

Code 9A23304

3

II B.Tech I semester (R09) Regular Examinations, November 2010  
**MICROBIOLOGY**  
(Biotechnology)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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1. (a) Write about germ theory of diseases  
(b) Write different techniques to identify micro organisms.
2. (a) What is the significance of microbial classification? Describe the classification of Carl-Woese et al.  
(b) Describe different taxonomic ranks in microbiology with special reference to bacteria.
3. (a) Write briefly on nutritional classes of microorganisms.  
(b) Write a detailed account on different types of media- selective media, differential media and enrichment media.
4. (a) Write about use of agar slants, agar stabs for preservation of microorganisms.  
(b) Write about aims and principles of biochemical test - sugar fermentations IMVIC tests and catalase production.
5. (a) Write about definition of infection, diseases and pathogens with examples.  
(b) Write about virulence and virulence factors of influenza and tuberculosis.
6. (a) Write 3 name of animal viruses and plant viruses.  
(b) Describe the classification of viruses.
7. (a) Describe the bacterial replication and also mechanism of lysogeny.  
(b) Write about DNA viruses and RNA viruses.
8. (a) Write a detailed account on different methods of identification and invitro cultivation of viruses.  
(b) Write about assay of animal viruses.

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