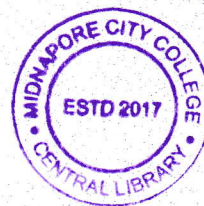


**The West Bengal University of Health Sciences**  
**M.Sc. MLT in Biochemistry 1st Year September- October, 2023**

**Examination**

Subject: Basic Biochemistry

Time: 3 hrs



Full Marks: 80

*Attempt all questions*

1. Answer the following questions :
  - a) State the difference between qualitative & quantitative Benedict's reagent. Define Epimer with examples. State the fate of Benedict's test of starch solution. Why sucrose is called an invert sugar? 2+2+2+2+2
  - b) State the factors that influence enzymes activity. Discuss about competitive inhibition of enzyme. State the difference between metalloenzyme & metal activated enzymes with example. 4+3+3
  - c) State the estimation principles & procedure of serum sodium level. What is the normal range of serum sodium? State the clinical significance of potassium & sodium in ionic balance. 6+1+3
  - d) Discuss the salient features of beta- pleated sheet structure of protein. Define denaturation of protein. Give examples of four denaturing agents. Name two aromatic amino acids. 4+2+2+2
  
2. Write short notes of the following : 8 x 5
  - a) RNA and its types.
  - b) Dehydration and osmotic imbalance.
  - c) Phosphoglyceride.
  - d) Uncompetitive inhibition.
  - e) Application of radioactivity for diagnosis.
  - f) Genetic code.
  - g) Physiological buffer system.
  - h) Vitamin deficiency.