas to calculate their rates, causes, risk factors and prevention	C1, C3	1			45 minutes	
		Essentail of Obstetric care	Define EOC. Differentiate between basic and comprehensive EOC, three delays	C1, C3	2			45 minutes	
		TBA training programm	Define TBA training program, its importance and advantges	C1, C2	2			45 minutes	

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	School health service	Introduction to school health services	Define school health	C1	1	tutorial	Lecture Hall	2 hours 30 minutes	SEQS, MCQs, OSPE, viva, class tests, send up
			List the components of school health	C1	1				
			List the members of school health team	C1	1				
			Describe role of school health team members	C2	1				
			Describe the functions of school health program	C1	1				
			Discuss common health problem of school children	C1	1				
		Equipment of school health service	List common medicines and equipment	C1	2				
			School health service in Paksitan	C2	2				
			types of desks	C1	1				
		Special children	Requirements of handicapped children	C2	3				

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment	
Community Medicine	Arthropods	Arthropod	Describe arthropod	C1	2	Lecture	Lecture Hall	45 minutes	Viva, MCQs, questioning, OSPE	
			Name common arthropod borne diseases	C1	1					
		Control of arthropods	Describe control measure of arthropods	C1	2					
		Insecticides	Insecticides and their public health importance	C1	2					
	Parasitology	Parasitic diseases		Name parasitic diseases of public health importance	C1					1
				Describe the routes of transmission of all parasitic diseases in human beings	C2					1
				Discuss the preventive measures against parasitic diseases	C3					1
	Snake bite	Types of snakes		Describe the types of poisonous snakes in Pakistan	C1					1
				Name the type of venom in each of the snake	C2					1
Protection			Describe protection and prevention against snake bite	C3	1					

Topic	Sub-topic	Learning Objective	Domain	Level	Mode of ins	Venue of ins	Time allocat	Assessment
Biostatistics and HMIS	Biostatistics	Define Biostatistics,	C1	1	Lecture and Visit to the BHU and RHC to understand DHIS	Lecture Hall; Health Facilities (BHU and RHC)	45 minute + 2 hour 30 minutes	By asking related questions at the end of the lecture, Class Test OSPE, MCQs and SEOs
		Describe Concepts and uses of Biostatistics	C2	2				
	Data	Define data	C1	1				
		Describe types of data	C1	1				
	Measurements	Define rates, ratios and proportions	C1	1				
		Differentiate between crude, specific and standardized rates	C2	2				
	Data presentaion	Discuss different methods of data presentation	C2	1				
	Measures of central tendency	Define measures of central tendency	C1	1				
		Measure and interpret central tendency of given data	C3	1				
	measures of dispersion	Define measures of dispersion	C1	1				
		Measure and interpret measures of dispersion	C2	1				
	Standard error	define and calcaulte standard error	C1, C3	2				
	Normal distribution curve	Define normal curve	C1	1				
		Use information about normal curve to solve problems	C3	2				
	Hypothesis testing	Define hypothesis testing	C1	1				
		Formulate null and alternate hypotheis	C2	1				
		find out whether to accept or reject null hypothesis in a given scenario	C3	1				

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Concept of health and disease	Introduction to health and disease	define health, disease, illness and wellbeing	C1					
		Iceberg phenomenon	Describe iceberg phenomenon of disease and discuss it with ref to important diseases	C1, C3					
		Definitions	Define basic terminologies used in community Medicine	C1					
		Prevention	List all levels prevention	C1					
			Find out the level of given prevention against any disease	C3					
		Mckeown's concept	Describe Mskeown's concept	C1					
		seven star doctor	List the attributes of 7 star doctor	C1					
		Sustainable developmental goals (SDGs)	list the SDGs and point out those relevant to public health	C1, C2					

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Disaster	Disaster	Define disaster	C1	1	Lecture and video clip	Lecture hall	45 minutes	
			Classify disasters	C2	1				
			Differentiate between disaster and accident	C2	2				
			Disaster management	Describe steps in pre and post disaster phases of disaster cycle	C2	1			
				Describe triage and tagging	C1	2		45 minutes	
				Public health intervention after disaster	C2	1			
			Effects of different disasters	Describe the magnitude and effects of different types of disasters and their public health consequences	C2	2			

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Environmental health sciences	Environment	Definition						
		Air	Describe composition of air						
			Enlist causes of air pollution						
			Methods of purification of air						
		diseases caused by air pollution	name the diseases caused by air pollution						
			Explain the methods of prevention of diseases caused by air pollution						
		Water	Enumerate sources of water						
			tell daily water requirement for human beings						
			methods of purification of water						
		Water pollution	Discuss causes of water pollution						
			Discuss methods of prevention against water pollution						
		Water quality standards	Discuss water quality standards						

