DETAILEDSYLLABUS FOR THE POST OF ASSISTANT PROFESSOR(COMMUNITY MEDICINE(SOCIAL AND PREVENTIVE MEDICINE) {GOVERNMENT HOMOEO MEDICAL COLLEGE}

(Cat.No.: 52/2020)

(Total Marks- 100)

1. Module: (Man and Medicine, Concept of Health and Disease) (5 marks)

- a. Man and Medicine: Towards Health for all
- b. Concept of Health and Disease
- c. Dimension of health
- d. Physical Quality of Life Index and Human Development Index
- e. Determinants of Health
- f. Indicators of Health
- g. Health Service
- h. Concept of Causation
- i. Natural History of disease
- j. Disease Control, Disease Elimination, Disease Eradication
- k. Levels of Prevention and Modes of intervention
- I. International classification of Disease

II. Module (Principles of Epidemiology and Epidemiological Methods)

(15 *Marks*)

- a. Aims of Epidemiology, Measurement in epidemiology, Tools of measurement
- b. Measurement of Mortality, Mortality Rates and Ratios,
- c. Incidence & Prevalence
- d. Epidemiological Methods, Descriptive Epidemiology, time and place distribution of disease, person distribution
- e. Analytical Epidemiology- Case Control & Cohort Study, Experimental Epidemiology,
- f. Uses of Epidemiology, Infectious disease Epidemiology, Dynamic of Disease Transmission, Modes of Transmission, Susceptible host.

- g. Host Defences, Immunizing agents, The Cold Chain, Open Vial Policy, Adverse Events following Immunization.
- h. Disease Prevention and Control, National Immunization Schedule.
- i. Health Advice to Travellers
- i. Disinfection
- k. Investigation of an Epidemic,
- I. Homoeopathic prophylaxis, Genus Epidemicus

III. Module (Epidemiology of Communicable Disease) (15 Marks)

- a. Epidemiological determinants, Clinical Feature, diagnosis, prevention and control of Respiratory infections- Small pox, chicken pox, Measles, Rubella, Mumps, Influenza, Diphtheria, Whooping Cough, Meningococcal Meningitis, Sars, Covid-19, Tuberculosis
- b. Epidemiological determinants, Clinical Feature, diagnosis, prevention and control of **Intestinal infections** Poliomyelitis, Viral Hepatitis, Acute diarrhoeal diseases, Cholera, Typhoid Fever, Amoebiasis, Ascariasis, Hookworm Infection, Dracunculiasis etc.
- c. Epidemiological determinants, Clinical Feature, diagnosis, prevention and control of **Arthropod-born infections** Dengue syndrome, Malaria, Lymphatic Filariasis, Zika Virus disease, West Nile Fever etc
- d. Epidemiological determinants, Clinical Feature, diagnosis, prevention and control of **Zoonoses** Rabies, Yellow Fever, Nipah Virus infection, Japanese Encephalitis. KFD, Chikungunya Fever, Brucellosis, Leptospirosis, Plague, Human Salmonellosis. Etc.
- e. Epidemiological determinants, Clinical Feature, diagnosis, prevention and control of **Rickettsial diseases** Rickettsial zoonoses, Scrub typhus, Murine typhus, Tick typhus, Q fever,
- f. Epidemiological determinants, Clinical manifestation, diagnosis, prevention and control of **-Parasitic zoonoses** Taeniasis, Hydatid disease, Leishmaniasis.
- g. Epidemiological determinants, Clinical manifestation, diagnosis, prevention and control of **Surface infections** Trachoma, Tetanus, Leprosy, STD, Yaws, AIDS
- h. Emerging and Re-emerging infectious diseases
- i. Hospital acquired infections

Module (Epidemiology of Chronic Non-Communicable Disease and Conditions, Screening for disease) (10 Marks)

General principles of prevention and control of non-communicable diseases-

- a. Cardiovascular disease
- b. Coronary Heart Disease
- c. Hypertension
- d. Stroke
- e. Rheumatic Heart Disease
- f. Cancer
- g. Diabetes mellitus,
- h. Obesity
- i. Blindness
- i. Oral diseases
- k. Accidents and Injuries.
- I. Screening for Disease- Concept of screening, uses of screening, Types of screening, Criteria for screening, Sensitivity & specificity, the problem of borderline.

V. (Demography and Family planning, Health Information and Basic Medical Statistics) (10 Marks)

- a. Demographic Cycle
- b. World Population trends
- c. Demographic trends in India
- d. Population pyramid
- e. Sex ratio
- f. Dependency ratio
- g. Density of population
- h. Literacy and education
- i. Fertility
- j. Birth and death rates
- k. Family planning- Eligible couples, couple protection rate
- I. National Population Policy

- m. Contraceptive methods-Spacing methods and Terminal methods, Natural family planning methods, Evaluation of contraceptive methods
- n. Abortion & Medical termination of pregnancy act
- o. Health Information and Basic Medical Statistics- Need of biostatics in medicine, Source of Health information, Elementary statistical methods
- p. Presentation of Statistical Data
- q. Statistical averages, measures of dispersion, Normal Distribution,
- r. Sample size calculation, Sampling methods
- s. Tests of significance
- t. Chi-square Test, Correlation and Regression
- u. Vital statistics

VI. Module (Preventive Medicine in Obstetrics, Paediatrics and Geriatrics, Occupational Health, Health Care of the Community) (10 Marks)

