<u>Department of Health Sciences, School of Health Sciences:</u> <u>Online Entrance Examination (OEE) pattern: 2024-25</u> Syllabus for OEE: M.Sc. Health Sciences and Masters of Public Health

Format of OEE: Multiple choice questions: 100 marks

Section A: General knowledge/aptitude/logic/comprehension: 20 marks

Section B: Subject-specific questions: 80 marks

Examination for both sections will be conducted together

Questions will be based on the following syllabus.

The paper aims to test

- a) analytical ability of students
- b) interdisciplinary aptitude
- c) comprehension skills
- d) application of scientific knowledge for a public health challenge

Syllabus

- 1) Unit 1: Bachelor's degree level knowledge of life sciences: topics related to life sciences, including microbiology, pathology, biochemistry, basic knowledge of human biology, environmental and occupational health, evolution, adaptation, genetics, important bacterial, viral, fungal, and protozoan diseases that affect humans with emphasis on etiologic agents, body systems affected, modes of transmission, prevention, drug resistance, immunity, antimicrobial resistance, etc.
- 2) Unit 2: General knowledge of public health: general knowledge on the health topics such as the concept of health and disease; common health problems (e.g. COVID-19 pandemic, Monkeypox, causes of death in various age groups, commonly observed conditions like anaemia, the health of women, children), Epidemiological transition (e.g. a burden of diabetes, cardiovascular diseases, cancer along with diarrhoea, respiratory infections, COVID-19, Ebola, etc.), common infectious diseases (e.g. TB, HIV, Malaria, Dengue etc.), Mental health, Suicides, Injuries, Accidents and Disabilities, Emerging public health threats (e.g. Swine flu, Ebola, COVID-19, Monkeypox), Zoonotic diseases and consideration of One Health approach, National health programmes (e.g. NTEP, NACP, NVBDCP, NLEP, etc.), health services (e.g. public, private, charitable trust, etc.), National Programme on Immunization, Vaccines and state-of-the-art prevention practices for communicable diseases and non-communicable diseases, etc.
- 3) Unit 3: General knowledge on determinants of health: factors affecting health such as nutrition (basic requirements, conditions due to deficiencies and excess intake), hereditary, behavioural, environmental factors (e. g., air, water pollution, climate change, etc.), ecological factors-climate change, natural/ man-made disasters, housing, social factors- violence, inequality, socioeconomic status, poverty, population growth
- **4) Unit 4: Applied research:** overview and updates on the latest public health and epidemiological research, steps in scientific research, basic arithmetic skills, mean, median mode, sample, proportion, rates, ratio, Interpretation of tables and graphs, etc.

Readings/References

- Bachelors' degree level books on life-sciences
- Human biology, microbiology, biotechnology and biochemistry
- Textbooks of preventive and social medicine
- General reading on health, current issues in health and disease
- An introductory book on research methodology
- Current affairs (including updates on the Measles Outbreak, AMR, Bird Flu Outbreak)