

MMC 103-P MICROBIAL TAXONOMY AND SYSTEMATICS [P]

Practical Course

Credit : 1 Contact

Hours : 30

1. Morphological, physiological and biochemical characterization of bacteria.
2. Chemotaxonomic analysis - cell wall, cell lipid, quinones.
3. Characterization of actinomycetes (*Streptomyces* sp.).
4. Characterization of yeast (*Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*).
5. Characterization of cyanobacteria.

References (Composite list for theory and practical):

1. Sneath, A. H. P., Mair, S. N. and Sharpe, E. M., Bergey's Manual of Systematic Bacteriology Vol. 2. Williams & Wilkins Bacteriology Symposium, Series No 2, Academic Press, London/New York.
2. Goodfellow, M., Mordarski, M. and Williams, S. T., The biology of the actinomycetes, Academic Press.
3. Goodfellow, M. and Minnikin, D. E., Chemical Methods in Bacterial Systematics, The Society for Applied Bacteriology. Technical Series No. 20, Academic Press.
4. Barlow, A., The prokaryotes: A Handbook on the Biology of Bacteria: Ecophysiology, Isolation, Identification, Applications, Volume 1, Springer-Verlag.
5. Kurtzman, C. P., Fell, J. W. and Boekhout, T., The Yeasts - A Taxonomic Study, Elsevier.
6. Prescott, L. M., Harley, J. P. and Klein, D.A., Microbiology. McGraw Hill, New York.
7. Norris, J. R. and Ribbons, D. W., Methods in Microbiology, Vol. 18 & 19, Academic Press.
8. Reddy, C. A., Methods for General and Molecular Microbiology, ASM Press.