

MSc DEGREE END SEMESTER EXAMINATION - OCTOBER 2024**SEMESTER 3 : ZOOLOGY****COURSE : 21P3ZOOT09 : ANIMAL PHYSIOLOGY***(For Regular 2023 Admission and Supplementary 2022/2021 Admissions)*

Duration : Three Hours

Max. Weights: 30

PART A**Answer any 8 questions****Weight: 1**

- | | | |
|-----|------------------------------------------------------------------------------------|--------------------|
| 1. | How does the body regulate the rate at which heat is lost? | (U, CO 7) |
| 2. | Distinguish between FSH and TSH. Note down their roles . | (U) |
| 3. | What is the cause of Cretinism? | (R, CO 7) |
| 4. | Explain the psychological processes involved in regulating short-term food intake. | (U, CO 2) |
| 5. | How does CO ₂ diffuse through the placental membrane? | (U, CO 3) |
| 6. | Schematically represent the anatomical organization of the Nervous system. | (An, CO 5) |
| 7. | Explain the role of Purkinje fibres in heart beat. | (U, CO 3) |
| 8. | Distinguish between Titin and Dystrophin. | (An) |
| 9. | What do you mean by light adaptation? | (R) |
| 10. | Outline the effects of malfunctioning of the kidneys. | (An) |
| | | (1 x 8 = 8) |

PART B**Answer any 6 questions****Weights: 2**

- | | | |
|-----|------------------------------------------------------------------------------------------------|---------------------|
| 11. | Explain the impact of senescence and age on reproduction. | (U) |
| 12. | With the help of suitable figures describe the sequence of events at a Neuromuscular Junction. | (E, CO 5) |
| 13. | Describe the location and functions of taste buds. | (U, CO 6) |
| 14. | Discuss the functions of neuro-endocrine secretions. | (E, CO 7) |
| 15. | Discuss the mechanism of electrolyte balance in the body. | (E) |
| 16. | Describe extracellular fluid compartment. | (U) |
| 17. | Distinguish between Acute and Chronic, Mountain sickness. | (An, CO 3) |
| 18. | Explain the role of testicular hormones in masculinizing an individual. | (U, CO 7) |
| | | (2 x 6 = 12) |

PART C**Answer any 2 questions****Weights: 5**

- | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------|---------------------|
| 19. | Explain relationship between stimulus, intensity and response using a flow diagram. | (U, CO 6) |
| 20. | Explain the effect of exercise on cardiovascular system. | (U, CO 3) |
| 21. | Discuss the synthesis and physiological role of endocrine hormones. | (E, CO 7) |
| 22. | Describe the physiology and hormonal influence in parturition and Lactation. Mention the significance of breastfeeding. | (U, CO 7) |
| | | (5 x 2 = 10) |

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
CO 2	Illustrate the mechanism of regulating food intake in human beings as well as problems related with overeating and resultant obesity	An	4	1
CO 3	Explain the structure of different types of hearts in animals, and examine the functioning of respiratory and circulatory systems of human beings together with their diseases	An	5, 7, 17, 20	9
CO 5	Illustrate the structure of sense organs and the transduction processes which convert changes in physical/chemical environment into nerve signals	U	6, 12	3
CO 6	Examine the mechanism of thermoregulation in the human body	An	13, 19	7
CO 7	Analyze the chemical coordination system of the animal body and examine the reproductive physiology in relation to the endocrinology of mammals	E	1, 3, 14, 18, 21, 22	16

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