

Duration: 2hrs

Marks 50

NB:- 1. All questions are compulsory.

2. Draw neat labelled diagram wherever necessary.

3. All questions carry equal marks.

- Q.1** Answer any **two** questions from the following (10)
- Define ecology? Comment on the scope of ecology. (05)
 - Distinguish between aquatic and terrestrial ecology. (05)
 - Define community? Explain its types in details. (05)
 - Explain different types of interactions in Environment.
- Q.2** Answer any **two** questions from the following (10)
- Explain the various Interactions between populations with suitable examples. (05)
 - Give a brief note on Biota in different types of zones, its diversity & adaptations. (05)
 - Describe ecological importance of mangrove vegetation & distribution of mangrove areas in India. (05)
 - What is Littoral Zones? Explain in detail. (05)
- Q.3** Answer any **two** questions from the following (10)
- Explain in detail mass and energy transfer in successive tropical level. (05)
 - Differentiate between Bioaccumulation and Bio magnifications with examples. (05)
 - State the importance of Biotic and Abiotic components in the functioning of the ecosystem. (05)
 - Give a brief note on Ecological Pyramid. illustrate with a suitable diagram.
- Q.4** Answer any **two** questions from the following (10)
- Explain in detail carbon cycle with suitable diagram. (05)
 - Give a brief note on Flow and energy fixation in ecosystem. (05)
 - What is Biogeochemical cycle? Explain their importance in detail. (05)
 - Explain in detail Sulfur and Phosphorus cycle with diagram. (05)
- Q.5** Answer any **Four** questions from the following (10)
- Indian Marine Territory $2^{1/2}$
 - Secondary succession $(2^{1/2})$
 - Biomes $(2^{1/2})$
 - Niche $(2^{1/2})$
 - Ballast water $(2^{1/2})$
 - Exclusive Economic Zones $(2^{1/2})$
 - Antibiosis $(2^{1/2})$
 - Estuarine ecology $(2^{1/2})$
