



Course No:	Course Name: Disaster Management				Course Code: ENV 536(IDC)		
Batch:	Programme:	Semester:	L	T	P	Credits	Contact Hrs. per Week: 2
2022-2024	M.Sc. Environmental Sciences	II	2	0	0	2	Total Hrs.: 30
Total Evaluation Marks: 100 Mid-Term: 25 End-Term: 75 CIA: 25		Pre-requisite of course: Basic knowledge of Physics, Chemistry and Biology along with geology					
Course Objectives	<ul style="list-style-type: none"> • Understand different natural and manmade disasters • Explore the reason of its origin and the possible antidotes so that it can dwindle to some extent. • Implement environmentally sound strategies in this concern 						
Course Outcomes:	<p>After completing this course, student is expected to learn the following:</p> <p>CO¹ : Explain disaster management theory (cycle, phases, risk, crisis, emergency, disasters, and resilience).</p> <p>CO² : Compare hazards, disasters and associated natural phenomena and their interrelationships, causes and their effects - developing humanitarian Assistance before and after disaster</p> <p>CO³ : Compare anthropogenic hazards, disasters and associated activities and their interrelationships of the subsystems - Green House Effect, Global warming, Causes and their effects and development of humanitarian assistance before and after disaster</p> <p>CO⁴ : Apply knowledge about existing global frameworks and existing agreements and role of community in successful Disaster Risk Reduction</p> <p>CO⁵ : Evaluate DM study including data search, analysis and presentation as a case study. Create Technological innovations in Disaster Risk Reduction: Advantages and problems</p>						
Attendance Requirement:	Students are expected to attend all lectures in order to be able to fully benefit from the course. A minimum of 75% attendance is a must failing which a student may not be permitted to appear in examination.						
Evaluation Criteria:	<ol style="list-style-type: none"> 1. Mid Term Examination: 20% 2. End Term Examination: 60% 3. Continuous Internal Assessment : 20% 						
COURSE SYLLABUS							
Unit No.	Contents						Contact Hrs.
I	Introduction to Disaster Management, Scope and Objectives of Disaster Management,						6

	Disaster Managers, Elements of Disaster Management	
II	Concepts and Terms in Disaster Management, Natural Disasters ,Man-made Disasters, Disaster Victim, Disaster Relief Systems, Phases of Disaster Response, Phases of Relief Operations.	7
III	The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations, and Communities to Disasters : Case study of Turkey earthquake disaster and Manipur Noney district landslide (2022)	6
IV	The Tools and Methods of Disaster Management, National System for Disaster Management,Prevention and Mitigation Tools, Preparedness Tools, Tools of Post-Disaster Management	6
V	Technologies of Disaster Management, Mapping, Aerial Photography and Remote Sensing ,Communications, Information Management, Logistics	6
Suggested Readings:		
<ul style="list-style-type: none"> • Harsh K. Gupta, (2004): Disaster management, Universities Press, ISBN: 9788173714566 • R.B. Singh, (2000): Disaster Management, Rawat Publication, New Delhi. • Satender, (2003): Disaster Management in Hills, Concept Publishing Co., New Delhi,ISBN: 9788180690143 • Bhandani, R.K., (2000): An overview on Natural & Manmade Disaster & their Reduction, CSIR, New Delhi. • W.Nick Carter(2008):Disaster Management,Disaster Manager’s Handbook,Asian Development Bank,2008 • Gupta, (2001): Manuals on Natural Disaster management in India, National Centre for Disaster Management, IIPA, New Delhi. 		

Course Outcomes (COs) Mapping with POs and PSOs

All the courses together must cover all the POs (and PSOs). For a course we map the COs to POs through the CO-PO matrix and to PSOs through the CO-PSO matrix as shown below. The various correlation levels are:

“-” indicates there is **no** correlation

“1” – Slight (**Low**) Correlation

“2” – Moderate (**Medium**) Correlation

“3” – Substantial (**High**) Correlation

Programme Specific Outcomes of Master of Science in Environmental Sciences

PSO¹- To enhance students’ ability to understand and mitigate environmental issues

PSO²- To augment the acumen to analyse geological and environmental research problems of social relevance

PSO³- To ensure lifelong learning on scientific skills for industrial applications and entrepreneurship

Programme Outcomes of Master of Science in Environmental Sciences

PO¹- To develop in-depth knowledge on the structure and function of the global environment

PO²- To inculcate a harmonious relationship between nature and human being

PO³- To foster a culture of indigenous traditional knowledge for sustainable future

PO⁴- To make them committed towards professional ethics

Course Articulation Matrix of ENV 536 – Disaster Management

PSOs/ POs	PSO ¹	PSO ²	PSO ³	PO ¹	PO ²	PO ³	PO ⁴
CO ¹	1	2	1	1	3	2	1
CO ²	2	2	2	3	2	2	3
CO ³	3	2	3	3	3	2	2
CO ⁴	2	3	3	2	2	2	3
CO ⁵	3	3	3	3	3	3	3



1: Partially Related **2:** Moderately Related **3:** Highly Related