



Department of _Biotechnology		LP: BT18511 Rev. No: 00 Date:10.07.2023
B.Tech	: Biotechnology	
Regulation	: 2018A	
PG Specialisation	: NA	
Sub. Code / Sub. Name : BT18511 & Instrumental Method of Analysis Laboratory		

Session No*	List of Experiments
CYCLE-I	
1	Precision of an experiment using absorption spectroscopy.
2	Validating the Lambert-Beer's law using KMnO ₄ Solution.
3	Finding the pKa value of 4-nitrophenol using absorption spectroscopy
4	Limits of detection of using aluminums alizarin complex
5	Estimation of Thiamine b Flourimetry
6	Limits of detection of absorption using aluminium alizarin complex
CYCLE-II	
7	Chromatography analysis of amino acids using TLC
8	Chromatography analysis of plant pigments using Column chromatography
9	Quantitative analysis of Protein by Dye binding method
10	Quantitative analysis of Starch by Anthrone method
11	Quantitative estimation of DNA by Diphenylamine method
12	Quantitative estimation of RNA by Orcinol Method
Content beyond syllabus (if any): HPLC handling and trouble shooting. Demonstration on HPLC and GC-MS.	

* Session Duration: 200 minutes



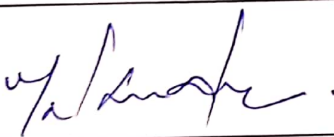

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TEXT BOOKS

1. Braun, R.D. Introduction to Instrumental Analysis. 2nd Ed., B. S. Publications., 2014.
2. Skoog, D. A. , James H.F. & Stanley, R. C. Principles of Instrumental Analysis. 6th Ed., Thomson & Brooks cole., 2007.
3. Gray N. Instrumental Methods of Analysis, CBS Publishers, 2011.

REFERENCE BOOKS

1. Mark F. V. Chromatography: Principles and Instrumentation. Wiley Publication, 2016.
2. Sharma, B. K. Instrumental Methods of Chemical Analysis. 24th Ed, Goel Publishing House, 2005.
3. PO.Shivaraja S. Y.M. Laboratory Manual for Practical Biochemistry. 2nd Ed., Jaypee Publication, 2012

	Prepared by	Approved by
Signature		
Name	Dr M Nareshkumar	Dr E Nakkeeran
Designation	Assistant Professor	Professor & HOD
Date	10.07.2023	10.07.2023
Remarks* : Course delivery plan is prepared as per the 2018A regulation with updates from previous year syllabus.		