

Discipline: <b>Civil</b>	Semester: 6th	Name Of The Teaching Faculty: <b>SANGRAM MIASHRA</b>
Subject: <b>DISASTER MANAGEMENT</b>	No. Of Days/Week Class Allotted: 4	No. Of Weeks: 15 From - 22.12.2025 to 18.4.2026
Week	Class Day	Theory Topics
1	1	<b>UNIT 1: Introduction to Disaster Management</b> Definition of hazards, disasters Explain the difference between hazard and disaster
	2	Concept of risk and vulnerability Risk reduction preparedness and mitigation
	3	Disaster management cycle Personal and community awareness
	4	Types of disasters, earthquake, Tsunami, Landslide, cyclone, flood, drought, forest fire, Chemical and industrial accidents
2	1	<b>UNIT 2: Earthquakes</b> Definition and concept, intensity, Richter's scale, Element of risk
	2	Richter's scale, Element of risk
	3	Hazard Zones in India, Typical effects
	4	Main mitigation strategies, safe Engineering practice, Indian Standard code and enforcement Bye-Laws
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	2	<b>UNIT 3: Tsunami</b> Definition and concept, Onset, Type and Cases
	3	Warming, Elements at risk
	4	Typical effects, Physical damage, Environmental Damage, Casualties and Public health
4	1	Specific Preparedness: Hazard Mapping, Early warning systems, Community preparedness
	2	Main mitigation strategies: Site planning and land management, Engineering structures, Flood management
	3	<b>UNIT 4: Landslides</b> Definition, concept, Onset time and warning
	4	Causes, Elements at risk, Hazard zones and Indian landslides
5	1	Typical effects: Physical damage, casualties
	2	Main mitigation strategies: Hazard mapping, Landslide practice, retaining walls
	3	Surface drainage control works, Engineering structures, Community based mitigation
	4	<b>UNIT 5: Cyclones</b> Definition, concept, Onset type, Warning
6	1	Elements at risk, Typical effects
	2	Indian Hazard Zones
	3	Main mitigation strategies: Hazard mapping, Land use control, Engineering Structures
	4	Flood management, improving vegetation cover
7	1	Community based mitigation
	2	<b>UNIT 6: Floods</b> Definition, concept, Onset type, Warning
	3	Elements at risk
	4	Hazard zones and Indian floods
8	1	Typical effects: Physical damage, Casualties and Public health, Crops and flood
	2	Main mitigation strategies: Mapping of the flood prone areas, land use control, Flood control and management
	3	Community based mitigation
	4	<b>UNIT 7: Droughts</b> Definition, concept, Onset type and warning
9	1	Elements at risk
	2	Typical effects
	3	Main mitigation strategies: drought monitoring, water supply augmentation and conservation
	4	Drought Planning
10	1	<b>UNIT 8: Forest Fire</b> Definition and concept, Forest fire damages in India
	2	Operational fire management systems and organizations
	3	Community involvement

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11	4	Public policies concerning fire
	1	The needs of fire management
	2	<b>UNIT 9: Other Hazards and Disasters</b> Chemical and Industrial disasters. brief description, effects
	3	Chemical and Industrial disasters. Preparedness, safety measures
12	4	Epidemic. Onset type, warning causes and effects, risk reduction measures
	1	Heat waves. definition, dangers and effects
	2	Forecasts and warning, awareness
	3	<b>UNIT 10: Policy, Planning and Institutions for Disaster Mitigation</b> Role of policy makers in disaster risk reduction
13	4	course for specification.
	1	Institutional arrangement in India: Central level, State Level
	2	Institutional arrangement in India: District and Block level.
	3	Major institutions in National and State level
14	4	<b>UNIT 11: Geospatial Applications for Disaster Risk Management</b> Overview of Disaster Risk Management (DRM) and relevance of geospatial technologies in DRM
	1	Earth observation technologies and their application in disaster management
	2	Remote sensing for disaster management
	3	Geospatial intelligence for disaster management
15	4	Application of remote sensing in hydro meteorological, geological
	1	Application of remote sensing in environmental disaster
	2	International systems for disaster risk management:- UN-SPIDER, International Charter for Space and Major Disasters
	3	<b>UNIT 11: Geospatial Applications for Disaster Risk Management</b> Overview of Disaster Risk Management (DRM) and relevance of geospatial technologies in DRM
		4 REVISION

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