

D 31926

Name.....

Reg. No.....

**FIRST SEMESTER M.Sc. (GENERAL BIOTECHNOLOGY) DEGREE
EXAMINATION, MARCH/APRIL 2004**

GBT 103. MICROBIOLOGY

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer any **two** questions.
Each question carries 10 marks.*

1. Describe the structure of a typical bacterial cell with illustrations and sketches.
2. Discuss the different biochemical pathways leading to energy production in aerobic bacteria.
3. Discuss the role of micro-organisms in biodegradation and **Bioremediation**.

(2 x 10 = 20 marks)

Section B

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

4. Enrichment culture methods.
5. Biological Nitrogen fixation.
6. Structure of **Bacteriophage**.
7. Replication of viruses.
8. Food preservation techniques.
9. Disinfectants.
10. Gene transfer in micro-organisms.
11. Microbial toxins.
12. Presumptive **coliform** test.
13. **Mycoplasma**.
14. AIDS.
15. Luis Pasteur.

(10 x 5 = 50 marks)

Section C

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

Write short notes on :

- | | |
|--------------------------|---------------------|
| 16. Yeasts. | 17. Pasteurisation. |
| 18. Episomes . | 19. Penicillin. |
| 20. Phototrophs . | |

(5 x 2 = 10 marks)