RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

SYLLABUS FOR SCREENING TEST FOR THE POST OF SENIOR DEMONSTRATOR- COMMUNITY MEDICINE MEDICAL EDUCATION DEPARTMENT

1. Concept of Health and Disease:

Rise of Public Health, Preventive Medicine, Social Medicine, Medical Revolution, Health Care Revolution, Community Diagnosis and Hygiene. Dimensions of Health, Positive Health, Human Development Index, Physical Quality of Life Index, Spectrum of Health, Determinants of Heath, Indicators of Health, Epidemiological Triad, Natural History of Disease, Iceberg Phenomenon of Disease, Concept of Prevention – Levels of Prevention and mode of intervention.

2. Principles of Epidemiology and Epidemiologic Methods:

Aims of Epidemiology, Epidemiological Approach, Rates and Ratios, Measurement of Mortality, Measurement of Morbidity, Epidemiological Studies – Descriptive Epidemiology, Analytical Epidemiology, Experimental Epidemiology, Uses of Epidemiology, Association and Causation, Basics of Infectious Epidemiology, Disease transmission, Immunity, Immunizing agents, Disease Prevention and Control, Disinfection and Investigation of an Epidemic, Vaccination, Cold chain, Adverse reactions following Immunization.

3. Screening for Disease:

Concept of Screening, Uses of Screening, Criteria for Screening, Sensitivity and Specificity.

4. Epidemiology of Communicable Diseases :

Respiratory Infections – Small Pox, Chicken Pox, Measles, Rubella, Mumps, Influenza, Diphtheria, Whooping Cough, Meningococcal meningitis, Acute Respiratory Infections, SARS, Tuberculosis, Intestinal Infections – Poliomyelitis, Viral Hepatitis, Acute Diarrhoeal diseases, Cholera, Typhoid fever, Food Poisoning, Amoebiasis, Hookworm Infection, Dracunculiasis, Arthropod – borne Infections – Dengue syndrome, Malaria, Lymphatic Filariasis, Zoonotic diseases, Surface Infections, Emerging and re–emerging infectious diseases and Hospital Acquired Infections.

5. Epidemiology of Non – Communicable Diseases and Conditions:

Cardiovescular Diseases, Coronary Heart Disease, Hypertension, Stroke, Rheumatic Heart Disease, Cancer, Diabetes, Blindness, Accidents and Injuries.

6. National Health Programmes:

- Related to Communicable Diseases National Vector Borne Disease Control Programme (NVBDCP), Revised National Tuberculosis Control Programme (RNTCP), National Filaria Control Programme, National Kala Azar Control Programme, National Japanese Encephalitis Control Programme, National Leprosy Control Programme/ National Leprosy Eradication Programme, National Poliomyelitis Eradication Programme, National Diseases Control Programme, National AIDS Control Programme (NACO), National Acute Respiratory Infection Control Programme.
- Related to Non-communicable Diseases National Programme for the Control of Blindness, National Programme for Prevention and Control of Deafness, National Programme for Prevention and Control of Diabetes, Cardiovascular Diseases and Stroke, National Mental Health Programme, National Cancer Control Programme.

National Iodine Deficiency Control Programme, National Programme for Control and Treatment of Occupational Diseases, National Vitamin 'A' Prophylaxis Programme, National Nutritional Anemia Control Programme, National Mid – day School Meal Programme, National Measles Mortality Reduction Programme, Integrated Child Development Services (ICDS), National Tobacco Control Programme, National Family Welfare Programme, Reproductive and Child Health Programme (RCH), National Water Supply and Sanitation Programme, Minimum Needs Programme, Twenty Point Programme, Universal Immunization Programme, Integrated Disease Surveillance Programme (IDSP), Integrated Management of Childhood and Neonatal Illness (IMNCI), RMNCH +A, National Health Mission and (Sustainable) Development Goal.

7. Environment and Health:

Physical Environment, Biological Environment, Social Environment, Cultural Environment, Health Hazards of Water Contamination, Purification of Water, Purification of Water on Large Scale, Purification of Water on Small Scale, Hardness of Water, Conservation of Water Resources and Laboratory Examination of Water, Water Quality Standards, Water Harvesting. Effects of Vitiated Air, Indicators of Thermal Comfort, Air Pollution and Ventilation. Hazards of Noise Pollution and Prevention and Control of Noise Pollution. Health Hazards of Lighting. Prevention and Control of Radiation Hazards. Housing and Health. Atmospheric Pressure, Air Temperature, Humidity and Air Movement. Disposal of Refuse, Waste, Recycling of Rifuse, Disposal of Sewage & Excreta and Treatment of Sewage. E-waste Disposal, Global Warming. Environmental Manipulation in prevention and control of Arthropod borne and zoonotic diseases.

