TB254752J

Reg. No :.....

Name :.....

BACHELOR'S DEGREE (C.B.C.S) EXAMINATION, MARCH 2025

2018, 2019, 2020, 2021, 2022 ADMISSIONS SUPPLEMENTARY

SEMESTER IV - COMPLEMENTARY COURSE 1 (CHEMISTRY)

CH4C01B18 - Advanced Bio-Organic Chemistry

Time : 3 Hours **Maximum Marks : 60**

Part A

I. Answer any Ten questions. Each question carries 1 mark **(10x1=10)**

1. What are the different types of alkaloids?
2. Define iodine value.
3. List the sources of citral.
4. What is meant by Rf value?
5. Give an example of a conjugated protein.
6. Give the biuret test for proteins.
7. Explain glycosidic bonds.
8. Explain gun cotton.
9. Define epimers.
10. Write the product obtained when glucose is treated with Con.HCl.
11. Give one example each of water soluble and fat soluble vitamins.
12. List any two deficiency diseases of vitamin A.

Part B

II. Answer any Six questions. Each question carries 5 marks **(6x5=30)**

13. Explain cleansing action of soaps.
14. Explain the isolation methods for alkaloids.
15. Explain briefly the different tests for proteins.
16. Explain the synthesis of dipeptide from Glycine.
17. Distinguish between transcription and translation.
18. Give the reactions of fructose with a) HNO3 b) Methanol c) acetic anhydride and sodium acetate d) concentrated H2SO4.
19. Discuss the reaction of glucose and fructose with excess phenylhydrazine.
20. List the sources and deficiency diseases of Vitamin A.
21. List the functions of bile acids.

Part C

III. Answer any Two questions. Each question carries 10 marks **(2x10=20)**

22. Explain the structure and physiological activity of citral.
23. Discuss the classification of protein with suitable examples.
24. Discuss the biological functions of nucleic acids.
25. Elucidate the structure of maltose.