

## **CORE SUBJECT LEARNING**

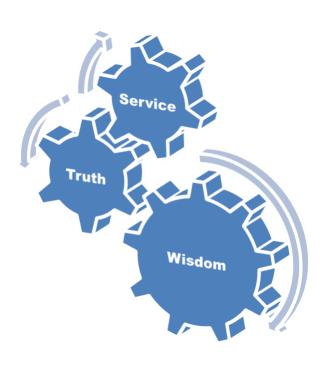
## "STUDY GUIDE"

# IN COMMUNITY MEDICINE FOR MPHIL STUDENTS

(Proposed)

Department of Community Medicine & Public health New Teaching Block Rawalpindi Medical University Rawalpindi

## MOTTO OF RAWALPINDI MEDICAL UNIVERSITY



## **MPhil Community Medicine**

### **Background**

Medical education in our country is mostly therapeutic and physician's oriented. Increasing importance of practices of preventive medicine is highly debated, deliberated and demanded but it has not given due space in framework of medical career. Much attention has been focused in recent past on scarcity of Public Health Professionals, especially in our part of world. Public Health is only taught under the heading of Community Medicine to undergraduate medical students as part of fourth year teachings in most medical teaching institutions of the country as theoretical knowledge based content with almost noexposure to practical component of subject and there is no mechanism for assurance of acquisition of necessary knowledge and skills.

Current pandemic crisis posed by COVID-19 has highlighted the fact that Preventive can play a significant contribution in improvement of patient care and ultimately the overall health care delivery system. The pandemic catastrophe has also proved that there is a need to produce public health professionals who can generate evidences in improving health systems, act as advocates and champions for addressing the 21st century challenges faced by Pakistan. The health care professionals at all levels are needed to be invited and equipped with necessary knowledge and skills to take up this legacy. Since preventive medicine plays a key role in the practice of medicine as a profession; a multi-pronged approach needs to be exercised, to best address the health needs of a community and to improve the service delivery.

Rawalpindi Medical University leads the way among public sector universities by introducing two year Master Program in Public Health. This will not only for Rawalpindi Medical University Faculty but medical professionals from other universities across the country also have been provided chance to avail this opportunity. Development of Doctorate level Program is the next mile stone to be achieved under visionary leadership of Vice Chancellor of Rawalpindi Medical University.

### MESSAGE OF THE VICE CHANCELLOR



Prof. Dr. Muhammad Umar (Sitara-e-Imitaz)

It is indeed a matter of great pleasure that Rawalpindi Medical University is going to commence the Master of Philosophy in Community Medicine . This is one of the initiatives that Rawalpindi Medical University has taken so far to promote the practices of Public Health and Preventive Medicine among medical professionals working both in public and private healthcare settings.

It is of prime importance for the medical professionals to keep pace with the recent advancements in field of Public Health and Preventive Medicine . This masters level program will serve to provide a broad framework to strengthen the capacity building of healthcare service providers in most commonly encountered healthcare research problems. Lastly, I congratulate my faculty for their untiring efforts in designing this course and wish them all the best for the success of this course which will ultimately be very beneficial to the community.

## **UNIVERSITY VISION& MISSION**

#### **VISION**

The Rawalpindi Medical University (RMU)'s MPhil Community Medicine Program aimed at the capacity building of among health care professionals in field of preventive medicine. The purpose is to equip the health professionals with knowledge and skills to evidence based decision-making in health care, policy-making and management and public health interventions implementation. The program stresses upon hands-on training to develop knowledge and skills for public health problems identification and prioritization, health planning, policy making , preparation of research project proposals and protocols, preparation of research plans and budgets, research reports and publications writing and reviewing of research proposals and publications.

#### **MISSION**

To produce competent public health oriented Professionals in community, adequately equipped with the knowledge, skills and attitude deemed necessary to meet the healthcare needs of the community and play a fundamental leadership role in the provision of comprehensive healthcare services through evidence based medicine.

#### **GOAL**

We aspire our scholars to be the best healthcare professionals in the region, meeting international standards of research with meaningful and effective service to society.

#### **AIM & OBJECTIVES**

Aim of Master level degree program is to create center of excellence for our faculty members by establishing intellectual foundation to promote critical thinking and practice evidence based medicine with the aspiration to improve clinical outcomes, population health and health care services delivery across the world beyond traditional medical care.

#### PREAMBLE:

This document contains a proxy curriculum which covers basic sub areas of the subject of community medicine which first degree postgraduate students in the subject of community medicine (MPhil) should at basic level have a level of understanding to deliver the learning needs o the undergraduate medical students in the subject of community medicine. This doc indicates major disciplines and sub-disciplines included in PMDC curriculum of the subject. It indicates contents outlines, learning outcomes, modes of teachings and assessments formally adopted for the deliverance of the given contents at undergraduate teaching level.

Its objective is to the capacity building of the PG student for its primary professional needs after post graduation in the subject of community medicine.

All the disciplines and sub-disciplines included should be taken as an initial & minimum area of learning. These topics should work as probe for further learning. The advance & complex learnings in each area will be identified by the PG student and the faculty under formal schedules notified by the course director of the M Phil program in the subject.

This doc covers theoretical contents of teachings in the subject, and also indicates various modes of teachings recommended in medical education. It is well influenced by "Prof Omar's Model" of medical education.

This curriculum is sequenced as the formal course of undergraduate leaning in community medicine in Rawalpindi Medical university. It is well harmonized with integrated modular curriculum being run by the university.

Course Director

MPhil Community Medicine Program

Department of Community Medicine RMU

Module - I

(Alignment module special senses-I ENT)

#### Course outlines, learning objectives, level of learning & assessment tools

**Theme:** The acquisition of medical knowledge must continually circulate back to the application of it and provide better and more relevant, quality patient care. The lifelong-learner attribute is evidenced by the student's commitment to querying literature and texts on a regular basisand critically evaluating new medical information and scientific evidence in order to modify their knowledge base accordinglythat can be done very finely having deep understanding of epidemiology and concept of health and disease taught is this module by establishing the factors that lead to public health issues, the appropriate responses, interventions, and solutions.

