

Time: 2:30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Q.1 Answer the following (any 7)** 14
1. Explain the term 'Ecotone'.
 2. Describe the age structure as a character of population.
 3. What is mutualism and commensalism in species interaction?
 4. Define the terms (i) Ecology (ii) Ecosystem
 5. What is primary production in an ecosystem
 6. What is desertification?
 7. Define the term monospecific and polyspecific species in ecology
 8. What do you mean by limiting factors in ecology?
 9. What is weathering process in soil formation?
 10. Define – Plant indicators
- Q.2 Answer the following (any two)** 14
1. Describe the general characteristics of community
 2. Explain the analytical characters of a community
 3. Give a detailed note on various growth forms of community
- Q.3 Answer the following** 14
1. Explain various methods used for measuring productivity
 2. Write a note on basic types of succession
- OR**
- Q.3 Answer the following** 14
1. Write a detailed note on trends and causes of ecological succession
 2. Describe the energy flow by giving an hypothetical example
- Q.4 Answer the following (any two)** 14
1. Explain the term 'Population Dynamics' by describing the equations
 2. Define species interactions. Describe the negative interaction in detail.
 3. Carrying capacity - Elaborate
- Q.5 Answer the following (any two)** 14
1. Explain the structure of soil
 2. Describe the process of mineralization of nitrogen
 3. Write a note on various causes of desertification
 4. What are the effects of fire on grassland and forests?