- a. Maternity cycle
- b. Antenatal care, Intra-natal care, postnatal care
- c. Infancy- Neonatal care, measurement of a baby
- d. Low birth weight, Feeding of Infants
- e. Growth and Development, Growth Chart
- f. Child Health problems, National Policy for children
- g. Indicators of MCH care
- h. Mortality in infancy & Childhood
- i. Congenital Malformations
- j. School Health service
- k. Handicapped Children
- I. Juvenile delinquency, Battered Baby syndrome, child abuse
- m. Social welfare programmes
- n. Health of adolescents, Health problems of the aged
- o. Occupational health- occupational Hazards occupational diseases
- p. Lead poisoning, Occupational Cancer, Occupational dermatitis,
- q. Occupational hazards of Agricultural workers
- r. Sickness absenteeism

- s. Health problems due to Industrialization
- t. Measure for health protection of workers, Prevention of Occupational diseases
- u. The employee State Insurance Act
- v. **Health care of community**-Levels of health care, Health for All, The Millennium Development Goal, The Sustainable Development Goal
- w. Health care systems
- x. The burden of disease in Tribal Community

VII. Module (Nutrition and Health) (10 Marks)

- a. Classification of Food
- b. Dietary fibre
- c. Sources, deficiency and Daily requirement all Vitamins and its prevention
- d. Minerals and other Trace elements
- e. Nutritional profiles of principal foods
- f. Food in relation to health and disease
- g. Energy requirements
- h. Balanced diet
- i. Nutritional problems in public Health
- i. Assessment of Nutritional status
- k. Nutritional deficiencies and nutritional survey
- I. Social aspects of Nutrition
- m. Food Hygiene
- n. Pasteurization of Milk
- o. Fish, egg, Fruits and Vegetables
- p. Food borne diseases
- a. Food Toxicants
- r. Food processing, food additives, Food Fortification, Adulteration of foods, Food standard.
- s. Food poisoning
- t. Community Nutritional programmes

VIII. Module (Environment and Health) (10 Marks)

- a. Water- Source of water, water requirements, Water borne diseases, Distribution of water
- b. Wells types, Disinfection of wells
- c. Water borne diseases
- d. Purification of water- on large scale and on small scale
- e. Water quality Criteria and standards, Surveillance of drinking water quality
- f. Hardness of water
- g. Water conservation
- h. Air Indices of Thermal comfort
- i. Air pollution, prevention and control of Air pollution
- j. Ventilation- types of ventilation
- k. Light, Noise- effects of noise exposure, control of Noise
- I. Radiation-sources of radiation exposure, types of radiation, Biological aspects of radiation, radiation protection.
- m. Meteorological environment, air temperature, heat stress indices, effects of heat stress. Effects of Cold stress, Global warming,
- n. Humidity measurement of Humidity, precipitation
- o. Air velocity and wind direction
- p. Housing, Disposal of waste, Excreta disposal, Sewage, Modern sewage treatment
- q. Medical entomology- Arthropod borne diseases, principles of arthropod control
- r. Mosquito- General description, Life history, Habits, Mosquito control measures.
- s. General characters, Life history, habits, Transmission of disease, control measures of Houseflies, Sandflies, Tsetse flies, Black flies, Lice, Fleas, Sand flea, Reduvid bugs, Ticks and Mites, cyclops,
- t. Insecticides
- u. Rodents

IX. Module (Hospital waste management, Disaster management) (5 Marks)

- a. Sources of Health-care waste
- b. Health hazards of health-care waste
- c. Treatment and disposal technologies for Health-care waste
- d. Biomedical Waste management in India
- e. Types of Disasters,
- f. Disaster impact and response,
- g. Disaster mitigation in health section
- h. Disaster preparedness
- i. Personal protection in different types of emergencies
- i. Manmade disasters & Disasters in India

X. Module (Communication for Health Education, Health Planning and Management) (5 Marks)

- a. The communication process
- b. Types of Communication
- c. Barriers of Communication
- d. Health communication
- e. Health Education, approach of Health education
- f. Models of Health Education
- g. Contents of Health Education
- h. Principles of Health Education
- i. Practice of Health Education- Methods of Health Communication
- i. Health planning
- k. Planning cycle
- 1. National Health policy
- m. Five-year Plans
- n. Health System in India

- o. Panchayat Raj
- p. Rural development
- q. Evaluation of Health Services

XI. Module (Mental Health, Health programmes in India, Medicine and Social Sciences) (5 Marks)

- a. Characteristics of a Mentally Healthy Person
- b. Warning signals of Poor Mental Health
- c. Types of Mental Illness
- d. Causes of Mental Illness
- e. Crucial points in the Lifecycles of Human Being
- f. Mental Health services
- g. Alcoholism and Drug Dependence
- h. Symptoms of Drug addictions
- i. Magnitude of substance abuse in India and its Prevention
- a. **Health programmes in India-** National Vector Born Disease Control Programme- Malaria, Lymphatic Filariasis, Kala-azar, Japanese Encephalitis, Dengue Fever, Chikungunya Fever
- b. National Leprosy Eradication Programme
- c. National TB Elimination Programme
- d. National AIDS Control Programme
- e. National Programme for Control of Blindness
- f. Iodine Deficiency Disorders (IDD) Programme
- g. Universal Immunization Programme.
- h. National Health Mission.
- i. Janani Suraksha Yojana
- j. National Mental health programme
- k. Ayushman Bharat Programme
- I. National Guinea-worm Eradication programme
- m. National Programme for Control and Treatment of Occupational Diseases
- n. National Water supply and Sanitation Programme
- o. Minimum Need Programme and 20-point Programme

- a. **Medicine and Social Sciences**-Clinical Medicine, Role of Emotions in health and disease,
- b. Conditions affecting learning, Types of Learning, Personality
- c. Intelligence Quotient
- d. Types of Family
- e. Cultural Factors in Health and Disease
- f. Doctor-patient relationship

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper