



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Heat Transfer**

**Major Equipment in the Laboratory:**

1. Shell and tube heat exchanger
2. Parallel & counter Flow Double pipe heat exchanger
3. Film wise & drop wise condensation Apparatus
4. Lagged pipe apparatus
5. Heat Transfer From Pin Fin Apparatus
6. Heat Transfer In Natural Convection Experimental Setup
7. Heat Transfer In Forced Convection Experimental Setup
8. Stefan Boltzmann Apparatus
9. Thermal Conductivity Of Metal Rod Experimental Setup
10. Finned Tube Heat Exchanger



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Mass Transfer- II**

**Major Equipment in the Laboratory:**

1. Distillation with total reflux
2. Steam distillation
3. York Scheible Column
4. Ion Exchange
5. Adsorption Column
6. Batch distillation
7. Bubble cap distillation



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Mass Transfer- I**

**Major Equipment in the Laboratory:**

1. Absorption of CO<sub>2</sub>
2. Solid Liquid extraction
3. Wetted Wall Column
4. Cooling Tower
5. Diffusion Coefficient of Salt in Water



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Bioprocess Engineering Laboratory**

**Major Equipment in the Laboratory:**

1. Autoclave
2. Laminar Air flow
3. Incubator shaker
4. Peristaltic pump
5. Micro centrifuge
6. BOD Incubator



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Chemical Reaction Engineering**

**Major Equipment in the Laboratory:**

1. Continuous Stirred Tank reactor (CSTR)
2. Plug Flow Reactor (PFR)
3. Three CSTR in series
4. Packed bed reactor (PBR) (2 nos)
5. CSTR-PFR in series
6. Residence time distribution in PBR
7. Autoclave
8. Microwave
9. Flocculator



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Process Dynamics & Instrumentation Control**

**Major Equipment in the Laboratory:**

1. Pressure Control Trainer
2. On- off controller
3. Bi metallic thermometer
4. U-Tube Manometer
5. Ratio & Cascade Controller



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Membrane Separation Laboratory**

**Major Equipment in the Laboratory:**

1. Porous membrane casting setup
2. Water permeation analysis setup
3. Bubble point analysis setup
4. Membrane solution preparation setup



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Instrumental Analysis Laboratory**

**Major Equipment in the Laboratory:**

1. Gas Chromatography
2. High Performance Liquid Chromatography
3. UV Spectrophotometer
4. Karl-Fisher Titrator
5. Bottle Centrifuge
6. COD apparatus
7. Fluoride ion detector
8. Conductivity meter
9. pH meter
10. High precision balance
11. CO<sub>2</sub> analyzer
12. Refractometer





**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**NAME OF THE DEPARTMENT: CHEMICAL ENGINEERING DEPARTMENT**

**NAME OF THE LABORATORY: SOFTWARE LABORATORY**

- **PLOTTER:** A0 SIZE, HP DESIGNJET 500
- **COMPUTERS:** 15 NOs (P-IV)
- **SOFTWARES:** CHEMCAD  
MATLAB & FEMLAB  
T.K. SOLVER  
AUTOCAD 2002  
ANSYS CFD & ANSYS CHEM KIN  
ORIGIN LAB - 15



**BHARATI VIDYAPEETH UNIVERSITY  
COLLEGE OF ENGINEERING PUNE – 411043**



**Name of the Department: Chemical Engineering Department**

**Name of the Laboratory: Mechanical Operation Laboratory**

**Major Equipment in the Laboratory:**

1. Fluidized bed
2. Cyclone separator
3. Jaw crusher
4. Ball mill
5. Plate & Frame filter press.
6. Stokes law apparatus
7. Sieve shaker
8. Redwood viscometer