



TRADE MARK

LIONTM

Teacher's Lesson Note

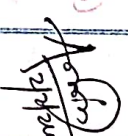
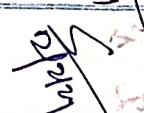
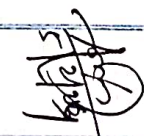
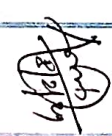
2023-24 (Summer)

SUB:- AUTOMOBILE Engg. & H.V.
BRANCH:- MECH Engg (I & II)
SEM :- 6th

TEACHERS

Date	Week	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
02/02/24	1 st Week	1 st	Introduction & Transmission System	Automobile	Definition of Automobiles	Need & Classification	
5/2/24		2 nd				Layout of automobile chassis	
8/2/24		3 rd				Clutch System. Need, Types.	
12/2/24		4 th				Working Principle with Sketch.	

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
3	10	11	12	13	14
- What is Automobile - Classification of automobile - Classification of Engines	- Need & Classification - Introduction				
	- Layout of automobile chassis - Types of chassis				
- Function of clutch? - Need? - Single plate clutch - Working Principle explain with diagram.	- Clutch system - Need, function - Types - Single plate clutch working.				

LEADER

LESSON NOTE

1	2	3	4	5	6	7	8
Week	Class	Subject	Topic	Sub-Topic	Learning Activities to be taken up	T.M. to be used	
21/02/24	12 th	Physics	Gear Box	Purpose of gear box	Purpose of gear box construction		
20/2/24	12 th	Physics	Gear Box	Purpose of gear box	Purpose of gear box construction		
13/2/24	12 th	Physics	Gear Box	Purpose of gear box	Purpose of gear box construction		
12/3/24	12 th	Physics	Gear Box	Purpose of gear box	Purpose of gear box construction		

9	10	11	12	13	14
Expected Learning Outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks	
- Need of gear box - Definition of gear box	Gear Box parts & Mechanism	21/2/24 21/2/24	21/2/24 21/2/24		
Working of sliding mesh gear box	Working of sliding mesh gear box	20/2/24 20/2/24	20/2/24 20/2/24		
Concept of gear change	Concept of gear change	13/2/24 13/2/24	13/2/24 13/2/24		
Concept of Automatic gear changing Mechanism	Concept of Automatic gear changing Mechanism	12/3/24 12/3/24	12/3/24 12/3/24		

TEACHERS

LESSON NOTE

Date	Week	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
14/3/24	5 th	1 st		Transmission System	Propeller Shaft	Constructional features	
18/3/24	6 th	2 nd			Differential	Need types Explain	
20/3/24	7 th					Meaning Principle of a Differential	
21/3/24	8 th					Class test on Introduction & Transmission system of a automobile & Discussion	

Evaluating Questions	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
	Constructional features of Propeller shaft		<i>[Signature]</i> 14/3/24	<i>[Signature]</i> 14/3/24	
	Differential - 76 words Need & Types		<i>[Signature]</i> 18/3/24	<i>[Signature]</i> 18/3/24	
	What is differential How it's work Explain with diagram Meaning Principle of differential		<i>[Signature]</i> 20/3/24	<i>[Signature]</i> 20/3/24	
	Class test		<i>[Signature]</i> 21/3/24	<i>[Signature]</i> 21/3/24	

REQUIRED

1	2	3	4	5	6	7	8
Date	Time	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used	
22/2/24	11 th		Braking System	Braking System in automobile	Need & Types of Discs		
21/3/24	11 th		Mechanical Brake		Mechanical Brake • Types • Construction • Working • Application		
24/2/24	11 th		Hydraulic Brake		Hydraulic Brake • Construction • Working • Application		
2/4/24	11 th				Hydraulic Brake • Working & Advantages • Application		

LESSON NOTE

9	10	11	12	13	14
Evaluate a Question	Expected learning outcome	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
Mechanics Brakes • Disc • Hydraulic	Need & Types of Braking		24/2/24	24/2/24	
Mechanical Brake • Types • Construction • Working • Application			24/2/24	24/2/24	
Hydraulic Brake • Construction • Working • Application			24/2/24	24/2/24	
Hydraulic Brake • Working & Advantages • Application			24/2/24	24/2/24	

TECHNICAL

EXAM NOTE

Day	Week	Class	Subject	Topic	Sub-Topic	Learning Activities to be taken up	Time to be used
12/11/24	12	12	12	12	12	Types • Construction • Working • Application	12
12/11/24	12	12	12	12	12	Types • Construction • Working • Application	12
12/11/24	12	12	12	12	12	Types • Construction • Working • Application	12
12/11/24	12	12	12	12	12	Types • Construction • Working • Application	12

Exercises Questions	Expected learning outcomes	Project work to be assigned	Signature of the Teacher	Signature of the Student
• Describe one working system with diagram.	• Types • Construction • Working • Application		12/11/24	12/11/24
• Describe one working system with diagram.	• Types • Construction • Working • Application		12/11/24	12/11/24
• Describe one working system with diagram.	• Types • Construction • Working • Application		12/11/24	12/11/24
• Describe one working system with diagram.	• Types • Construction • Working • Application		12/11/24	12/11/24

TEACHERS

Date	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
	6th	1st	Ignition & Suspension system		Describe Battery ignition system	
	7th	2nd			Describe Magnetron system	
	8th	3rd			Purpose Construction	
	9th	4th			Specification Types & working Application	

LESSON NOTE

Evaluative Questions	Expected learning outcome	Project to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
Describe Battery ignition system	Describe Magnetron system	Describe Purpose Construction	Describe Specification Types & working Application		

HEADERS

Date	Week	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
	1 st	1 st				State the common ignition troubles & its remedies	
	2 nd	2 nd				Description of the conventional suspension system for rear axle.	
	3 rd	3 rd				Description of the conventional suspension system for front axle.	
	4 th	4 th				Discuss about ignition system.	

