

D. K. M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1**SEMESTER EXAMINATIONS****JUNE - 2022****19CCH6B****ORGANIC CHEMISTRY - II****Time: 3 Hours****Max. Marks: 75****SECTION – A (10 x 2 = 20)****Answer ALL the questions.**

1. What happens when glucose is treated with bromine water?
2. Give the furanose structure of glucose.
3. What is an invert sugar?
4. Give any two applications of cellulose.
5. Define isoelectric point.
6. What are essential amino acids? Give an example.
7. What do you mean by denaturation of proteins?
8. What are conjugated proteins? Give two examples.
9. Define isoprene rule.
10. What are sesquiterpenes? Give an example.

SECTION – B (5 x 5 = 25)**Answer ALL the questions.**

11. (a) What is mutarotation? Explain with mechanism.
(Or)
(b) How will you identify the presence of carbohydrates analytically?
12. (a) Elucidate the structure of sucrose.
(Or)
(b) Explain the structure of starch.
13. (a) Give any three methods for the preparation of alpha amino acids.
(Or)
(b) Explain the action of heat on alpha, beta and gamma amino acids
14. (a) How will you differentiate between DNA and RNA?
(Or)
(b) Discuss the secondary structure of DNA.
15. (a) Discuss the general methods of isolation of alkaloids.
(Or)
(b) Elucidate the structure of menthol.

SECTION – C (3 x 10 = 30)**Answer any THREE of the following questions.**

16. Elucidate the straight chain and ring structure of Glucose.
17. (a) Explain the conversion of (i) Arabinose to Glucose (ii) Glucose to Fructose.
(b) Write the structure of cellulose and give its uses.
18. Explain the general reactions of amino acids.
19. Write a notes on the primary and secondary structure of proteins.
20. Elucidate the structure of piperine.

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