



### COURSE CONTENT

DISASTER MANAGEMENT (Audit Course-I)								
I Semester-SE								
Course Code	Category	Hours/ Week			Credits	Maximum Marks		
		L	T	P		C	CIA	SEE
2510003	Audit Course	2	0	0	0	100	-	100
		Contact Classes:30		Tutorial Classes: Nil		Practical Classes: Nil		TotalClasses:30
Prerequisites: Nil								

#### Course Overview:

Disaster Management is a course that provides a comprehensive understanding of the principles, strategies, and practices involved in preventing, preparing for, responding to, and recovering from natural and man-made disasters. The course covers various types of disasters such as earthquakes, floods, cyclones, landslides, droughts, fires, and industrial accidents, along with their causes, impacts, and risk factors. It emphasizes disaster risk reduction, hazard assessment, vulnerability analysis, emergency planning, mitigation measures, and rehabilitation processes.

#### Course Objectives:

1. To understand the basics of disasters, their types, impacts, and disaster-prone regions in India.
2. To study the repercussions of natural and man-made disasters on life, economy, and the environment.
3. To learn disaster preparedness methods using monitoring, risk evaluation, and community/governmental actions.
4. To understand disaster risk assessment concepts, global cooperation, and community participation in risk reduction.
5. To learn disaster mitigation strategies, emerging trends, and mitigation programs practiced in India.

#### Course Outcomes:

 The students will be able to

1. Classify different types of disasters and summarize disaster-prone regions in India.
2. Illustrate the impacts of natural and manmade disasters on the economy, environment, and society.
3. Examine methods of disaster preparedness and the role of monitoring and community involvement.
4. Critique different disaster risk assessment techniques and their effectiveness in global and national contexts.
5. Implement disaster mitigation strategies using both structural and non-structural methods based on Indian programs.



## **SYLLABUS:**

### **UNIT-I:**

#### **Introduction:**

Disaster: Definition, Factors and Significance; Difference Between Hazard and Disaster; Natural and Manmade Disasters: Difference, Nature, Types and Magnitude.

#### **Disaster Prone Areas in India:**

Study of Seismic Zones; Areas Prone to Floods and Droughts, Landslides and Avalanches; Areas Prone to Cyclonic and Coastal Hazards with Special Reference to Tsunami; Post-Disaster Diseases and Epidemics

### **UNIT-II:**

#### **Repercussions of Disasters and Hazards:**

Economic Damage, Loss of Human and Animal Life, Destruction of Ecosystem. Natural Disasters: Earthquakes, Volcanisms, Cyclones, Tsunamis, Floods, Droughts and Famines, Landslides and Avalanches, Man-made disaster: Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks and Spills, Outbreaks of Disease and Epidemics, War and Conflicts.

### **UNIT-III:**

#### **Disaster Preparedness and Management:**

Preparedness: Monitoring of Phenomena Triggering A Disaster or Hazard; Evaluation of Risk: Application of Remote Sensing, Data from Meteorological and Other Agencies, Media Reports: Governmental and Community Preparedness.

### **UNIT-IV:**

#### **Risk Assessment Disaster Risk:**

Concept and Elements, Disaster Risk Reduction, Global and National Disaster Risk Situation. Techniques of Risk Assessment, Global Co-Operation in Risk Assessment and Warning, People's Participation in Risk Assessment. Strategies for Survival.

### **UNIT-V:**

#### **Disaster Mitigation:**

Meaning, Concept and Strategies of Disaster Mitigation, Emerging Trends in Mitigation. Structural Mitigation and Non-Structural Mitigation, Programs of Disaster Mitigation in India.



# **MARRI LAXMAN REDDY** **INSTITUTE OF TECHNOLOGY AND MANAGEMENT**

**(AN AUTONOMOUS INSTITUTION)**

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## **REFERENCES:**

1. R. Nishith, Singh AK, “Disaster Management in India: Perspectives, issues and strategies “New Royal book Company.
2. Sahni, Pardeep Et. Al. (Eds.),” Disaster Mitigation Experiences and Reflections”, Prentice Hall of India, New Delhi.
3. Goel S.L., Disaster Administration and Management Text and Case Studies”, Deep & Deep Publication Pvt. Ltd., New Delhi.
- 4.

## **ELECTRONIC RESOURCES:**

**[Preview: Disaster Management | SWAYAM](#)**

## **MATERIALS ONLINE:**

1. Course template
2. Tutorial question bank
3. Definitions and terminology
4. Assignments
5. Model question paper – I
6. Model question paper – II
7. Lecture notes
8. E-Learning Readiness Videos (ELRV)