## **LESSON PLAN**

## Name of faculty : MR. PAWAN KUMAR BALODA / MR. HITESH AGGARWAL

## Discipline : Mechanical Engineering

Semester : 3<sup>RD</sup> Semester

## Subject : Mechanical Engineering Drawing-II

Lesson Plan Duration : 15 weeks

Work load (Lecture/ Practical) per week (in hours): 6 Hours

WEEK	THEORY		
	Lecture	Topic(Including Assignment/Test)	
1	1,2,3,	<b>LIMIT, FITS AND TOLERANCE-</b> Need of limit, fits and tolerance, Maximum limit of size, minimum limit of size,	
	4,5,,6,	Tolerance, allowance, deviation, upper deviation, lower deviation, fundamental deviation, clearance, maximum clearance, minimum clearance.	
2	7,8,9,	Fits – clearance fit, interference fit and transition fit. Hole basis system, shaft basis system, tolerance grades, calculating values of clearance, interference,	
2	10,11,12,	Hole tolerance, shaft tolerance with given basic size for common assemblies like H7/g6, H7/m6, H8/p6.	
3	13,14,15,	Basic terminology and symbols of geometrical dimensioning and tolerances. Surface finish representation	
5	16,17,18,	DRAWING OF THE FOLLOWING WITH COMPLETE DIMENSIONS, TOLERANCES, BILL OF MATERIAL AND SURFACE FINISH REPRESENTATION. Universal coupling and Oldham coupling (Assembly)	
4	19,20,21,	Bushed Bearing (Assembly Drawing)	
4	22,23,24,	Ball Bearing and Roller Bearing (Assembled Drawing)	
5	25,26,27,	Plummer Block (Detail and Assembly Drawing)	
5	28,29,30,	Foot step Bearing (Assembled Drawing) ASSIGNMENT - 1	
C	31,32,33,	1 <sup>ST</sup> SESSIONAL TEST	
6	34,35,36,	Pipe Joints Types of pipe Joints, Symbol and line layout of pipe lines Expansion pipe joint (Assembly drawing)	

7	37,38,39,	Reading and interpretation of mechanical components and assembly drawings
	40,41,42,	Sketching practice of wall bracket.
8	43,44,45,	DRILLING JIG (ASSEMBLY DRAWING)
	46,47,48,	MACHINE VICES (ASSEMBLY DRAWING) Lathe Tool Holder (Assembly Drawing) Lathe tail stock ( assembly drawing)
	49,50,51,	I.C. ENGINE PARTS - Piston
9	52,53,54,	Connecting rod (Assembly Drawing)
10	55,56,57,	Crankshaft and flywheel (Assembly Drawing) ASSIGNMENT-2
	58,59,60,	2 <sup>ND</sup> SESSIONAL TEST
	61,62,63,	BOILER PARTS- Steam Stop Valve (Assembly Drawing)
11	64,65,66,	Blow off cock. (Assembly Drawing)
	67,68,69,	MECHANICAL SCREW JACK (ASSEMBLED DRAWING)
12	70,71,72,	GEARS Gear, Types of gears,
13	73,74,75,	Nomenclature of gears and conventional representation
	76,77,78,	Draw the actual profile of involutes teeth of spur gear by approximate method.
	79,80,81,	Draw the actual profile of involutes teeth of spur gear by base circle method.
14	82,83,84,	ASSIGNMENT - 3 3 <sup>RD</sup> SESSIONAL TEST
15	85,86,87,	Revision
	88,89,90,	Revision