

SE681: Disaster Management and Mitigation

Teaching Scheme			Credits	Marks Distribution				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE	CE	ESE	CE	
3	2	0	5	70	30	30	20	150

Course Content:

Sr. No	Topics	Teaching Hrs.
1	<p><u>Introduction:</u></p> <p>Introduction to Natural & Man-made Disasters: Understanding Disasters, Geological and Mountain Area Disasters, Wind and Water Related Natural Disaster, Man Made Disasters.</p>	04
2	<p><u>Disaster Preparedness:</u></p> <p>Introduction to disaster Preparedness, Concept & Nature, Plan, Disaster Preparedness For People and Infrastructure, Community based Disaster Preparedness Plan.</p>	04
3	<p><u>Technologies for Disaster Management:</u></p> <p>Technologies for Disaster Management Role of IT in Disaster Preparedness, Remote Sensing, GIS and GPS, Use and Application of Emerging Technologies, Application of Modern Technologies for the Emergency communication, Application and use of ICST for different disasters.</p>	08
4	<p><u>Rehabilitation of structures:</u></p> <p>Rehabilitation, Reconstruction And Recovery: Introduction and basic concept.</p>	08
5	<p><u>Disaster Response And Management:</u></p> <p>Introduction to Response Essential Components, Stakeholders Co-ordination in Disaster Response, Human Behaviour and Response Management and Relief Measures.</p>	06
6	<p><u>Risk Assessment And Vulnerability Analysis:</u></p> <p>Introduction and basic concept.</p>	06

Meaning and concept, Disaster Mitigation Strategies, Emerging Trends in Disaster Mitigation, Mitigation management, Role of Team and Coordination.

Total Hrs. 42

Reference Books:

1. Bryant Edwards (2005): "*Natural Hazards*", Cambridge University Press, U.K.
2. Carter, W. Nick, 1991: "*Disaster Management*", Asian Development Bank, Manila.
3. Sahni, Pardeep et.al. (eds.) 2002, "*Disaster Mitigation Experiences and Reflections*", Prentice Hall of India, New Delhi.
4. Roy, P.S. (2000): "*Space Technology for Disaster management: A Remote Sensing & GIS Perspective*", Indian Institute of Remote Sensing (NRSA) Dehradun.
5. Sharma, R.K. & Sharma, G. (2005) "*Natural Disaster*", APH Publishing Corporation, New Delhi.
6. Kasperson, J.X., R.E. Kasperson, and B.L. Turner III, (1995), "*Regions at Risk: Comparisons of Threatened Environments*", United Nations University Press, Tokyo
7. Singh Satendra (2003): "*Disaster Management in the Hills*", Concept Publishing Company, New Delhi.
8. Taori, K (2005) "*Disaster Management through Panchayati Raj*", Concept Publishing Company, New Delhi.