

(i) Printed Pages : 3 Roll No.

(ii) Questions : 9 Sub. Code :

1	1	8	0	2
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Exam. Code :

5	0	1	3
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**Bachelor of Science (FYUP) 3rd Semester
(2125)**

ZOOLOGY

Paper : Animal Physiology

Time Allowed : Three Hours]

[Maximum Marks : 67

Note :— Attempt **FIVE** questions in all, including Question No. **I** which is compulsory and selecting **ONE** question from each Unit. Support your answers with neat diagrams wherever necessary.

I. Write short note on:

- (a) Tromboplastin
- (b) Granulocytes
- (c) Myelination
- (d) Hypothalamus
- (e) Cardiac output
- (f) Haldane effect
- (g) Minor and major calyx
- (h) Role of saliva in digestion
- (i) Sarcomere
- (j) Thyroid gland hormones.

1.5×10=15

UNIT—I

- II. (a) Discuss the transport and exchange of respiratory gases. 8
- (b) Give an account of digestion and absorption of fats. 5
- III. Give a detailed account of the following:
- (a) Process of gaseous exchange in the respiratory organs and tissues. 8
- (b) Difference between extracellular and intracellular digestion. 5

UNIT—II

- IV. (a) Give a detailed account of formed elements of blood and their functions. 7
- (b) Discuss ABO blood grouping and importance of Rh factor. 6
- V. (a) Give an account of the blood cell type and process involved in clotting mechanism. 6
- (b) What is Cardiac Cycle? Mention the different events involved. 7

UNIT—III

- VI. (a) Explain role of RAAS in sodium and water balance. 9
- (b) Explain the structure of functional actin filament of skeletal muscles. 4

- VII. (a) How actin and myosin interact during skeletal muscle contraction? 7
- (b) Explain the structure of nephron. 6

UNIT—IV

- VIII. (a) What is Action potential? Explain the different steps in its generation. 8
- (b) Give an account of gonadal hormones and their functions. 5
- IX. (a) Describe the hormones of endocrine pancreas and their functions. 7
- (b) Explain in detail the structure of neuron. 6