



BUNDELKHAND UNIVERSITY, JHANSI

SYLLABUS FOR POSTGRADUATE COURSES (Minor -1)

(Open elective Course for the all Discipline PG Students)

Title of paper: Disaster Management

Total Credit: 04

Type: Elective

Total hours: 50 L

UNIT I: *Introduction to Disasters*

Understanding of Hazard, Vulnerability & Disasters. Concept of Risks, Evaluation of Risks. Climate change Risk (IPCC Report): Natural & man-made factors. Driving forces of Vulnerability of cities. Landforms Developing forces: Endogenetic & Exogenetic. Concept of on-site Disasters.

UNIT II: *Types of Disasters*

Classification of Disasters. (Natural & man-made) Natural Disasters: Climatic Disasters (wind & water related): Tropical Cyclone, Floods & Drought. Earth related Disasters (Geological Disaster): Earthquake, Tsunami, and Landslides & Volcano Eruption.

Man-made Disasters: Industrial (on-site) Disasters: Toxic Gas leak, Explosion, Nuclear & chemical Disaster (BLEVE) Technological Disasters (Accidental Disasters): Rail, Road, Air & Sea. Ecological Disasters: Pollution, Soil Degradation, Loss of Biodiversity & Global warming. Epidemics: Cholera, Typhoid. Biological Disasters: COVID-19

UNIT III: *Disaster Management*

Basic measures for Disaster management: Preventive Measures, Preparedness Measures (Disaster mapping profile), Predictability, Forecasting & Warning. Response and Relief measures. Recovery & Rehabilitation measures.

UNIT – IV: *Disaster Preparedness and Training*

Disaster Management Bill, 2005. Institutional Framework for Disaster Management. Role of Media in Disaster Management. Basic Safety Measures (Pre and During): Earthquake & Floods.

Unit V: *Mitigation Strategies*

Disaster Mitigation – Emerging Trends in Disaster Management - UN Draft Resolution on Strengthening of Coordination of Humanitarian Emergency Assistance

References:

- IPCC, 2001: Impacts Adaptation and Vulnerability, GRID, Aewndal.
- Natural Hazards, Bryant Edwards (2005), Cambridge University Press, U.K.
- Space Technology for Disaster management: A Remote Sensing & GIS Perspective, Roy, P.S. (2000), Indian Institute of Remote Sensing (NRSA), Dehradun.
- Natural Disaster, Sharma, R.K. & Sharma, G. (2005), (ed) APH Publishing Corporation, New Delhi
- Disaster Management: A disaster Manager's Handbook, Carter, N W. (1992), Asian Development Bank, Manila.