

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2022
(First Semester)

Branch – ENVIRONMENTAL SCIENCE

ECOLOGY & SUSTAINABLE DEVELOPMENT

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 The lowermost layer of atmosphere is
(i) Stratosphere (ii) Troposphere
(iii) Ionosphere (iv) Exosphere
- 2 Which type of interaction does a mycorrhiza show?
(i) Predation (ii) Parasitism
(iii) Mutualism (iv) Commensalism
- 3 What are the species called whose number of individuals is greatly reduced to a critical level?
(i) Data Deficient (ii) Rare
(iii) Vulnerable (iv) Endangered
- 4 When did the phrase “Sustainable Development” first appear?
(i) 1987 (ii) 1980
(iii) 1978 (iv) 1992
- 5 Which one of the following sustainable Development Goal ensures soil quality?
(i) Goal 15 (ii) Goal 3
(iii) Goal 5 (iv) Goal 7

SECTION - B (15 Marks)

Answer ALL Questions

ALL questions carry EQUAL marks

(5 x 3 = 15)

- 6 a Define biotic component. How it interacts in an environment?
OR
b Describe any one of the gaseous cycle.
- 7 a Differentiate r and k selected species.
OR
b Explain the general process of ecological succession.
- 8 a Comment on freshwater ecosystem with appropriate example.
OR
b Mention about the factors affecting the ecosystem stability.
- 9 a Define the term sustainable development. Mention its scope and significance.
OR
b Write short notes on urban planning methods.
- 10 a State the significance of Chipko Movement.
OR
b Comment on 5 P's of SDG.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 6 = 30)

- 11 a Explain the structure and function of an ecosystem in detail.
OR
b Give a detailed account on hydrosphere.
- 12 a Describe the properties and characteristics of a population.
OR
b Explain the concept and principles of community ecology.
- 13 a Explain about different terrestrial biomes with suitable examples.
OR
b Illustrate the significance of biodiversity hotspots in India.
- 14 a Outline your views on global sustainable development practices.
OR
b Give a detailed account on Land Use Policy of India.
- 15 a Discuss on 2030 Agenda for sustainable development.
OR
b Explain the cases studies of Save Silent Valley Movement and Narmada Bachao Andolan.

Z-Z-Z

END