

SAVITRIBAI PHULE PUNE UNIVERSITY
Progressive Education Society's
Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016
B.Sc. Blended Program

(A degree of Savitribai Phule Pune University equivalent to the degree of University of Melbourne)

End Semester Examination: October/November 2022(January 2023)

Program: B.Sc. Blended **Program (Specific):** B.Sc. Blended (Chemistry) **Set:** A

Class: S.Y.B.Sc. Blended

Semester: III

Course code: EVSB 310

Course name: Environmental science II

Credits: 3

Time: 2½ hours

Maximum marks: 50

Instructions to the candidate:

- All questions are compulsory.
- Figures to the right indicate marks.
- Draw diagrams wherever necessary.
- Use of scientific calculator is allowed.
- Ask for graph paper if needed.

Q.1] Choose the correct option (Solve ANY 10 out of 12)

[1 x 10 =10M]

1. Which of the following requires maximum energy?
 - a. Secondary consumer
 - b. Decomposer
 - c. Primary producer
 - d. Primary consumer
2. In an ecosystem, the energy flow is always
 - a. Unidirectional
 - b. Bidirectional
 - c. In any direction
 - d. In all direction
3. Study of life history of Eagle is the example of.....ecology
 - a. Autecology
 - b. Synecology
 - c. Community ecology
 - d. Ecology
4. Abiotic component in ecology are part of environment
 - a. Non living
 - b. living
 - c. biological
 - d. None of these
5. How many agro-climatic zones present in India?

- a. 15
 - b. 10
 - c. 72
 - d. 25
6. is an example of ex-situ conservation.
- a. Sacred groove
 - b. Wild life sanctuary
 - c. Seed Bank
 - d. National Park
7. _____ is the forest cover to be maintained as per the National Forest Policy (1988)
- a. 67% for hills and 33% for plains
 - b. 37% for Hills and 11% for plains
 - c. 17% for Hills and 21% for plains
 - d. None of the above
8. Which biogeographic zone has highest vertebrate species in India?
- a. Desert
 - b. Western ghat zone
 - c. North east zone
 - d. Gangetic plain zone
9. What is the characteristic of Indian desert?
- a. Lack of cacti
 - b. Presence of xerophyte
 - c. Dry weather
 - d. Low rainfall
10. How many biogeographic zones present in India?
- a. Eleven
 - b. Ten
 - c. Fifteen
 - d. Twenty
11. What is called to the species which first established on barren land during succession?
- a. Pioneer species
 - b. Intermediate species
 - c. Climax community
 - d. Primary species
12. A transitional area of vegetation between two different plant communities is called.....
- a. Ecad
 - b. Ecotype
 - c. Ecotone
 - d. Community

Q.2] Answer the following in short (ANY 10 out of 12)

[2 x 10 = 20M]

1. Write difference between autecology and synecology?
2. Define ecological succession? What succession occurs on land which is created first time?
3. Comment on characteristics of ecotone?
4. What is edge effect?
5. Explain the indicator species along with example.
6. Comment on biogeographic zone which is rich in xerophytic species.
7. What are the principal crops of western plateau?
8. What is endangered, endemic and extinct species means?
9. Why is biodiversity important to planet
10. Define biodiversity? What is genetic diversity?
11. What is the use of RAMSAR convention act?
12. Comment on Genetic Drift?

Q.3. Answer in brief (ANY 4 out of 6)

[4 x 5 = 20M]

1. Define ecology? Comment on scope and functions of Ecology?
2. What are the primary objectives of agroclimatic zone classification? Comment on Island region.
3. What factors are responsible for the loss of biodiversity? How can this loss be prevented?
4. What are the characters of forest ecosystem? How tigers help in functioning of ecosystem?
5. What is in-situ conservation? Explain any one example of it?
6. What are the hotspots of Biodiversity? Write the basis of hotspot identification.

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