S. No	Major subject / area	Contents outlines (Major topics & sub-topics)	LOs After the session students will be able to:	Level of learning	Mode of teachings	Assessme nt Tools
CM- 1	Introduction to the subject of community medicine	Intro to the subject of community medicine & public Health. (All definitions explaining the subject)     Intro to IUGRC     Scheme of learning	Comprehend the definitions explaining the subjects.     Comprehend practices of Public Health.     Follow the scheme of learning & assessment CM over the year.     Follow scheme of learning IUGRC	C1 & C2	LGIS	MCQs SEQs EMQs and viva exam
CM- 2	Fundamental Preventive aspects of otolaryngology related diseases	Health & Disease in public health context.     Wellbeing & Positive Health     Health Dimensions	Comprehend public health     aspects of Health & disease     Explain well being and positive     Explain dimensions of health	C1 & C2	SGIS / GDSs	MCQs SEQs viva exam
CM-3	Fundamental concepts of Preventive medicine -II	Health Assessment (Indicators)     Quality of life indicators     Health indexes     Approaches to disease prevention & control	Comprehend statistical indicators     Describe health indicators     Comprehend & calculate e HI & Indexes     Apply approaches to diseases prevention	C1 & C2	SGIS / GDSs	MCQs SEQs viva exam
CM- 4	Levels of prevention	Models of Disease causation     Natural History of disease     Level of prevention		C1 & C2	SGIS / GDSs	MCQs SEQs viva exam
CM- 5	Fundamental Concepts & Uses of Epidemiology	Definition of epidemiology     Explanation of concepts embodied in definition (Time-place-Person format & Epidemiological triangle)     Epidemiologic approach     Basic tools of measurements (Rates, Ration, & Proportion)     Uses of epidemiology	<ol> <li>Define epi-</li> <li>Explain concepts embodied in definition.</li> <li>Comprehend epidemiologic approach</li> <li>Comprehend &amp; calculate epidemiologic rate, ratio and proportion</li> <li>Enumerate uses of epi-</li> </ol>	C1, C2 & C3	SGIS / GDSs	MCQs SEQs EMQs and viva exam
CM- 6	Basic Tools of Measurements in Epidemiology and Measurement of Mortality	Review of Basic tools of measurements in epi-     Measurement of Mortality & Issues of standardization of mortality data     04- Types of Mortality Rates     Standardization of Mortality Rate	Comprehend & calculate Rate,     Ration and Proportion     Comprehend problems of mortality recording.     Comprehend & calculate 04 types     Mortality rates     Comprehend & perform standardization of MRs	C2 & C3	Philips classroo m / workshop	MCQs, SEQs viva and OSPE
Epi- 7	Measurement of Morbidity	Concepts & Epidemiologic tools used for measurements of diseases or morbidity.     Incidence Rate     Prevalence Rate     Ration b/w inc. and pre.     Bathing Tub of Epi	Comprehend statistical tools used for disease measurement     Calculate incidence rate and prevalence rates for given diseases     Explain concept of Bathing tup of epi	C2 & C3	Philips classroo m / workshop	MCQs, SEQs viva and OSPE
CM- 8	Intro to Epidemiologic Methods	Classification of Epidemiologic     Methods / studies     Descriptive epidemiology- types of descriptive studies     Steps of descriptive studies     Migration studies	Explain classification of epidemiologic study designs     Comprehend types of descriptive studies     Explain steps of Descriptive     Comprehend Migration study designs		SGIS / GDSs	MCQs, SEQs viva and OSPE
CM- 9	Analytica studies (case-control studies)	<ol> <li>Fundamental concept of case-control study designs</li> <li>Steps of case control studies</li> <li>Bias &amp; Matching</li> <li>Odds ration</li> <li>Limitations of case-control studies</li> </ol>	Comprehend logics of C-Control study designs     Comprehend & apply steps for undertaking a C-C study     Comprehend Bias issues and perform matching     Calculate & interpret Odds Ratio     Comprehended limitations of C-C studies	C1, C2 & C3	SGIS / GDSs	MCQs, SEQs and OSPE and Viva Voce
CM- 10	Analytica studies (case-control studies)	Fundamental concept of Cohort study designs     Steps of case Cohort studies	Comprehend logics of Coh- study design     Comprehend & apply steps for undertaking a Coh-study in given scenario	C1, C2 & C3	SGIS / GDSs	MCQs, SEQs and OSPE and Viva Voce

		<ol> <li>Measures of association in Cohort-Study designs (RR, AR, PAR) Relative Risk,</li> <li>Types of Coh-Study designs</li> <li>Limitations of case-control studies</li> <li>Differences b/w Coh- &amp; C-C study designs</li> </ol>	Calculate & interpret 03-measures association in Coh-study     Comprehended and differentiate Coh-study designs from C-C studies     Comprehend demerits of Coh-studies			
CM- 11	Experimental Epidemiologic study designs	Fundamental concept of     Experimental Epidemiologic     designs     Steps of undertaking a Randomized     Controlled Trial (RCT)     Randomization & Blinding     Types Experimental Epidemiologic     study designs	Comprehend Fundamental concept of Experimental Epidemiologic designs     Apply Steps of undertaking a Randomized Controlled Trial (RCT) in required scenario     Comprehend and apply Randomization & Blinding in required situation     Comprehend Types Experimental study designs	C1, C2 & C3	SGIS / GDSs workshop	MCQs, SEQs and OSPE and Viva Voce
CM- 12	Comparative review of all Epi- study designs	Comparative review based on  1. Study population  2. Concepts of study group and control group  3. Data collection modes & Direction  4. Statistical components used in each design  5. Etiologic significance  6. Advantages & limitations of each design	Comprehend & differentiate parallel concepts of all study designs     Choose right study designs in given scene     Choose right analytical techniques for the given scene and Study design selected     Comprehend & choose right study population / groups for the study designs appropriate to given scene.     Comprehend & apply right statistical techniques for the studies undertaken under the given scene     Comprehend Etiologic significance, advantages & limitations of each design in relevance to each other	C1, C2 & C3	SGIS / GDSs	MCQs, SEQs and OSPE and Viva Voce
CM- 13	Epidemiologic Investigation	Disease outbreak & epidemic – review (epidemic, endemic & pandemic)     Types of epidemics     Steps of an epidemiologic investigation     Covid-19 a case study (an assignment to students)	Comprehend disease outbreaks & epidemics     Classify types and levels disease epidemics or outbreaks     Undertake required steps of investigating a disease outbreak situation     Delineates epidemiologic investigation levels involved in Covid-19 ( a student presentation)	C1, C2 & C3	Philips classroo m / workshop	MCQs, SEQs and OSPE and Viva Voce
CM- 14	Association & Causation	Types of associations     Requirements for causation     Statistical significance & clinical significance     Hill's criterion for judging causality of association	Comprehend Types of associations     Comprehend requirements for causation     Comprehend difference b/w statistical significance and clinical significance     Apply Hill's criterion for judging causality of association	C1, C2 & C3	Philips classroo m / workshop	MCQs, SEQs and OSPE and Viva Voce

#### (Alignment Module special senses-II (EYE)

Course outlines, learning objectives, level of learning, preferred modes of teachings &assessments.

