

BCC 101-P FUNDAMENTALS IN BIOCHEMISTRY [P]

Practical Course Credit: 1

Contact Hours: 30

1. Estimation of amino acids (ala, tyr, trp) and protein by spectroscopy.
2. Comparison of colorimetric methods for protein estimation – Biuret, Folin-Ciocalteu methods.
3. Comparison of methods for reducing sugar estimation – DNSA, Glucose Oxidase
4. Estimation of total sugar by anthrone and phenol-sulphuric acid methods
5. Estimation of lipid by acid-dichromate method
6. Estimation of nucleic acid by direct spectroscopy.

Reference Books (Composite list for theory and practicals)

1. Lehninger, A., Cox, M., & Nelson, D. L., Lehninger Principles of Biochemistry edited by Freeman, W. H. & Company
2. Stryer, L., Biochemistry. Freeman, W. H. & Company
3. Conn, E., Stumpf, P., Bruening, G. & Doi, R. H. Outlines of Biochemistry by John Wiley & Sons.
4. Voet, D., Voet, J. G. & Pratt, C. W. Principles of Biochemistry John Wiley & Sons
5. Bernard L. Oser. Hawk's Physiological Chemistry edited by McGraw-Hill Book Company
6. Harper, H. A., Physiological Chemistry. University Medical Publishers
7. Mu, P., & Plummer, D. T., Introduction to Practical Biochemistry. Tata McGraw-Hill Education.
8. Sadasivam, S. & Manickam, A. Biochemical Methods. Publisher, New Age International (P) Limited
9. Jayaraman, J., Laboratory Manual in Biochemistry. John Wiley & Sons, Limited