

**B.Sc. 3<sup>rd</sup> Semester Sessional Examination-2023**

**Sub: Zoology (H)**

**Paper: Fundamentals of Biochemistry**

**Paper Code: ZOO-HC-3036**

**Full Marks: 20**

**Time: 1 Hr**

*The figures in the margin indicate full marks for the questions*

1. Answer the following questions (**Any five**): 1×5=5
  - a. Give an example of group specificity of an enzyme.
  - b. The number of hydrogen bonds between guanine and cytosine is.....  
(**Fill in the blank**)
  - c. What is Isozyme?
  - d. Define mtDNA.
  - e. The non-protein component of the enzyme molecule is known as.....  
(**Fill in the blank**)
  - f. The type of inhibition in which inhibitors reversibly bind with the enzyme molecule affecting the equilibrium constant of the reaction is known as Reversible Inhibition.  
(**True/False**).
2. Write short notes on (**Any two**): 2½+2½=5
  - a. Specificity of Enzyme Action
  - b. Nomenclature of Enzymes
  - c. Types of DNA
  - d. Nucleosides
3. Answer **any one** of the following questions: 1×10=10
  - a. Give a brief account of denaturation and renaturation of DNA. 5+5=10
  - b. Define Inhibitor? Explain the roles of different types of Enzyme Inhibition. 2+8=10
  - c. What is Cofactor? Explain the mechanism of Enzyme Action. 2+4+4=10

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