**Theme:** role of **health education and communication** taught in this module cannot be neglected order to provide the care in a manner that recognizes and values the unique cultural background and emotions of every patient, thoughtfully including their families and support systems in every aspect of their care hence successfully master the Core Competency of Interpersonal and Communication Skills. another topic is **evidence-based screening programs** for early detection of diseases or for prevention of diseases specifically eye related issues in different age groups and playing role in **primary health care delivery** 

S. No	Major areas	Contents outlines (Major topics & sub-topics)	LOs After the session students will be able to:	Level of learning	Modes of teaching	Assess ment Tools
CM- 1 LGI S	screenin g I	<ol> <li>Iceberg phenomenon of disease</li> <li>Concept of screening</li> <li>Aims and objectives of screening</li> <li>Criteria for screening of diseases and screening tests</li> <li>Uses &amp; types of screening</li> </ol>	<ol> <li>Define screening</li> <li>Explain Iceberg phenomenon of diseases with examples</li> <li>Discuss Aims and objectives of screening</li> <li>Enlist Criteria for screening of diseases &amp; screening tests</li> <li>Discuss uses &amp; types of screening with examples</li> </ol>	C1 & C2& C3	Worksh op / Philips class room	MCQs , SEQs and OSPE and Viva Voce
CM- 2 LGI S	screenin g -II	<ol> <li>Screening test vs diagnostic test</li> <li>Rationale of screening tests</li> <li>Lead time in screening</li> <li>Concept of 2x2 table</li> <li>Validity &amp; yield of screening tests</li> <li>Sensitivity &amp; Specificity</li> <li>Positive predictive value(PPV) &amp; Negative predictive value(NPV)</li> <li>Issue of false positives and false negatives</li> <li>Evaluation of screening tests</li> <li>Characteristics of screening tests</li> <li>Problem of borderline</li> <li>Receiver operating characteristic curve</li> </ol>	<ol> <li>State differences between screening tests and diagnostic tests</li> <li>Describe rationale of screening tests with reference to natural history of disease and critical point</li> <li>Explain lead time in screening test</li> <li>Construct 2x2 table from given data</li> <li>Explain measures of validity of screening tests</li> <li>Calculate and interpret sensitivity &amp; specificity of screening test from given data</li> <li>Calculate and interpret PPV &amp; NPV of screening test from given data</li> <li>Discuss issues related to false positives and false negatives</li> <li>Explain yield of screening tests</li> <li>Discuss measures used to evaluate screening tests &amp; programs</li> <li>Explain various characteristics of screening tests with special emphasis on repeatability</li> <li>Discuss problems of borderline with emphasis on cutoff point decision</li> <li>Identify and explain ROC curve</li> </ol>	C1 & C2, C3	Worksh op / Philips classroo m	MCQs , SEQs and OSPE and Viva Voce
CM- 3 LGI S	Epidemi ology of blindnes s & accident s	Determinants of blindness     Temporary & permanent blindness     Prevention of blindness     WHO fact sheet on blindness and vision impairment     Types of accidents     Prevention of accidents	Categorize different types of accidents     Describe risk factors involved in accidents     Describe different preventive strategies for accident controls     Identify the methods to prevent blindness	C1, C2& C3	LGIS	MCQs , SEQs and OSPE and Viva Voce
CM- 4 SG D	Epidemi ology of trachom a (surface infectio ns)	<ul> <li>4. Trachoma</li> <li>5. Leprosy</li> <li>6. Sexually transmitted diseases</li> <li>7. Tetanus</li> </ul>	1. Comprehend the causative factor, pathophysiology and symptoms of trachoma. 2. Comprehend role of prevention in trachoma 3. Understand the causative agent, symptoms, types of leprosy. 4. Understand role of prevention in leprosy. 5. Understand the determinants, modes of transmission of STI. 6. Comprehend the social impact & preventive aspect of STI. 7. Understand the determinants & preventive aspects of neonatal tetanus and tetanus after injury	C1, C2& C3	SGIS	MCQs , SEQs and OSPE and Viva Voce
CM- 5	Preventi ve Geriatri	<ul><li>6. Health problems of aged</li><li>7. Lifestyle and healthy ageing</li><li>8. Disease prevention in elderly</li></ul>	Differentiate between geriatrics and gerontology.	C1, C2	SGIS	MCQs , SEQs

SG D	cs and eye problem s		<ol> <li>Explain the public health importance of geriatrics.</li> <li>Enlist common health and other problems related to old age.</li> <li>Describe important preventive measures in this regard.</li> <li>Explain role of social welfare department for provision of services for elderly.</li> <li>Describe important activities of World Health Organization for promotion of care of elderly people.</li> </ol>			and OSPE and Viva Voce
CM- 6 LGI S	Health educatio n-I	<ul> <li>5. Communication process</li> <li>6. Types of communication</li> <li>7. Health communication</li> <li>8. Barriers of communication</li> <li>9. Functions of health communication</li> </ul>	<ol> <li>Define communication and its types</li> <li>Explain Role of sender, receiver, feedback and content of message</li> <li>label Shannon Weaver communication model</li> <li>Enumerate communication barriers</li> <li>Explain various functions of health communication</li> </ol>	C2 & C3	SGIS	MCQs , SEQs and OSPE and Viva Voce
CM- 7 LGI S	Health educatio n-II	<ul><li>6. Health education models</li><li>7. Approach to health education</li><li>8. Contents of health education</li><li>9. propaganda</li></ul>	<ul> <li>4. recognize different models of health education</li> <li>5. Elaborate the scope /contents of health education</li> <li>6. Explain different approaches of health education</li> </ul>	C1 & C2 C3	SGDs , worksho p	MCQs , SEQs and OSPE and Viva Voce
CM- 8 LGI S	Health educatio n-III	<ul><li>5. Principles of health education</li><li>6. Practice of health education</li><li>7. Social marketing</li></ul>	<ul> <li>5. Explain principles of health education</li> <li>6. Explain different ways of practice of health education</li> <li>7. Explain social marketing</li> </ul>	C1, C2 C3	SGDs , worksho p	
CM- 9 LGI S	Health planning and manage ment	Planning cycle     Management methods     I-based on behavioural sciences&     Quantitative methods	<ol> <li>Define Health Planning</li> <li>Know the aim and objectives of planning</li> <li>Understand rationale of planning</li> <li>Elucidate the different levels of Planning</li> <li>Know-how of different phases of planning.</li> <li>Appreciate the various steps of planning cycle.</li> <li>Define Management</li> <li>Elaborate different methods of Management</li> <li>Apply planning and management in practice of medicine</li> </ol>	C1, C2 & C3	SGDs , worksho p	MCQs , SEQs and OSPE and Viva Voce
CM- 10 LGI S	Health manage ment informat ion system( HMIS)	Essentials of HMIS     Sources of health information     Functions of HMIS     Disease early warning system	<ol> <li>Define HMIS</li> <li>Discuss essential elements &amp; functions of HMIS</li> <li>Describe steps in developing HMIS</li> <li>Enlist components &amp; features of HMIS</li> <li>Discuss various sources of health information</li> <li>Discuss DEWS in Pakistan</li> <li>Enlist goals and objectives of DEWS</li> <li>Enlist diseases selected for DEWS</li> </ol>	C1, C2 & C3	SGDs , worksho p	MCQs , SEQs and OSPE and Viva Voce
CM- 11 SG D	Alma Ata declarati on and primary health care (PHC)	Health for all     Alma Ata declaration     Blements of PHC     Principles and challenges attributed with PHC     Comprehensive health care	<ol> <li>Define primary health care</li> <li>understand Concepts of 'health for all' and Alma Ata declaration</li> <li>Understand the development of comprehensive health care</li> <li>Enlist the elements, principles and strategy of comprehensive health care</li> <li>Outline the challenges that contributed to evolvement of PHC</li> </ol>	C1, C2 & C3	SGIS	MCQs , SEQs and OSPE and Viva Voce
CM- 12 SG D	Millenni um develop ment goals and sustaina	Origins of millennium development goals and sustainable development goals     universal health coverage	Explain the millennium development goals (MDGs), sustainable development goals (SDGs) and their origins     Difference between MDGs and SDGs     know how SDGs might affect overall health as a global priority in the future     Define universal health coverage	C1, C2	LGIS	MCQs , SEQs and OSPE and

