

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 8622

C

Roll No.....

Unique Paper Code : 223301

Name of the Paper : ZOHT-304 : Animal Physiology and Functional Histology-I

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

Semester : III

Duration : 3 Hours

Maximum Marks : 75

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

Instructions for Candidates :

Question no.1 is compulsory. Attempt *any four* of the *remaining six* questions.

Q1. (A) Define the following in one, brief sentence each :

1. Trophic hormone
2. Parturition
3. Treppe
4. Chromatolysis
5. Motor unit

(5)

(B) Differentiate the following pairs of terms :

1. Isometric & isotonic contractions
2. Intrafusal & extrafusal muscle fibres
3. EPSP and IPSP
4. Type I and Type II *Diabetes mellitus*
5. Spongy and Compact bone

(15)

(C) Fill in the blanks :

1. _____ cells form myelin sheath around neurons of Peripheral Nervous System.
2. _____ is the alternative energy rich phosphate compound in skeletal muscle.
3. _____ is a fluid connective tissue.
4. _____ is an example of excitatory neurotransmitter.
5. The expanded form of GnRH is _____.
6. Red bone marrow is located in _____.
7. The dominant and mature follicle in the ovary is known as _____.

(7)

P.T.O.

- Q2. Make a detailed, flow-sheet diagram to illustrate skeletal muscle structure from a macro to micro level. Annotate your diagrams with suitable description (notes) wherever necessary. *Please make only simple, outline diagrams.* (12)
- Q3. Compare the major changes in the ovary, uterus and their hormonal regulation during the female reproductive cycle. (12)
- Q4. (i) Provide a detailed account of the events taking place during the passage of impulse through a chemical synapse.
(ii) Explain the mode of transmission of an impulse over a medullated neuron. (6+6)
- Q5. (i) How does pancreas regulate the normal level of glucose in the blood ?
(ii) What do you understand by negative feedback mechanism ? (9+3)
- Q6.. (i) Draw a well-labelled diagram of the T.S. of a Mammalian bone.
(ii) Explain briefly the physiology of hearing. (4+8)
- Q7. Write short notes on *any three* of the following :
1. *Rigor mortis.*
 2. Hypothalamo-hypophyseal portal system.
 3. Retinine-Rhodopsin cycle.
 4. Muscular dystrophy.
 5. Neurotransmitter. (4+4+4)