LESSON PLAN

Name of faculty **Sh. Baljit Siwach & Sh. Rajesh Kumar**
Discipline **Mechanical Engineering**
Semester **3rd Semester**
Subject **Mechanical Engineering Drawing**
Lesson Plan Duration **15 weeks**
Work load (Lecture/ Practical) per week (in hours) **6 Hours Practical**

WEEK	PRACTICAL	
	Day Practical	**Practical Topic**
1	1	**Unit- 1** Limit, fits and tolerance Need of limit, fits and tolerance, Maximum limit of size, minimum limit of size, tolerance, allowance, deviation, upper deviation, lower deviation, fundamental deviation, clearance, maximum clearance, minimum clearance. Fits – clearance fit, interference fit and transition fit
	2	Hole basis system, shaft basis system, tolerance grades, calculating values of clearance, interference, hole tolerance, shaft tolerance with given basic size for common assemblies like H_7/g6, H_7/m6, H_8/p6. Basic terminology and symbols of geometrical dimensioning
2	3	tolerances. **Unit- 2** Drawing of the following with complete dimensions, tolerances, bill of material and surface finish representation.
	4	Universal coupling and Oldham coupling (Assembly)
3	5	Bearings - Bushed Bearing (Assembly Drawing)
	6	Ball Bearing and Roller Bearing (Assembled Drawing) & **Assignment No.-1.**
4	7	Plummer Block (Detail and Assembly Drawing)
	8	Foot step Bearing (Assembled Drawing)
5	9	Pulleys, Function of pulley, Types and materials of Pulley
	10	**1st Class Test**
6	11	Free hand Sketch of Various types of pulleys,Fast and loose pulley (Assembly Drawing)
	12	Pipe Joints, Types of pipe Joints, Symbol and line layout of pipe lines
7	13	Expansion pipe joint (Assembly drawing)
	14	Flanged pipe and right angled bend joint (Assembly Drawing)
8	15	**1st Sessional test**
	16	Lathe Tool Holder (Assembly Drawing), Reading and interpretation of mechanical components and assembly drawings. & **Assignment No.-2.**
9	17	Sketching practice of bearings and bracket.
	18	**2nd Class Test**
10	19	**Unit- 3** Drilling Jig (Assembly Drawing)
	20	**Unit- 4** Machine vices (Assembly Drawing)
11	21	**Unit- 5** I.C. Engine Parts – Piston, Connecting rod (Assembly Drawing)
	22	Crankshaft and flywheel (Assembly Drawing)
12	23	**2nd Sessional test**
	24	**Unit- 6** Boiler Parts, Steam Stop Valve (Assembly Drawing) & **Assignment No.-3.**
13	25	Blow off cock. (Assembly Drawing)
	26	**3rd Class Test**

14	27	**Unit- 7** Mechanical Screw Jack (Assembled Drawing)
	28	**Unit- 8** Gears, Types of gears, Nomenclature of gears, conventional representation of gears
15	29	Draw the actual profile of involute teeth of spur gear by different methods. **Assignment No.-4.**
	30	**3rd Sessional test**