

15082

M.Sc. DEGREE EXAMINATION, OCTOBER/NOVEMBER 2018.

FIRST SEMESTER

Biotechnology

Paper II — BIOMOLECULES

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Melting temperature.
2. Purines structures.
3. Hydrophobic interactions.
4. Amylopectin.
5. Ninhydrin reaction of amino acids.
6. Ethylene.
7. Structure of chlorophyll.
8. Biological importance of phenolics.

PART B — (4 × 15 = 60 marks)

Answer ALL the questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Write an essay on polymorphism of DNA:

Or

10. What are the various types of RNA observed in relation to structure?

11. Write the definition and explain the classification of carbohydrates.

Or

12. Describe the various types of chemical bonds present in biomolecules.

13. Write the structure and chemical reactions of amino acids.

Or

14. Describe the classification of proteins and add a note on peptide bond.

15. Discuss the structures and biological functions of cytochromes and chlorophylls.

Or

16. Explain the different types of microbial toxins and antibiotics biotechnological significance.

