

**24P216**

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Name : .....

Reg. No : .....

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2025**

(CBCSS-PG)

(Regular/Supplementary/Improvement)

**CC19P ZOL2 C06 - SYSTEMATICS AND EVOLUTION**

(Zoology)

(2019 Admission onwards)

Time: 3 Hours

Maximum: 30 Weightage

**Part-A**

Answer any *four* questions. Each question carries 2 weightage.

1. Define the terms monotypic, polytypic and morpho species with examples.
2. Describe research and type collections in taxonomic studies.
3. Explain any two taxonomic characters.
4. Describe chemotaxonomy and serotaxonomy.
5. Describe ethics related to taxonomic publication.
6. Describe sympatric speciation.
7. Enumerate the different extinct species of genus Homo.

**(4 × 2 = 8 Weightage)**

**Part-B**

Answer any *four* questions. Each question carries 3 weightage.

8. Describe theories of classification.
9. Discuss heirarchy of categories.
10. Explain any six impediments in taxonomy and problems to overcome it.
11. What is orthogenesis? Discuss the modern scientific views on orthogenesis.
12. What is co-evolution? Illustrate with example.
13. What is Neutral theory of molecular evolution?
14. Explain Y chromosome Adam and mitochondrial Eve.

**(4 × 3 = 12 Weightage)**

**Part-C**

Answer any *two* questions. Each question carries 5 weightage.

15. Discuss various kinds of species concepts.

16. Explain taxonomic publications and preparation of taxonomic papers.
17. Describe zoological nomenclature.
18. What are the major attributes of natural selection in islands?

**(2 × 5 = 10 Weightage)**

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