

**SYLLABUS FOR GSAT-2020**  
**For Admission to M.Sc. Environmental Science**  
**Test Code: 102 B**

**Multidisciplinary nature of Environmental Studies:** Definition, Scope and Importance – Need for Public Awareness.

**Ecosystems:** Concept of an ecosystem - Structure and function of an ecosystem - Producers, consumers and decomposers - Energy flow in the ecosystem - Food chains, food webs and ecological pyramids. Typical Structure of Ecosystem – Forest, Grassland, Desert and Aquatic ecosystems.

**Biodiversity and its conservation:** Biodiversity, Definition, Types of Biodiversity (Genetic, Species and Ecosystem), Causes for depletion of biodiversity, Ecological importance of biodiversity Conservation of Biodiversity at national level.

**Natural Resources:** Forest resources – Use and over – exploitation, deforestation - Mining, dams and other effects on forest and tribal people.

**Water Resources** – Use and over utilization of surface and ground water – Floods, drought, dams – benefits and problems - Food resources: World food problems, effects of modern agriculture, fertilizer-pesticide problems, water logging and salinity.

**Energy and Land resources:** Solar Energy, Wind Energy, Types of Indian Soils, Reasons for depletion of fertile soil and conservation of soils.

**Environmental Pollution:** Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution and Noise pollution.

**Solid waste Management:** Causes, effects and control measures of urban and industrial wastes. – Role of an individual in prevention of pollution.

**Social Issues and the Environment:** From Unsustainable to Sustainable development -Urban problems related to energy - Water conservation, rain water harvesting, and watershed management.

**Global Environmental Problems:** Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents.

**Human Population and the Environment:** Environment and human health. Trends of Population growth in urban areas, reasons for population explosion and its control.

## MODEL QUESTIONS

1. The term “Ecosystem” is coined by [    ]  
a) Ernst Haeckel   b) Frederic Clements   c) E .P. Odum   d) A.G.Tansley
  
2. The following Gas is responsible for Global warming [    ]  
a) Carbon dioxide   b) Sulphur dioxide   c) Oxides of Nitrogen  
d) None of the above
  
3. World Environmental Day is celebrated on [    ]  
a) Jan 5<sup>th</sup>            b) June 5<sup>th</sup>            c) July 5<sup>th</sup>            d) Sept 5<sup>th</sup>

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