## Bachelor of Science (B.Sc.) (Part-I) First Semester (Old Course)

## 02-P-II - Environmental Science Paper-II : Ecology

GUG/W/18/1209 P. Pages: 1 Time: Three Hours Max. Marks: 50 Notes: 1. All questions are compulsory and carry equal marks. Illustrate the answers with suitable diagrams and examples. 2. Discus any two types of positive interactions among organisms with examples. 10 1. OR Define community. Describe any two characteristics of community ecology. 2. What are ecological pyramids? Explain pyramids of number and biomass. 10 Describe adaptations in aquatic animals. **3.** a) Describe wind as an environmental factor.  $2^{1/2}x4=10$ Write about ecotone and edge effect. b) How productivity is measured by harvest method? c) Explain protective mimicry with examples. d) OR Give the modern branches of ecology.  $2^{1/2}x4=10$ e) Write significance of ecological succession. f) What are the types of ecosystem? g) How coloration is used for warning and signalling. h) 4. Explain Liebig's Law of minimum.  $2^{1/2}x4=10$ a) Discuss age structure of population. b) Explain light and dark bottle method for the measurement of productivity. c) What are the different causes of coloration. d) OR What is the scope of ecology?  $2^{1/2}x4=10$ e) Explain the concept of carrying capacity. f) With the help of sketch explain oxygen cycle. g) Elaborate the terms-protective mimicry and biomimicry. h) 5. Answer in 2-3 lines any ten. 10 Give objectives of ecology. a) State the Shelford's law of tolerance. b) Give the examples of antibiosis. c) What are keystone species? d) Define natality of population. e) What is migration of population? f) Define GPP. g) Give the components of grassland ecosystem. h) What is sedimentary cycle? i) Give any two examples of hydrophytes. j) What is camouflage? k) What are xerophytes? 1) \*\*\*\*\*

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