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
normal with state the common ignition troubles & its remedies	Describe the common ignition troubles & its remedies	Explain	Signature	Signature	Remarks
Describe the conventional suspension system for rear axle.	Describe the conventional suspension system for rear axle.	Signature	Signature	Signature	Remarks
Describe the conventional suspension system for front axle.	Describe the conventional suspension system for front axle.	Signature	Signature	Signature	Remarks
Discuss about ignition system.	Discuss about ignition system.	Signature	Signature	Signature	Remarks

TEACHERS

Date	Week	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
	8 th	1 st				Description of Independent Suspension system used in cars.	
	2 nd					Coil spring	
	3 rd					Tension bars	
	4 th					Constructional features & working of a telescopic shock absorber.	

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
	Description of Independent Suspension system used in cars.	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
	Coil spring		Signature of the Teacher	Signature of the Headmaster	Remarks
	Tension bars		Signature of the Teacher	Signature of the Headmaster	Remarks
	Constructional features & working of a telescopic shock absorber		Signature of the Teacher	Signature of the Headmaster	Remarks

TEACHERS

Date	Week	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
	9th	1st		Cooling & Lubrication	Engine Cooling	- Need - Classification	
		2nd				Engine cooling steps Explain	
		3rd				Describe objects of cooling	
		4th				Describe Engine Cooling remedial Measures	

LESSON NOTE

Evaluative Questions	Expected learning outcomes	Project work to be assigned	Signature of the Teacher	Signature of the Headmaster	Remarks
9	10	11	12	13	14
Q1. What is the need for cooling & lubrication? Q2. What are the different types of cooling & lubrication?	Need Classification of cooling & lubrication	Explain	Amir	Amir	
Q1. What are the different types of engine cooling? Q2. What are the different types of engine cooling?	Engine cooling Classification of engine cooling	Explain	Amir	Amir	
Q1. What are the different types of cooling? Q2. What are the different types of cooling?	Describe objects of cooling	Explain	Amir	Amir	
Q1. What are the different types of engine cooling? Q2. What are the different types of engine cooling?	Describe Engine Cooling remedial Measures	Explain	Amir	Amir	

TEACHERS

LESSON NOTE

Date	Period	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	TLM to be used
	10 th	1 st				Describe the Function of Lubrication	
		2 nd				Describe the Lubrication System of I.C engine	
		3 rd				• Working • Application	
		4 th				• Character of above 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
Describe the Function of Lubrication	Describe the Lubrication System of I.C Engine	Describe the Lubrication System of I.C Engine			
Describe the Function of Lubrication	Describe the Lubrication System of I.C Engine	Describe the Lubrication System of I.C Engine			
Describe the Function of Lubrication	Describe the Lubrication System of I.C Engine	Describe the Lubrication System of I.C Engine			

LESSON NO. 15

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>strong</u> and a <u>weak</u> acid? 2. How do you determine the <u>strength</u> of an acid?	1. To understand the difference between a strong and a weak acid. 2. To learn how to determine the strength of an acid.				
1. What is the difference between a <u>strong</u> and a <u>weak</u> base? 2. How do you determine the <u>strength</u> of a base?	1. To understand the difference between a strong and a weak base. 2. To learn how to determine the strength of a base.				
1. What is the difference between a <u>strong</u> and a <u>weak</u> electrolyte? 2. How do you determine the <u>strength</u> of an electrolyte?	1. To understand the difference between a strong and a weak electrolyte. 2. To learn how to determine the strength of an electrolyte.				

NOTICE

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>strong</u> and a <u>weak</u> argument? 2. What is the difference between a <u>strong</u> and a <u>weak</u> argument?	1. What is the difference between a <u>strong</u> and a <u>weak</u> argument? 2. What is the difference between a <u>strong</u> and a <u>weak</u> argument?				
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1. What is the difference between a <u>strong</u> and a <u>weak</u> argument? 2. What is the difference between a <u>strong</u> and a <u>weak</u> argument?	1. What is the difference between a <u>strong</u> and a <u>weak</u> argument? 2. What is the difference between a <u>strong</u> and a <u>weak</u> argument?				
1. What is the difference between a <u>strong</u> and a <u>weak</u> argument? 2. What is the difference between a <u>strong</u> and a <u>weak</u> argument?	1. What is the difference between a <u>strong</u> and a <u>weak</u> argument? 2. What is the difference between a <u>strong</u> and a <u>weak</u> argument?				

TEACHERS

LESSON NOTE

Date	Week	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
	13 th	1 st			Electricity Hybrid vehicles	Introduction on HV & EV	
		2 nd				Social & Environmental importance of Hybrid & Electric Vehicles.	
		3 rd				Description of Electric Vehicles operational advantages.	
		4 th				Present Performance & application of Electric Vehicles.	

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

TEACHERS

LESSON NOTE

1	2	3	4	5	6	7	8
Date	Week	Class	Subject	Topic (Concept)	Sub-Topic (Sub-Concept)	Learning Activities to be taken up	Time to be used
	14 th 1 st					Battery for EV	
	2 nd					Battery types & Fuel cells	
	3 rd					Hybrid Vehicles	
	4 th					Types of Hybrid & Electric Vehicles	

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

TEACHERS

LESSON NOTE

Date	Week	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
	15 th	1 st				Parallel Series Configurations	
		2 nd				Parallel & Series Configurations	
		3 rd				Driver train	
		4 th				Solar Powered Vehicles.	

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