

CIV890:DISASTER PREPAREDNESS AND MITIGATION

L:3 T:0 P:0 Credits:3

Course Outcomes: Through this course students should be able to

- Describe the basic terms and definition related to Disaster Management
- Differentiate between natural and technological disasters and their challenges involved.
- Evaluate the efficiency, effectiveness and impact of disaster emergency response mechanism at the community, national and Federation level.
- Explain the basic requirement and preparedness for Disaster management
- Summarize the knowledge towards the assessment of various hazards, disasters and their mitigation.

Unit I

Introduction to Disaster : Concepts and definitions of disaster, Hazard, Vulnerability, Risk, Capacity, Impact, Prevention and mitigation

Natural Disaster : Floods, Draught, Cyclones, Volcanoes, Earthquakes, Tsunami, Landslides, Coastal erosion, Soil erosion, Forest fires

Unit II

Man-made Disaster : Industrial pollution, Artificial flooding in urban areas, Nuclear radiation, Chemical spills, Hazard and vulnerability profile of India

Unit III

Disaster Impacts : Disaster impacts, Health, Psycho-social issues, Demographic aspects, Hazard locations, Global and national disaster trends, Climate change and urban disasters

Unit IV

Disaster Risk Reduction : Disaster management cycle, Prevention, Mitigation, Preparedness, Relief and recovery, Structural and non-structural measures, Risk analysis, Phases of disaster management cycle, Early warning systems

Unit V

Post Disaster Issues : Post-disaster environmental response, Roles and responsibilities of government, Community, Local institutions, NGOs and other stakeholders, Policies and legislation for disaster risk reduction, DRR programmes in India and the activities of National Disaster Management Authority

Unit VI

Disasters, Environment and Development : Factors affecting vulnerability such as impact of developmental projects and environmental modifications, Sustainable and environmental friendly recovery, Reconstruction and development methods

Text Books:

1. DISASTER MANAGEMENT by DR. MRINALINI PANDEY, WILEY

References:

1. DISASTER MANAGEMENT GLOBAL CHALLENGES AND LOCAL SOLUTIONS by RAJIB SHAW AND R R KRISHNAMURTHY, UNIVERSITIES PRESS PVT. LTD
2. SUSTAINABLE RURAL DEVELOPMENT FOR DISASTER MITIGATION by VINOD K. SHARMA, SATENDRA, CONCEPT PUBLISHING

References: 3. DISASTER MITIGATION: EXPERIENCES AND REFLECTIONS by PARDEEP SAHNI,
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