POST GRADUATE CERTIFICATE IN MEDICAL MANAGEMENT OF CBRNE DISASTERS (PGCMDM)

Term-End Examination

June, 2022

MME-011: BASICS OF CBRNE

Time: 3 hours Maximum Marks: 70

Note: There are three parts - A, B and C. All parts are compulsory.

PART A

- **1.** Answer any *one* of the following in 300 400 words:
 - (a) Enumerate official agencies responsible for preparedness and response during nuclear or radiological accidents.
 Describe the role of each agency in detail.
 - (b) Enumerate and elaborate the steps of
 Disaster Response and Manpower
 Management in a radiological mass event.
 Discuss QRT and QMRT. 6+6=12

- **2.** Write short notes on any *two* of the following in 70 100 words each: $2 \times 6 = 12$
 - (a) Role and Responsibilities of EMRC
 - (b) "Radioactive Decay" and various modes of Decay
 - (c) Dual use of Radioactivity and Radio Isotopes used in Medicine

PART B

- **3.** Answer any *one* of the following in 300 400 words:
 - (a) What are the methods of sample processing in case of Environmental Contamination by an unidentified Biological Agent?
 - Explain the methodology of collection of food, water, air and surface samples. 6+6=12
 - (b) Enumerate a few viruses coming under 'Category B' of Potential Bio Agents.
 - Describe clinical specimen and diagnostic methods useful in detection of viral hemorrhagic fevers. 6+6=12
- **4.** Write short notes on any *two* of the following in 70 100 words each : $2 \times 6 = 12$
 - (a) Biological Weapon Convention and Categories of Biological Agents
 - (b) Point Source and Continuous Common Source Epidemics
 - (c) Emergency Operation Centre (EOC) and Levels of EOC

PART C

- **5.** Answer any *one* of the following in 300 400 words:
 - (a) Enumerate methods of detection of Chemical Agents.
 Write in detail about onsite detection methods.
 - (b) What are the types of Personal Protective
 Equipment used in Chemical Agent
 exposure?
 Describe the components of PPE in level
 A, B, C, D.
- **6.** Write short notes on any *two* of the following in 70 100 words each : $2 \times 5 = 10$
 - (a) Chemical Weapons Convention (CWC) and the General Obligations of CWC
 - (b) Classification of Chemical Warfare Agents with examples
 - (c) Iran-Iraq War