

## Annexure I

### Syllabus for Entrance Test of M.Sc. Environmental Science

**Note:** The entrance test will have 50 multiple choice questions of 2 marks each. The time for entrance test will be 90 minutes. There will be no negative marking. The question paper will be framed covering uniformly the entire syllabus.

**Natural resources and Management:** Natural Resources - Forest, Water, Minerals, Marine, Energy (Renewable and Nonrenewable) - Sources, Threats, Conservation and Management.

**Ecology and Environment:** Biosphere, Organizational levels of biosphere, Ecosystem: Structure and types, Food Chain, Food Web, Energy Flow in ecosystem, Population and Community Ecology, Biodiversity and its Conservation.

**Environmental Pollution:** Sources, causes, effects and consequences of Air, Water, Soil, Noise, Thermal, and Radioactive Pollution.

**Earth Sciences:** Structure and composition of Environment- Atmosphere, Hydrosphere and Lithosphere, Earth Processes, Meteorology: Temperature, Pressure, Wind.

**Physical and Chemical Sciences:** Atmospheric Chemistry, Water Chemistry, Geochemistry, Green chemistry, Water - physical characteristics, Bio-molecules - chemical components of cells, Bio-geochemical cycles - carbon, nitrogen and phosphorus, Hydrological cycle, Toxicity of Arsenic, Cadmium and Mercury, Chemical equilibrium, chemical thermodynamics, chemical kinetics, electromagnetic waves.

**Mathematics and Statistics:** Basic concepts of Logarithms, Trigonometry and Probability, Mean, mode and median, standard deviation, correlation, regression.

**Global Environmental issues:** Ozone depletion, Climate Change, global warming, Acid rain, Smog, Waste Management: Solid waste - Disposal, Management; Waste to energy conversion, Social issues related to environment.

  
(M. K. Kidwai)

  
(Rani Devi)

Chemistry, Geochemistry,  
chemical components of cells,  
hydrological cycle, Toxicity of  
thermodynamics, chemical

Probability, Mean,

global warming, Acid rain.

Anju  
(Anju)  
08/05/22