Lesson Plan

Name of the faculty: Sh. Tasvir singh/Sh. vikas dahiya / Sh. sombir, Lecturer in Mechanical Engg.

Discipline: Mechanical

Semester: 2nd Mechanical A+B

Subject: Mechanical Engineering Drawing -1

Lesson Plan Duration: 15 weeks (January 2025 to May 2025)

*Work Load (Lecture/ Practical) per week (in hours): Theory-03

Week	Theory		Practical	
	Lecture day	Topic (including assignment / test)	Practical Day	Topic
1st	1st	Detail and Assembly Drawing	1st	
	2nd	Principle and utility of detail and assembly drawings (lap joint – T joint and corner joint, Mortise and tenon joint, Bridle joint, Mitre faced corner joint)		
	3rd	Practical exercise on drawing from detail to assembly or vice versa using different wooden joints as	2nd	
2nd	1st	Nomenclature of threads, types of threads. Single and multiple start threads, right hand and left hand thread.	1st	
	2nd	Forms of various external thread sections such as V thread (Metric thread, British associate, American thread, Basic whitworth thread)		
	3rd	Square, Acme, Knuckle, and Buttress thread. Simplified conventional representation of V thread.	2nd	
3rd	1st	Different views of hexagonal and square headed nuts and bolts. Assembled view of nuts and bolts with washers.	1st	
	2nd	Foundation bolt- Rag bolt, Hook bolt. Lewis bolt, Eye bolt and curved bolt (Free hand)		

	3rd	Sheets of Nut and bolt	2nd	
4th	1st	Screws, Studs and Washers	1st	
	2nd	Drawing of various types of machine and set screws. Drawing of various types' of studs, through bolt, tap bolt and stud bolt.		
	3rd	Sheets of nut bolt	2nd	
5th	1st	Various types of keys and their application. Preparation of drawings of various keys and cotters.	1st	
	2nd	Various types of joints (a) Gib and Cotter joint (b) Knuckle joint (c) Spigot andSocket join		
	3rd	Various types of joints (a) Gib and Cotter joint (b) Knuckle joint (c) Spigot andSocket join sheets	2nd	
6th	1st	Types of general purpose rivet heads (Snap Head, Pan Head , Flat and counter sunk).	1st	
	2nd	Types of riveted joints – lap (single and double riveted), butt (single cover plate and double cover plate),		
	3rd	chain and zigzag riveting (Double riveted). Caulking and fullering operation of riveted joints	2nd	
7th	1st	Introduction to coupling, their uses and types, Muff Coupling	1st	
	2nd	Sheet making of coupling		
	3rd	Introduction, Various 2 D commands – Draw, modify and option commands	2nd	
8th	1st	Introduction, Various 2 D commands – Draw, modify and option commands	1st	
	2nd	Prepare at least 4 sheets using CAD software – one drawing each from wooden joint,		
	3rd	Prepare at least 4 sheets using CAD software – one drawing each from thread joint,	2nd	
9th	1st	Prepare at least 4 sheets using CAD software – one drawing each from nut bolt joint,	1st	

	2nd	Prepare at least 4 sheets using CAD software – one drawing each from coupling joint,		
	3rd	Complete sheets	2nd	
10th	1st	Revision	1st	
	2nd	Revision		
	3rd	Revision	2nd	
11th	1st	Revision	1st	
	2nd	Revision		
	3rd	Revision	2nd	
12th	1st	Revision		
	2nd	Doubt classes		
	3rd	Doubt classes		
13th	1st	Revision		
	2nd	Doubt classes		
	3rd	Doubt classes		
14th	1st	Revision		
	2nd	Doubt classes		
	3rd	Doubt classes		
15th	1st	Revision		
	2nd	Doubt classes		
	3rd	Doubt classes		