

## ZOOLOGY

Paper B : Biochemistry and Animal Physiology-I (Zoo-302)

Time Allowed : Three Hours

Maximum Marks : 36

Note : Attempt five questions in all, selecting at least one question from each Unit. Question No. 1 is compulsory.

1. (i) Isoenzymes
- (ii) Biological Oxidation
- (iii) Emulsification
- (iv) Bohr effect
- (v) Cardiac Output
- (vi) Anemia
- (vii) Defence Protein
- (viii) Essential Fatty Acids.

1×8

### UNIT-I

2. (a) Classify carbohydrates and give suitable examples for each type. 5+2
- (b) What are Nucleosides ?
3. Discuss primary, secondary, tertiary and quaternary structure of proteins giving suitable example. 7

## UNIT-II

4. What are Allosteric Enzymes ? Discuss the mechanism of enzyme action. 7
5. (a) What is Glycolysis ? Describe glycolysis in a tabulated form.  
(b) What is Glucogenesis ? 5+2

## UNIT-III

6. (a) Describe the physiology of digestion in different parts of digestive system.  
(b) Differentiate between extracellular and intracellular digestion. 5+2
7. Describe the transport of  $O_2$  and  $CO_2$  in detail. 7

## UNIT-IV

8. (a) Describe the mechanism of blood clotting.  
(b) Write a note on ECG and its significance. 5+2
9. Describe the origin and regulation of heart beat in detail. 7