

Second Year Pharmacy
BIOCHEMISTRY AND CLINICAL PATHOLOGY
(ER20-23T)

Time : Three Hours

Maximum Marks : 80

Note : i) Attempt any five questions out of eight.
ii) Each question carry equal marks.

- 1. a) Classify proteins the various ways with suitable examples. 8
b) Describe structure formulae of any two non-essential amino acid with their biological significance. 4
c) Discuss any two qualitative test for Carbohydrates. 4
2. a) Write a note on chemical properties of carbohydrates. 8
b) Discuss the structure of Maltose and Sucrose. 4
c) Explain the functions of lipids in the body. 4
3. a) Explain the term rancidity. Why does it occur and how can it be reduced? 6
b) Explain the term : 4
i) Gene
ii) Genetic code
iii) Transcription
iv) Translation
c) Give clinical importance of SGPT and SGOT. 6
4. a) Define enzyme inhibition. Explain in detail the different types of inhibitions with suitable examples. 8
b) Discuss the pharmaceutical and diagnostic importance of Enzymes. 4
c) Discuss the role of fat soluble vitamins in the body. 4

- 5. a) Enlist the coenzymes taking part in metabolic functions. 6
b) Write a brief account of vitamin B-complex. 6
c) Give the importance of LDL and HDL in lipid metabolism. 4
6. Write note on any two of the following. 16
a) Urea cycle
b) Glycolysis
c) beta-Oxidation of fatty acids
7. a) Explain the role of minerals in the body. 6
b) Describe the sources, functions and deficiency disease of Iodine. 6
c) Explain regulation of water balance in the body. 4
8. Write notes any four of the following. 16
a) Urea clearance test
b) Common liver function tests
c) Different types of Anaemia
d) Role and significance of abnormal constituents of urine
e) Role and significance of WBC and immunoglobulin

