

Zoology (P.G.)

[CBCS]

M.Sc. Third Semester End Examination-2023

(Regular & Supplementary Paper)

PAPER-304

[CBCS PAPER]

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

[USE SEPARATE ANSWER SCRIPT IN EACH GROUP]

Group A

Full Marks 20

[Biological oceanography]

1. Answer any two questions of the following: 2x2= 4
 - a. What do you mean by decomposers in an ecosystem?
 - b. What do you mean by netproductivity in an ecosystem?
 - c. What is biomass?
 - d. What is spatial niche?

2. Answer any two questions of the following: 2x4= 8
 - a. Explain the pressure as physical factor in Marine ecosystem.

(2)

- b. What are the impact of oil pollution on marine prawn fisheries.
- c. Describe different trophic level of marine ecosystem.
- d. Describe different theories regarding formatin of coral reef.

3. Answer any one question of the following: $1 \times 8 = 8$

- a. What is energy? What is energy flow of an ecosystem? Write the Y channel energy flow model of an ecosystem. $1+2+5$
- b. What do you mean by pneumatophores? Write characteristics features of mangrove ecosystem. Write note on benthic organisms. $2+3+3$

Group B

Full Marks 20

[Applied Biological and Ecological Principles]

4. Answer any two questions of the following: $2 \times 2 = 4$

- a. What do you mean by bioremediation & phytoremediation?
- b. What is edge effect? Give an example.
- c. What is population pyramids? What are the types? $1+1$
- d. What is niche overlap?

5. Answer any two questions of the following: $2 \times 4 = 8$

- a. Elaborate the concept of resource partitioning. Mention its significance in ecosystem function.

(3)

- b. Name the major terrestrial biomes you studied with their location.
- c. What is resource partitioning & character displacement.
- d. Describe about the types of bioremediation.

6. Answer any one question of the following: $1 \times 8 = 8$

- a. Describe about life history strategies in a population. Briefly describe about island biogeography with diagram. $4+4$
- b. Describe about Tropical & Temperate biomes. $4+4$