25019404

QP CODE: 25019404

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

Complementary Course - CH4CMT06 - CHEMISTRY - ADVANCED BIO-ORGANIC CHEMISTRY

(Common for B.Sc Botany Model I, B.Sc Botany Mdel II Environmental Monitoring and Management , B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany Model II Plant Biotechnology, B.Sc Family & Community Science Model I, B.Sc Food Science & Quality Control Model III, B.Sc Food Technology & Quality Assurance, B.Sc Zoology Model I, B.Sc Zoology Model II Aquaculture, B.Sc Zoology Model II Food Microbiology, B.Sc Zoology Model II Medical Microbiology)

2017 Admission Onwards

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Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Write down the oxidation and reduction products of citral.
2. What are the products obtained when nicotine is oxidised with alkaline KMnO4?
3. What are oils and fats?
4. What is meant by saponification value?
5. What are essential aminoacids
6. What is meant by a peptide bond?
7. Differntiate between apoenzyme and coenzyme.
8. Draw the structure of thymine and cytosine.
9. What is the function of m-RNA?
10. What is mutarotation?
11. Draw the structure of vitamin D.

12. Which are the steroid hormones?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. How are essential oils isolated from plants?
14. Discuss the cleansing action of soaps.
15. How is glycine prepared by Strecker Synthesis?
16. Explain the Lock and key model of enzyme action.
17. Write a note on the structure of ATP.
18. Distinguish between polysccharides and oligosaccharides.
19. Explain the structure of Starch.
20. Explain the biological functions and deficiency diseases of vitamin B3 and B5. Give its Structure.
21. Discuss the structure and functions of cholesterol.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. What are synthetic detergents? How are they classified? What are the differences between soaps and detergents?
23. Explain the structure of proteins.
24. a) Explain the structure of DNA b) Distinguish between DNA and RNA
25. Discuss the structure of Sucrose.

(2×10=20)