

**BCC 203-P ANALYTICAL BIOCHEMISTRY – II [P]****Practical Course Credit : 1****Contact Hours : 30**

1. Column chromatography: Preparation of column, determination of void, bed, dead volume, loading capacity and resolution.
2. Measurement of fluorescence by spectrofluorimeter
3. Separation of molecules by HPLC.
4. Study of cell and cell components using SEM.
5. Demonstration of: GC, IR, NMR, and Mass/MALDI-TOF, AFM.
6. Elucidation of structure of cellular metabolites using IR, NMR and Mass profiles

**Reference Books (Composite list for theory and practicals)**

1. Sansonetti, P., & Zychlinsky, A, Molecular Cellular Microbiology, In: Methods in Microbiology, Volume 31.
2. Norris, R., Ribbons, D.W. Molecular Cellular Microbiology. In Methods in Microbiology
3. Sidney P., Colowick & Nathan O. Methods in enzymology. Volume IV: Edited by Kaplan, McCollum Pratt Institute, Johns Hopkins University, Baltimore, Maryland. Academic Press Inc., New York, New York.
4. Wilson, K & Walker, J.: Principles and Techniques of Practical Biochemistry. Kluwer Academic Publishers
5. Colowick, S.P. & Kaplan, N.O., Methods in Enzymology, Volume 2.
6. Parakhia, M.V., Tomar, R. S., Patel, S., & Golakiya, B. A., Molecular Biology and Biotechnology : Microbial Methods