LESSON PLAN

NAME OF FACULTY: SHIV KUMAR

DISCIPLINE: MECHANICAL ENGINEERING

SEMESTER: 2ND SEM

SUBJECT: MECHANICAL ENGINEERING DRAWING

LESSON PLAN DURATION: 15 WEEKS

WORK LOAD (LECTURE/PRACTICAL) PER WEEK: 6 PRACTICALS

Week	Lecture Day	Topics
1st	1.	**1. Detail and Assembly Drawing**
	2.	Principle and utility of detail and assembly drawings
	3.	Practical exercise on drawing from detail to assembly
	4.	or vice versa using different wooden joints
	5.	lap joint – T joint and corner joint, Mortise and
	6.	lap joint – Tenon joint
2nd	7.	lap joint – Bridle joint
	8.	lap joint – Mitre faced corner joint
	9.	2 sheets of assembly drawings
	10.	Revision of assembly drawings
	11.	**2. Threads**
	12.	Nomenclature of threads
3rd	13.	types of threads
	14.	Single and multiple start threads
	15.	right hand and left hand thread.
	16.	Forms of various external thread sections such as V thread
	17.	Forms of various external thread sections such as Metric thread
	18.	Forms of various external thread sections such as British associate
4th	19.	Forms of various external thread sections such as American thread
	20.	Forms of various external thread sections such as Basic whit worth thread
	21.	Square, Acme, Knuckle,
	22.	Buttress thread
	23.	Simplified conventional representation of V thread.
	24.	2 sheets of threads
5th	25.	Revision of threads
	26.	**3. Nuts and Bolts**
	27.	Different views of hexagonal
	28.	square headed nuts and bolts
	29.	Assembled view of nuts and bolts with washers
	30.	Foundation bolt- Rag bolt
6th	31.	Hook bolt. Lewis bolt

	32.	Eye bolt and curved bolt (Free hand)
	33.	Assignments/Test
	34.	Revision Previous Topics
	35.	**1st Sessional**
	36.	**4. Locking Devices**
7th	37.	Locking nuts - Castle nut, Sawn nut
	38.	Split pin lock nut.
	39.	Locking by spring washers
	40.	Locking plates.
	41.	**5. Screws, Studs and Washers**
	42.	Drawing of various types of machine and set screws
8th	43.	Drawing of various types' of studs
	44.	through bolt
	45.	tap bolt
	46.	stud bolt.
	47.	Checking of drawing sheets
	48.	Revision of previous topics
9th	49.	**6. Keys and Cotters**
	50.	Various types of keys and their application
	51.	Preparation of drawings of various keys and cotters
	52.	Assignments/Tests
	53.	Revision of scale topic
	54.	Various types of joints
10th	55.	(a) Gib and Cotter joint
	56.	(b) Knuckle joint
	57.	(c) Spigot and Socket joint
	58.	**7. Rivets and Riveted Joints**
	59.	Types of general purpose rivet heads Snap Head
	60.	Pan Head
11th	61.	Flat and counter sunk
	62.	Types of riveted joints – lap single
	63.	Types of riveted joints – lap double riveted
	64.	Assignments/Tests
	65.	butt (single cover plate and double cover plate
	66.	Chain and zig-zag riveting (Double riveted).
12th	67.	Caulking and fullering operation of riveted joints
	68.	**8. Shaft Coupling**
	69.	Introduction to coupling,
	70.	their uses and types
	71.	Muff Coupling,
	72.	Protected type flange coupling
13th	73.	Flexible or non-rigid coupling

	74.	Revision of previous units
	75.	Assignments /tests
	76.	**2nd Sessional**
	77.	**9. Computer Aided Drafting (CAD)**
	78.	Introduction,
14th	79.	Various 2 D commands
	80.	Draw, modify and option commands
	81.	Prepare at least 4 sheets using CAD software
	82.	one drawing each from wooden joint
	83.	one drawing each from threads
	84.	one drawing each from nut and bolts
15th	85.	one drawing each from coupling.
	86.	Revision
	87.	Revision
	88.	**3rd Sessional**
	89.	Revision
	90.	Revision