TS- 5 ECOLOGY, ENVIRONMENT AND TOURISM
(TUTOR MARKED ASSIGNMENT)

Course Code: TS-5 **Programme: DTS**
Total Marks: 100 **Assignment Code: TS-5/ TMA/ 2026**

Note: This TMA consists of ten questions, out of which you have to attempt any five.
The question carries 20 marks each and should be answered in about 600 words each.
Send your TMA to the coordinator of your Study Centre.

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1. Explain with examples the different components of the abiotic environment. Also discuss how they have changed with time. **20**

2. Discuss the concept of environment and its conservation in the Indian philosophical tradition. **20**

3. What are the different Biomes of India? How can the biomes be used as a tool for Tourism Promotion? Support your answer with suitable examples. **20**

4. Discuss the various environmental issues to be considered while developing coastal areas for tourism purposes. **20**

5. Differentiate between the following: **5 X 4 =20**

i) Slow Changes and Fast Changes in the Environment
ii) Freshwater Biome and Marine Biome
iii) Parasitism and Mutualism
iv) Food Chain and Food Web
v) Tropical Deciduous Forests and Tropical Rain Forests

6. What is meant by Carrying Capacity in Tourism? What is the need of Tourism Carrying Capacity? Explain with the help of suitable examples. **20**

7. Define Wetlands. Explain its significance and suggest measures for its conservation. **20**

8. Define Responsible Tourism. Discuss the ways in which responsible tourism helps in preserving nature. **20**

9. Critically analyse the impact of Adventure Sports on the environment. Support your answer with suitable examples. **20**

10. Write short notes on ***any two*** of the following: **2X10 = 20**

i) Ecosystem
ii) Politics of Environment
iii) Importance of Biodiversity for Tourism

1. Explain with examples the different components of the abiotic environment. Also discuss how they have changed with time.

Answer

Meaning and importance of abiotic environment

The environment includes living organisms as well as the non-living conditions around them. The non-living part is called the abiotic environment. It supplies the space, energy and materials on which plants, animals and human communities depend. Sunlight enables photosynthesis, water supports life processes, air provides important gases, and rocks and soil supply minerals. Temperature, rainfall and landforms also decide which kinds of organisms can live in a place. A sandy desert, a mountain slope and a tropical forest therefore have very different living communities, even when some of the same plants or animals could potentially reach them. The main abiotic components are discussed below.

Air and the atmosphere

The atmosphere is the layer of gases surrounding the earth. Nitrogen and oxygen form most of it, while carbon dioxide, water vapour and other gases occur in smaller amounts. Oxygen is needed for respiration, carbon dioxide is used by green plants, and atmospheric water vapour is involved in cloud formation and rain. Winds transfer heat and moisture from one region to another. For example, the Indian summer monsoon brings moisture from the surrounding seas and supports agriculture, forests and freshwater bodies over large areas. The atmosphere also protects life by filtering harmful ultraviolet radiation through the ozone layer. Air quality is an abiotic condition that directly affects health, visibility and outdoor tourism.

Water and the hydrosphere

The hydrosphere includes oceans, seas, rivers, lakes, wetlands, groundwater, glaciers and atmospheric moisture. Water is essential for drinking, plant growth, nutrient transport and aquatic habitats. Its availability, depth, flow, temperature and salinity shape ecosystems. The saline water of the Arabian Sea supports different communities from the freshwater of the Ganga and its tributaries. Seasonal streams may flow strongly during the monsoon and become nearly dry in summer. In tourism, rivers and lakes support boating and recreation, while dependable drinking water and sanitation are necessary for hotels and visitor facilities.