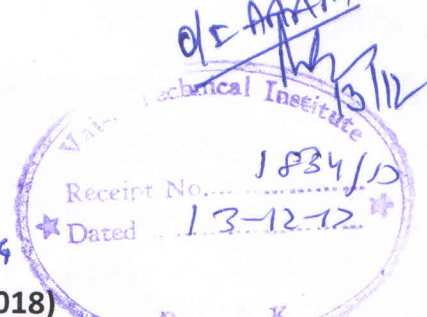


Name of Faculty: **SUNIL KUMAR**
 Discipline: **MECHANICAL ENGINEERING**
 Semester: **4th**
 Subject: **MACHINE DESIGN AND DRAWING**



Lesson Plan Duration: 15 Weeks (From Jan. 2018 to Apr. 2018)

	Lecture	THEORY PART	PRACTICAL PART
WK 1	1	Design - Definition, Type and Necessity	Load and its classification, stress strain and types
	2	Design procedure	Design under tensile, compressive and torsional loads
WK 2	3	Design considerations, comparison of designed and underdesigned work	- DO -
	4	Characteristics of a good Designer	Factor of Safety
WK 3	5	fatigue and endurance limit	Numericals
	6	stress concentration, methods to reduce stress concentration	- DO -
WK 4	7	mechanical Properties of materials	Design failures
	8	- DO -	Numericals
WK 5	9	Selection of materials, codes and standards	- DO -
	10	Types of shafts, shaft materials, standard sizes available	Design of shafts
WK 6	11	Types of Keys, materials of keys	- DO -
	12	- DO -	- DO -
WK 7	13	Introduction, Advantages, Disadvantages and location of screw joints	Design of key
	14	Important terms and designation of screw threads.	- DO - Effect of keyway
WK 8	15	stresses in screwed fastenings	Numericals on screwed fastenings
	16	Design of Power screws	Design of brass screws
WK 9	17	- DO -	- DO -
	18	- DO -	- DO -

MACHINE DESIGN AND DRAWING

WK 10	19	Types of cam and followers	Cam Profiles
	20	- Du -	- Du -
WK 11	21	- Du -	- Du -
	22	motions of followers	- Du -
WK 12	23	Nomenclature of Gears	- Du -
	24	- Du -	- Du -
WK 13	25	- Du -	Gear Profiles
	26	- Du -	- Du -
WK 14	27	- Du -	- Du -
	28	- Du -	- Du -
WK 15	29	Conventional Representation of Gears	- Du -
	30	- Du -	- Du -