

**M.Sc. DEGREE I SEMESTER EXAMINATION IN ENVIRONMENTAL TECHNOLOGY,
DECEMBER 2006**

ENV/ENB 2104 ENVIRONMENTAL MICROBIOLOGY

Time : 3 Hours

Maximum Marks : 50

All question carry equal marks

SECTION - A

(Answer any **TEN** questions)

(10 x 1 = 10)

I

1. FC/FS
2. Interferons
3. Use of luminometer
4. BGA
5. Joseph Lister
6. Psychrophiles
7. Chemotaxis
8. RFLP-PCR
9. Capsid
10. Hapten
11. Viroids
12. BPL
13. Diaceous fungi
14. Biofilm
15. Name any two nitrogen fixing bacteria

SECTION – B

(Answer any **FIVE** questions)

(5x 2 = 10)

II

1. What is fastidious organisms?
2. What is eutrophication
3. Define Enrichment culture
4. What is leaching?
5. Write a short note on lysogenic and lytic cycles
6. Define rhizosphere.
7. What is attenuated vaccine?
8. Differentiate prokaryote and eukaryote

SECTION – C

(Answer any **FIVE** questions)

(5x 3 = 15)

III

1. Define viable but nonculturable bacteria
2. Write a short note on membrane filtration technique.
3. What are the methods commonly used for the isolation of pure culture?
4. Write a short note on enumeration of microorganisms by spectroscopic method.
5. Give a brief account on the principles of electrophoresis.
6. Explain in detail account on exo and endo enzymes.
7. What are the types of bioremediation
8. Write a short note on infectious malarial parasites

(Turn over)

SECTION – D
(Answer any **THREE** questions)

(3x 5 = 15)

1. Write an essay on the contributions of early microbiologists for the development of microbiology.
2. How can you differentiate the Gram +ve and -ve bacterial cells based on their cell wall composition?
3. Differentiate the SEM and TEM with neat diagram. Add a note on the preparation of biological sample for electron microscopy.
4. Write an account on the production of therapeutically useful substances by recombinant DNA technology.
5. Write a detailed account on cultivation methods of virus.
