

PG CBCS
M.Sc. Semester-I Examination 2020
MLT
PAPER: MLT 103
(CLINICAL BIOCHEMISTRY)

Full Marks: 40**Time: 2 Hours****Answer any four questions of the following:****10X4=40**

1. Describe the primary structure of protein with example. What do you mean by α amino acid? Name two hydrophilic amino acids. 6+2+2
2. What do you mean by reducing sugar? Give example. Describe the classification of protein with example. Name the distinguishing test of between monosaccharide's and disaccharides. 2+1+6+1
3. What is L-amino acid? Mention the difference between peptide and protein. What are the factors affecting activity of the enzymes? What do you mean by isoelectric pH)? 2+2+4+2
4. Mention the role of vitamin A. What do you mean by derived lipid? Write down the function of essential fatty acid. Classify polysaccharide with example. What is mucopolysaccharide? 3+2+2+2+1
5. What is ribozyme? Give an example. Write the different causes of protein denaturation. What is domain in protein structure? Mention the different dietary sources of vitamin D. 2+3+2+3
6. What complications are associated with Vitamin A deficiency? What do you mean by β - D-glucose. Describe the structure of tRNA. What do you mean by 1,4- glycosidic linkage? 3+2+3+2
7. What do you mean by Gibbs free energy? Mention the structure of DNA. What is the slope of Lineweaver Burk double reciprocal Plot in case of uninhibited condition. What is nucleotide? 2+4+2+2
8. How is Fisher projection arranged? What do you mean by chiral carbon? What is complete protein? Give example. What type of DNA is found in human. 5+2+2+1
9. Write the Michelis-Menten equation with proper explanation. What are non essential amino acids? What do you mean by anomeric carbon? Derive the Eadie-Hofstee equation. 4+2+ 2+2
10. "Induced Fit Model" and "Lock and Key" model of enzyme- which one is better and why ? Write an example of EC4 lyases. What is non-competitive inhibition? Why RNA is susceptible to base catalyzed hydrolysis? 4+1+3+2