PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – BOTANY

ECOLOGY AND PHYTOGEOGRAPHY

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1. An association between two individuals or populations where both are benefitted and where neither can survive without the other is
    (i) Commensalism   (ii) competition
    (iii) mutualism   (iv) protocooperation

2. Which statement is correct with respect to the food chain?
    (i) Every component of the food chain forms a trophic level
    (ii) Inter-relation between different food chains is known as a food web
    (iii) All the chains formed by nutritional relations is used to understand energy flow
    (iv) All of the above

3. A population is a group of
    (i) individuals in a species   (ii) species in a community
    (iii) communities in an ecosystem   (iv) individuals in a family

4. What is the correct order of the 3R principle?
    (i) Recycle, Reuse, Reduce   (ii) Reuse, Reduce, Recycle
    (iii) Reduce, Reuse, Recycle   (iv) None of the above

5. Remote sensing uses which of the following waves in its procedure?
    (i) Electric field   (ii) Sonar waves
    (iii) Gamma- rays   (iv) Electro-magnetic waves

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6. a. State the basic concepts of ecology.
                            OR
    b. Determine the Classification of climate.

7. a. Explain the structure of ecosystem.
                            OR
    b. Evaluate food chain.

8. a. State the concept of habitat.
                            OR
    b. Justify the features of population.

9. a. Discuss about the principles of environmental education.
                            OR
    b. Determine the natural resources.

10. a. What are the vegetation types in India?
                            OR
    b. Explain area hypothesis.

SECTION -C (30 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11. a.   Discuss on divisions of ecology.

OR

    b.   Write an essay on physical environment in ecology.

12. a.   Discuss about ecological pyramids.

OR

    b.   Explain energy flow in ecosystem.

13. a.   What are adaptations of hydrophytes?

OR

    b.   Discuss about ecological succession.

14. a.   Recommend the management of natural resources.

OR

    b.   Justify human health in present environment.

15. a.   Give an account on theories of discontinuous distribution.

OR

    b.   State the applications of remote sensing.

Z-Z-Z   END