	ble develop ment goals					Viva Voce
CM- 13 LGI S	Hospital administ ration	Types of hospital     Functions of hospital     Factors influencing hospital utilization	<ol> <li>Define hospital</li> <li>Understand development of hospital as an institution.</li> <li>Appreciate types &amp; functions of hospitals.</li> <li>Know hospital utilization</li> <li>Ascertain hospital statistics in use.</li> <li>Identify factors influencing hospital utilization</li> <li>Know the role of hospital administrator</li> </ol>	C1, C2 & C3	SGDs , worksho p	MCQs , SEQs and OSPE and Viva Voce
CM- 14 LGI S	Epidemi ology of hospital acquired infectio n	Mode of transmission of nosocomial infection     Prevention of nosocomial infection	<ul> <li>5. define nosocomial infections</li> <li>6. Understands the various modes of transmission of nosocomial infections</li> <li>7. Enlist the various strategies for prevention and control of nosocomial infections</li> </ul>	C1, C2 & C3	SGDs / SGIS	MCQs , SEQs and Viva Voce
CM- 15 LGI S	Hospital waste manage ment	biomedical waste     hazards of health care     waste     waste management     system     disposal methods of     health care waste	1.Define Biomedical waste. 2. Describe type of waste. 3. Describe risk and non-risk waste. 4. Explain health hazards of health care waste. 5. Describe waste management team and waste segregation. 6.Describe the disposal / treatment technologies for health care waste	C1 & C2 C3	SGDs , worksho p	MCQs SEQs , OSPE
CM- 16 LGI S	Disinfec tion	disinfection &     sterilization     types and properties of     disinfectant	<ol> <li>Differentiate between disinfection and sterilization.</li> <li>Enlist properties of an ideal disinfectant.</li> <li>Explain different types of disinfection.</li> <li>Describe various important types of agents (natural, physical and chemical agents) used as disinfectants.</li> </ol>	C1 & C2		MCQs SEQs, OSPE

#### Module - III

### (Alignment Module Endocrinology)

#### Course outlines, learning objectives, level of learning, preferred modes of teachings &assessment tools

**Theme:** health care delivery system along with the important national health programs are main debut in this module because assoon as students graduate, they will be participating in the health care system as a whole: working in the health care field, operating under government regulations, maintaining certification, and more. Therefore, students must be aware of the health care systems in which they will operate. non communicable diseases insight will enable them to Offer and implement strategies to continuously improve community health and wellness.

S. No	Major areas	Contents outlines (Major topics & sub-topics)	LOs After the session students will be able to:	Level of learning	Modes of	Assessme nt Tools
140	subject			Ü	teaching	
CM _1 LGI S	Adolescent Health	1.Mental Health issues in adolescence 2.nutritional Health issues in adolescence 3.reproductive Health issues in adolescence 4.unintended injuries in adolescence	<ol> <li>Demonstrate understanding of normal adolescent development, its impact on health and implications for health care &amp; promotion</li> <li>Counselling of adolescents with specific</li> <li>conditions</li> <li>Identification of normal growth and pubertal development and manage disorders of growth and puberty</li> <li>Manage common health conditions during Adolescence</li> <li>Identification of mental health problems and their management</li> <li>Identify sexual and reproductive health care</li> <li>Assess nutritional status and manage nutrition-related disorders</li> <li>Identify signs of substance use and substance use disorders</li> <li>Educate about prevention of unintended injuries</li> </ol>	C1 & C2 C3	SGIS /GDs	MCQs, SEQs and Viva Voce
CM- 2 LGI S	Epidemiolo gy & Prevention of Non- communica ble diseases- I	diabetes mellitus     obesity     coronary heart     disease	Differentiate between communicable and non communicable diseases     Describe the risk factors and their importance in causation of diabetes, obesity and heart diseases     Measure the burden of diabetes, obesity & cardiovascular diseases in Pakistan     Impart health education for prevention and control of cardiovascular diseases, obesity and diabetes mellitus     Define obesity     Categorize/classify obesity     Describe different methods of obesity Assessment	C1 & C2 C3	SGIS SGDs	MCQs, SEQs and Viva Voce
CM- 3 LGI S	Epidemiolo gy & Prevention of Non- communica ble diseases- II	11. cancer 12. stroke 13. hypertension (HTN)	<ol> <li>Describe the risk factors and their importance in causation of HTN, cancer &amp; stroke</li> <li>Measure the burden of HTN, cancer &amp; stroke in Pakistan</li> <li>Impart health education in prevention and control of hypertension, cancer, stroke</li> <li>Classify hypertension</li> <li>Understand the rule of halves</li> <li>Identify common carcinogens</li> <li>Understand role of risk factors in cancers</li> </ol>	C1, C2 C3	SGIS SGDs	MCQs, SEQs and Viva Voce
CM- 4 SG D	Health Programs of Pakistan	<ol> <li>National program for family planning</li> <li>Expanded program of immunization(EPI)</li> <li>AIDs control program</li> <li>Hepatitis control program</li> <li>Malaria control program</li> </ol>	<ol> <li>Explain program and why National Health programs?</li> <li>Important national health programs</li> <li>Enlist important National Health programs</li> <li>Know key points regarding National Program for family planning and primary health care, EPI, AIDs Control program, Hepatitis control Program, Malaria Control Program, National maternal, neonatal and child health program (RMNCH), Iodine deficiency disorder program</li> </ol>	C1 & C2	SGIS SGDs	MCQs, SEQs and Viva Voce

