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(5th Semester)

ZOOLOGY

Paper : ZL-VI

(**Animal Physiology**)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

*The figures in the margin indicate full marks
for the questions*

1. What do you mean by extracellular and intracellular digestions? Describe the mechanism of digestion of carbohydrates. 2+5=7

Or

What do you understand by cutaneous respiration? Add a note on the mechanism of respiration in gills. 2+5=7

2. Describe the difference between open and closed types of circulatory systems. 7

Or

Give an account of extrinsic and intrinsic factors involved in the mechanism of blood coagulation.

3. Describe in detail the physiology of urine formation. 7

Or

Describe the structure of mammalian kidney.

4. Give a brief account of contractile and regulatory muscle proteins. 7

Or

Discuss in detail the process of muscle contraction in a skeletal muscle.

5. Give an account of the ultrastructure of a typical neuron with a neat labelled diagram. 5+2=7

Or

Differentiate between myelinated and non-myelinated nerve fibres. Explain the mechanism of propagation of nerve impulse in a non-myelinated nerve fibre. 2+5=7

Subject Code : **V**/ZOO (vi)

Booklet No. **A**

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Date Stamp

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To be filled in by the Candidate

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DEGREE 5th Semester
(Arts / Science / Commerce /
.....) Exam., **2016**
Subject
Paper

To be filled in by the Candidate
DEGREE 5th Semester
(Arts / Science / Commerce /
.....) Exam., **2016**
Roll No.
Regn. No.
Subject
Paper
Descriptive Type
Booklet No. B

INSTRUCTIONS TO CANDIDATES

- 1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.
- 2. This paper should be ANSWERED FIRST and submitted within 45 minutes of the commencement of the Examination.
- 3. While answering the questions of this booklet, any cutting, erasing, overwriting or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.

Signature of
Scrutiniser(s)

Signature of
Examiner(s)

Signature of
Invigilator(s)

V/zoo (vi)

2 0 1 6

(5th Semester)

ZOOLOGY

Paper : ZL-VI

(Animal Physiology)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

Answer **all** questions

SECTION—A

(Marks : 5)

Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

1. The oxyntic or parietal cells of the epithelium of the stomach secrete

(a) hydrochloric acid ()

(b) trypsin ()

(c) chymotrypsin ()

(d) elastase ()

/147

(2)

2. The normal cardiac cycle lasts about

(a) 0.4 sec ()

(b) 0.8 sec ()

(c) 0.16 sec ()

(d) 1 sec ()

3. Water reabsorption in the kidney is regulated by

(a) oxytocin ()

(b) ADH ()

(c) ACTH ()

(d) FSH ()

4. The section of myofibril between two Z-discs is called

(a) H-band ()

(b) A-band ()

(c) I-band ()

(d) sarcomere ()

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(3)

5. The myelin sheath of a neuron is interrupted at regular intervals by minute gap called

(a) Nissl bodies ()

(b) synapse ()

(c) nodes of Ranvier ()

(d) Schwann cells ()

(4)

SECTION—B

(Marks : 15)

Write short notes on the following :

3×5=15

1. Role of liver in digestion

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(5)

2. Pacemaker

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(6)

3. Ammonotelic animals

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(7)

4. Isometric contraction

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(8)

5. Resting potential

G7—350/147

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