## **LESSON PLAN**

Name of Faculty : Sahil Bangar Discipline : Civil Engg L T P
Subject : Plumbing Service Semester : 1st 2 - -

Lesson plan : 15 weeks

Lesson pi		THEORY	Delivery	Date of	Whether the
Week	Lecture Day	TOPIC	Lecture		<b>Lesson Plan</b>
		(including Assignments / Seeminar /			
	7	Group Discussion / Sessional Tests)	Expected	Actual	Yes / No
1st	1	Introduction to the subject			
	2	1. Plumber's Tools			
		Selection, use and care of tools required			
		for plumbing work, such as threading die,			
		bit brace, ratchet brace,			
2nd	1	Pipe wrench, spanner set, pipe cutter, pipe			
	1	vice, hacksaw, chisel, files			
	2	Other common hand tools, bench drilling			
		machine, soldering iron			
3rd	1	2. Pipes and Pipe Fitting			
		Selection and use of different pipes like			
		GI Pipes, Plastic pipes,			
	2	PVC pipes, HDPE pipes, Cast iron pipes,			
	1	Plumbing symbols; Bends, Elbows,			
4th		Sockets, Tees, Unions, Pipe cutting, Pipe			
		bending,			
	2	Pipe Threading, Pipe joints, Pipe fitting,			
		Alignment of pipes, Branching of pipes,			
		Safety precautions.			
	2	3. Water Supply System			
		Sources of water; Rainwater harvesting;			
5th		Water supply systems in a town;			
		Water distribution systems; Distribution			
		reservoirs;			
6th	2	Pumps; Valves; Fire hydrants; Storage of			
		water in buildings;			
		Types of tanks; Laying water supply pipe			
		lines			
7th	1 2	Assignment – 1 / Group discussion / Technical Quiz / Seminar			
		Sessional Test - 1			
		4. Domestic Drainage			
8th	1	Drainage system (two pipe, one pipe,			
		single stack and other systems), Trap			
	2	Cesspool, Sceptic tank, Cleaning blocked			
		pipes and drains, Laying sanitary and			
		sewer pipes, Manholes			
9th	1	Inspection and testing (pressure & leakage			
		test, testing straightness of pipes, ball test			
		etc.);			
	2	Fixing accessories, Problems in drainage			
		and their solution			

10th	1 2	Assignment – 2 / Group discussion / Technical Quiz / Seminar Sessional Test - 2	
11th	1	<b>5. Sanitary Appliances</b> Flush toilet, Squat toilet, Wash basin, Sink	
	2	Floor traps, Urinal, Bathtub, Shower, Bidet, Mixing tap, Popup waste	
12th	1	Heating System Heat transfer, Water heater, Geyser, Domestic hot water supply system	
	2	Central heating, Solar water heater	
13th	1	Revision	
	2	Revision	
14th	1 2	Assignment – 3 / Group discussion / Technical Quiz / Seminar Revision	
15th	1	Sessional Test - 3	
	2	Revision	