

**M.SC DEGREE I SEMESTER EXAMINATION IN
ENVIRONMENTAL TECHNOLOGY
DECEMBER 2004**

ENB 2104 ENVIRONMENTAL MICROBIOLOGY

Time : 3 Hours

Maximum Marks: 50

I. Answer ANY TEN of the following:-

(10 x 1 = 10)

1. What is pasteurization?
2. Name four common fungi in soil.
3. Invention of penicillin.
4. Antiviral agents.
5. Protozoan grazing.
6. Thermophile and halophile.
7. What is PCR?
8. Anti bacataerial agents.
9. Radio isotopes.
10. Epiflorescent microscopy.
11. What is chemoautotrophy? :
12. Archae bacteria.
13. Fish technique and applications.
14. Exponential growth phase.
15. Resolution in electron microscopy.

II. Answer any five of the following:-

(5 x 2 = 10)

1. Methods of sterilization.
2. Name four viral diseases in animals.
3. Auto radiography.
4. Biological sulphate reduction.
5. Nitrification and denitrification.
6. Action of tetracyclin in cell.
7. Infection by eukaryotic agents.
8. ATP from glycolysis.

(Turn Over)

III. Answer ANY FIVE of the following:-

(5 x 3 = 15)

1. Gram staining.
2. *E.coli* as a genetic tool.
3. Principle and use of U.V. Spectrophotometer.
4. Reduce dechlorination.
5. Techniques in microbial an analysis of water.
6. Microbial consortium.
7. Whole cell immobilization in water treatment.
8. Cell line.

IV. Answer ANY THREE of the following:-

(3 x 5 = 15)

1. PCR application in genetic engineering.
2. Quantification of microbial growth.
3. Biogeocycles in nature -explain any one.
4. Energy cycle in heterotrophism.
5. Biological wastewater treatment.