

S.No. 8088

16 SACBT 1

(For candidates admitted from 2016–2017 onwards)

B.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

Part III — Allied

BIOMOLECULES

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20)

Answer ALL questions.

1. Define – Isomerism.
2. Write the functions of chitin.
3. What is Isoelectric pH?
4. What is essential and non-essential amino acids?
5. Define – Reichert-Meissel number.
6. Define – Halogenation
7. Draw the structure of Watson and Crick model of DNA.
8. Write the functions of m-RNA

9. Write the biological role of Vitamin K.

10. Define - Micro minerals.

PART B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write the chemistry and Functions of Sucrose.

Or

(b) Write the chemical composition and function of Dextrose.

12. (a) Write the difference between essential and non - essential aminoacids.

Or

(b) Write about the salting in and salting out behaviour of protein.

13. (a) Write the physical and chemical properties of fatty acids.

Or

(b) Define the structure of Stigmasterol and Calciferol.

14. (a) Write the Properties of DNA.

Or

(b) Write about tRNA and its types.

15. (a) Briefly write the Source and functions of Macro minerals.

Or

(b) Write the daily requirements, Manifestation of Vitamin A.

PART C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Write the structure, Chemistry and functions of Peptidoglycan.

17. Explain the physical and chemical properties of aminoacids.

18. Briefly explain about the structure and functions of Ergosterol.

19. Explain – Structure and types of RNA.

20. Write the structure, biological role and deficiency manifestation of Vitamin B12.