QP CODE: 20101135

20101135

Reg No : .....

Name : .....

B.Sc. DEGREE (CBCS) EXAMINATION, NOVEMBER 2020

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

4D140FD3

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. What is Mutarotation?
2. Explain why sucrose is called as invert sugar ?
3. Comment on Heparin
4. What are simple lipids?
5. What is triacylglycerol?
6. Name the phospholipid present in the myelin sheath.
7. Define iodine number.
8. What is a zwitter ion?
9. Give the names of any two non-covalent bonds found in proteins
10. What are nucleotides ?
11. Draw a deoxyribose sugar , numbering the carbon atoms.
12. Point out the difference between B and Z DNA.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Briefly account on D and L form of glyceraldehydes
14. Is epimerization reversible or not? Briefly justify your statement with suitable schematic representation
15. Distinguish between cellulose and chitin.
16. Explain essential and nonessential fatty acids with examples.
17. Write the structure and functions of ergosterol.
18. Give the structures of tyrosine and arginine
19. Explain the factors that cause denaturation of proteins
20. State and explain Chargaff"s rule.
21. Outline the structure of RNA molecule.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the reducing action of sugars
23. Give the structure and properties of
    a)Lecithin
    b) Phosphatidic acid
    c) Cephalin.
24. Describe the structure and functions of collagen
25. Explain about denaturation of nucleic acids.

(2×10=20)