

QP CODE: 19101755



Reg No :

Name : VISHNU

B.Sc. DEGREE (CBCS) EXAMINATION, MAY 2019

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

490F1757

Maximum Marks: 60

Time: 3 Hours

Part A

Answer any ten questions.

Each question carries 1 mark.

1. What are epimers?
2. Draw the structure of Mannose
3. What is animal starch
4. Define fats.
5. Name any two saturated fatty acid.
6. Give the structure of phosphatidic acid.
7. Define saponification.
8. Give the one letter code for serine
9. Give the significance of isoelectric pH.
10. What is the complementary sequence of nitrogenous bases for an AGCCGTTAAC fragment of a DNA ?
11. Point out the importance of DNA denaturation in research.
12. Draw the structure of tRNA



(10×1=10)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. What is the difference between epimers and anomers?
14. Distinguish between reducing and non-reducing sugars with Suitable examples .
15. Draw the structure of chitin and explain its properties
16. What are sphingolipids? Give functions.
17. Write the structure and functions of cholesterol.
18. Explain the various types of bonds found in proteins
19. Give the structure and functions of collagen
20. Contrast the structure of pyrimidine with that of purines ?
21. Give a short note on different forms of DNA.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Describe the structure and properties of important monosaccharides, disaccharides and polysaccharides.
23. Explain in detail the structure and importance of Triacyl glycerol and chemical constants.
24. Elaborate the structural levels of proteins
25. Explain the double helical structure of B DNA.

(2×10=20)

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lyophilic