M.Sc.(Previous) Environmental Sciences Semester –II

Paper - IV

Environmental Hazards and its management

Unit I

Natural Disasters: nature causes and effect, Cyclone ,tornadoes ,floods, earthquakes, avalanches, land slides, drought, fires, volcanism, Case study of disasters, community reaction to disasters, coping mechanism classes of victims ,disaster management, pre disaster phase, actual disaster phase, post disaster phase.

Unit II

Disaster assistance, technological assistance relief camps, organization camp layout, food requirement, water needs, sanitation security, information administration fire fighting camping and tent pitching, rope knots and their use, rescue, emergency rescue, disaster education, alternative and new direction.

Unit III

Concept of disaster recovery, mitigation and preparedness, program planning and management, occupational risk analysis survey and health evaluation, behavioural studies occupational injury, disease reporting, investigation monitoring and control of environmental hazards.

Unit IV

Occupationally induced illness, non-occupational illness. discomfort at work, epidemiological approach ,radioactive material, dispersion of radioactive material. Risk assessment techniques for release of toxic and inflammable material ,hazard analysis, potential risk, conceivable release mechanism and release rates.

Unit V

Environmental hazards, protective measure while handling hazardous substance, hazardous waste disposal. Hospital waste handling and disposal, guidelines for their disposal, fire and explosion hazards, radiation hazards. Case studies related to hazardous waste, accidents simplified measures for their assessment. Various diseases related to handling of hazardous waste. nasal cancer and other fatal diseases their symptoms prevention and control.