

**ACADEMIC SESSION: 2022-23(SUMMER -2023)**

<b>DISCIPLINE:MECHANICAL ENGINEERING</b>			<b>Semester:4TH</b>	<b>Name of the teaching faculty: ASHISH MEHER</b>
<b>SUBJECT: Theory of Machine</b>			<b>Semester from date:14.02.2023 to 23.05.2023</b>	
<b>SL NO</b>	<b>DATE</b>	<b>CHAPTER</b>	<b>THEORY TOPIC NAME</b>	<b>NO OF PERI ODS</b>
1.	15.02.2023	<b>Simple mechanism</b>	Simple mechanism	<b>1</b>
2.	16.02.2023		Link ,kinematic chain	<b>1</b>
3.	17.02.2023		mechanism, machine	<b>1</b>
4.	20.02.2023		Inversion, four bar link mechanism	<b>1</b>
5.	22.02.2023		Lower pair and higher pair	<b>1</b>
6.	23.02.2023		Cam and followers	<b>1</b>
7.	24.02.2023	<b>Friction</b>	Friction	<b>1</b>
8.	27.02.2023		Friction between nut and screw for square thread	<b>1</b>
9.	01.03.2023		Friction in screw jack	<b>1</b>
10.	02.03.2023		Bearing and its classification	<b>1</b>
11.	03.03.2023		Description of roller, needle roller& ball bearings.	<b>1</b>
12.	06.03.2023		Torque transmission in flat pivot	<b>1</b>
13.	09.03.2023		Torque transmission in conical pivot bearings.	<b>1</b>
14.	10.03.2023		Flat collar bearing of single type	<b>1</b>
15.	13.03.2023		Flat collar bearing of multiple type	<b>1</b>
16.	15.03.2023		Torque transmission for single and multiple clutches	<b>1</b>
17.	16.03.2023		Working of simple frictional brakes	<b>1</b>
18.	17.03.2023		Working of Absorption type of dynamometer	<b>1</b>
19.	20.03.2023	<b>Power Transmission</b>	Concept of power transmission, Type of drives, belt, gear and chain drive.	<b>1</b>
20.	21.03.2023		Computation of velocity ratio, length of belts (open and cross)with and without slip	<b>1</b>
21.	22.03.2023		Ratio of belt tensions, centrifugal tension and initial tension.	<b>1</b>
22.	23.03.2023		Power transmitted by the belt.	<b>1</b>
23.	24.03.2023		Determine belt thickness and width for given permissible stress for open and crossed belt considering centrifugal tension.	<b>1</b>
24.	27.03.2023		V-belts and V-belts pulleys.	<b>1</b>
25.	29.03.2023		Concept of crowning of pulleys.	<b>1</b>
26.	31.03.2023		Gear drives and its terminology	<b>1</b>
27.	03.04.2023		Gear trains, working principle of simple, compound gear train	<b>1</b>
28.	05.04.2023		reverted and epicyclic gear trains	<b>1</b>
29.	06.04.2023	<b>Governors and Flywheel</b>	Function of governor	<b>1</b>
30.	10.04.2023		Classification of governor	<b>1</b>
31.	12.04.2023		Working of Watt governor	<b>1</b>
32.	13.04.2023		Working Porter governor	<b>1</b>
33.	17.04.2023		Working of Proel governor	<b>1</b>
34.	19.04.2023		Working of Hartnell governor	<b>1</b>
35.	20.04.2023		Conceptual explanation of sensitivity, stability and	<b>1</b>

			isochronisms.	
36.	21.04.2023		Function of flywheel	1
37.	24.04.2023		Comparison between flywheel & governor	1
38.	26.04.2023		Fluctuation of energy and coefficient of fluctuation of speed	1
39.	27.04.2023	Balancing of Machine	Balancing of Machine	1
40.	28.04.2023		Concept of static and dynamic balancing	1
41.	01.05.2023		Static balancing of rotating parts	1
42.	03.05.2023		Static balancing of rotating parts	1
43.	04.05.2023		Principles of balancing of reciprocating parts	1
44.	05.05.2023		Principles of balancing of reciprocating parts	1
45.	08.05.2023		Causes and effect of unbalance	1
46.	10.05.2023		Difference between static and dynamic balancing	1
47.	11.05.2023	Vibration of machine parts	Vibration of machine parts	1
48.	12.05.2023		Introduction to Vibration and related terms	1
49.	15.05.2023		Amplitude, time period and frequency, cycle	1
50.	17.05.2023		Classification of vibration.	1
51.	18.05.2023		Basic concept of natural, forced & damped vibration	1
52.	19.05.2023		Torsional and Longitudinal vibration.	1
53.	22.05.2023		Torsional and Longitudinal vibration.	1

Prepared By  
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