

**UNIVERSITY OF CALCUTTA**  
**CITY COLLEGE CENTER**  
**B.Sc PART-II EXAMINATION-2020**  
**ZOOLOGY HONOURS**  
**FOURTH PAPER, UNIT-1**  
**ANIMAL PHYSIOLOGY AND BIOCHEMISTRY**  
**FULL MARKS-25**

**Q-1. Answer any 4 of the following:** (4x5)

- a. What are depolarisation and repolarisation?
- b. What is Haldane effect?
- c. Define unsaturated fatty acid with an example.
- d. What are ammonotelic and ureotelic animals?
- e. What is meant by neurotransmitter? Give example.
- f. Distinguish between R-state and T-state of haemoglobin.
- g. Mention the functions of rod and cone cells.
- h. Define hibernation and aestivation.

**Q-2. Answer any 1 of the following:**

- a. Write the process of glycogenolysis mentioning the name of enzymes involved in each step. (3+2)
- b. Describe nerve impulse propagation through neuromuscular junction with proper diagram. (3+2)
- c. Discuss the effects of temperature on enzyme kinetics. What is transamination? (3+2)