

## LESSON PLAN WINTER-2022

SUBJECT- DESIGN OF MACHINE ELEMENTS		SEM-5th	BRANCH- MECHANICAL ENGG.	
SL. NO	DATE	CHAPTER	TOPIC NAME	NO OF PERIODS
1	22.10.21	<b>Introduction: CHAP-01</b>	Introduction to Machine Design and Classify it.	1
2	23.10.21		Different mechanical engineering materials used in design with	1
3	01.11.21		l engineering materials used in design with their mechanical and	1
4	02.11.21		Define working stress, yield stress, ultimate stress	1
5	03.11.21		Define factor of safety and stress strain curve for M.S & C.I.	1
6	05.11.21		odes of Failure (By elastic deflection, general yielding & fracture	1
7	08.11.21		Continue..	1
8	09.11.21		Continue..	1
9	10.11.21		State the factors governing the design of machine elements.	1
10	12.11.21		Continue..	1
11	15.11.21		Describe design procedure.	1
12	16.11.21		Continue..	1
13	22.11.21	<b>Design of fastening elements CHAP-02</b>	Joints and their classification.	1
14	23.11.21		State types of welded joints .	1
15	24.11.21		State advantages of welded joints over other joints.	1
16	26.11.21		Design of welded joints for eccentric loads.	1
17	29.11.21		Design of welded joints for eccentric loads continue..	1
18	30.11.21		State types of riveted joints and types of rivets.	1
19	01.12.21		Describe failure of riveted joints	1
20	03.12.21		Determine strength & efficiency of riveted joints	1
21	06.12.21		Design riveted joints for pressure vessel.	1
22	07.12.21		Numerical on Welded Joint and Riveted Joints.	1
23	08.12.21	Continue..	1	
24	10.12.21	Continue..	1	
25	13.12.21	<b>DESIGN OF SHAFT AND KEYS CHAP-03</b>	State function of shafts and materials for shafts	1
26	14.12.21		Design solid & hollow shafts to transmit a given power	1
27	15.12.21		Based on Shear stress, Combined bending tension	1
28	17.12.21		Based on angle of twist, deflection and modulus	1
29	20.12.21		Cont..	1
30	21.12.21		State standard size of shaft as per I.S	1
31	22.12.21		State function of keys, types of keys & material of keys.	1
32	03.01.22		Failure of key, effect of key way.	1
33	04.01.22		& crushing	1
34	05.01.22		Design rectangular sunk key by using empirical relation for	1
35	07.01.22		State specification of parallel key, gib-head key, taper key	1
36	10.01.22		conti..problem practice	1
37	11.01.22	<b>DESIGN OF SHAFT COUPLING CHAP-04</b>	Design of Shaft Coupling	1
38	12.01.22		conti..	1
39	17.01.22		Requirements of a good shaft coupling	1
40	18.01.22		conti..	1
41	19.01.22		Types of Coupling.	1

42	21.01.22	<b>DESIGN OF COUPLING CHAP-4</b>	Design of Sleeve or Muff Coupling.	1
43	24.01.22		conti...	1
44	25.01.22		Design of Clamp or Compression Coupling.	1
45	28.01.22		conti...	1
46	31.01.22		Numerical on coupling	1
47	01.02.22		conti...	1
48	02.02.22		conti...	1
49	04.02.22	<b>DESIGN OF CLOSED COIL HELICAL SPRING CHAP-5</b>	Materials used for helical spring.	1
50	07.02.22		Standard size spring wire. (SWG).	1
51	08.02.22		Terms used in compression spring	1
52	09.02.22		Stress in helical spring of a circular wire.	1
53	11.02.22		Deflection of helical spring of circular wire	1
54	14.02.22		Surge in spring.	1
55	18.02.22		Solve numerical on spring.	1
56	21.02.22		conti..problem practice	1
57	22.02.22		<b>revision lesson</b>	1
58	23.02.22		<b>Previous year question</b>	1
59	25.02.22		Previous year question	1
60	28.02.22		conti...	1
			<b>TOTAL</b>	<b>60</b>

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22/10/21

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