

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

FIRST SEMESTER

Microbiology

Paper III — BIOLOGICAL CHEMISTRY

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — ( $5 \times 3 = 15$  marks)

Answer any FIVE questions.

Each questions carries 3 marks.

Each answer should not exceed 1 page.

1. Chitin.
2. Glycolipids.
3. Ramachandran Plot.
4. Cot Values.
5. Michalis-Menten equations.
6. RNase.
7. Entropy.
8. Concept of free energy.

PART B — ( $4 \times 15 = 60$  marks)

Answer ALL questions.

Each questions carries 15 marks.

Each answer should not exceed 6 pages.

9. Outline the structure and properties of carbohydrates.
- Or
10. Narrate an account on physicochemical properties and classification of lipids.
  11. Describe protein sequencing.
- Or
12. Describe the structure ,properties and functions of DNA.

13. Write an essay on enzyme classification and properties.

Or

14. Discuss the action mechanism of lysozyme, Chymotrypsin and RNase.

15. Explain thermodynamic laws.

Or

16. Write an essay on bioluminescence.

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