#### SAVITRIBAI PHULE PUNE UNIVERSITY

### **Progressive Education Society's**

Modern College of Arts, Science and Commerce, Ganeshkhind, Pune-411016 (Autonomous)

### B.Sc. Blended Program

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

**End Semester Examination: Nov. - Dec. 2023** 

Program: B.Sc. Blended Semester: III SET: A
Program (Specific): B. Sc. Blended (Chemistry) Course Type: Core Course Theory
Class: S. Y. B. Sc. Blended Max. Marks: 50

Name of the Course: Environmental science II

Course Code: EVSB 310 Time: 2 ½ hrs

Credit: 3 Paper:

### Note:

1) All questions as compulsory

- 2) Figures to the right corner indicate full marks
- 3) Use of scientific calculators is allowed
- 4) Draw diagrams wherever necessary.
- 5) Use only Black or blue ink/ball/gel pens for writing.

# Q.1] Select the correct option. (Any 10 out of 12) $[1M \times 10 = 10M]$

Write the entire statement in the answer sheet with the correct option.

- 1) Rhododendrons are commonly found in.....biogeographical zone.
  - a) Himalaya
  - b) Desert
  - c) Coastal zone
  - d) North East
- 2) In which of flowing weeds are placed
  - a) Producer
  - b) Primary consumer
  - c) Secondary consumer
  - d) Decomposer
- 3) At each trophic level, in which form energy is lost
  - a) Heat
  - b) Chemical
  - c) Light
  - d) None
- 4) —---- is an example of exsitu conservation
  - a) Sacred groove
  - b) Wildlife sanctury
  - c) Seed bank
  - d) National park

- **5)** What is the name of the species whose population has been reduced to a critical level?
  - a) Intermediate
  - b) Rare
  - c) Vulnerable
  - d) Endangered
- 6) Which is a common Non-Renewable Source?
  - a) Silica
  - b) Uranium
  - c) Hotspring
  - d) Crude oil
- 7) How Much Forest Cover Is To Be Maintained As Per The National Forest Policy of 1988?
  - a) 11% for plains and 37% for hills.
  - b) 33% for plains and 67% for hills.
  - c) 23% for plains and 17% for hills.
  - d) None of these
- 8) For Documenting rare and endangered species of animals and plants what is established?
  - a) Red data book
  - b) Green data book
  - c) Blue data book
  - d) None of these
- 9) Wildlife is destroyed more by........
  - a) Destruction of natural habitat
  - b) Mass scale hunting
  - c) Hunger
  - d) Natural calamity
- 10) Which of the following is an exhaustible natural resource?
  - a) Wildlife
  - b) Minerals
  - c) Soil fertility
  - d) Aquatic animals
- 11) Which of the following region in India is known as 'hotspot'?
  - a) Eastern Ghat
  - b) Thar desert
  - c) Western ghat
  - d) Deccan Plateau
- 12) As we proceed in food chain, bio-mass
  - a) Remain same
  - b) Decreases
  - c) Increases
  - d) Initially same and later decreases

### Q.2] Answer in brief. (Any 10 out of 12)

 $[2M \times 10 = 20 M]$ 

- 1) What are agroclimatic zones?
- 2) Comment on any one biogeographical zone in detail.
- 3) Differentiate between autecology and synecology.
- 4) Define edge effect
- 5) Define term Ecology.
- 6) Explain the concept of species richness and evenness.
- 7) What are consumes and what are their types?
- 8) How to identify hotspots?
- 9) What are the benefits of migratory corridors?
- 10) Comment on carbon sequestration.
- 11) Availability of energy is less at higher trophic level, explain why?
- 12) How population and communities differ from each other?

## Q.3] Answer in detail. (Any 4 out of 6)

 $[5M \times 4 = 20 M]$ 

- 1) What is biodiversity? Explain the various values provided by biodiversity.
- 2) Explain the various ways to conserve species in its original habitat.
- 3) What are IUCN red list categories and criteria?
- 4) Explain the structure and functions in ocean ecosystem.
- 5) Define succession? Explain primary and secondary succession in details.
- 6) Explain the scope and importance of environmental studies.