

(i) Printed Pages: 2

Roll No.

(ii) Questions : 9

Sub. Code :

0	3	5	6
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Exam. Code :

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B.A./B.Sc. (General) 4th Semester
1059

ZOOLOGY

Paper-II : Biochemistry and Physiology-II (Zoo-402)

Time Allowed : Three Hours]

[Maximum Marks : 36

Note :— Attempt **FIVE** questions in all including question No. 1.
Attempt **ONE** question from each unit. Draw suitable
diagrams wherever necessary.

1. Explain briefly :—

- (a) Ketosis
- (b) Juxtaglomerular apparatus
- (c) Ultrafiltration
- (d) Synaptic fatigue
- (e) FSH
- (f) Troponin and Tropomyosin
- (g) Role of ADH
- (h) Fight-or-flight hormone.

8×1=8

UNIT—I

2. (a) What is gluconeogenesis ? Discuss the fate of glycerol in gluconeogenesis.
(b) Discuss lipogenesis in tissues. 4,3
3. Describe in detail fatty acid oxidation. Discuss energetics of Palmitic acid oxidation. 7

UNIT—II

4. Write notes on the following :—
 - (i) Transamination
 - (ii) Oxidative deamination. 4,3
5. (a) Discuss urea cycle in detail.
(b) What is the significance of Acetyl CoA in metabolism and how it can be metabolised ? 4,3

UNIT—III

6. (a) Discuss the structure and types of nephrons. Draw a well labelled diagram of a nephron.
(b) In which portion of the nephron selective reabsorption of substances from glomerular filtrate takes place and what is the mechanism of selective reabsorption ? 4,3
7. Draw the structure of a sarcomere and discuss the chemical basis of skeletal muscle contraction. 7

UNIT—IV

8. Discuss the transmission of nerve impulse at a synapse. 7
9. Draw the structure of pancreas and write the functions of hormones secreted by pancreas. 7