

GUJARAT TECHNOLOGICAL UNIVERSITY
Disaster Risk Mitigation and Management (Elective)
SUBJECT CODE: 1075507
B.PLAN 7th SEMESTER

Aim: To study Disaster Management Practices and Disaster Mitigation Measures.

Objective:

1. To understand the Basic Concepts of Disaster Management
2. To understand Disaster Management Mechanisms; Disaster Risk Mitigation; and Post Disaster

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	VIVA (V)	PA(I)	
2	0	0	2	50	50	0	0	100

L- Lectures; T- Tutorial/Teacher Guided Student Activity/Field work; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment.

Content:

Sr. No.	Content	Total Hrs
Unit - 1	Basic Concepts of Disaster Management Disaster – definitions, concept and perceptions; different types of disasters; recent initiatives at national and state level; Kyoto Framework of disaster mitigation and management; Disaster management policy – national and states; Disaster Management Act – national and states	4
Unit - 2	Disaster Management Mechanisms & Institutions Disaster management mechanisms – national, state and district levels; select global practices; disaster and development; physical planning and disaster management plans; various role players in disaster management – NGOs / CBOs and Armed Forces; Community Based Disaster Preparedness (CBDP) ; Institutional Framework	4
Unit - 3	Disaster Risk Mitigation Natural Disasters – physical phenomenon, causes and consequences	8

	mitigation and management practices – cyclones, floods, earthquakes, landslides etc.; causes and risk mitigation strategies at the Master Plan for industrial, chemical and biological disasters; land use planning, building bye laws and disaster safe construction practices for different types of disasters	
Unit - 4	Disaster Preparedness Forecasting and early warning systems for various types of disasters eg Tsunami, Flood etc; communication and information technology in disaster management; disaster education and awareness; documentation and case studies on natural disasters. Urbanization, land requirements, social and affordability issues of land use, Climate change and its implications in disaster mitigation	8
Unit - 5	Post Disaster Management and Cross Cutting Issues Post disaster management; rehabilitation and reconstruction of disaster affected areas; urban disaster mitigation; natural resource management for disaster safe habitation; relationship between disaster and environment; safe hill area development guidelines and coastal zone regulations for safe habitation; human settlement planning for consequence mitigation of global warming and climate change.	8
	Total no. of hours	32

Reference Books:

Text / Reference Books:				
S. No.	Name of Authors	Titles of the Book	Edition	Name of the Publisher
1.	Damon P Capolla	Introduction to International Disaster Management	2007	Butterworth Heinemann
2.	George D Haddow and Jane A Bullock	Introduction to Emergency Management	2006	Elsevier Butterworth Heinemann
3	Dr. Aniruddha Dhairyadhar Joshi,	Text Book of Disaster Management	2009	Lotus Publication of Pvt ltd.
4	NDMA	Disaster Management Guidelines	2007-11	NDMA
5	Ministry of Home Affairs	Model Amendment in Town and Country Planning Legislations, Regulation for	2004	MHA

		Land Use Zoning and Building Byelaws for Structural Safety		
6	Ministry of Home Affairs	National Policy on Disaster Management(NPDM)	2006	MHA

Course Outcome:

List of Exercises / Practicals:	
1.	Visit to Office of Disaster Mitigations Cell or NIDM and submit Report.
List of Assignments/Tests:	
1	Test on Unit 1 and Unit 2.
2	Case Study based Assignments on Unit 4 or Unit 5.