

DISCIPLINE :

MECHANICAL
SUBJECT :

THEORY OF MACHINE

SEMESTER: 6th Sem

No. of Days/week

class allotted : 4

Name of the Teaching

faculty: Snigdha Ranu Sahu

Semester from: 10th March-22

To: 10th June 2022

Week	No. of period	Theory Topics
	1st	Link
10 th March	2nd	Kinematic chain
to		
12 th March		
	1st	Mechanism
14 th March	2nd	Machine
to	3rd	Inversion, Four bar link Mechanism
19 th March		and it's inversion
	4th	Holi
	1st	Lower pair & Higher pair
21 st March	2nd	Cam & follower
to	3rd	Continuation
26 th March	4th	Continuation
	1st	Revision of topic previously taught
28 th March	2nd	Friction between nut and screw free
to		Square thread, Screw Jack
and April	3rd	Bearing and it's classification
	4th	Bearing, Description of roller, needle roller & ball bearing
4 th April	1st	Torque transmission in flat pivot &
to	2nd	Conical pivot bearing
9 th April	3rd	Flat collar bearings of single &
	4th	multiple types.
11 th April	1st	Torque transmission free single & multiple
to		clutches.
16 th April	2nd	Working of simple frictional brakes
	3rd	Maha Visuba Sankranti
	4th	Continuation.

Week	No. of Period	Topics to be covered
	1st	Working of absorption type of dynamometer.
16 th April to 23 rd April	2nd	Concept of power transmission.
	4th	Type of drives, belt, gear & chain drive.
25 th April to 30 th April	1st	Computation of velocity ratio, length of belts (open & cross) with an idler slip.
	2nd	Ratio of belt tension, centrifugal tension and initial tension.
	3rd	Power transmitted by the v-belt & pulleys.
2 nd May to 7 th May	2nd	Id-Ul-Fitree
	3rd	Concept of crowning pulleys.
	4th	Gear drives and its terminology.
9 th May to 14 th May	1st	Gear trains, working principles of simple, compound, reverted & epicyclic gear train.
	2nd	Governors of flywheel.
	4th	Function of governor.
16 th May to 21 st May	1st	Buddha Purnima
	2nd	Classification of Governor.
	3rd	Working of watt, porter Governor.
	4th	Working of porter Governor, Hartnell Governor.
23 rd May to 28 th May	1st	Conceptual explanation of Sensitivity, stability & isochronism.
	2nd	Function of flywheel. Comparison between flywheel and governor.

Week	No. of period	Topics to be covered
	3rd	Fluctuation of energy & coeff. of fluctuation of speed.
	4th	Concept of static & dynamic balancing of reciprocating parts.
30 th May to 4 th June	1st	Sabir Amabasiya
	2nd	Cause & effects of unbalance.
	3rd	Difference between static and dynamic balancing.
	4th	Introduction to vibration and related terms (Amplitude, time period and frequency).
	4th	Classification of vibration.
6 th June to 10 th June	1st	Basic concept of natural, forced and damped vibration.
	2nd	Torsional and longitudinal vibration.
	3rd	Cause & remedies of vibration.
	4th	Revision of previous year questions.
		Accepted 10/05/2022