

**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 312

**Course name:** Environmental studies I

**Credits:** 2

**Time:** 1½ hours

**Maximum marks : 25**

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 5 out of 6)**

**[1 x 5 =5M]**

1. The pyramid of energy in an ecosystem is ....
  - a. Always upright
  - b. May be upright or inverted
  - c. Always inverted
  - d. None of these
2. Burning of fossil fuel add
  - a. CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>2</sub>, gases in air
  - b. C, SO<sub>2</sub>, N<sub>2</sub>, gases in air
  - c. CH<sub>4</sub>, CO<sub>2</sub>, NO<sub>3</sub>, gases in air
  - d. None of these
3. The life supporting zone of the earth is
  - a. Lithosphere
  - b. Hydrosphere
  - c. Atmosphere
  - d. Biosphere
4. Which gases cause global warming?
  - a. Inert gases
  - b. Rare gases
  - c. Nobel gases
  - d. Greenhouse gases

5. When the last individual of a species dies, it is known as
- Speciation
  - Adaptation
  - Extinction
  - Phylogenetic diversity
6. Trophic levels are formed by
- Only plants
  - organism linked to food chain
  - Only animals
  - Only carnivorous

**Q.2] Answer the following in short (ANY 5 out of 6 )**

**[2 x 5 = 10M]**

1. What are renewable resources?
2. Comment on ecological succession.
3. What is soil erosion? Enlist the causes of same.
4. Define sustainable development.
5. Draw the energy pyramid.
6. Comment on solar energy.

**Q.3. Answer in brief (ANY 2 out of 3)**

**[4 x 5 = 10M]**

1. What are the impacts of mining on forests, environment and biodiversity?
2. Explain the concept of ecosystem and biodiversity services in detail.
3. Explain how environmental study is beneficial.

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