

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)

**BSc DEGREE EXAMINATION MAY 2022**  
(Sixth Semester)

Branch - BOTANY

**PLANT ECOLOGY**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

1. Plants growing under shade are known as
  - a. Psamophytes
  - b. Sciophytes
  - c. Heliophytes
  - d. Monocots
2. An orchid living on a tree exhibit
  - a. Predation
  - b. Mutualism
  - c. Commensalism
  - d. Parasitism
3. The ratio between energy flow at different points in a food chain is known as
  - a. Ecological capacity
  - b. Ecological efficiency
  - c. Ecological assimilation
  - d. Ecological potential
4. Among the following select a non-denitrifying bacteria
  - a. *Pseudomonas aeruginosa*
  - b. *Thiobacillus*
  - c. *Thiobacillus denitrificans*
5. The number of individuals of species in an unit area is called:
  - a. Abundance
  - b. Density
  - c. Frequency
  - d. Cover
6. A long rectangular sample plot is:
  - a. Transect
  - b. Strip
  - c. Quadrat
  - d. Line
7. Where do the tropical rain forests occur?
  - a. Jammu and Kashmir
  - b. Himachal Pradesh
  - c. Bihar
  - d. Andamans
8. The term biosphere is used for the zone of earth where life exists
  - a. on the lithosphere surface
  - b. in the hydrosphere
  - c. in the lithosphere, hydrosphere and atmosphere
  - d. in the lithosphere and hydrosphere
9. Ozone layer occurs in
  - a. mesosphere
  - b. thermosphere
  - c. stratosphere
  - d. troposphere
10. Which of the following are the primary causes of water pollution?
  - a. Plants
  - b. Animals
  - c. Human activities
  - d. Birds

Cont...

**SECTION - B (35 Marks)**

Answer ALL Questions

**ALL Questions Carry EQUAL Marks (5 x 7 = 35)**

- 11 a Distinguish between mutualism and commensalism.  
OR  
b Describe the edaphic factors.
- 12 a With an illustration describe food chain.  
OR  
b Describe the structure of an ecosystem.
- 13 a Write the characteristics of plant communities.  
OR  
b Explain the quadrat method of studying plant community.
- 14 a Describe about Red Data Book.  
OR  
b Explain the biodiversity hotspots.
- 15 a Explain the greenhouse effect.  
OR  
b Write notes on eutrophication.

**SECTION - C (30 Marks)**

Answer any THREE Questions

**ALL Questions Carry EQUAL Marks (3 x 10 = 30)**

- 16 Discuss various abiotic factors.
- 17 Discuss nitrogen cycle.
- 18 Write an essay on major vegetation types of India with suitable examples.
- 19 Give an account on Chipko and Apico movements.
- 20 Discuss the water pollution and its control measures.

Z-Z-Z

END