

Course Code	Course Name	L-T-P-Credits	Year of Introduction
CE369	DISASTER MANAGEMENT	3-0-0-3	2016
<b>Prerequisite: NIL</b>			
<b>Course objectives:</b>			
<ul style="list-style-type: none"> <li>To provide an overview of the common hazards and their dynamics</li> <li>To inculcate the basic concepts of disaster management</li> </ul>			
<b>Syllabus :</b>			
<p>Fundamental concepts of hazards and disasters: Relationship between disasters and development, implications. Introduction to key concepts and terminology of hazard, vulnerability, exposure, risk, crisis, emergencies, Disasters, Resilience.</p> <p>Types of Natural Disasters I- Earth quakes, Landslides. Classification of Disasters and nature of Impacts.</p> <p>Types of Natural Disasters II- Floods, Coastal disasters-Tidal waves, Cyclones, Tsunamis. Classification of Disasters and nature of Impacts.</p> <p>Types of Anthropogenic Disasters I – Soil degradation and desertification.</p> <p>Types of Anthropogenic Disasters II- Fundamental concepts of water and atmospheric pollution.</p> <p>Hazard and disaster management plans for floods, cyclones, tidal waves.</p>			
<b>Expected Outcomes:</b>			
<p>The students will</p> <ol style="list-style-type: none"> <li>gain the general ideas about the processes involved in natural and anthropogenic disasters</li> <li>understand the concepts of disaster management and measures taken to mitigate and contain common episodes of disasters</li> </ol>			
<b>References :</b>			
<ol style="list-style-type: none"> <li>Andrew, S., "Environmental Modeling with GIS and Remote Sensing", John Willey, 2002</li> <li>Ariyabandu, M. and Sahni P. "Disaster Risk Reduction in South Asia", Prentice-Hall (India), 2003.</li> <li>Bell, F.G., "Geological Hazards: Their assessment, avoidance and mitigation", E &amp; FN SPON Routledge, London. 1999</li> <li>Bossler, J.D., "Manual of Geospatial Science and Technology", Taylor and Francis, 2001</li> <li>David Alexander, "Natural Disasters", Research Press, New Delhi, 1993</li> <li>Matthews, J.A., "Natural hazards and Environmental Change", Bill McGuire, Ian Mason, 2002</li> <li>Mitigating Natural Disasters, Phenomena, Effects and options, A Manual for policy makers and planners, United Nations. New York, 1991</li> <li>Nick Carter. W., "Disaster Management - A Disaster Manager's Handbook". Asian Development Bank, Philippines. 1991</li> </ol>			
COURSE PLAN			
Module	Contents	Hours	Sem. Exam Marks %

<b>I</b>	Fundamental concepts of hazards and disasters: Relationship between disasters and development, implications. Introduction to key concepts and terminology of hazard, vulnerability, exposure, risk, crisis, emergencies, Disasters, Resilience.	7	15
<b>II</b>	Types of Natural Disasters I- Earth quakes, Landslides. Classification and nature of impacts.	7	15
<b>FIRST INTERNAL EXAMINATION</b>			
<b>III</b>	Types of Natural Disasters II- Floods, Coastal disasters- Cyclones, Tsunamis. Classification and nature of impacts.	7	15
<b>IV</b>	Types of Anthropogenic Disasters I- soil and soil degradation, desertification.	7	15
<b>SECOND INTERNAL EXAMINATION</b>			
<b>V</b>	Types of Anthropogenic Disasters II-Fundamental concepts of water and atmospheric pollution.	7	20
<b>VI</b>	Hazard and disaster management plans for floods, cyclones, tidal waves.	7	20
<b>END SEMESTER EXAMINATION</b>			

### QUESTION PAPER PATTERN (End semester examination)

**Maximum Marks :100**

**Exam Duration: 3 Hrs**

Part A -Module I & II : 2 questions out of 3 questions carrying 15 marks each

Part B - Module III & IV: 2 questions out of 3 questions carrying 15 marks each

Part C - Module V & VI : 2 questions out of 3 questions carrying 20 marks each

**Note :** 1.Each part should have at least one question from each module

2.Each question can have a maximum of 4 subdivisions (a, b, c, d)