

Code 9A23304

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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

1. (a) Write two scientists names and their contribution in the field of microbiology.
(b) Write typical characteristics features of fungi an their significance role in medicine.
2. (a) What are the different growth factors and their functions in microbial metabolism?
(b) Describe cultivation of microorganisms and also describe the role of solidifying agents in media.
3. (a) Write about preservation of microorganisms-use of sterile oil and cryopreservation .
(b) Write a detailed account on simple staining differential staining and endospore staining.
4. (a) Write about three domains of life.
(b) Write briefly about biochemical, immunological and genetical characters referring to Taxonomy of microorganisms.
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 about the properties of viruses and illustrate the virus structure.
(b) Write about the application of viruses in biotechnology industry.
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 of viruses and in vitro cultivation of viruses.
(b) Write about assay of animal viruses.
