## M.TECH/AEIE/BT/CSE/ECE/VLSI/1ST SEM/DIMA 5116/2024

## **DISASTER MANAGEMENT** (DIMA 5116)

Time Allotted: 2½ hrs Full Marks: 60

Figures out of the right margin indicate full marks.

Candidates are required to answer Group A and any 4 (four) from Group B to E, taking one from each group.

1.

Candida	tes are required to give answer in the	rir own words as far as practicable.		
	Group – A			
Answe	er any twelve:	12 × 1 = 12		
	Choose the correct alternative	e for the following		
(i)	What is it called when a large number of the same time? (a) Influx (c) Epidemic	f people in a community get a disease at (b) Black death (d) Parasite.		
(ii)	Effective hazard management largely rel (a) Govt. agencies (c) Pre-disaster planning	y on (b) Emergency responses (d) NGOs		
(iii)	The Indian Tsunami Early Warning Centre (ITEWC) established at India National Centre for Ocean Information Sciences is located in (a) Chennai (b) Goa (c) Kochi (d) Hyderabad.			
(iv)	Mock drills exercise to create awareness (a) State level (c) GP/Village level	among people are conducted at (b) District level (d) All of the above		
(v)	According to the Indian Meteorological Department (IMD), which storm classified as a "Super cyclone" when the wind blows at whatever speed?  (a) Above 200 km  (b) Above 110 km  (c) Above 220 km  (d) None of the above.			
(vi)	Amateur Radio is also known as (a) Ham radio (c) Pocket radio	(b) Home radio (d) Silent radio.		
(vii)	Which of the following activities is co during or after a disaster? (a) Reconstruction and Rehabilitation (c) Emergency response	vered by Disaster management before,  (b) Mitigation  (d) All the above.		

(viii)	What are the three phases of disaster management planning? (a) Evacuating, Rebuilding and Re-branding (b) Preparation, Planning and Perception (c) Planning, Evacuating and Recovery (d) Preparation, Response and Recovery			
(ix)	Mechanisms established under Disaster Management Act, 2005 include (a) National Disaster Management Authority (b) State Disaster Management Authority (c) District Disaster Management Authority (d) All the above.			
(x)	Which is the nodal agency at the Indian Union Government for coordinating disaster management activities for all natural hazards?  (a) Minister of Home affairs (b) Ministry of social justice and Empowerment (c) Ministry of Science and Technology (d) Ministry of Environment and Forests.			
	Fill in the blanks with the correct word			
(xi)	The place of origin an earth quake is called			
(xii)	The first responders when a disaster strikes are			
(xiii)	The National Civil Defence college was founded in 1957 at			
(xiv)	International Day of Natural Disaster Reduction is celebrated on			
(xv)	The term Tsunami is coined from			
	Group - B			
(a) (b) (c)	Classify the types of the following disasters.  Civil War, Radio-active spills, Avalanche, Covid-19  Analyse the emotional expressions of victims observed during post disaster disillusionment phase.  [CO1](Analyze/IOCQ)]  Differentiate between the two terms, epidemic and pandemic. What is CBRNE?  [(CO2)(Remember/LOCQ)] $4+4+(3+1)=12$			
(-)				
(a) (b)	How can you describe the size or severity of a disaster? Discuss the scale of measurement of Tsunami intensity. [(CO1)(Understand/LOCQ)] What is the Golden hour in disaster management? Explain the tasks to be performed in the golden hour. [(CO2)(Understand/LOCQ)] $(2 + 4) + (2 + 4) = 12$			
	Group - C			
(a)	Discuss the role of the following agencies in the context of disaster management.  (i) NIDM (ii) NDRF. [(CO3)(Remember/LOCQ)]			

2.

3.

4.

(b) How are the damages in masonry building measured after a disaster?

[(CO3)(Remember/LOCQ)]

(4+4)+4=12

- 5. (a) What is the relationship between the terms Risk, Hazard, Exposure, Vulnerability and Capacity? [(CO3)(understand/LOCQ)]
  - (b) "Effective hazard management largely rely on Pre-disaster planning" Justify the statement.

    [(CO3)(Analyse/IOCQ)]

6 + 6 = 12

## Group - D

- 6. (a) Illustrate the role of UNISDR in the context of disaster management. Where are the headquarters and the regional offices of UNISDR located? [(CO4)(Remember/LOCQ)]
  - (b) Explain any three technologies that can help in different phases of disaster management. [(CO4)(Analyse/IOCQ)]

(3+3)+6=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)]

(b) 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) List the seven global targets set for assessing the global progress in achieving the outcome and goal of the Sendai Framework. [(CO5)(Remember/LOCQ)]
  - (b) 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)]

7 + (4 + 1) = 12

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

[(CO5)(Analyse/IOCQ)]

(2+2+2)+6=12

Cognition Level	LOCQ	IOCQ	HOCQ
Percentage distribution	61.4	33.3	5.3