

Sr. No. 2799**Exam. Code: 103206**
Subject Code : 1388**B.A./B.Sc. 6th Sem.****(2517)****Botany Paper-VI-A (Ecology)****Time Allowed: 3 hrs.****Max. Marks: 35****SECTION A****All parts are compulsory Each part of the question carries 1 mark (7 Marks).****I Define the following:****a) Atmosphere b) Heliophytes c) Abiotic d) Alpha diversity e) Ecotype f) Trophic level g) Producers****SECTION B****Attempt any 4 questions out of the given eight questions. Each question carries 7 marks.****II What are the various factors that regulate population size of a species in a community?****III Decomposers play an important role in the nutrient cycling and returning the small molecules back to soil, water or air. Describe the following stages of nitrogen cycle in terrestrial ecosystem a) Ammonification b) Nitrification c) Denitrification****IV What is a food chain and a food web? Provide an example of the same in grassland ecosystem and discuss the various trophic levels.****V Name ten recognizable biogeographical zones of India and provide a brief description of each.****VI Ecological succession is gradual process influenced by various factors. What are the different types of succession that can be observed in a terrestrial ecosystem? Name the factors that can instigate the changes in vegetation structure.****VII Discuss the following a) Producers b) Herbivores c) Carnivores d) Decomposers and provide an example of a food chain that explains their inter-relationship.****VIII Population ecology is the study of how populations — of plants, animals, and other organisms — change over time and space and interact with their environment. Explain the exponential growth and logistic growth models of population.****IX Discuss morphological, anatomical and physiological responses of plants (Hydrophytes and xerophytes) to water, temperature and light.**

2799(2517)1700