(i)	Printed Pages: 2	Roll No.
(ii)	Ouestions : 9	Sub. Code · 0 2 5 6

Exam. Code: 0 0 0 3

# B.A./B.Sc. (General) 3rd Semester

(2122)

### ZOOLOGY

Paper—II: Biochemistry & Physiology - I (ZOO-302)

Time Allowed: Three Hours] [Maximum Marks: 36

Note:— Attempt *five* questions in all including Question No.I, which is compulsory and selecting **one** question from each unit.

- I. Describe the following:
  - (a) snRNA
  - (b) Zwitter ion
  - (c) Isozymes
  - (d) Site of glycolysis and Kreb's cycle in cell
  - (e) Apolipoproteins
  - (f) Dead sapce
  - (g) Monocytes
  - (h) Purkinje fibres.

1×8

#### UNIT-I

- II. What are Conjugated Lipids? Discuss their types, structure,and function.
- III. (a) Differentiate between homo and heteropolysaccharides with suitable example of each.

  4
  - (b) What is the difference between anomers and isomers?

    Illustrate with suitable example.

#### UNIT-II

- IV. What are Allosteric Enzymes? Discuss the mechanism of enzyme action. 2+5
- V. What is Pentose Phosphate Pathway? Describe in detail the process and its regulation.

# UNIT-III

- VI. Differentiate extra and intra-cellular digestion. Write note on symbiotic digestion. 5+2
- VII. (a) What is Pulmonary Ventilation? Discuss the laws regulating it.
  - (b) Mention the various forms in which CO<sub>2</sub> is transported in blood.

## UNIT-IV

VIII. Discuss in detail the Coagulation Cascade.

IX. (a) What is Cardiac Cycle? Describe the different stages.

(b) What is Blood Pressure? How is it related to resistance?

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