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(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 : $1 \times 5 = 5$

- (a) The cell body of a neuron is called ____.
- (b) Ovulation is induced by a hormone called ____.
- (c) In a muscle fibre, Ca^{2+} is stored in ____.
- (d) ____ is a hyperglycemic hormone.
- (e) Bone is a type of ____ tissue.

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(Turn Over)

(2)

2. Distinguish between any two of the following : $3 \times 2 = 6$
- (a) Skeletal muscle and Cardiac muscle
 - (b) Blood and Lymph
 - (c) Adenohypophysis and Neurohypophysis
3. Write short notes on any two of the following : $3 \times 2 = 6$
- (a) Role of parathormone
 - (b) Cartilage
 - (c) Functions of epithelial tissue
4. Write illustrative notes on any two of the following : $4 \frac{1}{2} \times 2 = 9$
- (a) Spermatogenesis
 - (b) Anatomical structure of adrenal gland
 - (c) Hormones of pancreas
5. What is synapse? Give an account on the synaptic transmission with suitable diagram. $1+8=9$

Or

Describe the structure of cochlea. Give an account on the physiology of hearing in human with suitable diagram. $3+6=9$

(3)

6. What is sarcomere? Describe the mechanism involved in muscle contraction with diagram. $2+7=9$
- Or
- What is puberty? Describe the histology of ovary with suitable diagram. $2+7=9$
7. Name the hormones of thyroid gland and mention their functions. $3+6=9$
- Or
- Why is hypothalamus called neuroendocrine gland? Discuss the principal nuclei involved in neuroendocrine control of anterior pituitary. $2+7=9$
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