



Department of Biotechnology	LP: BT22412
B.E/B. Tech/M.E/M.Tech : Biotechnology UG Specialisation : Biotechnology Sub. Code / Sub. Name : BT22412/ Chemical Engineering Laboratory	Regulation: 2022 Rev. No: 00 Date: 20.01.2025

Session No*	List of Experiments
CYCLE-I	
1	Determination of flow rate and coefficient of discharge using Orificemeter
2	Determination of flow rate and coefficient of discharge using Venturimeter
3	Determination of flow rate of fluids using Rotameter
4	Determination of minimum fluidization velocity in Fluidized bed reactors
5	Determination of Pressure drop in Packed bed reactors
6	Determination of Filter cake and Medium resistance in Filtration using Leaf Filter
CYCLE-II	
7	Determination of heat-transfer coefficient in Double-Pipe Heat Exchanger
8	Determination of heat-transfer coefficient in Shell and Tube Heat Exchanger
9	Determination of heat-transfer coefficient in Helical Coil Heat Exchanger
10	Verification of Rayleigh's Equation using Simple Distillation
11	Extraction of biological compounds using Soxhlet Apparatus
12	Adsorption of dyes using activated charcoal

Content beyond syllabus: -NA-

* Session Duration: 200 minutes



TEXT BOOKS

1. McCabe W.L, Smith J.C and Harriot P, "Unit Operations of Chemical Engineering", 7th Edition McGraw Hill, 2014.

	Prepared by	Approved by
Signature		
Name	Dr. G. Karthigadevi / Mr. Vimal Arasan. A	Dr. Nakkeeran. E
Designation	Assistant Professor	HOD
Date	20.01.2025	20.01.2025
Remarks *:-		
Remarks *:-		

* If the same lesson plan is followed in the subsequent semester/year it should be mentioned and signed by the Faculty and the HOD