

Lesson Plan

Name of the Faculty : SH AMIT PHOGHAT and SH NEERAJ
 Discipline : Mechanical Engg.
 Semester : 3rd
 Subject : Mechanical Engg. Drawing
 Lesson plan duration : 15 weeks (from September 2023 to,December 2023)

Week	Practical	
	Practical Lect.	Topic (including assignments /tests)
Week 1	Day 1	Limit, fits and tolerance -Need of limit, fits and tolerance, Maximum limit of size, minimum limit of size, tolerance, allowance
	Day 2	deviation, upper deviation, lower deviation, fundamental deviation, clearance, maximum clearance, minimum clearance
Week 2	Day 1	Fits – clearance fit, interference fit and transition fit. Hole basis system, shaft basis system, tolerance grades
	Day 2	calculating values of clearance, interference, hole tolerance, shaft tolerance with given basic size for common assemblies like H ₇ /g ₆ , H ₇ /m ₆ , H ₈ /p ₆
Week 3	Day 1	Basic terminology and symbols of geometrical dimensioning and tolerances
	Day 2	Drawing of the following with complete dimensions, tolerances, bill of material and surface finish representation A) Universal coupling and Oldham coupling (Assembly)
Week 4	Day 1	B) Oldham coupling (Assembly)
	Day 2	Bushed Bearing (Assembly Drawing)
Week 5	Day 1	Ball Bearing, Roller Bearing
	Day 2	Plummer Block (Detail and Assembly Drawing)
Week 6	Day 1	Foot step Bearing (Assembled Drawing)

	Day 2	Pulleys- Pulleys, Function of pulley, Types and materials of Pulley.
Week 7	Day 1	Free hand Sketch of Various types of pulleys , Fast and loose pulley (Assembly Drawing)
	Day 2	Pipe Joints - Types of pipe Joints, Symbol and line layout of pipe lines
Week 8	Day 1	Expansion pipe joint (Assembly drawing)
	Day 2	Flanged pipe and right angled bend joint (Assembly Drawing)
Week 9	Day 1	Lathe Tool Holder (Assembly Drawing) (01 sheets)
	Day 2	Sketching practice of bearings and bracket. (01 sheet)
Week 10	Day 1	Drilling Jig (Assembly Drawing) (01 sheets)
	Day 2	Machine vices (Assembly Drawing) (01sheets)
Week 11	Day 1	I.C. Engine Parts Piston (01 sheets)
	Day 2	Connecting rod (Assembly Drawing)
Week 12	Day 1	Crankshaft and flywheel (Assembly Drawing)
	Day 2	Boiler Parts Steam Stop Valve (Assembly Drawing) (02 sheets)

Week 13	Day 1	Blow off cock. (Assembly Drawing)
	Day 2	Mechanical Screw Jack (Assembled Drawing) (01 sheet)
Week 14	Day 1	Gears - Gear, Types of gears, and Nomenclature of gears
	Day 2	conventional representation of gears
Week 15	Day 1	Draw the actual profile of involute teeth of spur gear by different methods
	Day 2	Draw the actual profile of involute teeth of spur gear by different methods