Total No. of Printed Pages—3

3 SEM TDC ZOOH (CBCS) C 6

2025

(Nov/Dec)

ZOOLOGY

(Core)

Paper : C–6

(Animal Physiology : Controlling and Coordinating Systems)

Full Marks : 53
Pass Marks : 21

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks : 1×5=5

(a) The main bone cell is _____.

(b) In muscle fibres, the myofibrils are enclosed by _____.

(c) The junction of two neurons is called _____.

(d) Estrogen is secreted by _____.

(e) Any method that prevents pregnancy is called _____.

2. *(a)* Distinguish between the following (any *three*) : 2×3=6

(i) Simple epithelium and Stratified epithelium

(ii) Blood and Lymph

(iii) Myelinated and Non-myelinated nerve fibres

(iv) Steroidal and Non-steroidal hormones

(b) Write short notes on (any *two*) : 3×2=6

(i) Placental hormone

(ii) Structure of neuron

(iii) Characteristics of muscle twitch

(iv) Bone growth and resorption

3. Describe the histological structure of muscle with suitable diagram. 6+3=9

Or

Write a note on the structure and function of epithelial tissue. 6+3=9

4. What are threshold stimulus and resting membrane potential? Describe the mechanism of generation of action potential. 2+7=9

Or

What is synapse? Write a note on synaptic transmission and neuromuscular junction. 1+8=9

5. What is puberty? Describe the histology of ovary with suitable diagram. 2+7=9

Or

Write a note on the methods of contraception in male and female. 9

6. Write about the signal transduction pathways for steroidal and non-steroidal hormones. 9

Or

Define hormone. Write a note on the classification of hormone. 1+8=9

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