



22102742

QP CODE: 22102742

Reg No : .....

Name : .....

**B.Sc DEGREE (CBCS) REGULAR EXAMINATIONS, AUGUST 2022**

**Fourth Semester**

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

(Common for B.Sc Botany Model I, B.Sc Botany Model 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)

2020 Admission Only

875A26E9

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. Draw the structure of nicotine.
3. Give two examples of fat.
4. What are soaps chemically?
5. What is meant by isoelectric point?
6. Give an example for a dipeptide.
7. What is enzyme inhibition.
8. What is a glycosidic bond?
9. Draw the structure of AMP.
10. Write any two physical properties of Glucose.
11. What are the biological functions of vitamin B3?
12. What do you mean by good cholesterol?





(10×1=10)

**Part B**

*Answer any **six** questions.*

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

13. How are terpenoids classified? Give examples for each class?
14. Explain the biological functions of phospholipids and glycolipids.
15. How is glycine prepared by Strecker Synthesis?
16. Write a note on the different classifications of enzymes.
17. Distinguish between ribose sugar and deoxyribose sugar.
18. How fructose is converted to glucose?
19. Write the industrial applications of Cellulose.
20. Explain the biological functions and deficiency diseases of vitamin D. Give its Structure.
21. Write short notes on amine hormones and artificial hormones.

(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. Briefly explain
  - a) The biological importance of proteins
  - b) Effects of denaturation on proteins
  - c) Any three tests for proteins.
24.
  - a) Explain protein synthesis
  - b) Write a note on the structure of ATP
25. Elucidate the structure of Fructose.

(2×10=20)

