

B.M.S College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

January / February 2025 Semester End Main Examinations

Programme: B.E.

Branch: Civil Engineering

Course Code: 22CV6OEDMM

Course: Disaster Management and Mitigation

Semester: VI

Duration: 3 hrs.

Max Marks: 100

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

UNIT – I			CO	PO	Marks
1	a)	Define disaster management and explain the major components involved.	<i>CO1</i>	<i>PO6</i>	10
	b)	List the general objectives of disaster management and explain the important principles of disaster management.	<i>CO1</i>	<i>PO6</i>	10
OR					
2	a)	Define the following terms related to disaster management: vulnerability, risk, exposure, capacity, and resilience.	<i>CO1</i>	<i>PO6</i>	10
	b)	Identify the major challenges involved in any disaster management.	<i>CO1</i>	<i>PO6</i>	10
UNIT – II					
3	a)	Discuss the causes, general characteristics, emergency management plan, countermeasures, and challenges in the management of the COVID-19 pandemic.	<i>CO1</i>	<i>PO6</i>	10
	b)	List the mitigation measures that can be adopted to reduce the landslide events.	<i>CO1</i>	<i>PO7</i>	10
OR					
4	a)	With an appropriate case study, discuss how surveillance and awareness are essential in mitigating epidemics.	<i>CO1</i>	<i>PO6</i>	10
	b)	List the steps needed to increase the road safety in your city.	<i>CO1</i>	<i>PO6</i>	10
UNIT - III					
5	a)	Analyze the disaster management cycle with a focus on the response and recovery phases. Provide examples to illustrate your point.	<i>CO 2</i>	<i>PO6</i>	10
	b)	Examine the role of Information and Communication Technology (ICT) in the various phases of disaster management.	<i>CO 2</i>	<i>PO6</i>	10
OR					
6	a)	Discuss the qualitative and quantitative methods for risk assessment.	<i>CO 2</i>	<i>PO6</i>	10

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

	b)	Discuss the objectives and general structure of the disaster management plan.	CO 2	PO6	10
UNIT – IV					
7	a)	Illustrate the institutional structures for disaster management in India.	CO 2	PO6	10
	b)	Discuss the functions and responsibilities of NDMA.	CO 2	PO6	10
OR					
8	a)	List the various stakeholders and their responsibilities in disaster management.	CO 2	PO6	10
	b)	Discuss the disaster profile of India.			
UNIT – V					
9	a)	Discuss the significance of Paris agreement India's Nationally Determined Contribution under Paris Agreement.	CO 3	PO7	10
	b)	Define environmental degradation. Discuss the factors causing the same and its potential impact.	CO 3	PO7	10
OR					
10	a)	List the impacts of climate change on various sectors. Illustrate any one of the impacts in detail.	CO 3	PO7	10
	b)	Discuss the phenomenon of ozone layer depletion, factors causing the same and its potential impact.	CO 3	PO7	10
