



WEST BENGAL STATE UNIVERSITY  
B.Sc. Honours 3rd Semester Examination, 2023-24

**ZOOACOR06T-ZOOLOGY (CC6)**

Full Marks: 40

Time Allotted: 2 Hours

*The figures in the margin indicate full marks.  
Candidates should answer in their own words and adhere to the word limit as practicable.  
All symbols are of usual significance.*

2×8 = 16

1. Answer any **eight** questions from the following:

- What is sarcoplasm?
- Mention two types of adhesive junctions of epithelial tissue.
- Comment on negative feedback mechanism.
- What is corpus luteum?
- Comment on hyaline cartilage.
- What is antrum? State its function.
- What is gradient potential? What do you mean by "All or None" Law?
- Delineate the saltatory conduction of impulse.
- Why is the connective tissue so named?
- Mention the functions of osteoclast and osteoblast cells.
- State the functions of seminiferous tubules.
- What is a neuromuscular junction? What is resting potential?

2. Answer any **three** questions from the following:

3×3 = 9

- What is capacitation of mammalian sperm?
- Delineate the role of hypothalamus in regulating sexual function of human male.
- How does reflex arc formed? Mention a respiratory reflex.
- Distinguish between insulin and glucagon functions.
- Name a glial cell that surrounds axon of peripheral nerve. What do you mean by neurotransmitters?

1+2

1+2

3. Answer any **three** questions from the following:

5×3 = 15

- Delineate different adrenal cortical layers. Why are they so named? Mention the functions of hormones released by these layers.
- State the role of myofibrillar proteins in skeletal muscle contraction.
- Draw, label and describe the T.S. of a mammalian thyroid gland.
- Distinguish between:
  - Cardiac muscle and skeletal muscle
  - Collagen fibre and reticular fibre.
- What do you mean by ossification? Discuss the process in brief.

(1+1)+3

2  $\frac{1}{2}$  + 2  $\frac{1}{2}$

1+4

—x—