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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. Describe the process of complete digestion of fats with suitable schematic representation. 7

Or

What are the different types of respiration?
Describe the mechanism of lung respiration. 2+5=7

2. Describe the sequence of events in cardiac cycle. 7

Or

Write an account of ABO blood grouping system. Add a note on Rh factor. 5+2=7

3. What is micturition? Write an account of nervous control of micturition. 7

Or

Define osmoregulation. Write the mechanism of osmoregulation in marine animals. 1+6=7

4. What are the different types of muscles? Write an account of the ultrastructure of muscles. 1+6=7

Or

Explain the mechanism of muscle contraction. 7

5. What do you mean by resting and action potentials? Write notes on propagation of nerve impulse in myelinated nerve fibre. 2+5=7

Or

What are neurotransmitters? Give a detailed mechanism of synaptic transmission. 1+6=7

Subject Code : ZOO/V/06

Booklet No. **A**

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Date Stamp

To be filled in by the Candidate

DEGREE 5th Semester
(Arts / Science / Commerce /
.....) Exam., **2017**
Subject
Paper

.....

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To be filled in by the Candidate

DEGREE 5th Semester
(Arts / Science / Commerce /
.....) Exam., **2017**

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)

ZOO/V/06

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(5th Semester)

ZOOLOGY

Paper : ZL-VI

(**Animal Physiology**)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 5)

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

1. The type of respiration that works in both air and water but requires a thin, moist and highly vascularized skin is

- (a) pulmonary respiration ()
- (b) cutaneous respiration ()
- (c) internal respiration ()
- (d) external respiration ()

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(2)

2. The site at which the intrinsic and extrinsic coagulation cascades converge is

(a) activated factor XI ()

(b) activated factor IX ()

(c) activated factor X ()

(d) activated factor XII ()

3. The nitrogenous waste product formed from ammonia in the liver by ornithine cycle is

(a) urea ()

(b) uric acid ()

(c) ammonia ()

(d) urea and uric acid ()

4. Which one of the following forms major component of proteins of myofibril?

(a) Actin ()

(b) Myosin ()

(c) Troponin ()

(d) Tropomyosin ()

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(3)

5. The most common type of neuron having several dendrites and one axon extending from the cell body is

- (a) motor neuron ()
- (b) bipolar neuron ()
- (c) unipolar neuron ()
- (d) multipolar neuron ()

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SECTION—B

(Marks : 15)

Write short notes on the following :

3×5=15

1. Difference between extracellular and intracellular digestion

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(5)

2. Open and closed circulation

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(6)

3. Functions of kidney

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(7)

4. Muscle proteins

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(8)

5. Structure of neuron

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