



TRADE MARK

LIONTM

Teacher's Lesson Note

2023-24

NAME:- UTTAM K. NAIK

BRANCH:- MECHANICAL

SEM:- 5TH (3RD YEAR)

SUB:- MECHATRONICS

LESSON NOTE

Date	Week	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
14-08-23	1st	1st	Mechatronics	Definition of Mechatronics	Introduction of Mechatronics	Definition, Advantages & Disadvantages of Mechatronics	
16-08-23	2nd	2nd		Elements of Mechatronics	Component of Mechatronics	- Scope of Mechatronics in Industrial Sector - Component & Importance of Mechatronics	
17-08-23	3rd	3rd		Sensors & Actuators	Sensors & Transducers	Definition of Transducers	
20-08-23	4th	4th		Function of Transducers		Classification of Transducers	

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
	Mechatronics Introduction				
	Elements of Mechatronics				
	Sensors and Actuators				
	Function of Transducers				

1	2	3	4	5	6	7	8
Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
26-08-20	Week 15/1		Mechanics	Transducers Elements		Electro Mechanical Transducers	
26/08/20				Review Topic Discussion		Revision class	
26-08-20				Transducers Elements		Transducers Actuating Mechanisms	
28-08-20				Sensor Displacement		Displacement & Position Sensor	

LESSON NOTE

9	10	11	12	13	14
Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
	Electro mechanical Transducer				
	Discussion Previous Topic				
	Transducers Actuating Mechanisms				
	Positions Sensor				

TEA (HIPS)

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
27-8-20	2	9	Physics	Pressure	Types of Pressure	Velocity, Motion, Force & Pressure Sensors	
28-8-20	2	9	Physics	Pressure	Discussion	Temperature & Light Sensors	
29-8-20	2	9	Physics	Pressure	Revision	Revision class	
30-8-20	2	9	Physics	Pressure	Test	class Test	

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
Pressure and Motion Definition	Pressure and Motion Definition				
Pressure and Motion Definition	Pressure and Motion Definition				
Pressure and Motion Definition	Pressure and Motion Definition				
Pressure and Motion Definition	Pressure and Motion Definition				

TEA (CUEB)

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
20-09-2023	Week	1st		Kinematic Link & Pair	Actuator, Mechanical, Electrical	Machine, Kinematic Link, Kinematic Pair	
21-09-2023	Week	1st		Slide Crank Mechanism		Mechanism, Slide crank Mechanism	
22-09-2023	Week	1st		Types of Gear drives		Gear drive, Spur gear, Bevel gear	
23-09-2023	Week	1st		Helical Gear & Worm Gear		Helical gear & Worm gear	

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
	Kinematic Link		U. S. S. S. S.		
	Slide Crank Mechanism		U. S. S. S. S.		
	Different type of Gear		U. S. S. S. S.		
	Helical Gear & Worm Gear		U. S. 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
	Discussion Preparation Class		<i>[Signature]</i> 21/11/23	<i>[Signature]</i> 21/11/23	
	Reading Notes		<i>[Signature]</i> 21/11/23	<i>[Signature]</i> 21/11/23	
	Answer		<i>[Signature]</i> 21/11/23	<i>[Signature]</i> 21/11/23	
	Definition		<i>[Signature]</i> 21/11/23	<i>[Signature]</i> 21/11/23	

TEA (HCB)

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
12-11-23	4th	4th	Working Principle	DC Motors			
13-11-23	4th	4th	Working Principle	AC Motors			
14-11-23	4th	4th	Working Principle	Revision classes			
15-11-23	4th	4th	Function	Steppers Motors			

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
What is a motor?	DC Motor				
What is a motor?	AC Motor				
What is a motor?	Revision				
What is a motor?	Revision				
What is a motor?	Steppers Motor				

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
1. What is the difference between a <u>proper fraction</u> and an <u>improper fraction</u> ?	Expected learning outcome of 3rd grade Grade 3 Math				
2. What is the difference between a <u>proper fraction</u> and an <u>improper fraction</u> ?	Grade 3 Math DC AC				
3. What is the difference between a <u>proper fraction</u> and an <u>improper fraction</u> ?	Grade 3 Math DC AC				
4. What is the difference between a <u>proper fraction</u> and an <u>improper fraction</u> ?	Grade 3 Math DC AC				

TEACHERS

LESSON NOTE

1	2	3	4	5	6	7	8
Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
20-11-23	4th	1st			Advantage of PLC	Advantages of PLC	
20-11-23	4th	1st				Selection of PLC	
20-11-23	4th	1st				Uses of PLC	
20-11-23	4th	1st				Architecture basic internal structure	

9	10	11	12	13	14
Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
	Advantages of PLC				
	Selection of PLC				
	Uses of PLC				
	Architecture basic internal structure				

TEA(4EDS)

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
09-12-20	1st	1st			Processing & Programming		
05-12-20	2nd	2nd			Memorics		
06-12-20	3rd	3rd			Master Stamp Controller		
07-12-20	4th	4th			Elements of CNC Machine		

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
	Processing & Programming				
	Memorics				
	Master Stamp Controller				
	Elements of CNC Machine				

TEACHERS

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
02/12/20	1st	1st				Introduction of CAD/CAM	
						Detailed Description of NC Machine	
						Detailed Function of CNC Machines	
						Revision classes	

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
	CAD/CAM				

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Parent's Signature
9			11	12	13
10			12	13	14
11			13	14	
12			14		
13					
14					

TEACHERS

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
16th Nov						Functioning of CAD/CAM System	
						Features of CAD/CAM system	
						Characteristics of CAD/CAM system	
						Application area for CAD/CAM	

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
Q1. Define CAD/CAM system.					
Q2. List the features of CAD/CAM system.					
Q3. List the characteristics of CAD/CAM system.					
Q4. List the application areas of CAD/CAM system.					

TEACHERS

1	2	3	4	5	6	7	8
Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
	13th Nov	1st				Element of CNC Machine with Introduction	
		2nd				Machine Structure	
		3rd				Guideway / Slide way	
		4th				Introduction & Types of Guideway & Factors of design of guideway.	

LESSON NOTE

9	10	11	12	13	14
Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks

TEA (HUBS)

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
						Driver's spindle drives	
						Feed drive	
						Spindle Definition	
						Spindle Bearings	

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
What is the function of the spindle?	to convert rotational motion into linear motion				
What is the function of the feed drive?	to move the tool relative to the workpiece				
What is the function of the spindle bearings?	to support the spindle and reduce friction				

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	
15th Week		1st			Robotics	Definition, Function & Laws of Robotics		
		2nd				Types of Industrial Robot		
		3rd				Robotic System		
		4th				Advantages & Disadvantages of Robot		

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	