

QP CODE: 20100856



Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATION, MARCH 2020

Fourth Semester

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

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

2017 Admission onwards

B510961D

Time: 3 Hours

Marks: 60

Part A

Answer any ten questions.

Each question carries 1 mark.

1. Write the molecular formula of citral.
2. Write any two physiological activities of coniine.
3. What are oils and fats?
4. What is meant by saponification value?
5. What are essential amino acids?
6. How a peptide bond is formed between two amino acids?
7. What are Lyases?
8. What do you mean by Central Dogma in molecular biology?
9. Who discovered the structure of DNA?
10. Write any two industrial applications of cellulose.
11. What are the biological functions of vitamin B1?
12. Which are the diseases caused by the deficiency of vitamin C?

(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. Write a note on enzyme inhibition.
17. Write a note on the structure of ATP.
18. Differentiating reducing and non reducing sugars with examples.
19. How glucose is converted to fructose.
20. Write short notes on LDL and HDL.
21. Write short notes on steroid hormones and peptide hormones.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Explain the environmental aspects of 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. Explain the biological functions of nucleic acids.
25. Discuss the structure of Sucrose.

(2×10=20)

