

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati
(Autonomous)
Department of Botany
M.Sc. I, BOT 4204 Plant Ecology and Biodiversity
Question Bank

Short Answer Questions
Marks)

(Each Carry 2

- 1) Define habitat and niche.
- 2) Define autecology and synecology.
- 3) Comment on levels of species diversity.
- 4) Concept of wetland with suitable example.
- 5) Comment on topographic factors affecting the plant distribution?
- 6) Comment on the types of ecological pyramids.
- 7) Differentiate autogenic and allogenic succession
- 8) Comment on Natality and Mortality
- 9) Comment on the components of ecosystem.
- 10) Write the ecological features of Halophytes.
- 11) Comment on the ecological features of xerophytes?
- 12) Explain the Plant relation and climatic factors.
- 13) What is species diversity?
- 14) Comment on the factors affecting loss of genetic diversity.
- 15) Define population size and mention the factors affecting population size.
- 16) What is food web?
- 17) What is viviparous germination?
- 18) What is ecological succession?
- 19) Comment on food chain?
- 20) Define population. Write its characteristics.
- 21) Comment on Strategies for Biodiversity Conservation
- 22) What is Extinction? give its types.

- 23) Explain the mechanism and phases of plant succession.
- 24) Comment on the causes of biodiversity loss
- 25) Describe C-S-R triangle.
- 26) Comment on Important National parks and wild life sanctuaries in India.
- 27) Comment on the policies for biodiversity conservation.
- 28) Comment on the factor affecting loss of genetic diversity.

Write Short note
Marks)

(Each Carry 4

- 1 Germplasm Banks.
- 2 Project tiger.
- 3 Keystone Species.
- 4 Biosphere Reserves.
- 5 Hot spots of Indian Biodiversity.
- 6 Indian Board of Wildlife.
- 7 Sanctuary.
- 8 Plant succession.
- 9 Measurements/indices of Biodiversity.
- 10 Components/ Levels/Types of Biodiversity.
- 11 Patterns of biodiversity.
- 12 Noise pollution
- 13 Global warming
- 14 Differentiate community ecology and population ecology.
- 15 Community and community structure.
- 16 Levels of species diversity.
- 17 International programme for conservation of Biodiversity.
- 18 Concept of biodiversity and its scope.
- 19 Write economic uses of biodiversity.

- 20 What are extinction events?
- 21 National Biodiversity Authority (NBA).
- 22 Indian Biodiversity Act.
- 23 Describe the energy flow in a ecosystem.
- 24 Y-shaped energy flow model.
- 25 Edge structure population.
- 26 Population growth curves.
- 27 Kyoto protocol.
- 28 Hydrosere
- 29 Halosere
- 30 Xerosere
- 31 Metapopulation
- 32 NBSAP
- 33 EIA
- 34 Population Viability analysis
- 35 Vernalization
- 36 Winter hardness

Long Answer Questions

(Each question carried 6 Marks)

- 1 Silent features of India's Biodiversity
- 2 Define Biodiversity and write in short global species Diversity.
- 3 Loss of biodiversity and comment on factors affecting on it
- 4 Describe methods of Biodiversity conservation?
- 5 What are the major causes of species losses in a geographical region?
- 6 What are the different reasons of extinction of species?
- 7 Comment on the values and uses of biodiversity
- 8 What is Biosphere Reserve? Write in short on protected areas network of India?
- 9 Explain Plant Relation with respect to topographic factors.

- 10 Define ecosystem. Give an account of the structure and function of an ecosystem.
- 11 Explain factors affecting population size.
- 12 Describe in brief EIA.
- 13 Write note on r and k selection with suitable examples.
- 14 Describe terrestrial ecology.
- 15 What is carbon sequestration?
- 16 Differentiate between Biosphere Reserve, Sanctuary and National Park.
- 17 Comment on ecotone and edge effect.
- 18 Give the concept climax and cerial communities.
- 19 Comment on life history strategies.
- 20 Comment on food chains and food webs.
- 21 What are the sources of water pollution? State its impact.
- 22 Explain the following ecological pyramids
- 23 Write a note on levels and measurements of biodiversity.

Broad Answer Questions

(12 Marks Each)

- 1 Explain in brief the plants relations with various climatic factors.
- 2 Explain in brief the plants relations with various edaphic factors
- 3 Define pollution. Give an account of air pollution.
- 4 Define pollution. Give an account of water pollution.
- 5 Define pollution. Give an account of noise pollution.
- 6 Define pollution. Give an account of soil pollution.
- 7 What are the life history strategies? Comment on r and k selection.
- 8 Define ecosystem. Describe in brief aquatic ecosystem
- 9 Define ecosystem. Describe in brief terrestrial ecosystem

- 10 Define ecosystem. Describe in brief artificial ecosystem
- 11 What is population size? Write in brief about the factors affecting population size.
- 12 Define ecosystem. Comments on component and organization of ecosystem.
- 13 Define plant succession. Comment on mechanism and phases of plant succession.
- 14 Explain in brief the phytogeographic regions of India.
- 15 What are ceral communities? Comment on hydrosere and lithosere
- 16 What are ceral communities? Comment on xerosere and halosere