		National maternal,     neonatal and child     health program     (RMNCH)      Iodine deficiency     disorder program				
CM- 5 SG D	Tuberculosi s(TB), National TB control program, Multi Drug Resistance TB	<ul> <li>12. World statement regarding TB</li> <li>13. Epidemiology of TB</li> <li>14. End TB strategy</li> <li>15. national TB control program</li> </ul>	<ol> <li>Describe the public health importance of Tuberculosis in global and local context.</li> <li>Describe the epidemiology of Tuberculosis</li> <li>Enlist the modes of transmission and incubation period of Tuberculosis.</li> <li>Identify the high risk individuals to get the disease.</li> <li>Explain significance, procedure and interpretation of Monteux Test.</li> <li>Enlist the complications of Tuberculosis.</li> <li>Describe prevention and control of Tuberculosis in community.</li> <li>Enumerate components of End TB Strategy.</li> <li>Differentiate between primary and secondary drug resistance with reference to Tuberculosis.</li> <li>Differentiate between MDR-TB and XDR-TB.</li> <li>Explain national TB control program</li> </ol>	C1, C2 C3	SGIS SGDs	MCQs, SEQs and Viva Voce
CM-	health care	Health system	6. Define health system	C!, C2	SGIS	MCQs,
6	delivery	2. Health system	7. Enlist health system models	C3	SGDs	SEQs and
SG D	systems of Pakistan	models 3. Health system	Comprehend components of health care delivery system			Viva Voce
D	1 aristan	analysis	9. Identify objectives of health system 10. Understand the functions of health system			

#### Module - IV

#### (Alignment module Population medicine & Reproductive health)

Course outlines, learning objectives, level of learning, preferred modes of teaching& assessment.

**Theme:** by understanding the concepts of **preventive medicine in obstetrics**, the competency of patient care in relation to other and child health care highlights the necessity of maintaining a client-centered approach to health care. **Contraceptive perceptions** and **demography** of our community will make them understand and recognize the unique effects of age, gender, culture, race, religionorientation and its effects on a client's health and well-being and act accordingly to provide care that is cognizant of these cultural ramifications.

S. No	Areas of the subject	Contents outlines (Major topics & sub-topics)	LOs After the session students will be able to:	Level of learnin g	Mode s of teachi ngs	Assess ment Tools
CM-1 LGI S	Preventive medicine in obstetrics-I (social obstetrics)	1. Maternal and child health care(MCH) 2. Maternity cycle 3. MCH problems 4. Delivering MCH services 5. Recent trends in MCH care	1. Define and comprehend the rationale of different components of maternal and child health including  a. Reproductive Health & its Components  b. Safe motherhood & its Components c. Maternal Mortality Rate, causes & prevention d. Infant Mortality Rate, causes & e. Prevention MCH Center f. Child Care- IMCI  2. Infer the logic behind application of different preventive measures in various phases of life to improve the Maternal Health 3. Appreciate the relationship between the Maternal Health status and the outcome of pregnancy 4. Determine the factors that contribute to increase Maternal mortality rate (MMR) 5. Develop interventions to control MMR 6. To understand the selection of different indicators for multi-dimensional concept of health related to MCH services 7. To acquire knowledge on different indicators which can be used for maternal and child health care and service.	C1 & C2 C3	SGIS, SGDs	MCQs, SEQs and Viva Voce, OSPE
CM- 2 LGI S	Preventive medicine in obstetrics-II (Antenatal care)	Preventive services for mothers     Indicators in MCH care	Understand the availability of preventive services for mother during antenatal period     Appraise the mortality indicators related to MCH care	C1 & C2 C3	SGIS, SGDs	MCQs, SEQs and Viva Voce, OSPE
CM- 3 LGI S	Preventive medicine in obstetrics- III (Intra natal ,Post-natal Care)	14. domicillary care     15. Institutional care     16. Rooming in     17. Post natal period and related complications	Comprehend the concept of care required for the rapid restoration of the mother to optimum health     Enlist the preventive strategies required to prevent complications during intra natal & post-natal period     Appreciate the importance of health education for mother/family regarding intra natal & postnatal complications     Understand the relevance of family planning services provided during postnatal period	C1 & C2 C3	SGIS, SGDs	MCQs, SEQs and Viva Voce, OSPE
CM- 4 LGI S	Preventive medicine in pediatrics-I	8. Mortality in infancy and childhood  9. Integrated Management of Childhood Illness (IMCI)	<ol> <li>Knowledge about concept of infant mortality</li> <li>Determine the factors which predispose to high infant mortality</li> <li>Appreciate the causes of infant mortality in different phases of child bearing and postnatal periods.</li> <li>Classify according to Integrated Management of Childhood Illness</li> <li>Classify degree of Pneumonia and ARI according to IMNCI</li> </ol>	C1 & C2 C3	SGIS, SGDs , works hop	MCQs, SEQs and Viva Voce, OSPE
CM- 5	Preventive medicine in pediatrics-II	16. Surveillance of growth & development	Able to record Weight the baby and measure the height of children     Assess degree of dehydration	C1 & C2 C3	SGIS, SGDs	MCQs, SEQs and

LGI S		17. Preventive measures to control infant and child mortality	<ul> <li>3. Prepare home-made ORS</li> <li>4. interpret growth chart</li> <li>5. Suggest preventive measures at different levels of prevention and in different scenarios</li> <li>6. Understand the logic of measures taken to prevent infant and child mortality</li> </ul>			Viva Voce, OSPE
CM- 6 LGI S	immunizatio n	1. host defenses 2. immunizing agents	1. Differentiate between active & passive immunity 2. Categorize the primary & secondary immune response 3. Differentiate between herd & ring Immunity Differentiate between functions of different types of immunoglobulins 4. Recognize different types of vaccines, their storage & administration 5. Describe the comparison of killed & live vaccines 6. Describe cold chain & its equipment 7. Identify the vaccines vial monitor 8. Describe the correct storage; use of diluents	C1 & C2 C3	SGIS, SGDs	MCQs, SEQs and Viva Voce, OSPE
CM- 7 LGI S	(Immunizati on )Expanded program of immunizatio n	1. Adverse events following immunization (AEFI) 2.immunization schedule	<ol> <li>Define AEFI</li> <li>Describe common, minor vaccines</li> <li>Reaction &amp; rare, more serious vaccine</li> <li>reactions</li> <li>Memorize case definitions of AEFI</li> <li>Recognize the anaphylaxis</li> <li>Describe error-related &amp; anxiety-related reactions</li> <li>Enlist the precautions to be taken</li> <li>during immunization</li> <li>Investigate AEFI</li> <li>Enlist the diseases in EPI</li> <li>Enlist the diseases other than EPI</li> <li>against which vaccination is</li> <li>recommended</li> <li>Categorize the vaccination of high risk population/group</li> </ol>	C1 & C2 C3	SGIS, SGDs	MCQs, SEQs and Viva Voce, OSPE
CM- 8 SG D	Scope of Family planning	Health aspects     of family     planning     Welfare     concept     Small family     norms     Eligible couples     Couple     protection rate	1. To identify the need and requirements for an informed decision-making process on contraceptive choice 2. To characterize the principles of reproductive rights and gender issues related to family planning 3. identify the scope of family planning 4. appreciate health aspects of family planning 5. understand the terms of small family norms and eligible couples & target couples 6. calculate the couple protection rate of a given population	C1 & C2 C3	SGIS, SGDs , works hop	MCQs, SEQs and Viva Voce, OSPE
CM- 9 SG D	National population policy and natural methods of contraceptio n	<ol> <li>National population policy</li> <li>Unmet need of family planning</li> <li>Classification of Fertility regulating methods</li> <li>Barrier methods</li> <li>Natural contraceptive methods</li> <li>Terminal methods</li> </ol>	Explain national population policy     understand the concept of unmet need of family planning     Classify fertility regulating methods     comprehend barrier methods     classify natural methods of fertility control     explain sterilization and its complication	C1 & C2 C3	SGIS, SGDs , hands on sessio ns	MCQs, SEQs and Viva Voce, OSPE
CM- 10 SG D	Contracepti ve methods and its evaluation	Intra uterine devices     Hormonal contraceptives     Postconception al methods     Evaluation of contraceptive methods	characterize the following contraceptive methods based on mechanism of action, indicators of effectiveness, side effects, non-contraceptive benefits, eligibility criteria and interventions for certain problems during use:     Combined oral contraceptives     Progestin only pills     Injectable contraceptives     Hormonal implants     Tubal ligation and vasectomy     Intrauterine contraceptive devices     Emergency contraception     New contraceptive technology     Identify the methods for family planning evaluation	C1 & C2 C3	SGIS, SGDs , hands on sessio ns	MCQs, SEQs and Viva Voce, OSPE

