QP CODE: 24020112

24020112

Reg No : .....

Name : .....

# B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

## Second Semester

B.Sc Bioinformatics Model III

## Core Course - BI2CRT05 - BIOCHEMISTRY

2017 ADMISSION ONWARDS

C7F956A4

Time: 3 Hours Max. Marks : 80

.

### Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Write two functions of carbohydrates.
2. Define anomers.
3. Draw the structure of dermatan sulfate.
4. Write three functions of lipids.
5. Write two properties of unsaturated fatty acids.
6. Draw the structures of monoacyl and diacyl glycerol.
7. What are aminoacids?
8. Define protein.
9. What is the importance of protein folding?
10. What is the difference between nucleoside and nucleotide?
11. Give three properties of vitamins.
12. Name the deficiency disese caused by vitaminA with two features.

(10×2=20)

### Part B

*Answer any **six** questions.*

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

13. Explain the structure of monosaccharides.

14. Explain the structure and importance of sucrose.

15. Explain in detail about essential fatty acid ?Mention its functions.

16. Give a brief account on saponiofication value and acid value of fats.

17. Explain structure and importance of phosphatidic acid.

18. Differentiate between essential and non essential amino acid with examples.

19. Explain the quaternary structure of protein with examples.

20. Explain in detail about bonds responsible for protein structure.

21. Explain the functions of RNA.

(6×5=30)

**Part C**

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Write an essay on homopolysaccharides and its importance.

23. What are fatty acids?Explain nomenclature,classification and physical properties of fatty acids.

24. Write an essay on structure and function of glycolipids.

25. Write an essay on structure of DNA?Explain in detail about watson and crick model of DNA with diagram.

(2×15=30)