

This question paper contains 4 printed pages].

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S. No. of Question Paper : 5829

Unique Paper Code : 2232011203

Name of the Paper : Human Physiology-Control and Coordination
Systems/Discipline Specific Core-6

Name of the Course : B.Sc. (H) Zoology

Semester : II (NEP-UGCF)

Duration : 2 Hours

Maximum Marks : 60

(Write your Roll No. on the top immediately on receipt of this question paper.)

~~Attempt four~~ questions in all.

Question No. 1 is compulsory

Draw well labelled diagram wherever necessary.

1. (a) Define the following (any four) :

4

- (i) Enteric plexuses
- (ii) Second messenger
- (iii) Andrology
- (iv) Aponeurosis
- (v) Spermiation.

P.T.O.

(b) Differentiate between the following :

4

(i) IPSP and EPSP

(ii) Sertoli and Leydig cells.

(c) Fill in the blanks :

2

(i) cells of pancreatic islet secrete insulin.

(ii) A is a bundle of axon located in the central nervous system.

(d) Expand the following abbreviation :

2

(i) PNS

(ii) ACh

(iii) GAGs

(iv) TBG

(e) Give the location and function of the following :

3

(i) Acrosome

(ii) Chromaffin cells

(iii) Cremaster muscle

2. (a) Discuss the events involved in excitation-contraction coupling cycle. 8
- (b) Give an account on microscopic organization of skeletal muscle. 7
3. (a) Discuss the concept of summation of graded potential. How does generation of action potentials take place using different types of voltage gated channels ? 9
- (b) Compare graded potential with action potential in neuron. 6
4. (a) Describe the process of spermatogenesis and differentiate it with oogenesis. 8
- (b) Write a note on hormonal control of testicular function. 7
5. (a) Describe the mechanism of action of peptide hormone with a suitable example. 7
- (b) Name the various hormones secreted by anterior pituitary with their functions. How is the hormonal secretion regulated ? 8

6. Write short notes on any *three* :

3×5=15

- (a) Implantation
- (b) Rigor mortis
- (c) Blood-testis barrier
- (d) Structure of neuron
- (e) Motor unit.