

(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) 4<sup>th</sup> Semester  
(2054)**

**ZOOLOGY**

**Paper-II : Biochemistry and Physiology-II (ZOO-402)**

**Time Allowed : Three Hours]**

**[Maximum Marks : 36**

**Note :—**Attempt **FIVE** questions in all, including Q. No. 1 which is compulsory and selecting **ONE** question from each unit.

1. Briefly explain the following :—

- (a) Glucogenic and Ketogenic amino acids.
- (b) Oxidative deamination.
- (c) Motor unit.
- (d) Dicarboxylic Acid Shuttle.
- (e) Renin-angiotensin.
- (f) Cori cycle.
- (g) Troponin & Tropomyosin
- (h) Islets of Langerhans.

8×1

## UNIT—I

2. (a) Explain  $\beta$ -oxidation of fatty acids.  
(b) Discuss energetics of stearic acid oxidation. 5+2
3. Explain gluconeogenesis. Discuss the fate of glycerol in gluconeogenesis. 7

## UNIT—II

4. Write notes on the following :  
(a) Oxidative Deamination  
(b) Decarboxylation of Amino acids 3½+3½
5. (a) What is the significance of Acetyl CoA in metabolism ?  
(b) Explain Ornithine cycle in detail. 3+4

## UNIT—III

6. Describe the counter-current mechanism of urine formation. 7
7. What is the physiological basis of skeletal muscle action ? 7

## UNIT—IV

8. Write notes on :—  
(a) Resting membrane potential  
(b) Structure of neuron. 3+4
9. Draw the structure of Thyroid and write the functions of hormones secreted by Thyroid. 7