Continuous Learning Assessment	: CLA-3	Date	: 17.11.2022
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	

Qn. No.	Question	Marks	BL	CO	PO	PI
	PART A: Answer all the questions (10 × 1 = 10 Marks)					
1	In one map different hazard related information for a study area to be convey a composite picture of natural hazard such as frequency and magnitude is called a) **Multiple Hazard Mapping** b) Early Warning system c) Zoning Magnitude d) Land Use and Cover	1	L1	CO4	1	1.3.1
2	A set of capacities needed to generate and disseminate timely and meaning full warning information of possible disaster is called	1	L1	CO4	1	1.3.1

	a) Multiple Hazard Mapping **b) Early Warning system** c) Zoning Magnitude d) Land Use and Cover					
3	The Agencies for forecasting cyclones are a) **Indian Meteorological Department** b) Water Commission c) Oceanic Information services d) Disaster Rescue Force	1	L1	CO4	1	1.3.1
4	Areas are classified on the purpose the land serves such as recreation, agriculture is a) Land Cover b) Zoning **c) Land Use** d) Hazard Mapping	1	L1	CO4	1	1.3.1
5	The vulnerable groups such as the artisans, elderly, orphans, single women and young children would need special support to survive the impact of disasters is coming under **a) Social Rehabilitation** b) Physical Rehabilitation c) Economical Rehabilitation d) Relocation	1	L1	CO4	1	1.3.1
6	A Collection of energy that is reflected from the earth surface is called a) Active sensing b) Control system c) Simulation **d) Passive Sensing**	1	L1	CO5	1	1.3.1
7	The remote sensing simulation effectively used for mapping flood Inundation areas due to all weather capability is a) **RADARSAT** b) FEM c) EWS d) IMG	1	L1	CO5	5	5.2.2
8	How many earthquake zone categories are there in India? a) 5 b) 6 **c) 4** d) 3	1	L1	CO5	1	1.3.1
9	Microwave remote sensing technology used in Landslide is a) Scatterometry b) Polarimetry **c) Interferometry** d) Monometry	1	L1	CO5	5	5.2.2
10	One of the largest domestic communication satellite systems in Asia Pacific region with nine operational satellites placed in geo - stationary orbit is **a) INSAT** b) SCAR c) AGNI d) RADSAT	1	L1	CO5	5	5.2.2
PART B: Answer any four questions (4 × 10 = 40 Marks)						
11	Write briefly about Early warning system and their characteristics. Also write in detail about early warning system for earthquake. - Early warning system definition and characteristics – **5 marks** - Early warning system for earthquake – **5 marks**	10	L1, L2	CO4	1, 5	1.3.1, 5.2.2
12	Explain briefly about Rehabilitation and its various aspects in post disaster stage - Rehabilitation for disaster management – **3 marks** - Social aspect – **3 marks** - Economic aspect – **2 marks** - Environmental aspect – **2 marks**	10	L1, L2	CO4	1	1.3.1
13	Explain in detail about Pre-disaster stage activities for cyclone and flood. - Pre disaster activities for cyclone – **5 marks** - Flood – **5 marks**	10	L1, L2	CO4	1	1.3.1
14	Write in detail about role of Remote Sensing in Disaster Management. **– 10 marks** - Remote sensing in prediction, warning and rehabilitation	10	L1, L2	CO5	2, 5	2.2.2, 5.2.2

	- Applications of remote sensing for disaster management					
15	Write about Geographical Information system and its application in Disaster Management - Structural and non structural mitigation plan for cyclone – **5 marks** - Structural and non structural mitigation plan for chemical disasters – **5 marks**	10	L1, L2	CO5	5	5.2.2
16	Explain briefly about Meteorological Laboratory and its services. **10 marks** - Meteorological laboratories and the equipment required for weather data collection and prediction - Any major 4 tools/equipment/instruments with its applications	10	L1, L2	CO5	1	1.3.1

* 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.