CM- 11 SG D	Breast feeding	<ol> <li>Advantages of breast feeding</li> <li>Weaning practices</li> <li>Feeding associated problems</li> <li>Baby friendly hospital initiative (BFHI)</li> </ol>	<ol> <li>Procure knowledge about advantages         &amp;disadvantages of types of feeding practices.</li> <li>Acquire knowledge of the hazards associated with feeding of the child.</li> <li>Appreciate the logic behind the conditions of concern prevailing in the mother during breast feeding.</li> <li>Identify, the problems associated with feeding and the measures to rectify.</li> <li>Educate mothers about the steps of weaning</li> <li>Educate the mothers about technique of breast feeding and to advice to Tuberculous mother about lactation</li> <li>Determine the conditions of concern prevailing in the mother during breast feeding</li> <li>Understand BFHI</li> </ol>	C1, C2 c3	SGIS	MCQs, SEQs and OSPE and Viva Voce
CM- 12 SG D	Demograph y (World population trends)	<ol> <li>Definition</li> <li>Linkage of         Demography with         other disciplines</li> <li>Application of         Demography within         the health system</li> <li>Sources of         population data</li> <li>Measures of         Mortality</li> <li>Measures of fertility</li> <li>Population explosion</li> </ol>	<ol> <li>Define demography and population dynamics</li> <li>Discuss linkage of demography with other disciplines</li> <li>Apply demographic concepts in health system.</li> <li>Discuss all major sources of population data with special emphasis on population Census</li> <li>Calculate different rates related to mortality from given data</li> <li>Calculate different rates related to fertility from given data</li> <li>Describe Demographic, economic, social and interdisciplinary implications of population explosion</li> </ol>	C1, C2 & C3	SGIS , works hop	MCQs, SEQs and OSPE and Viva Voce
CM- 13 SG D	Demograph y (Demograph ic cycle of population)	<ol> <li>Demographic transition</li> <li>Demographic cycle</li> <li>Malthusian theory</li> <li>Population Momentum</li> <li>Demographic dividend, bonus, trap</li> <li>Growth Rate</li> <li>Population doubling time</li> </ol>	<ol> <li>Discuss theory of demographic transition</li> <li>Describe and interpret stages of demographic cycle with examples and logical reasoning</li> <li>Graphically illustrate the stages of demographic cycle</li> <li>Explain limitations of this model</li> <li>Discuss Malthusian theory of population growth</li> <li>Explain population momentum</li> <li>Describe the effect of population momentum on growth of population</li> <li>Discuss demographic dividend, bonus, trap</li> <li>Calculate growth rate from given data</li> <li>Calculate and interpret population doubling time</li> </ol>	C1, C2 & C3	SGIS , works hop	MCQs, SEQs and OSPE and Viva Voce
CM- 14 SG D	Demograph y (fertility trends and related statistics)	1. Population dynamics or change 2. Migration and urbanization 3. Population density 4. Family size 5. Replacement level fertility 6. Life expectancy	Discuss concept of demographic equation     Calculate population at a particular time from the given data     Calculate population in future from given data     Discuss push and pull factors associated with migration.     Describe various measures of migration.     Discuss implications of urbanization     Explain types of migration and associated measures     Define population density     Explain family size and factors associated with it     Explain replacement level fertility     State what is meant by life expectancy and how it is calculated	C1, C2 & C3	SGIS , works hop	MCQs, SEQs and OSPE and Viva Voce
CM- 15 SG D	Demograph y (population pyramid and dependency )	Population pyramids     Dependency ratio     Age-sex composition	<ol> <li>Explain population pyramid</li> <li>Read and interpret a population pyramid</li> <li>Identify and interpret population pyramids in different stages of growth</li> <li>Identify and interpret different types of population pyramids with respect to shape</li> <li>Explain any asymmetry in shape</li> <li>Identify baby boom in population pyramid</li> <li>State importance of population pyramids</li> </ol>	C1, C2 & C3	SGIS , works hop	MCQs, SEQs and OSPE and Viva Voce

