

Subject Code: 2SC1000131	Subject Title: Disaster management
COURSE TYPE: Elective Generic	

Course Objective:

This paper is designed to enable students to acquire basic understanding of the disasters and its management. It also provides information about mitigation methodology for the environmental disasters. It also gives information about psychological health and mental therapies and social awareness.

Teaching scheme (hours) per week		Credit			Theory Marks		Practical Marks		Total
Theory	Practical	Theory	Practical	Total	Uni. Assessment	Cont. Assessment	Uni. Assessment	Cont. Assessment	
2	--	2	--	2	--	50	--	--	50

Unit	Content	Lectures	Weight (%)
1	Understanding Disasters: Understanding the Concepts and definitions of Disaster, Hazard, Vulnerability, Risk, Capacity – Disaster and Development, and disaster management Types, Trends, Causes, Consequences and Control of Disasters: Geological Disasters (earthquakes, landslides, tsunami, mining); Hydro-Meteorological Disasters (floods, cyclones, lightning, thunder-storms, hail storms, avalanches, droughts, cold and heat waves); Biological Disasters (epidemics, pest attacks, forest fire); Technological Disasters (chemical, industrial, radiological, nuclear) and Manmade Disasters (building collapse, rural and urban fire, road and rail accidents, nuclear, radiological, chemicals and biological disasters); Global Disaster Trends – Emerging Risks of Disasters – Climate Change and Urban Disasters	15	50%
2	Disaster Management Cycle and Framework: Disaster Management Cycle – Paradigm Shift in Disaster Management Pre-Disaster – Risk Assessment and Analysis, Risk Mapping, zonation and Microzonation, Prevention and Mitigation of Disasters, Early Warning System; Preparedness, Capacity Development; Awareness During Disaster – Evacuation – Disaster Communication – Search and Rescue – Emergency Operation Centre – Incident Command System – Relief and Rehabilitation – Post-disaster – Damage and Needs Assessment, Restoration of Critical Infrastructure – Early Recovery – Reconstruction and Redevelopment; IDNDR, Yokohama Strategy, Hyogo Framework of Action	15	50%

Learning Outcome:

The students will learn about the environmental disasters, pre disaster management and post disaster management, and social awareness.

Reference book:

1. Modi C D & others (2006) Paryavaran and Aapatti Vyavasthapan [Gujarati], Swami prakashan, Patan-384265
2. Patel J C (2006) Paryavaran and disaster management [Gujarati], Parshwa publication, Ahmedabad-380001
3. Erachs Bharucha (2008, first edition) Paryavaran Adhyayan [Gujarati], Orient Longman Pvt. Ltd., Hyderabad.
4. Distributor: M/S Himanshu book company, 06-07 Shri Jayendrapuri Bhavan, Ellisbridge, New Sanyas Ashram, Ahmedabad – 380 006.
5. K Ramana Murthi, 2004 Disaster Management, Dominant Publishers and Distributors, New Delhi -110002
6. Coppola D P, 2007. Introduction to International Disaster Management, Elsevier Science (B/H), London.
7. Manual on natural disaster management in India, M C Gupta, NIDM, New Delhi
8. An overview on natural & man-made disasters and their reduction, R K Bhandani, CSIR, New Delhi
9. Publications of National Disaster Management Authority (NDMA) on Various Templates and Guidelines for Disaster Management