

### B.Sc.

### **SEMESTER – III**

## EC-301 - Disaster Management

#### **SEMESTER PATTERN :**

- The Course content has been designed on **Semester pattern**.
- The workload for Theory is allotted on Semester pattern.
- There shall be **01 Theory papers 70 marks** of 2.30 Hours duration.
- Total Teaching Period 45 lectures.

Paper No.	Name Of The Paper	Total Marks (Internal)	Passing Standarad	Total Teaching Hours	Exam Hours	Credits
EC- 301	Disaster Management	70 + 30	28+12	15 WEEKS X 3 HOURS =45	03	02



## **B.Sc. Semester: III**

# Paper EC: 301

Title of the Paper: Disaster Management.

Marks : 70 + 30

Credits: 02

Unit	Detailed Syllabus	Marks/ Weight		
	Introduction to Natural Disaster	weight		
	Introduction to 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.			
1	Technological Disasters:			
	Chemical, industrial, radiological, nuclear.			
	<b>Man-made Disasters</b> : Building collapse, rural and urban fire, road and			
	aril accidents, nuclear, radiological, chemicals and biological disasters.			
	<b>Global Disaster Trends</b> – Emerging Risks of Disasters – Climate Change			
	and Urban Disasters.			
	Earthquake			
	Introduction, Examples of Earthquake from the record, Precautions taken			
	luring Earthquake, Richter scale.			
	Destruction caused by earthquake, Earthquake prone zone of India.			
	Land slide			
	Causes of landslide, Types of landslide			
	Sliding forces, Clues to land slides			
	Prevention of landslides, Damage caused by land slide.	14		
2	Tsunami			
	Introduction			
	Tsunami in India, Precautions taken during Earthquake			
	Destruction caused by tsunami			
3A	Flood			
	Types of flood			
	Causes of flood, Damage caused by flood			
	Protective steps against flood, What to do after flood			
	Organization involved in flood relief	14		
	Major flood records in India			
	Rain Water Harvesting			
	Introduction			
	Need for rain water harvesting,			



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	Method for rain water harvesting				
	Cyclone				
3B	Introduction				
	Cyclones of India, Cyclones prone areas of India				
	Destruction caused by cyclones	14			
	Fire and Fire Prevention				
	Precaution for fire, What to do and not to do during fire.				
	Fire safety Management.				
	Drought				
	Introduction				
	Types of drought, Causes of drought				
4	Impact of drought, Drought management				
	Disaster Management in India				
	Disaster Management Act 2005 – Institutional and Financial Mechanism	14			
	National Policy on Disaster Management, National Guidelines and Plans				
	on Disaster Management;				
	Role of Government (local, state and national),				
	Non-Government and Inter-Governmental Agencies				

## **:: REFERENCE BOOK ::**

- 1. **Paryavaran Adhyayan**–University Grants Commission Oriental longman private limited.
- 2. **Paryavaran and Aapatti Vyavasthapan [Gujarati]**, Modi C D & others (2006). Swami prakashan, Patan-384265
- 3. **Paryavaran and disaster management [Gujarati]**, Patel J C (2006), Parshwa publication, Ahmedabad-380001
- 4. **Disaster Management**, K Ramana Murthi, 2004, Dominant Publishers and Distributors,New Delhi.
- 5. **Concept of Ecology**: N. Arumugam Saras publication.