Name.. Reg. No

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Microbiology

MB 1C 01—GENERAL BIOCHEMISTRY

Time: Three Hours

Maximum: 36 Weightage

Section A

Answer all **fourteen** questions in 2 **or** 3 sentences. Each question carries 1 weightage.

- 1. Scurvy.
- 2. N and 0 glycosidic linkages.
- 3. Steroids.
- 4. Invert sugar.
- 5. Gas Chromatography.
- 6. Beer-Lambert's law.
- 7. Isoelectric focusing.
- 8. Thromboxanes.
- 9. Phosphodiester bond.
- 10. Non-protein amino acids.
- 11. Anomers.
- 12. PUFA.
- 13. Vasopressin.
- 14. Colloids.

 $(14 \times 1 = 14 \text{ weightage})$

Section B

Write notes on any **seven** of the following. Each question carries 2 weightage.

- 15. Structure of t-RNA.
- 16. Watson-Crick model of DNA structure.
- 17. Mass spectroscopy.

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- 18. Sugar Derivatives.
- 19. Cell-membrane structure.
- 20. Applications of radioisotopes in research.
- 21. Phospholipids.
- 22. Fat-soluble vitamins.
- 23. Mechanism of action of peptide hormones.
- 24. Lyophilisation techniques.

 $(7 \times 2 = 14 \text{ weightage})$

Section C

Write an essay on notes on any two of the following.

Each question carries 4 weightage.

- 25. Structural levels of organization in proteins.
- 26. Principle and application of various types of chromatography.
- 27. Polysaccharides.
- 28. Theory and applications of NMR.

 $(2 \times 4 = 8 \text{ weightage})$