

M.Sc. (Part - I) (Environmental Science) (NEP Pattern) Semester-I  
**NEP-43 / PMENVT03 - Paper-III : Ecology**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15096**

Max. Marks : 80

---

Notes : 1. All questions are compulsory and carry equal marks.

1. Discuss temperature as a limiting factor with the help of examples. **16**
- OR**
- a) Describe the objectives of ecology and subdivision of ecology. **8**
- b) Explain in detail fire as limiting factor. **8**
2. Discuss commensalism as biotic interaction with the help of examples. **16**
- OR**
- a) Describe benthos and periphytons as an indicator of water quality. **8**
- b) Explain characteristics of fresh water habitat. **8**
3. Discuss in brief the characteristic of population ecology. **16**
- OR**
- a) Describe the growth and structure as characteristic of community ecology. **8**
- b) Explain the ecological succession in xerosere. **8**
4. Discuss biogeochemical cycle w.r.t. Nitrogen and oxygen. **16**
- OR**
- a) Write about ecological pyramids. **8**
- b) Discuss anthropogenic impact of ecological perturbation on ecosystem. **8**
5. a) Write a note on Shelford's law of Tolerance. **4**
- b) Explain competition as negative interaction. **4**
- c) Explain the periodicity as characteristics of community ecology. **4**
- d) Write about function of the ecosystem. **4**

\*\*\*\*\*