

M. Sc. DEGREE END SEMESTER EXAMINATION - APRIL 2021**SEMESTER 4 : PHARMACEUTICAL CHEMISTRY****COURSE : 16P4CPHT13EL : PHARMACEUTICAL CHEMISTRY - II***(For Regular - 2019 Admission & Supplementary - 2018/2017/2016 Admissions)*

Time : Three Hours

Max. Marks: 75

PART A**Answer any 10 (2 marks each)**

1. Discuss the relevance of mannitol in pharmaceutical chemistry.
2. Discuss the relevance of glucose in pharmaceutical chemistry.
3. Explain ion exchange chromatography as a tool for amino acid analysis.
4. What is Edman method of peptide sequencing? Explain with an example.
5. Give two clinical uses of enzymes?
6. Explain the function of biotinyl coenzyme?
7. Draw the structure of a nucleotide and its three individual components
8. What do you mean by denaturation of DNA ?
9. What are transamination reactions?
10. Describe oxidative deamination.
11. Define buffer capacity.
12. Differentiate osmolarity and osmolality.
13. What is Autoimmunity?

(2 x 10 = 20)**PART B****Answer any 5 (5 marks each)**

14. Explain the tertiary and quaternary structure of proteins.
15. What is solid phase peptide synthesis? What are the merits of this method over solution phase synthesis?
16. What are enzyme immunological assays? Explain ELISA test.
17. What is enzyme inhibition? Classify it with mechanism and suitable examples?
18. Give an idea about the general functions of hormones.
19. Give the structure and functions of progesterone
20. Discuss fructose metabolism.
21. Explain the connection between urea cycle and citric acid cycle.

(5 x 5 = 25)**PART C****Answer any 2 (15 marks each)**

22. Discuss the classification of enzymes? Explain the mechanism and Kinetics?
23. Give a detailed description about the structure and functions of sex hormones.
24. (a) Explain inborn errors of metabolism.
(b) Explain urea cycle.
(c) Write a note on fatty acid activation and transport across membrane.
25. Explain in detail about a) Immune System, b) Immune response and c) Immunosuppressive Drugs. (5 + 5 + 5)

(15 x 2 = 30)