



# बिरसा मुंडा ट्रायबल युनिवर्सिटी Birsamunda Tribal University

राजपिपला, जि० नर्मदा Rajpipla, Dist. Narmda

Established by Tribal Development Department, Govt. of Gujarat

## School of Science B.Sc. (Chemistry) Programme

**Subject Code & Name: - BS04AECHE2 Disaster Risk Management**

### Teaching and Evaluation Scheme:

Teaching Scheme				Examination Scheme			
Credits				Component Weightage (%)			
				CCE		SEE	
L	T	P	Total	TH	PWE	TH	PWE
2	0	0	2	50	---	50	---

Programme Name	B.Sc. (Chemistry)
Semester	IV
Course Code	BS04AECHE2
Course Title	Disaster Risk Management
Course Content Type (Th./Pr.)	Theory
Credit	2 credits
Sessions+ Lab. Per Week	2
Total Teaching/Lab. Hours	30 Hours
* 2 Laboratory = 1 Session	

### Learning Objectives

The course is intended to provide a general concept in the dimensions of disaster caused by nature beyond the human control as well as the disasters and environmental hazards induced by human activities with emphasis on disaster preparedness, response and recovery.

1. To study the different types of natural and man made disasters.
2. To understand about the disaster management system and it's functioning.

### Prerequisites (if any)

### Learning Outcomes

On the Completion of this course, students will able to:

1. Explain about concepts of disaster management and types of disasters
2. Explain the vulnerability profile of India & legal framework in India
3. Discuss about disaster preparedness and Response







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Detailed Contents		
UNIT	TOPIC/SUB-TOPIC	TEACHING HOURS
I	<b>Introduction on Disaster:</b> <b>Different types of Disaster:</b> Natural Disaster such as <ul style="list-style-type: none"><li>• Flood</li><li>• Cyclone</li><li>• Earthquake</li><li>• Landslide (causes, warning systems, precautions etc.)</li></ul> Manmade Disaster: such as <ul style="list-style-type: none"><li>• Fire,</li><li>• Industrial Pollution,</li><li>• Nuclear disaster,</li><li>• Biological disaster,</li><li>• Accidents (Air, Sea, Rail &amp; Road),</li><li>• Structural Failures (Buildings and Bridges),</li><li>• War &amp; Terrorism etc.</li></ul>	15
II	<b>Disaster preparedness and Response:</b> <b>Preparedness-</b> <ul style="list-style-type: none"><li>• Disaster Preparedness: Concept and Nature</li><li>• Disaster Preparedness Plan</li><li>• Prediction, Early Warnings and Safety Measure of Disaster.</li><li>• Role of Information, Education, Communication and Training</li><li>• Role of Government, International and NGO bodies</li><li>• Role of IT in Disaster Preparedness</li></ul> <b>Response-</b> <ul style="list-style-type: none"><li>• Disaster Response: Introduction</li><li>• Disaster Response Plan</li><li>• Communication, Participation and Activation of emergency preparedness plan</li><li>• Search, Rescue, Evacuation and Logistic Management</li><li>• Role of Government, International and NGO Bodies.</li><li>• Psychological Response and Management (Trauma, Stress, Rumor and Panic)</li><li>• Medical health response to Different Disasters</li><li>• Relief and Recovery</li></ul>	15





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### Text Book(s)

1. Disaster Management by Dr. Mrinalini Pandey, Wiley India Pvt. Ltd.
2. Disaster Science and Management by Tushar Bhattacharya, Mc. Graw Hill Edu.
3. Disaster Management: Future Challenges and Opportunities by Jagbir Singh, K W Publishers Pvt. Ltd.
4. Disaster Management by H. K. Gupta, 2<sup>nd</sup> Edition, University Press, 2001
5. Disaster Management by R. B. Singh, Rawat Publication, New Delhi, 2000.

### Practical

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### Reference Books

1. Biodiversity, Environment and Disaster Management by Shailesh Shukla, Shamna Hussain, Unique Publications
2. Disaster Management by J. P. Singhal, Laxmi Publications.
3. Disaster Management and Risk Reduction, Role of Environmental Knowledge, Narosa Publishing House, Delhi (2013).
4. Disaster Management, D.B.N. Murthy, Deep and Deep Publication Pvt. Ltd. New Delhi (2012).
5. Managing Natural Disasters, S. Modh, Mac Millan publishers India Ltd. (2010).

### Web Resources

1. <https://www.youtube.com/live/dJNooEJ8alo?feature=shared>
2. <https://www.youtube.com/live/dJNooEJ8alo?feature=shared>
3. [https://youtu.be/9WIwljva\\_s?feature=shared](https://youtu.be/9WIwljva_s?feature=shared)
4. [https://youtu.be/AchtgtBjc\\_I?feature=shared](https://youtu.be/AchtgtBjc_I?feature=shared)
5. <https://youtu.be/2B823bEBKGU?feature=shared>

### Required Software(s) (if any)

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**L::** Lecture, **T::** Tutorial, **P::** Practical

**CCE::** Continuous and Comprehensive Evaluation

(CCE Theory includes Mid Semester Examination, Assignment, MCQ quizzes, Seminar, Reflective notes, class participation, case analysis and presentation, slip tests (announced/surprised), attendance etc. or any combination of these)

**PWE::** Practical Work Examination

(PWE includes Laboratory practical work, project work, viva simulation exercise work etc.)

**SEE::** Semester End Evaluation

