

M.Sc. Environmental Science
Semester-IV
NATURAL HAZARDS AND DISASTER
MANAGEMENT

UNIT- I

Snow Avalanches: Origin and impacts.

Floods – Type of floods, causes of floods, nature and frequency of flood, flood management and control.

UNIT – II

Coastal hazards - Cyclones, Tsunami, Tides, prediction and coastal zone management.

Drought: Definition, types, assessment and mitigation.

Forest Fire: Causes and consequences, monitoring and mitigation.

UNIT- III

Earthquakes – Seismology, causes, intensity and magnitude of earthquakes, earthquake mitigation for buildings and dams; seismic zones of India.

Landslides – Types, causes, control and mitigation measures of landslides.

Volcanoes - Nature, types and extent of volcano, causes of volcanism, volcanic materials

UNIT –IV

Disaster Management: Disaster Management in India; Disaster Management Act 2005; National Guidelines and Plans on Disaster Management; Role of Government, Non-Government and Inter- Governmental Agencies;

National Disaster Management Authority (NDMA);
NIDM (National Institute
of Disaster Management), international and national
agencies in disaster management.