LESSON PLAN - WINTER 2023
SWAMI VIVEKANANDA SCHOOL OF ENGINEERING & TECHNOLOGY, BBSR

NAME OF THE FACULTY: ER. Abhijit Chand

DISCIPLINE- MECHANICAL	SEMESTER-5TH	SEM. From date: 01.08.2023 TO 30.11.2023 No of weeks: 19TH
SUBJECT- DME	NO. OF CLASS ALLOTED/ PER	THEORY TOPIC
WEEK	CLASS DAY	
1ST	1.08.2023	Introduction to Machine Design and classify it.
	2.08.2023	Different mechanical engineering materials used in design with their uses
	3.08.2023	and their mechanical physical properties
	4.08.2023	Define working stress, yield stress, ultimate stress
	5.08.2023	Factor of safety and stress- strain curve for M.S. & C.I.
2ND	7.08.2023	Modes of failure (by elastics deflection, general yielding & fracture)
	9.08.2023	State the factors governing the design of machine elements
	10.08.2023	Describe design procedure
	11.08.2023	DO
3RD	14.08.2023	Design of fastening elements: Joints and their classification
	16.08.2023	State types of welded joints, state advantages of welded joints over other joints
	18.08.2023	Design of welded joints for eccentric loads
4TH	21.08.2023	State types of rivetes joints and types of rivets
	22.08.2023	Describe failure of riverted joints.
	24.08.2023	Determine strength and efficiency of riverted joints
	25.08.2023	Design riveted joints for pressure vessel
5TH	28.08.2023	Solve problems on welded joints and riveted joints
	29.08.2023	Solve problems on welded joints and riveted joints
	30.08.2023	DO
6TH	1.09.2023	**Monthly Test**
7TH	4.09.2023	Design of shafts and keys: State function of shafts, state material for shafts
	5.09.2023	Design solid & hollow shafts to tranmit a given power at given rpm based on strength
	8.09.2023	Design solid & hollow shafts to tranmit a power at given rpm based on shear stress
	9.09.2023	Design solid & hollow shafts to tranmit a power at given rpm based on tension
8TH	11.09.2023	Design solid & hollow shafts to tranmit a given power at given rpm based on rigidity
	12.09.2023	Design solid & hollow shafts to tranmit power at given rpm based on angle of twist
	13.09.2023	Design solid & hollow shafts to tranmit a given power at given rpm based on deflection
	14.09.2023	Design solid & hollow shafts to tranmit power based on Modulus of Rigidity
	15.09.2023	State standard size of shaft as per I.S.
9TH	18.09.2023	State function of keys, types of keys & material of keys
	21.09.2023	Describe failure of key, effect of key way
	22.09.2023	Design rectangular sunk key considering its failure against shear and crushing
	23.09.2023	Design rectangular sunk key by using empirical relation for given diameter of shaft
10TH	25.09.2023	Solve numerical on design of shaft and keys.
	29.09.2023	Solve numerical on design of shaft and keys.
11TH	3.10.2023	Design of Coupling: Design of shaft coupling
	5.10.2023	Requirements of a good shaft coupling, types of coupling
12TH	9.10.2023	Design of sleeve or Muff- Coupling
	11.10.2023	**Internal Accessment**
	13.10.2023	Design of clam or compression coupling

	17.10.2023	Solve the numerical problems
13TH	19.10.2023	Solve the numerical problems
14TH	28.10.2023	DO
15TH	3.11.2023	Closed Coil Helical Spring, Material used for helical spring
16TH	6.11.2023	Design a closed coil helical spring
	8.11.2023	Design a closed coil helical spring
	10.11.2023	Standard size spring wire(SWG)
17TH	14.11.2023	Terms used in compression spring
	16.11.2023	Stress in helical spring of a circular wire
	18.11.2023	Deflection of helical spring of circular wire
18TH	22.11.2023	Surge in spring
	24.11.2023	Solve numerical on design of closed coil helical compression spring
	25.11.2023	Surge in spring
19TH	27.11.2023	Solve numerical on design of closed coil helical compression spring
	29.11.2023	Solve numerical on design of closed coil helical compression spring
	30.11.2023	Solve numerical on design of closed coil helical compression spring
HOD SIGN		