

M.Sc. (Botany) Semester - 2 (CBCS) Examination
March/April – 2025 (As Per Syllabus Year-2018)
Environmental Science (CORE)

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que-1 Answer any seven of the following. (14)**
- (1) Describe a concept of niche in brief
 - (2) Describe the S shape growth curve of population growth.
 - (3) Explain the K selection.
 - (4) Write a note on interspecific interaction.
 - (5) Describe the various levels of species diversity.
 - (6) Explain the community structure in a grassland biome.
 - (7) Write a note on physical environment.
 - (8) Describe the lithosphere.
 - (9) Describe the primary pollutants.
 - (10) Write the causes for ozone depletion.
- Que-2 Answer any two of the following. (14)**
- (1) What is resource partitioning? Explain with example.
 - (2) Write an essay on demes and dispersal of population.
 - (3) Write a descriptive note on age structured population.
- Que-3 Answer the following questions. (Both are compulsory) (14)**
- (1) The nitrogen cycle in detail.
 - (2) Explain the process of decomposition in detail.
- OR
- Que-3 Answer the following. (14)**
- (1) Write down edges and ecotones. (05)
 - (2) Write note on Grassland ecosystem. (05)
 - (3) Explain energy flow. (04)
- Que-4 A. Answer any two out of following. (10)**
- (1) Explain the structure of a forest ecosystem.
 - (2) Describe the xerosere succession.
 - (3) Describe the biosphere in detail.
- B. Answer any one out of following. (04)**
- (1) Write a note on Girnar wildlife sanctuary
 - (2) Explain the importance of a botanical garden.
- Que-5 Answer any two out of following. (14)**
- (1) Describe the methods of monitoring and control of air pollution.
 - (2) Describe the waste water treatment in detail.
 - (3) Write an essay on application of GIS in environmental management.
 - (4) Write an essay on clean development mechanism.
