

II B.Tech I Semester(RR) Supplementary Examinations, May/June 2010
MICROBIOLOGY
(Bio-Technology)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. Describe the similarities between Germ theory of disease and Germ theory of fermentation. [8+8]
2. Define a "Bacterial species". Explain the difficulties encountered in classification of bacteria. [16]
3. Describe the general characteristics of Archebacteria. [16]
4. (a) What are siderophores?
(b) Explain about the microbial iron chelators. [8+8]
5. Describe the methodology for the enrichment of the following bacteria:
(a) Thiobacillus thiooxidans
(b) Rhizobium
(c) Halobacterium
(d) Clostridium [4×4]
6. Define water activity. Explain how water activity influences the growth of different microorganisms? [16]
7. Enumerate the various classes of disinfectants and their use as anti-microbial agents with suitable examples. [16]
8. Why microbiological standards are prescribed for Pharmaceuticals. Explain with a suitable example. [16]