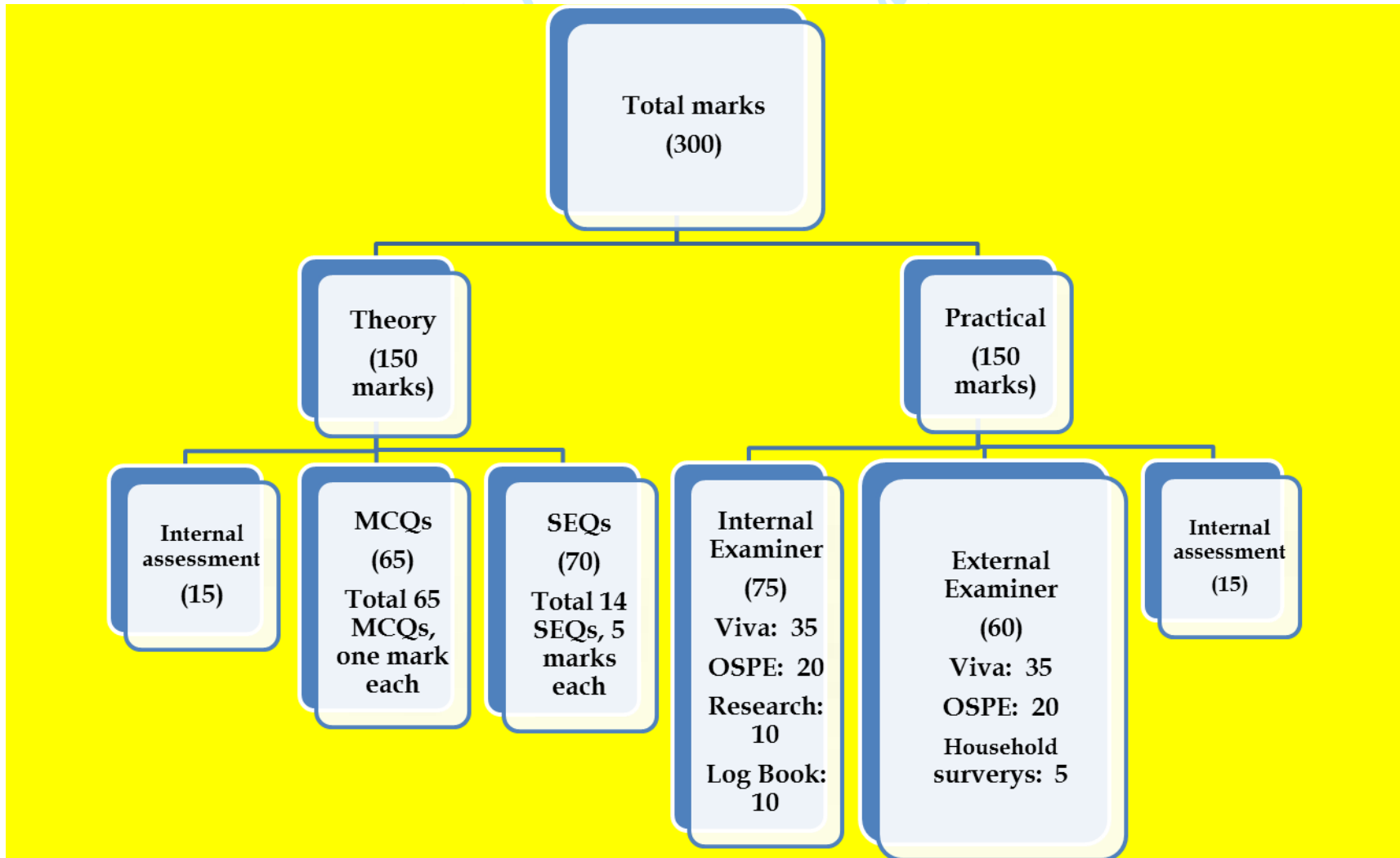
		Background measurements	Definition of mortality, morbidity and disability	C1	1	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
			uses and applications of mortality, morbidity, disability, fatality	C1, C2, C3	1	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
		Epidemiological methods	Definitions and application of different epidemiological methods (descriptive, analytical, experimental)	C1, C2, C3	1	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
		epidemiological transition	define and describe association and causation	C1, C2, C3	2	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
		classification of Communicable diseases, important CDs	classify Communicable diseases	C2	1	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
			define terminology used in CD,	C1	1	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
			differentiate between infective disease and Communicable disease	C3	3	Lectures	Lecture Hall	45 minutes	Viva, OSPE, SEQs, MCQs, questioning,
		Control of infection	Epidemiology, control and spread of important Communicable diseases, and prevention against each of them at primary, secondary and tertiary levels	C2, C3	1	Lectures (about 8 lectures)	Lecture Hall	6 hours	Viva, OSPE, SEQs, MCQs, questioning,

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Information, education and communication (IEC)	Concept of health education	Define health education						
			Explain contents, principles and stages of health education						
			Describe aims and objectives of health education						
			Discuss Approaches used in public health						
		Communication	Discuss methods of communication						
			Describe barriers of communication						
			skills of communication						
		health education program	Plan a health education program						
			organize and evaluate						
		Social marketing	define social marketing and its uses health education						

Course	Topic	Sub-topic	Learning objective	Domain	Level	Mode of instruction	Venue of instruction	Time allocation	Assessment
Community Medicine	Dynamics of infectious disease transmission	Reservoir and source of infection	Define reservoir and source of infection	C1	1				
			Discuss the procedure of escape of organism from reservoir	C1	1				
			discuss mode of entry of pathogen into the host	C2	1				
			Define host and susceptible host	C1	2				
		Immunity	Define immunity	C1	1				
			describe types of immunity	C2	1				
		Immunization	Define immunization	C1	1				
			Describe EPI schedule with details of each vaccine	C2	1				
	Control of infection	Prevention against infection	Describe the methods of controlling reservoir of infection	C2	1				
			What is notification	C1	2				
			Discuss Primary,secondary and tertiary prevention against infection	C2	1				
			describe interruption of transmission	C2	2				

EVALUATION METHOD (4th Year MBBS Professional Examination)



REFERENCE BOOKS

(as listed in the UHS curriculum)



1. Textbook of Community Medicine by Park J E. Latest edition
2. Textbook of Community Medicine by Ilyas Ansari. Latest edition
3. Textbook of Community Medicine by Maxcy-Rozenau-Last. Latest edition
4. Medical statistics by R. Kirkwood. Latest edition
5. Online Journals and reading materials through HEC digital library facility and WHO website