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**School of Biological and Life sciences**

**Master of Science in Zoology  
Semester End Examination - Jun 2024**

**Duration : 180 Minutes**

**Max Marks : 100**

**Sem II - P1PN201T - Comparative Physiology***General Instructions*

*Answer to the specific question asked*

*Draw neat, labelled diagrams wherever necessary*

*Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Discuss the primary functions of the testes in different animal species K1 (2)
- 2) List the primary nitrogenous waste products commonly excreted by animals. K2 (4)
- 3) Explain the role of dendrites and axons in neuronal function. How do they differ in structure and function? K2 (6)
- 4) Illustrate the role of lymphatic system in animals K3 (9)
- 5) Differentiate between unipolar, bipolar, and multipolar neurons K3 (9)
- 6) compare the respiratory pigments found in invertebrates, considering their structural diversity and functional adaptations to diverse ecological niches. K5 (10)
- 7) Point out examples of low-temperature adaptations of some ectotherms and some endotherms. K4 (12)
- 8) Examine the feedback mechanisms that the hypothalamus employs to maintain homeostasis in response to changes in external and internal temperatures. K5 (15)
- 9) Summarize the functions of histamine as a neurotransmitter and its involvement in allergic reactions and inflammatory responses. K5 (15)
- 10) Compile the contribution of postsynaptic receptors to drug actions and therapeutic interventions. K6 (18)