

LESSON PLAN OF 5 th SEMESTER CHEMICAL ENGINEERING DEPARTMENT		
Discipline: Chemical	Semester: 5th	Name of the Teaching Faculty: M Srinivasan
Subject: Theory-2 Mass Transfer-2	No of Days per week class allotted: 4	No of Weeks: 15
Week	Class days	Theory/Practical Topic
1 st	1 st	Chapter-1: Humidification and Dehumidification Introduction about humidification and dehumidification
	2 nd	Define temperature, wet bulb temperature and dry bulb temperature
	3 rd	The principle of wet bulb temperature theory
	4 th	Illustrate humidity chart
2 nd	1 st	Different methods of measurement of Humidity
	2 nd	Practice to identify different lines, temperatures, humidity in humidity chart
	3 rd	Different methods of humidification
	4 th	Different methods of dehumidification
3 rd	1 st	The construction and working of natural cooling tower
	2 nd	The construction and working of mechanical draft cooling tower
	3 rd	Solve simple problems
	4 th	Revision of the chapter
4 th	1 st	Doubt clearing and practicing class
	2 nd	Chapter-2: Drying Introduction to drying
	3 rd	Types of Moisture content-equilibrium, unbound, free moisture
	4 th	Showing different types of moisture content in the graph
5 th	1 st	Concept of drying rate with graphical view
	2 nd	Practicing numerical
	3 rd	The methods of removing liquids from solids
	4 th	Illustrate constant rate and falling rate period
6 th	1 st	The construction and working principle of tray dryer
	2 nd	The construction and working principle of rotary dryer, spray dryer
	3 rd	The construction and working principle of tunnel dryer, flash dryer
	4 th	The construction and working principle of dryer fluidized bed dryer
7 th	1 st	Dryer for heat sensitive materials
	2 nd	Solve simple problem
	3 rd	Solve simple problem
	4 th	Revision of the chapter
8 th	1 st	Practicing previous year questions
	2 nd	Chapter-3: Extraction Introduction to extraction
	3 rd	Liquid extraction and leaching
	4 th	Different types of extraction
9 th	1 st	Learning concentration on the triangular diagram
	2 nd	The principle of solid liquid extraction
	3 rd	Revision of the chapter
	4 th	Define Batch leaching with example
10 th	1 st	Continuous leaching operation
	2 nd	Construction and working of Solid-Liquid extraction equipment

	3 rd	ConstructionandworkingofSolid-Liquidextractionequipment
	4 th	Theprincipalof liquid-liquidextraction
11 th	1 st	Theparameterinchoiceofsolventfor liquid-liquidextraction
	2 nd	Revisionanddoubt clearingclass aboutthechapter
	3 rd	Practice questionsbasedonthe chapter
	4 th	Constructionandworkingprincipleofliquid-liquidextractionequipment
12 th	1 st	Constructionandworkingprincipleofsolidliquidextractionequipment
	2 nd	Solvesimpleproblems
	3 rd	Solvesimpleproblems
	4 th	Chapter–4:Crystallization Introductiontocrystallization
13 th	1 st	Principleofcrystallization
	2 nd	Constructionandworkingofdifferenttypesofbatchcrystallizer
	3 rd	Constructionandworkingofdifferenttypesofcontinuouscrystallizer
	4 th	Solvesimpleproblems
14 th	1 st	Solvesimpleproblems
	2 nd	Practicepreviousyearsquestionrelatedtothechapter
	3 rd	Revisionof thechapter-1
	4 th	Revisionof thechapter-2
15 th	1 st	Revisionof thechapter-3
	2 nd	Revisionof thechapter-4
	3 rd	Practicepreviousyearquestions
	4 th	Practicepreviousyearsquestions