

**AUGUST 2006**

**[KP 872]**

**Sub. Code : 5002**

**B.Sc. (Medical Laboratory Technology) DEGREE  
EXAMINATION.**

**First Year**

**Paper II — BASIC CHEMISTRY**

**Time : Three hours                      Maximum : 100 marks**

**Descriptive : Two hours and  
forty minutes                      Descriptive : 80 marks**

**Objective : Twenty minutes                      Objective : 20 marks**

**Answer ALL questions.**

**Write Essays on :**

1. Describe the structure and functions of (a) cell membrane (b) Nucleus (c) Mitochondria. Add a note on MRNA and t.RNA. (20)
2. (a) Discuss the classification of carbohydrates with examples.  
(b) Explain any two qualitative tests for identification of carbohydrates.  
(c) Bring out the biological importance of carbohydrates. (5 + 5 + 5 = 15)

3. (a) What is a peptide linkage? Explain with an example.

(b) Write any two colour tests for proteins.

(c) Discuss the biological importance of proteins. (5 + 5 + 5 = 15)

4. Write short notes on : (6 × 5 = 30)

(a) Organelles.

(b) Factors affecting enzyme reaction.

(c) Oils and fats.

(d) pH and its biological importance.

(e) Lewis concept of acids and bases.

(f) Aromatic compounds of physiological importance.