Reg. No ..... Name **25P116**

M.Sc. DEGREE END SEMESTER EXAMINATION - NOVEMBER 2025

SEMESTER 1 : ZOOLOGY

COURSE : **24P1ZOOT01 : ANIMAL DIVERSITY: PHYLOGENETIC AND TAXONOMIC APPROACHES**

(For Regular - 2025 Admission and Improvement/ Supplementary 2024 Admission)

Time : Three Hours Max. Weights: 30

PART A

Answer any 8 questions **Weight: 1**

1.	Explain pairwise identity.	(An, CO 8)
2.	List out the evolutionary significance of Onychophora	(An)
3.	Comment on evolutionary approach in taxonomy.	(R, CO 6)
4.	Comment on IUCN and its role.	(U)
5.	Explain with example tissue grade of organization.	(U)
6.	List out the features of order chiroptera giving suitable examples.	(A)
7.	Comment on cephalization.	(U)
8.	What is Macrotaxonomy?	(U, CO 1)
9.	Mesozoic era is considered as the age of reptiles. Examine	(An, CO 2)
10.	Differentiate between Micro and Macro Taxonomy.	(An)

(1 x 8 = 8)

PART B

Answer any 6 questions

Weights: 2

11.	What is endemism. Explain endemism in Kerala.	(An)
12.	Specify the importance of biomolecules in molecular phylogeny.	(An, CO 7)
13.	Briefly explain different types of body symmetry.	(An, CO 6)
14.	A good taxonomist never suppress any relevant details on a research work. Examine the statement	(E, CO 3)
15.	Enlist the contributions of Salim Ali and Sunder Lal Hora to the study of Indian Fauna.	(An, CO 7)
16.	Write briefly on the adaptations of nematodes as parasites.	(An)
17.	Briefly explain the origin and adaptive radiation of reptiles.	(U)
18.	Explain burgess shale. Add notes on its relevance in fossil history	(A, CO 8)

(2 x 6 = 12)

PART C

Answer any 2 questions **Weights: 5**

19.	Elaborate on five differnt phyla coming under pseudocoelomata.	(An)
20.	Adaptive radiation is a subset of the theory of descent with modification. Comment	(An)
21.	Outline the format of a new description in the journal Zootaxa. Mention the significance of type study in taxonomy	(E, CO 5)
22.	DNA barcoding is an accurate ecological approach to identify species and ecological research. Justify the statement	(An, CO 3)

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 1	Understand the basic concepts of systematics and taxonomyPO1, PO4, PO5 PSO3, PSO4	U	8	1
CO 2	Discuss the procedures in taxonomy and ethics in publications PO1, PO3, PO4 PSO3, PSO4	A	9	1
CO 3	Appreciate the contributions made by scientists and organisations towards conservation of animal diversity	An	14, 22	7
CO 5	Examine the diversity of Palaeofauna	An	21	5
CO 6	Discuss the animal architecture	An	3, 13	3
CO 7	Compare the invertebrate fauna by their characteristics	An	12, 15	4
CO 8	Compare the vertebrate animals by their characteristics	An	1, 18	3

Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;