



Eastern University, Sri Lanka
External Degree Programme
Second Year Examination in Science-1996/1997
(June/August, 2004) (Proper & Repeat)

EXBT 201, Microbiology

Answer FOUR questions only

Time: 02 hrs

- 1) a) What is the Gram stain?
b) How does the structure of the cell-walls (envelopes) differ in Gram positive and Gram negative bacteria?
- 2) a) What are the bacteriophages and what is their structure?
b) What is a prophage or temperate phage?
c) What is lysogeny?
- 3) a) Why water must be subjected to microbial analysis?
b) Why do water testing procedures look for coliform organisms rather than pathogens?
- 4) Write an essay on the sewage (wastewater) treatment in municipalities?
- 5) Explain the role of microorganisms in the biochemical transformations in the soil with suitable examples
- 6) a) Describe the importance of microorganisms in recycling of Nitrogen?
b) What is the importance of nitrogen fixation?
c) How roots are infected with rhizobia?