

Pre-requisites: Nil

Modern analytical techniques involved in biochemistry, immunology, molecular Biology, microbiology, biochemical engineering, biophysics and other frontier research fields of Biotechnology; different techniques, such as, Spectrophotometric techniques: UV-VIS, IR, Atomic absorption, Mass, Fluorescence, NMR, X-ray, etc.; Microscopic techniques: Phase contrast, Fluorescence, TEM, SEM etc.; Chromatographic techniques: Column chromatography (GLC, HPLC, FPLC etc.), Electrophoresis, TLC, etc.; other classical and modern methodologies and techniques involved in the fields of biotechnology.

References:

1. H-P Schmauder, M Schweizer and L M Schweizer., *Methods in Biotechnology*, (eds), Taylor & Francis Publishers, 2002.
2. K. Wilson & J. Walker, *Practical Biochemistry: Principles and Techniques*. (eds) Cambridge University Press, New York, 1995.
3. Douglas A. Skoog and James J. Leary, *Principles of Instrumental Analysis*. 4th Edition. Saunders College Publishing, 1992.