



TRADE MARK

LIONTM

Teacher's Lesson Note

THEORY OF MACHINE

Mechanical Engg. & Mechanical Engg.

Semester : 4th (Summer) - 2022-23

Lecturer: En. S.K. Mohanta



Branch:- Mechanical Engg & Mech. Eng (CIT)
Lesson Plan (2022-23)

Subject: TOM

Sem: 4th (Summer - 2022-23) **TEA (4th Sem)**

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
1	2	3	4	5	6	7	8
19/09/23	1st	1st		Ch:1 Simple Mechanism	link types of link, pairs types of pair.		
20/09/23	1st week	2nd			Types of joints, Revolute, prismatic, Kinematic Chain		
21/09/23	3rd	3rd			Mechanism, Machine, Structure Difference, Wren, Mc/s, Gruebler		
22/09/23	4th	4th			Inversion of four bar chain mechanism, Inversions		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Study of link, types of link, pair and types of pair.		S. S. S. S. S.		
	Joints and types of joints, Relation between link kinematic chain.		S. S. S. S. S.		
	Mechanism, machine structure Difference bet'n me and structure.		S. S. S. S. S.		
	Inversion of four bar chain mechanism and Inversion.		S. S. S. S. S.		

TEA CHECKS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
14/02/23	1st	1st			Order of Chain Mechanism		
15/02/23	2nd Week	2nd			Lower & Higher pair cam & follower		
17/02/23	3rd	3rd			Revision Class		
18/02/23	4th	4th			Assignment & class test		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Sicker Crank chain Mechanism & its prevention		S		
	Lower & Higher Pair cam & follower.		S		
	Revision Class		S		
Class Test	Assignment & class test		S		

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
21/02/23		1st		Ch:02 Friction	Revising friction		
22/02/23	3rd Week	2nd			Screw Jack Terminology, Friction nut & Screw		
24/02/23		3rd			Efficiency of Screw Jack Numerical		
26/02/23		4th			Function of Bearing, Classification of ball, Roller, Needle Roller, Worm		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Intro question Class 5 & 6 Friction		<i>S. Srinivas</i>		
	Screw Jack Terminology Frictionable nut & Screw		<i>S. Srinivas</i>		
	Efficiency of Screw Jack Numerical		<i>S. Srinivas</i>		
	Function of Bearing, Classification of ball, Roller & Needle roller beam		<i>S. Srinivas</i>		

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
28/03/23	1	2	3	4	5	6	7
01/03/23	4th Week	2nd		Torque Transmission in flat pivot bearing simple problems			
03/03/23	3rd			Torque Transmission in conical pivot bearing			
05/03/23	4th			Torque Transmission in flat pivot bearing			

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Torque Transmission in flat collar bearing simple problems.		28/03/23		
	Torque Transmission in flat pivot bearing.		01/04/23		
	Torque Transmission in conical pivot bearing.		03/04/23		
	Torque Transmission in flat pivot bearing.		05/04/23		

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
27/03/23	1st	1st		Torque in single multiple clutch.			
8/03/23	4th Week	2nd		Working of Simple frictional brakes.			
10/03/23	3rd	3rd		Working of Simple frictional brakes. Absorption type dynamo.			
11/03/23	4th	4th		Review Class.			

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Torque in single & multiple clutch.				
	Working of Simple Friction brakes.				
	Working of Simple frictional brakes, Absorption type dynamo				
	-Revision Class-				

TECHNICAL

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
19/03/23	2	3	4	5	6	7	8
				Assignment Evaluation & Class Test			
15/03/23	6th week			Ch-03 Power Transmission	Concept of power transmission types of - chain, rope gear drive.		
07/03/23					Types of belt Drive, pulley types of power drive.		
18/02/23					Velocity Ratio of belt, Drive length of open & crossed belt.		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
Class Test - 02					
	Concept of Power Transmission types of drive belt, chain, rope & gear drive.				
	Types of Belt Drive, Pulley & types of Pulley				
	Velocity ratio of belt, Drive length of open belt & closed belt.				

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
21/03/20	1	2	3	4	5	6	7
22/03/20	2	3	4	5	6	7	8
24/03/20	3	4	5	6	7	8	9
25/03/20	4	5	6	7	8	9	10

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Numerical Problem Discussion		S. S. S.		
	Ratio of Tension Power Transmission in belt Numerical		S. S. S.		
	Initial Tension in belt Centrifugal Tension Numerical Discussion.		S. S. S.		

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	V-belt & V-belt pulley crossing of pulley gear drives & its terminology		<i>S. S. S.</i>		
	Working principle of simple compound gear Trains.		<i>S. S. S.</i>		
	Working principle of Reverted & Epicyclic gear train		<i>S. S. S.</i>		
	Revision class		<i>S. S. S.</i>		

TEACHING

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
09/09/23		4 th			7 th & 8 th grade Evaluation & Class Test		
05/09/23	9 th week	4 th		Ch:04 Governor & Ministers	function of Governor & Ministers		
7/09/23	3 rd				working with poster governor		
8/09/23	4 th				working with poster governor		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
Class Test - 03					
	function of governor classification of governor working of central & state governor.				
	Working of West Governor & Porten Governor.				
	Working of P.W. & H.P. Governor.				

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
19/09/23		1st			Sentiments Stability of governor Ischaemous Governor		
12/04/23	10th Week	2nd			Numerical Discussion		
14/04/23		2nd			flywheel of governor of flywheel Difference between governor governor		
15/04/23		4th			function of Energy coefficient of flywheel Energy		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Sensitivity & stability of governor of Ischaemous Governor.		Signature		
	Numerical Discussion		Signature		
	Function of flywheel, Difference between flywheel & governor		Signature		
	Function of energy, Co-efficient of function of energy.		Signature		

TEACHERS

LESSON NOTE

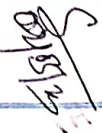
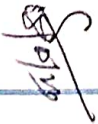
Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
18/04/22	1st				Numerical Discussion		
19/04/22	11th Week	2nd			Review class		
21/04/22	3rd				Assignment Evaluation & Class Test		
22/04/22	4th				Ch:05 - Concept of Balancing static & dynamic Machine Balancing		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Numerical Discussion		18/04/22		18/04/22
	- Revision class -		19/04/22		19/04/22
	Class Test -04		21/04/22		21/04/22
	Concept of Static & dynamic balancing.		22/04/22		22/04/22

LESSON NOTE

Evaluative Questions		Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14	
	Principle of Balancing of Reciprocating masses.					
	Static Balancing of Rotary masses.					
	Static Balancing of Rotary mass Centineir					
	Cause & effects of unbalance.					

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Numerical Discussion				
	-Revision class-				
Class Test -5-	Assignment Evaluation				
	Introduction to vibration & the terms Amplitude, Time period, frequency				

TEA (HLE)

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
9/05/23	2	3	4	5	6	7	8
10/05/23	14th Week	2nd			Longitudinal & Transverse Vibrating		
12/05/23	3rd				Transverse Vibrating		
13/05/23	4th				Causes & Remedies of Vibration		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Classification of vibration of concept of Natural forced & damped vibration.				
	Longitudinal & Transverse vibration				
	Transverse vibration				
	Causes & Remedies of vibration				

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
16/05/23		1st			Revision class		
17/05/23	15th week	2nd			Assignment & Exam Class Test		
19/05/23		3rd			Discussion on previous year question paper		
20/05/23		4th			Discussion on previous year question paper		

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Revision classes		Selvi		
	Class test - 2		Selvi		
	Discussion on previous year question paper		Selvi		
	Discussion on previous year question paper		Selvi		