



QP CODE: 21103175



21103175

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS,
DECEMBER 2021
Second Semester**

Complementary Course - BC2CMT02 - BIOCHEMISTRY- BIOMOLECULES

(Common to 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 and Biotechnology Model III Double Main, 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 Zoology and Industrial Microbiology Model III Double Main, B.Sc Biological Techniques and Specimen Preparation Model III ,B.Sc Botany Model II Plant Biotechnology ,B.Sc Biotechnology Model III ,B.Sc Microbiology Model III)

2017 ADMISSION ONWARDS

A4D0604B

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What are epimers?
2. Draw the structure of Mannose.
3. Write down the structure of Milk sugar?
4. Define lipids.
5. What are long chain fatty acids?
6. What is triacylglycerol?
7. Name any two steroids in biological system.
8. Give the three letter code for cysteine.
9. What do you mean by secondary structure of a protein?
10. What is the complementary sequence of nitrogenous bases for an AGCCGTTAAC fragment of a DNA ?
11. Which scientists proposed the double helical structure for DNA?





12. Point out the functions of mRNA.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Explain mutarotation.

14. Structure and properties of starch.

15. What is the difference between homopolysaccharides and heteropolysaccharides?

16. Give the structure and functions of Plasmalogens.

17. Explain chemical constants.

18. Comment on denaturation of proteins.

19. Briefly explain the structure of collagen.

20. Define denaturation of nucleic acids .

21. Give a detailed note on hyperchromic effect.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain isomerisation of carbohydrate.

23. Give the structure and importance of sphingolipids and triacyl glycerol.

24. Describe the classification of proteins.

25. Explain in detail about chemical nature of nucleic acids?

(2×10=20)