		I		1		1
			8. Calculate and interpret dependency ratio			
			9. Explain age and sex composition of a			
			population			
CM	C -11	1	10. Calculate sex ratio from a given data	C1, C2		MCO-
CM- 16	School Health	1. functions of	1. Define School health services	C1, C2		MCQs, SEQs
LGI	Services	school health services	2. Enlist objectives of School Health Services.	CS		and
S	Services	_	3. Explain duties of School Health Team.			OSPE &
		2. health related problems of	4. Enlist various health related problems of School children.			viva
		school children 3. 3.	Enumerate and explain various functions of School health services.			
		implementation strategies of school health	6. Demonstrate importance of implementation of various aspects of school health services.			
		services				
CM-	Handicappe	1.definition	1. Define handicapped	C1, C2	LGIS	MCQs,
17 LGI	d rehabilitatio	2. difference between	2.Define impairment and disability 3.Differentiate between handicapped, impairment and			SEQs , viva &
S	n	handicapped, impairment, disability	disability with examples			OSPE
		3. types of disability	4.Enlist types of disability and causes of disability			0012
		4. rehabilitation	5.Define rehabilitation, enlist types of rehabilitation			
			and objectives of rehabilitation			
			6.Integrated approach towards handicapped and			
			prevention of disability 7.Social attitude towards handicapped			
CM-	micro &	Concept and definitions	Define economics, health economics	C1, C2	SGIS'	MCQs,
18	macro	Types	2. Explain	C3	works	SEQs,
LGI	Economics	2. Framework of health	Macroeconomics		hop	viva &
S	(Health	economics	Microeconomics			OSPE
	economics	3. Supply and demand	Positive economics			
	)	4. elasticity	Normative Economics     Describe for example of health accounting			
			Describe framework of health economics     Explain law of demand and law of supply			
			5. Describe elasticity			
CM-	Framework	1. Production possibility	Describe Production possibility frontier	C1, C2	SGIS'	MCQs,
19	of health	frontier	2. Explain Different types of Costs	C3	works	SEQs,
LGI	economics	2. Different types of Costs	3. Explain		hop	viva &
S	(Health	3. Structures of Economic	Cost minimization analysis			OSPE
	economics)	Evaluation	Cost effectiveness analysis     Cost utility analysis			
			Cost utility analysis     Cost Benefit analysis			
CM-	Non-	1. World Health	Describe history, constitution and objectives of	C1, C2	LGIS	MCQs,
20	government	Organization	WHO	- ,		SEQs
LGI	al	2. United Nations	2. State WHO regions			vivsa
S	organization	International Children's	3. Explain organizational structure of WHO with			
	s(NGO)	Emergency Fund	functions of each			
	And Agencies	(UNICEF)	4. Describe history, mission and milestones of UNICEF 5. Enlist important NGOS of Pakistan		1	
	1 igenetes	NGO	3. Danist important 11005 of 1 axistan		1	
			I .	1	1	i

## **Module - V**

## (Alignment Module "Renal")

#### Course-outlines, learning objectives, level of learning, preferred modes of teaching, &assessment.

**Theme:** The objective of strengthening regional and national capacity for prevention and control vector borne diseases can be achieved with better training of students regarding the integrated approach to control these diseases to contribute to the reduction of the spread of vector-borne diseases in the region. Our teachings are intended to support the strategic lines of action to achieve vector controls & disease prevention.

S. No	Major areas	Contents outlines (Major topics & sub-topics)	LOs After the session students will be able to:	Level of learnin	Modes of teachings	Assessme nt Tools
CM-	Modes of	1. Classification of	Define Medical entomology.	C1 &	SGIS	MCQs,
1	transmission	arthropods	2. Define vector along with examples.	C2 C3		SEQs,
LGI	arthropod	2. Mosquito control	3. Enlist and classify arthropods of medical			Viva &
S	,	measures	importance			OSPE

	borne		4. Identify, differentiate and explain features of			
	diseases) (Medical		various classes of arthropods.  5. Explain with examples modes of			
	entomology (		transmission of arthropods borne diseases.  6. Draw and explain life cycle of plasmodium			
			along with various mosquito control measures 7. Describe importance of entomology from			
			public health aspect.			
CM- 2	Principles Of	1. diseases caused by housefly	<ol> <li>Enlist diseases caused by house fly.</li> <li>Describe life cycle of house fly and its</li> </ol>	C1 & C2 C3	SGIS	MCQs, SEQs,
LGI	Arthropods	2. diseases caused by sand	habitat along with various methods to			Viva &
S	Control Medical	fly, Tsetse fly, black fly 3. integrated approach to	control fly.  3. Identify and describe sand-fly, Tsetse fly,			OSPE
	Entomology .	control insect	and black fly along with diseases caused by them			
	,		4. Describe integrated approach towards control of class insect.			
CM-	epidemiolog	1. mosquito borne diseases	Define a vector and enlist various vector	C1 &	SGIS	MCQs,
3 LGI	ical determinant	<ul><li>2. relapsing fever</li><li>3. control of vector borne</li></ul>	borne diseases. 2. Explain modes of transmission and	C2 C3		SEQs, Viva &
S	s of Vector born	disease	propagation of parasites.  3. Define host and its types with examples.			OSPE
	diseases		4. Enlist and explain mosquito borne			
			diseases 5. Name various causes of viral			
			hemorrhagic fever along with their clinical features.			
			6. Enlist causes of relapsing fever and			
			various methods towards control of vector borne diseases.			
CM- 4	(filariasis, leishmaniasi	1.filariasis 2.leshmeniasis	Define and explain filariasis and life cycle of filarial parasites.	C1 & C2 C3	SGIS	MCQs, SEQs,
LGI	s scabies)	3. scabies	2. Describe modes of transmission of	02 03		Viva &
S	Vector born diseases;		filariasis and assessment of various mosquito control programs.			OSPE
			3. Explain Leishmaniasis, life cycle of sand-fly and integrated measures towards			
			disease control.			
			4. Explain scabies, its mode of spread along with curative and preventive measures.			
CM- 5	Snake bite prevention	1.epidemiology 2. prevention of snake bite	Describe importance of snake bite     Know the epidemiology of snake bite	C1 & C2 C3	SGIS	MCQs, SEQs,
LGI	provention	3. people at risk	3. Differentiate between clinical			Viva &
S			manifestations of different types of snakes			OSPE
			Enumerate ways of prevention from snakebite			
			5. Management of snakebite			
CM-	Disaster	1. types of disaster	Enlist people more at risk     Define disaster	C!, C2	SGDs,	MCQs,
6 LGI	managemen t	disaster management     triage	Differentiate between natural and man made disaster	C3	workshop	SEQs, Viva &
S			<ol><li>Classify different types of disaster</li></ol>			OSPE
			<ul><li>4. Assess the magnitude of disaster</li><li>5. Describe all the disaster management</li></ul>			
			steps 6. Understand triage and its importance			
CM	Daid: 1	1 componer - f ' 1	in disaster management	C1 0-	core	MCO-
CM- 7	Epidemiolo gy of	<ol> <li>concepts of parasitology</li> <li>classification of parasites</li> </ol>	<ol> <li>Define parasite and parasitology.</li> <li>Define and explain with examples</li> </ol>	C1 & C2 C3	SGIS	MCQs, SEQs,
SG D	parasitic disease;	3. amebiasis 4. ascariasis	concepts in parasitology.  3. Describe classification of parasites.			Viva & OSPE
	amebiasis &	5. whipworm infestation	4. Describe epidemiological			
	ascariasis		determinants and modes of transmission of following parasitic			
			infection. (1) amebiasis			
			(2) ascariasis			
			<ul><li>(3) whipworm infestation</li><li>5. Enlist measures towards control of</li></ul>			
			these parasitic infections.			

