

Lesson Plan

Subject: **AE&HV** (Th -2)


Name of faculty: **Er.SATYABRATA MOHARANA**

Semester: **6TH** Class allotted: **4p/week**

Branch: **Mechanical**

Session: **2025(S)**

Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	04/02/2025 TO 08/02/2025	1-INTRODUCTION & TRANSMISSION SYSTEM: Automobiles: Definition, need and classification: Layout of automobile chassis with major components (Line diagram) Clutch System: Need, Types (Single & Multiple) And Working principle with sketch		White Board Marker Smart board
2	10/02/2025 TO 15/02/2025	Gear Box: Purpose of gear box, Construction and working of a speed gear box Concept of automatic gear changing mechanisms		White Board Marker Smart board
3	17/02/2025 TO 22/02/2025	Propeller shaft: Constructional features Differential: Need, Types and Working principle		White Board Marker Smart board
4	24/02/2025 TO 01/03/2025	2-BRAKING SYSTEM Braking systems in automobiles: Need and types Mechanical Brake Hydraulic Brake Air Brake		White Board Marker Smart board
5	03/03/2025 TO 08/03/2025	Air assisted Hydraulic Brake Vacuum Brake 3-IGNITION & SUSPENSION SYSTEM: Describe the Battery ignition and Magnet ignition system Spark plugs: Purpose, construction and specifications		White Board Marker Smart board
6	10/03/2025 TO 15/03/2025	State the common ignition troubles and its remedies Description of the conventional suspension system for Rear and Front axle		White Board Marker Smart board
7	17/03/2025 TO 22/03/2025	Description of independent suspension system used in cars (coil spring and tension bars) Constructional features and working of a telescopic shock absorber		White Board Marker Smart board


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8	24/03/2025 TO 29/03/2025	4-COOLING AND UBRICATION: Engine cooling: Need and classification Describe defects of cooling and their remedial measures	White Board Marker Smart board
9	31/03/2025 TO 05/04/2025	Describe the Function of lubrication. Describe the lubrication System of I.C. engine INTERNAL ASSESMENT TEST	White Board Marker Smart board
10	07/04/2025 TO 12/04/2025	5-FUEL SYSTEM Describe Air fuel ratio Describe Carburetion process for Petrol Engine	Marker White Board Smart board
11	14/04/2025 TO 19/04/2025	Describe Multipoint fuel injection system for Petrol Engine Describe the working principle of fuel injection system for multi cylinder Engine	White Board Marker Smart board
12	21/04/2025 TO 26/04/2025	Filter for Diesel engine. Describe the working principle of Fuel feed pump and Fuel Injector for Diesel engine 6-ELECTRIC AND HYBRID VEHICLES: Introduction, Social and Environmental importance of Hybrid and Electric Vehicles	Marker White Board Smart board
13	28/04/2025 TO 03/05/2025	Description of Electric Vehicles, operational advantages, present performance applications of Electric Vehicles Battery for Electric Vehicles,	White Board Marker Smart board
14	05/05/2025 TO 10/05/2025	Battery types and fuel cells Hybrid vehicles, Types of Hybrid and Electric Vehicles: Series, Parallel and Series configurations Drive train Solar powered vehicles	White Board Marker Smart board
15	12/05/2025 TO 17/05/2025	Revision Revision Revision	White Board Marker Smart board



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