2023

B.A./B.Sc.

Third Semester

CORE - 6

ZOOLOGY

Course Code: ZOC 3.21

(Physiology: Controlling & Coordinating Systems)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT_I

1. Write notes on the following:

 $7 \times 2 = 14$

- (a) Muscular tissue
- (b) Ossification of bones
- 2. Explain the structure and types of bones. Add a note on types of cartilage. 10+4=14

UNIT-II

- 3. Describe the structure of neuron with a neat labelled diagram. Write a short note on neuromuscular junction. 10+4=14
- 4. Explain the origin of action potential and its propagation across the myelinated and unmyelinated nerve fibres. 7+7=14

UNIT-III

- 5. Discuss the molecular and chemical basis of muscle contraction. 7+7=14
- 6. Explain the histological aspects of different types of muscles. Give the characteristics of muscle twitch. 9+5=14

UNIT-IV

7. Describe the physiology of male reproductive system.

14

8. Write notes on the following:

 $7 \times 2 = 14$

- (a) Puberty
- (b) Contraceptive method in female

UNIT-V

- 9. Give an account on hypothalamus and neuroendocrine control of anterior pituitary gland.
- 10. Explain the hormonal secretions of parathyroid and pancreas. 7+7=14