CM- 8 SG D	Epidemiolo gy of parasitic disease;	1.dracunculiasis 2. hookworm infestation	1. Describe and explain diseases along with their clinical features caused by class trematodes (Flukes). 2. Describe diseases caused by class	MCQs, SEQs, Viva & OSPE
	dracunculias is & hookworm infestation		cestodes.  3. Briefly explain life cycle of parasites of medical importance.  4. Explain epidemiological determinants, mode of transmission of following infections  i) dracunculiasis  ii) hookworm infestation  5. Explain integrated approach towards	
			prevention and control of these parasitic	
CM- 9 LGI S	Epidemiolo gy of viral zoonotic diseases	1. rabies	infections.  1. Explain introduction of zoonosis. 2. Discuss rabies disease, its origin and pathophysiology. 3. Identify the preventive aspects of rabies. 4. Enlist vaccination schedule discussion in detail.	MCQs, SEQs, Viva & OSPE
CM- 10 LGI S	Epidemiolo gy of bacterial zoonotic diseases	1. Plague 2. brucellosis	1. Enlist the types and pathophysiology of plague 2. Procure The preventive and health education aspects relevant to plague. 3. Understand brucellosis,its causes and clinical features 4. Appreciate Strategies of brucellosis prevention	MCQs, SEQs, Viva & OSPE
CM- 11 LGI S	Epidemiolo gy of rickettsial diseases	1. tetanus	1. Identify The causative agent, pathophysiology of tetanus. 2. Enlist types of tetanus 3. Understand Vaccination schedule of tetanus. 4. Explain Preventive approach to be adopted in tetanus.	MCQs, SEQs, Viva & OSPE
CM- 12 LGI S	Epidemiolo gy of parasitic zoonotic diseases	1. anthrax	<ol> <li>Understand Causation and pathophysiology of anthrax in detail.</li> <li>Identify Anthrax role as a bioweapon.</li> <li>Discuss Prevention related to anthrax.</li> </ol>	MCQs, SEQs, Viva & OSPE

#### **Module - VI**

#### (Alignment Module CNS & Psychiatry)

Course outlines, learning objectives, level of learning, preferred modes of teaching &assessment.

**Theme:** Ideology of mental health, behavioral sciences and medical ethics help the students topresent themselves in a manner befitting the role of a societal caregiver, placing the needs of others above their own, striving for continual improvement in their knowledge and skills, accepting responsibility, and treating all people with respect and dignity. hence highlighting the core competency of professionalism. Moreover, the health of a substantial proportion of the population is at the verge of their professions or work environment. Occupation's related generalized and specific health problems need to be incorporated in medical curricula. The preventive aspects of occupation's related health problems and measures to promote health & wellbeing of the workers is covered in this module under a series of sessions titled occupational health.

S. No	Major areas		ntents outlines for topics & sub-topics)	LC Afte	S r the session students will be able to:	Level of learnin g	Modes of teachings	Assess ment Tools
CM- 1 LGI S	Preventive & promotive aspects of Mental health	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	components of mental health determinants of mental health preventive strategies for mental disorders	1. 2. 3.	understand the components of mental health. understand the etiological factors responsible for mental health deterioration. comprehend the preventive aspect of mental health	C1 & C2 C3	SGIS	MCQs , SEQs, Viva & OSPE
CM- 2 SG D	Promotion of healthy Behaviors & Lifestyle	2. 3. 4.	dynamics of behaviour needs and attitude .learning habits	1. 2. 3. 4.	Understand behaviour Ascertain dynamics of behaviour 3.Identify causes of behavior Elaborate needs and its types	C1 & C2 C3	SGIS	MCQs , SEQs, Viva

			5. Define attitude and its components			&
			6. Recognize learning and its types			OSPE
			7. Identify habits & its characteristics	G1 0	0.070	1.00
CM-3 SG D	Ergonomics (Occupation al Health-I)	<ol> <li>Ergonomics</li> <li>Pneumoconiosis</li> <li>Protection against Organic &amp; inorganic pneumoconiosis</li> </ol>	<ol> <li>Define Occupational Health.</li> <li>Enlist Occupational Hazards encountered in various occupations.</li> <li>Elaborate the concept and significance of Ergonomics.</li> <li>Define Pneumoconiosis.</li> <li>Enumerate important diseases grouped under pneumoconiosis.</li> <li>Describe the occupations and common features of silicosis.</li> <li>Describe the occupations and common features of anthracosis.</li> <li>Describe the occupations and common features of byssinosis.</li> <li>Describe the occupations and common features of bagassosis.</li> <li>Describe the occupations and common features of sabestosis.</li> <li>Describe the occupations and common features of asbestosis.</li> <li>Describe the occupations and common features of farmer lung.</li> </ol>	C1 & C2 C3	SGIS	MCQs , SEQs, Viva & OSPE
CM-	Health	Hazards in agricultural	Explain the common features, occupations and	C1 &	SGIS	MCQs
4	protection	workers	diagnostic investigations of lead poisoning.	C2 C3		,
SG	of agri	2. Protection against	2. Illustrate common causes and prevention of			SEQs,
D	workers (Occupation	exposures to Lead 3. Sickness absenteeism	Sickness absenteeism. 3. Describe causes and impact on health of			Viva &
	al Health-II)	4. Occupational health	massive industrialization.			OSPE
		services	4. Enlist common hazards occurring in			
			agricultural workers.			
			5. Describe functions of occupational health			
CM-	Social	Preventive measures of	service.  1. Explain general Preventive and control	C1 &	SGIS	MCQs
5	security	occupational hazards	measures of occupational hazards.	C2 C3		,
SG	benefits to	2. Social security measures	2. Enlist important legislative measures for			SEQs,
D	workers		occupational hazards prevention.			Viva
	(Occupation al Health-III		Describe Social security measures for occupational workers in Pakistan			& OSPE
CM-	Emporiatric	Health risk related to	Define emporiatrics	C1 &	SGIS	MCQs
6	s	travel	<ol> <li>Enlist health risks related to travel</li> </ol>	C2 C3		,
LGI		2. High risk travellers	3. To understand the concept of behavioural			SEQs,
S		3. Role of health	modification required to be adopted in travel			Viva
		physician in	4. Knowledge of high-risk group of travellers			& OCDE
		emporiatrics	<ol> <li>Appreciate the role of health physicians in giving health advise to travellers</li> </ol>			OSPE
CM-	Medical	Principle of medical	Define and comprehend the rationale of	C1 &	SGIS	MCQs
7	ethics	ethics	medical ethics	C2 C3		,
SG		2. Codes of medical ethics	2. Recognize the principle of medical ethics			SEQs,
D		3. Principles of research	3. Knowledge of different codes of medical			Viva
		ethics	ethics			& OCDE
			4. Appreciate the principles of research ethics		l	OSPE

#### **Recommended books:**

- 1. K Park Text Book of Preventive & social Medicine 28th or latest edition
- 2. Textbook of community medicine by Muhammad Illyas, Irfanullah latest edition
- 3. Text book of preventive & social medicine Maxy Rosenau Last latest edition