DISASTER MANAGEMENT
(DIMA 5116)

Time Allotted : 3 hrs   **Full Marks : 70**

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and
<u>any 5 (five)</u> from Group B to E, taking <u>at least one</u> from each group.

Candidates are required to give answer in their own words as far as practicable.

Group – A
(Multiple Choice Type Questions)

1. Choose the correct alternative for the following: **10 × 1 = 10**

(i) A geophysicist who studies earthquakes and the mechanical characteristics of the Earth is called
(a) Seismologist   (b) Geologist
(c) Geographer   (d) Archaeologist

(ii) The point in the earth from which seismic waves spread out in all direction is:
(a) Earthquake focus   (b) Seismic Centre
(c) Epicentre   (d) None of these

(iii) International Tsunami Information Centre is in?
(a) Honolulu   (b) Goa
(c) Jakarta   (d) Pondicherry

(iv) In which of the following countries, hurricanes are common?
(a) India   (b) Sri Lanka
(c) Australia   (d) USA

(v) Which of the following best defines a disaster?
(a) Any event that results in multiple deaths
(b) Devastation that cannot be relieved without assistance
(c) Devastation that covers a broad geographical area
(d) When the event results in multiple injuries and deaths as well as property damage

(vi) The Indian Tsunami Early Warning Centre (ITEWC) established at Indian National Centre for Ocean Information Sciences is located in
(a) Chennai   (b) Goa
(c) Kochi   (d) Hyderabad

    (vii)   Which option is the perfect answer to the Civil war?
            (a) Kargil war   (b) World war II
            (c) World war I   (d) Syrian War

    (viii)   Nodal Ministry related to natural disaster is
            (a) Home Affair   (b) Agriculture
            (c) Health and family welfare   (d) Environment and Forest

    (ix)   India's total flood-prone area is up to
            (a) 30%   (b) 20%
            (c) 12%   (d) 10%

    (x)   National Disaster Management authority comes under which ministry?
            (a) Ministry of Pollution   (b) Ministry of Environment
            (c) Ministry of Home Affairs   (d) Ministry of Foreign Affairs.

Group- B

2.   (a)   Classify the following natural disasters. Volcanic eruption, Global warning, Typhoon, El Nino.   [(CO1) (Apply/IOCQ)]
    (b)   Compare and contrast the emotional expressions of victims observed during post disaster honeymoon phase and disillusionment phase. [CO2] (Analyze/IOCQ)]
    (c)   Differentiate between the two terms, epidemic and pandemic. What is CBRNE? [(CO1)(Remember/LOCQ)]

                                                 4 + 4 + (2 + 2) = 12

3.   (a)   Name the nodal ministries involved with following types of disasters.
            (i) Industrial accident (ii) Biological (iii) Civil war (iv) Chemical Spill. [(CO2) (Remember/LOCQ)]
    (b)   Explain the institution framework for disaster management in India. [(CO2) (Understand/LOCQ)]
    (c)   Identify four impactful disasters of four different categories (namely, air accident, cyclone, bridge collapse, Flash flood) in India that occurred in recent past. [(CO1)(Analyze/IOCQ)]

                                                   4 + 4 + 4 = 12

Group - C

4.   (a)   "Disaster mitigation and disaster preparedness go hand in hand"- Justify. [(CO3) (Evaluate/HOCQ)]
    (b)   Describe the plans for medical preparedness and hospital disaster preparedness. Explain the need of "triage" in medical response. [(CO3) (Understand/LOCQ)]

                                                 4 + (6 + 2) = 12

5. (a)   Justify the use of Aarogya setu App in the context of Covid-19 in India. Which phase of disaster management is associated with the Aarogya setu App? [(CO6) (Evaluate/HOCQ)]
    (b)   What are the responsibilities of following international agencies in the context of disaster management? (i) UNOCHA (ii) UNDP (iii) UNDAC. [(CO2) (Remember/LOCQ)]

(4 + 2) + (2 + 2 + 2) = 12

Group - D

6. List, assess and justify various response measures taken at national and state level in India to combat Covid-19 pandemic in healthcare sectors. [(CO4) (Evaluate/HOCQ)]

(4 + 4 + 4) = 12

7. (a)   Why is situation awareness an important aspect of Disaster management? What is the traditional process of gathering situational information? [(CO4) (Remember/LOCQ)]
    (c)   Illustrate various crowd sourcing mechanisms used for situation data collection in post disaster scenario. [(CO4)(Analyse /IOCQ)]

(2 + 4) + 6 = 12

Group - E

8. (a)   What is Hyogo framework? Explain the priority action areas specified in Hyogo framework?   [(CO5) (Analyse/IOCQ)]
    (b)   Name the three phases of recovery. What are the tasks involved in each of these thee recovery phase?   [(CO5) (Remember/LOCQ)]

(1 + 5) + (3 + 3) = 12

9. (a)   What is Co-Win? Identify in which phase of disaster management this portal is being used? Explain the features of this portal?   [(CO5) (Understand/LOCQ)]
    (b)   Compare and contrast between structural and non-structural mitigation. [(CO6)(Analyse/IOCQ)]

(2 + 2 + 2) + 6 = 12

Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	45.83%	31.25%	22.91%

Course Outcome (CO):
After the completion of the course students will be able to
DIMA5116.1. Understand the concepts of disaster, types of disasters, causes, impact of disaster on environment and society, disaster profile of India
DIMA5116.2. Analyze various phases of disaster management (DM) cycle, local, state, and central government organizations and international agencies involved in DM

DIMA5116.3. Explain the terms: hazards, risks, vulnerability, capacity and their inter-relationship, process of hazard analysis and vulnerability assessment, disaster preparedness

DIMA5116.4. Learn various methods for post disaster situational information collection, current practices and standards for post-disaster damage and need assessment and response operations

DIMA5116.5. Understand the concepts, strategies and activities during recovery and mitigation

DIMA5116.6. Apply the knowledge of technology tools to build conceptual architecture of ICT based Emergency Management Systems and smart phone apps for disaster management.

*LOCQ: Lower Order Cognitive Question; IOCQ: Intermediate Order Cognitive Question; HOCQ: Higher Order Cognitive Question

Department & Section	Submission Link
AEIE/BT/CSE/ ECE/RE/VLSI	https://classroom.google.com/c/NDEwMzEyMDI4NjYw/a/NDc0ODQ1NjQ5OTUx/details