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(5th Semester)

ZOOLOGY

Paper : ZL-VII

(Biochemistry)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

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

1. Define carbohydrates. Describe different types of carbohydrate. Write the significances of carbohydrates. 1+4+2=7

Or

What are peptides? Give a detailed note on the properties of peptides. 1+6=7

2. Explain Michaelis-Menten equation for enzyme action. 7

Or

Write notes on the following : 3½+3½=7

(a) Coenzymes

(b) Ribozyme

3. Describe the process of glycolysis in detail. 7

Or

What is glycogenesis? Describe various steps of glycogenesis with their significances. 1+(5+1)=7

4. Describe the hexose monophosphate shunt system in detail. 7

Or

What is oxidative phosphorylation? Give a detailed note on electron transport chain. 1+6=7

5. Describe the mechanism of lipogenesis with a note on its importance. 5+2=7

Or

Give a detailed account on urea cycle with its importance. 5+2=7

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

Booklet No. **A**

Date Stamp

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To be filled in by the Candidate

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)

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(5th Semester)

ZOOLOGY

Paper : ZL-VII

(Biochemistry)

(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 number of carbons contained in heptose is

(a) 16 ()

(b) 20 ()

(c) 24 ()

(d) 7 ()

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(2)

2. A non-protein group bound to the enzyme protein is

- (a) prosthetic ()
- (b) holoenzyme ()
- (c) apoenzyme ()
- (d) None of the above ()

3. The process of reconversion of glycogen to glucose is known as

- (a) glycogenesis ()
- (b) glycolysis ()
- (c) glycogenolysis ()
- (d) glucogeogenesis ()

4. Electron cascade occurs in

- (a) HMP shunt ()
- (b) ETC ()
- (c) ATP synthesis ()
- (d) Kreb's cycle ()

(3)

5. In 1869, nucleic acids were discovered by

- (a) Friedrich Miescher ()
- (b) James Watson and Francis Crick ()
- (c) Rosalind Franklin ()
- (d) Madyn McCarty ()

(4)

SECTION—B

(Marks : 15)

Write short notes on the following in 5 to 8 sentences
each : 3×5=15

1. Significance of lipids

(5)

2. Suicide inhibitors

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(6)

3. Gluconeogenesis

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(7)

4. ATP synthesis

(8)

5. Nucleotides

★ ★ ★

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