8. Management Of Biomedical Waste: Legislative Framework.

9. Nutrition and Health:

Classification of Foods, Macro and Micro Nutrients, Food Groups, Caloric Requirements, Balanced Diet, Food Hygiene, Food Related Diseases, Diet Survey (Nutritional Assessment), Indicators of Malnutrition, Nutritional Surveillance, National Nutrition Policy, Food Additives, Food Enrichment and Food Fortification and Food Safety Act. Nutritional Health Problems of India.

10. Occupational Health:

Burden of Occupational Diseases, Ergonomics, Occupational Hazards, Pneumoconiosis, Lead Poisoning (Plumbism), Occupational Health in Agriculture Industry, Hazards due to Industrialization and Urbanization, Accidents in Industries, Offensive Trades and Occupations, Sickness Absenteeism, Women in Industry, Prevention and Control of Occupational Hazards, Legislation and Social Security.

11. Demography and Family Welfare:

Demographic Cycle (Demographic Stages), Population Dynamics, Measurement of Fertility (Fertility Indicators), Measurement of Mortality, Population Explosion (Population Bomb) and Population Stabilization. Need for Family Planning, Scope of Family Welfare Services, Contraceptive Methods (Fertility Regulating Methods, Techniques of Birth Control) and Evaluation of Contraceptive Methods.

12. **Maternal and Child Health Services**: (Preventive Obstetrics and Paediatrics)

Preventive aspects in Materinity Cylcle, Growth Monitoring, Under Fives Clinic, Handicapped Children, Juvenile Delinquency, Child Guidance Clinic, School Health Services, Indicators of MCH Care, Rights of the Child, Child Welfare Agencies, Integrated Mother and Child Development Services Scheme (IMCDS). Challenges in Adolescent Health in India, Adolescent Health Problems and Services in Adolescent Health Clinics.

13. Preventive Geriatrics:

Population of the Aged, Theories of Aging Process, Health Problems of the Aged, Care of the Aged, Old Age Social and Income Security, Benefits given to Senior Citizens of India.

14. Social Science:

Acculturation, Family Cycle, Family Types, Family Functions, Role of Family and Cultural Factors in Health and Disease, Social Process, Operational Research, Medico social Worker and Personal Hygiene, Socio-economic status, Social Problems.

15. Biostatistics and Research:

Health Information System, Application of Biostatistics, Presentation of Statistical Data, Tabulation, Diagrammatic Presentation, Measures of Central Tendency, Measure of Dispersion, Probability, Sampling, Sampling Variation, Null Hypothesis, Test of Significance and Life Table, Confidence Interval.

16. Information, Education and Communication:

Information, Education and Communication, Types of Communication, Barriers of Communication, Steps in IEC: Planning, Implementation and Evaluation and Health Education, Approaches in Health Education, Contents of Health Education, Practice in Health Education, Lecture, Demonstration, Delphi Method.

17. Health Care - Three - tier System of Health Care:

Role of Non-Government Organisation in Health Care.

18. Health Planning and Management:

Planning Cycle, Basic Management Techniques in Public Health, Bhore Committee, Mudaliar Committee, Kartar Singh Committee, Srivastav Committee & Others Committees, National Development Plans, Organization of Indian Health Administration and Rural Development.

19. National Health Policies and Acts:

National Health Policy, National Population Policy, National Housing Policy, National Nutrition Policy, National Policy for Children and National Policy for Older Persons.

20. International Health Organizations:

Public Health in International Travelling, Bio-Terrorism, WHO, UNICEF, Food and Agricultural Organization, International Labour Organization and Bilateral Agencies – Colombo Plan, United States Agency for International Development.

21. Disaster Management : impact on Health.

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Pattern of Question Papers:

- 1. Objective Type Paper
- 2. Maximum Marks: 180
- 3. Number of Questions: 180
- 4. Duration of Paper: Three Hours
- 5. All Questions carry equal marks
- 6. There will be Negative Marking

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