

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

FIRST SEMESTER

Biochemistry

Paper I — CHEMISTRY OF BIOMOLECULES

Time: Three hours

Maximum: 75 marks

(No additional sheet will be supplied)

PART A — $(5 \times 3 = 15 \text{ marks})$

Answer any FIVE questions.

Each questions carries 3 marks.

Each answer should not exceed 1 page.

- 1. Oligosacharides
- 2. Formation of glycosidic bond
- 3. Unusual aminoacids
- 4. Denaturatial of proteins
- 5. Phospholipids
- 6. Functions of chlorophylls
- 7. Renaturation of DNA
- 8. Purine bons

PART B — $(4 \times 15 = 60 \text{ marks})$

Answer ALL questions.

Each questions carries 15 marks.

Each answer should not exceed 6 pages.

9. Explain the various chemical reactions of monosaccharides.

Or

- 10. Describe the chemistry and functions of heteropoly saccharides.
- 11. How protein structure is organized at various levels?

Or

12. What are the various steps involved in the purification of proteins.

13. Describe structure and classification of lipids.

Or

- 14. Explain the structure and functions of heme.
- 15. Discuss the structure of DNA using Watson and Crick model.

Or

16. Write the structure of various types of RNA with emphasis particularly on t-RNA.

