Name.....

Reg. No.

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2006

General Biotechnology

GBT 103—MICROBIOLOGY

Time : Three Hours

Maximum: 80 Marks

Section A

Answer any two questions. Each question carries 10 marks.

- 1. Describe the biosynthesis of cell wall in Gram negative bacteria in detail.
- 2. How would you distinguish unicellular algae from cyanobacteria?
- 3. What are the major modes of antibacterial action of antibiotics ?

 $(2 \ge 10 = 20 \text{ marks})$

Section **B**

Write briefly on any **ten** of the following. Each question carries 5 marks.

- 4. Nosocomial infection.
- 5. Cholera.
- 6. Mycoplasma.
- 7. Lambaa phage.
- 8. Lyophilisation.
- 9. Euglena.
- 10. Trickling filter.
- 11. Is Bergey's manual of Systematic Bacteriology is so important to bacteriologist? Justify your answer.
- 12. Explain the methods of making culture axenic.
- 13. Discuss the characteristics of algae used for algal classification.
- 14. Explain the process of mineralization with an example.
- 15. Discuss the problem of using antibiotics as a good preservative.

 $(10 \ge 5 = 50 \text{ marks})$

Section C

Answer **all** questions. Each question carries 2 marks.

- 16. Pasteurization.
- 17. Spirochete.
- 18. Voges-Proskauer reaction.
- 19. Botulism.
- 20. Reverse transcriptase.

 $(5 \ge 2 = 10 \text{ marks})$