

**POST GRADUATE CERTIFICATE IN
MEDICAL MANAGEMENT OF CBRNE
DISASTERS (PGCMDM)
Term-End Examination
December, 2024**

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) Distribution and determinants of health effects in case of a Radiological Disaster. Discuss in detail about the factors that determine the severity and type of effect.

6+6=12

- (b) Enlist Medical Management echelons of preparedness in case of a Radiological Disaster. Write in detail about Pre-Hospital Medical/Health Personnel development. $6+6=12$
2. Write short notes in **70-100** words each on any *two* of the following topics : $2 \times 6 = 12$
- (a) Types of Radiation Detectors : Enumerate and describe.
- (b) Activities performed in Quarantine Zone-2 (QZ-2).
- (c) Mechanism of interaction of Radiation with matter.

Part—B

3. Answer any *one* of the following in **300-400** words :
- (a) What are Category C agents of Bioterrorism and enlist the agents. Discuss any *two* of the Category 'C' agents in detail, including mode of infection, symptoms, clinical consequences, diagnosis and medical management.

$6+6=12$

- (b) Discuss different types of Anthrax. How would you differentiate a natural Anthrax outbreak from that of an intentional attack ? 6+6=12

4. Write short notes in **70-100** words each on any *two* of the following : 2×6=12

- (a) Epi-curve
- (b) Methods of Environmental Sample processing in a biological event.
- (c) Activities of incident command systems in a Biological Emergency.

Part—C

5. Answer any *one* of the following in **300-400** words :

- (a) What are chemical warfare agents ? Write in detail about the role of various National and International agencies in CW agent use and regulation. 6+6=12

- (b) Blister agents used in chemical warfare.

Describe in detail about : $6+6=12$

- (i) Mechanism of action of Sulphur Mustard, and

- (ii) Clinical manifestations after exposure

6. Write short notes in **70-100** words each of any *two* of the following : $2 \times 5 = 10$

- (a) Salisbury Novichok Attack, U.K.
- (b) Three colour detector paper for chemical detection
- (c) Chemical Weapon Convention

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