

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY
COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF CIVIL ENGINEERING
EVEN QUESTION PAPER

Continuous Learning Assessment	: CLA-2	Date	: 20.10.2022
Course Code & Course Name	: 18CEO307T (Disaster Mitigation and Management)	Duration	: 90 minutes
Year / Semester	: 3rd Year/ 5th Semester	Maximum Marks	: 50
Academic year	: 2022-2023 (Odd Semester)	Mode of Exam	: Offline

Course Articulation Matrix																
Course Learning Outcomes (CLO):		Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
CLO-1 :	Understand basic concepts of disaster and hazards of India.	3	3			2								3	3	
CLO-2 :	Acquire Knowledge on the various natural disasters.	3	3			3								3	3	
CLO-3 :	Acquire Knowledge the various manmade disasters.	3	3			3								3	3	
CLO-4 :	Understand the disaster management principles.	3	3			2								3	3	
CLO-5 :	Appreciate the modern techniques used in disaster mitigation and management.	3	3			3								3	3	

Q. No.	Question	Marks	BL	CO	PO	PI
PART A: Answer all the questions ($10 \times 1 = 10$ Marks)						
1	Which among the following is not included in the manmade disaster classifications? a) Wars b) Wildfire c) Engineering failure d) Biological disasters	1	L1	CO2	1	1.3
2	A rapidly rotating storm system characterized by low pressure centre, strong winds, spiral arrangement of thunderstorms is often called _____ a) Tsunami b) Trade winds c) Tropical cyclone d) Thunderstorm	1	L1	CO2	1	1.3
3	A place where an earthquake originates is called the _____. a) Focus b) Tsunami c) Fault line d) Epicentre	1	L1	CO2	1	1.3
4	Which among the following is NOT the natural cause of flood? a) Riverbank erosion b) Poor natural drainage c) Deforestation d) Heavy rain	1	L1	CO2	2	2.1
5	Indian Meteorological Department (IMD) calls a storm ‘Super cyclone’ when the wind blows_____ a) More than 120 km/hour b) More than 100 km/hour c) More than 220 km/hour d) More than 50 km/hour	1	L1	CO2	1	1.3
6	The Bhopal gas tragedy occurred due to leakage of which gas? a) Chloro fluoro Carbon b) Methane c) Carbon monoxide d) Methyl Isocyanide	1	L1	CO3	1	1.3
7	Disaster caused by the leak from atomic power plant can be grouped under: a) Chemical b) Biological c) Nuclear d) Meteorological	1	L1	CO3	1	1.3
8	Select the reason for the attack of solar ultra violet rays on flora and fauna of the world. a) Carbon dioxide emission b) Automobile exhaust c) Ozone depletion d) Deforestation	1	L1	CO3	2	2.1
9	Which of the following causes can be controlled significantly among man made causes of land pollution? a) Usage of manure b) Biomass c) Use of pesticides d) Volcanic eruption	1	L1	CO3	1	1.3
10	When the outbreak of any disease was restricted to one country, it is called _____ a) Epidemic b) Pandemic c) Endemic d) Hypodemic	1	L1	CO3	1	1.3
PART B: Answer any four questions ($4 \times 10 = 40$ Marks)						
11	Explain the seismic waves and its types with neat sketch. - Explanation about types of seismic waves (Body waves and Surface waves) – 3 marks - Characteristics of waves – 3 marks - Effects of waves – 2 marks - Diagram – 2 marks	10	L1	CO2	1	1.3
12	Explain in detail about cyclone, its formation, its classification and possible mitigation measures. - Cyclone definition – 2 marks - Formation – 3 steps – 3 marks - Classification based on the speed of cyclone as per IMD – 2 marks - Possible mitigation measures – 3 marks	10	L1	CO2	1	1.3

13	<p>Discuss in detail about the effects of climatic change and global warming and how they are related to disasters?</p> <ul style="list-style-type: none"> - Effects of climate change - 3 marks - Effects of global change – 3 marks - Relation between climate change and disasters – 4 marks 	10	L1, L2	CO2	1	1.3
14	<p>Explain in detail about biological disasters along with its impacts and mitigation measures.</p> <ul style="list-style-type: none"> - Biological disasters – definition – 2 marks - Characteristics/forms of biological disasters/ types – 2 marks - Impacts of biological disaster – 3 marks - Mitigation measures – 3 marks 	10	L1	CO3	1	1.3
15	<p>Discuss forest fire and its types along with effects and management.</p> <ul style="list-style-type: none"> - Forest fire – explanation – 2 marks - Types – five types – 3 marks - Effects of forest fire – 3 marks - Management measures for forest fire – 2 marks 	10	L1	CO3	1	1.3
16	<p>Write in detail about chemical disaster and explain with any one case study with possible mitigation measures.</p> <ul style="list-style-type: none"> - Chemical disaster – definition – 2 marks - Forms of chemical disaster – 3 marks - Case study with mitigation measures – 5 marks 	10	L1, L2	CO3	1,2	1.3, 2.1

* BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating) * CO- Course Outcomes, PO- Program Outcomes, PI- Performance Indicator.