Reg. No ..... Name **25P132**

M.Sc. DEGREE END SEMESTER EXAMINATION- NOVEMBER 2025

SEMESTER 1 : ZOOLOGY

COURSE : **24P1ZOOT02 : EVOLUTIONARY BIOLOGY AND ETHOLOGY**

(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 Lee-Boot effect.	(U, CO 8)
2.	Outline the hormonal effects on behaviour?	(U, CO 8)
3.	Outline different mating systems.	(R, CO 8)
4.	What is Neutral Theory of Molecular Evolution?	(R, CO 3)
5.	Differentiate Strepsirrhines and Haplorhines.	(An, CO 4)
6.	Write an account on stimulus-response paradigm as the basis of animal behaviour.	(R, CO 6)
7.	Explain how geographical isolation influence speciation events?	(U)
8.	Define altruism.	(R, CO 8)
9.	What is stress and adaptation?	(R, CO 8)
10.	What are biological rhythms?	(R, CO 8)

(1 x 8 = 8)

PART B

Answer any 6 questions **Weights: 2**

11.	Write a short note on the anatomical basis for evolution.	(R, CO 4)
12.	Give a comparative account on micro, macro and mega evolution.	(E, CO 3)
13	Elaborate the neural basis of learning and memory.	(E, CO 8)
14.	Discuss the hormonal control of reproductive behaviour in vertebrates.	(E, CO8)
15.	Write a short note on RNA world.	( )
16.	Describe the spontaneity of mutation.	( )
17.	Elaborate the orgin of eukaryotic cell.	( )
18.	Discuss Molecular clocks.	( )

(2 x 6 = 12)

PART C

Answer any 2 questions **Weights: 5**

19.	Elaborate on animal evolution by presenting an account of common fossil types at different geological era and period	(E, CO 3)
20.	Explain the morphological evidences of Evolution.	(U, CO 3)
21.	Elaborate on the various mechanisms in evolution of complexity.	(Cr, CO 4)
22.	Write an essay on Sherrington's neurophysiological concepts in behaviour.	

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 3	Examine the process of animal evolution through studying the population genetics and ontogeny	U	4, 12, 15, 16	13
CO 4	Explain the theories regarding human evolution and analyse the molecular evidences of our phylogeny	U	5, 11, 17	8
CO 6	Explain the causal factors of behaviour and different types of behaviour	U	6	1
CO 8	Evaluate the processes underlying the expression of behaviour patterns by animals	U	1, 2, 3, 8, 9, 10, 13, 14	10

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