

### SEMESTER-III

**MEN-C 301 : Environmental Impact Assessment and Disaster management M.M.: 70**

#### UNIT – I

Environmental impact assessment: Introduction, aims, objectives, constraints in EIA, environmental assessment process (impact prediction, evaluation, mitigation and monitoring), environmental impact statement (EIS), methods of impact analysis (check lists, overlays, matrices, models, comparative studies), environmental items in Leopold's identification matrix, questions for impact identification, impact interpretation, impact communication, impact statements.

#### UNIT – II

EIA Guidelines of GOI (2015). Prediction, evaluation, assessment and monitoring of impacts of different developmental activities on the air environment, water environment, noise environment, biological environment, cultural environment, socio-economic environment.

#### UNIT – III

Impacts of urbanization, socio-economic and environmental impacts of tourism, impact of coal mining and stones, Types of dams, impact of hydroelectric development projects, impact of fly ash, impact of sewage and other effluents, impact of leather tanning.

#### UNIT – IV

Introduction to catastrophic geological hazards. Type of disasters (Natural and manmade), Casual factors of disasters, phases of disasters. Study of floods, droughts and their types, earthquakes, Tsunami, landslides, volcanism and avalanche., Uttarkashi (1991), Latur (Killari-1993) & Nepal (2015) earthquakes, Kedarnath aapda (2013), Kerala flood ( 2018): implications and lessons.

#### UNIT – V

Action plan for earthquake disaster mitigation, flood mitigation practices in India, drought management through anticipatory multidimensional approach. controlling the landslides. Flood management, monitoring of avalanches. Man made Disasters and Hazards- Improper Irrigation, deforestation, Industrial hazards- safety in industry. Management of dangerous materials in Industry, Safety system in industry. Disaster and accident prevention. National Disaster management act (2005).

**NOTE:** The question paper shall consist of two sections (A & B). Section A shall contain ten short answer type questions of six marks each and student has to attempt any five questions in about 150 words each. Section B shall consist eight long answer type questions of ten marks each and student shall be required to attempt any four questions in detail. Questions shall be uniformly distributed from the entire syllabus. The previous year paper can be used as a guideline and the following syllabus should be strictly followed while setting the question paper.