

2022

ZOOLOGY

[P.G.]

(M.Sc. Second Semester End Examination-2022)

PAPER- 201

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 Unit

Group – A Marks 20

Biosystematics

1. Answer any two questions from the following: 2x2= 4
- a) Write the name of two pre-Linnaean taxonomists. 2
 - b) Define systematics. Write one basic difference between systematic and classification. 2
 - c) What do you mean by polytypic species? Give two examples. 2
 - d) Define sub-species with an example. 2
2. Answer any two questions from the following: 2x4 = 8
- a) Write down the tusk of a taxonomist. 4

(2)

- b) Is classification a theory? Write the function of classification in biology. 2+2
- c) Write down the role of systematic in Agriculture.
- d) Write a note on International Code of Zoological Nomenclature. 4

3. Answer any one question of the following: 1x8 = 8

- a) Describe biological species concept with its major drawbacks during application of species identification. 4+4
- b) What is phylogenetic tree? How phylogenetic is prepared to study the evolution. 2+6

Group – B Marks 20

Ecological Principles

4. Answer any two questions from the following: 2x2= 4

- a) What is Ecosphere? Who coined the term? 2
- b) What is ecotone? Give example. 2
- c) Write a short note on niche breadth. 2
- d) What is Linkage density? 2

5. Answer any two questions from the following: 2x4 = 8

- a) Write a short note on Bet-Hedging strategies.
- b) State natural evidence on competitive exclusion theory.
- c) State the difference between 'r' and 'k' strategies.
- d) Write a note on Gaia Hypothesis.

(3)

6. Answer any one question of the following: 1x8 = 8

- a) Explain the cybernetic nature of ecosystems. State the difference between resistance and resilience stability. 4+4
- b) What is inclusive fitness? What is foundation species? Briefly describe the niche overlap. 2+2+4
