

MBP-405: Microbial Techniques

1. Preparation of culture media & Inoculation methods
2. Colony characteristics of bacteria
3. Staining techniques (Simple, Negative, Gram's, Endospore, flagellar)
4. Bacterial Growth curve (Titrimetric and Turbidometric)
5. Enumeration of bacteria from different sources
6. Micrometry
7. Lactophenol cotton blue staining for fungal culture
8. Enumeration of fungi from soil, water and air
9. Study of endophytic fungi
10. Study of follicolous fungi
11. Isolation of VAM fungi
12. Identification of wood rotting fungi
13. Identification of Phytoplanktons in fresh water, & marine water
14. Isolation and culturing Cyanophycean members
15. Study of Lichens

MBP-406: Microbial Physiology

1. Estimation of reducing sugar by DNS method
2. Estimation of Protein by Lowry's method
3. Estimation of Protein by Biuret method
4. Estimation of Saponification value of fats
5. Estimation of Peroxide Value
6. Gelatin Hydrolysis by microorganisms
7. Fermentation of Carbohydrates
8. Casein Hydrolysis
9. Determination of specific gravity of fats & oils
10. Triple sugar Iron test
11. Urease production test
12. Determination of catalase activity
13. Determination of V_{max} and K_m value