

THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

CC24UZOO3CJ201 - SYSTEMATICS, EVOLUTION & ZOOGEOGRAPHY

(B.Sc. Zoology - Major Course)

(2024 Admission - Regular)

Time: 2.0 Hours

Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)Answer ***all*** questions. Each question carries 3 marks.

1. Outline the steps involved in numerical taxonomy. [Level:2] [CO1]
2. Explain the role of morphological features in distinguishing between closely related insect species. [Level:2] [CO1]
3. What are the characteristics of Triassic-Jurassic mass extinction? [Level:2] [CO2]
4. Enlist any four major events occurred on earth during Palaeozoic era? [Level:1] [CO2]
5. What is mutation theory of evolution? [Level:2] [CO3]
6. Name the title of the book published on 24 November 1859 with the scientific literature by Charles Darwin. [Level:2] [CO3]
7. Explain gene frequency. [Level:2] [CO3]
8. What are the geographical isolation mechanisms? [Level:2] [CO3]
9. Discuss the importance of the North-Eastern zone for endemic species. [Level:2] [CO4]
10. Describe the importance of Weber's Line in biogeography. [Level:2] [CO4]

(Ceiling: 24 Marks)**Part B** (Paragraph questions/Problem)Answer ***all*** questions. Each question carries 6 marks.

11. Explain the role of ICZN in maintaining global stability in animal nomenclature. [Level:2] [CO1]
12. Explain the ecological species concept and its relevance in conservation biology. [Level:2] [CO1]
13. Explain the endosymbiotic theory for the origin of eukaryotes. [Level:1] [CO2]
14. Explain the important embryological evidences for organic evolution. [Level:2] [CO2]

15. Differentiate convergent and divergent evolution. [Level:1] [CO2]

16. Explain reproductive isolation. [Level:1] [CO2]

17. Review the skeleton modification across Homininae Subfamily. [Level:1] [CO4]

18. Describe the principles of island biogeography, including how island size and isolation affect species diversity. [Level:2] [CO4]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any **one** question. The question carries 10 marks.

19. Review the the major fossils of Genus Homo. [Level:1] [CO3]

20. Analyse the historical development of zoogeography and evaluate the major abiotic and biotic factors that control the present-day distribution of animals across the globe. [Level:4] [CO4]

(1 × 10 = 10 Marks)
