

**1<sup>st</sup> Semester**  
**Major Course**  
**DMG122J DISASTER MANAGEMENT (HAZARDS AND DISASTERS)**  
**CREDITS: THEORY 04, PRACTICAL 02**

*Course Outcome/Learning Objectives: This course has been designed to discuss the concept, nature, origin and types of hazards and Disasters. The course is expected to make the learners aware about the genesis of hazards arising out of Geological, Geophysical, Hydro-meteorological, Environmental and other Anthropogenic Processes.*

**THEORY (4 CREDITS)**

**UNIT-I**

1. Concept of Hazard
2. Classification of Hazards
3. Characteristic Features of Hazards
4. Disaster: Definition and Concept

**UNIT –II**

Geological Hazards:

1. Earthquakes
2. Landslides
3. Volcanoes
4. Tsunamis

**UNIT –III**

Hydro-meteorological Hazards:

1. Floods
2. Droughts
3. Cyclones
4. Snow Avalanches

**UNIT -IV**

Human-induced Hazards:

1. Biological hazards
2. Urban and Wild Fires
3. Air and Water pollution
4. Technological hazards

**PRACTICAL (2 CREDITS)**

**UNIT -V**

1. Interpretation of Seismogram
2. Measuring of Earthquake Magnitude
3. Measuring of Earthquake Epicenter

**UNIT –VI**

Identification and Interpretation of the following in the field:

1. Hazards
2. Vulnerability
3. Elements at Risk

**SUGGESTED READINGS**

1. Encyclopedia of Disaster and Hazards Management. Oxford Book Company
2. Environmental Disasters; KK Singh, et. Al. APH Publishers
3. Forest Fire Disaster Management; Satendra, 2014. A. D. Kaushik
4. Geological Hazards and Hydro-meteorological Hazards [www.nidm.gov.in](http://www.nidm.gov.in)
5. Man-made Disasters; Barry A. Tuner, Nick Pidgeon.
6. Earthquake & Natural Disasters; Manik Kar. Motilal Banarsidass Publishers Private Limited.
7. Encyclopedia of Disaster Management; PC Sinha. Anmol Publishing House.