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Gandhi Institute of Engineering and Technology University, Odisha, Gunupur (GIET UNIVERSITY)

M.Sc. (Fourth Semester – Regular/ Supplementary) Examinations, April – 2026
24MASPC24001 – Animal Physiology and Taxonomy
(Life Science)

Time: 3 hrs

Maximum: 60 Marks

Answer ALL questions
(The figures in the right-hand margin indicate marks)

PART – A**(2 x 5 = 10 Marks)**Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. Define haemopoiesis.	CO2	K1
b. Draw a neat diagram of neuron.	CO1	K2
c. What is acclimation?	CO3	K2
d. Define histochemistry.	CO4	K2
e. Define classification.	CO5	K2

PART – B**(10 x 5 = 50 Marks)**Answer **ALL** the questions

	Marks	CO #	Blooms Level
2. a. Write notes on ICZN rules.	5	CO5	K4
b. Evaluate the role of molecular tools in modern taxonomy.	5	CO5	K4
(OR)			
c. Compare different staining techniques and their applications.	5	CO4	K4
d. Describe the cardiac cycle with a neat diagram.	5	CO1	K3
3.a. Write short notes on diseases of sensory organs (any two).	5	CO2	K3
b. Explain mechanisms of cell volume regulation (RVD & RVI).	5	CO3	K4
(OR)			
c. Write notes on fixatives and stains.	5	CO4	K3
d. Describe taxonomic collection and preservation methods.	5	CO5	K4
4.a. Explain the role of enzymes in digestion and absorption of nutrients.	5	CO1	K2
b. Evaluate survival strategies of extremophiles in harsh environments.	5	CO3	K5
(OR)			
c. Explain composition and functions of blood.	5	CO2	K2
d. Describe the structure and function of muscle tissue.	5	CO2	K2
5.a. Illustrate synaptic transmission (chemical vs electrical).	5	CO1	K4
b. Explain the stages of blood coagulation with factors involved.	5	CO2	K2
(OR)			
c. Explain structural and physiological adaptations in aquatic organisms.	5	CO3	K2
d. Explain principles of enzyme histochemistry with suitable examples.	5	CO4	K3
6.a. Write a note on endocrine glands and their hormones.	5	CO1	K2
b. Describe taxonomic hierarchy with examples.	5	CO5	K3
(OR)			
c. Analyse osmoregulatory mechanisms in terrestrial animals.	5	CO3	K4
d. Analyse the importance of fixation in tissue preservation.	5	CO4	K4

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