LESSON PLAN

(For theory course)

Program Name	Program Elective Core Course
Course Title	Automobile Engineering
Course Code	ME PE-202-3(Automobile Engineering)
Semester	4th
Course Teacher	Anil Sen

Sr. No.	Subject Code	Subject	Study Scheme			Total Study Hours	Credits	Evaluation Scheme								Total Marks
								Internal Assessment				External Assessment				
			Th	Pr	DCS			Th	Pr	total	th	hrs	Pr	hrs	total	
01	MEPE 202-3	AUTOMOBILE-Engg	03	—	—	03 hrs	03	40	-	40	60	3hrs	—	—	60	100

Evaluation Scheme

Reference Books/ Study Material

1. AUTOMOBILE Engg vol.2 → Dr. Kirpal Singh Standard Publishers.
2. AUTOMOBILE Engg BY R.B. Gupta
3. Automotive Mechanics, S. Srinivasan, TATA McGraw Hill.

Course outcomes (Cos)

CO-1 :	Indentify fy the components of an AUTOMOBILE with their working
CO-2	Expain the components of cooling and lubricating system
CO-3	Explain the concepts of Ignition and Transmission and Steering System

Co-4 : To Identify different system of suspension and their applications.
Co-5 : Differentiate the special vehicles according to the usage.

Teaching Plan

UNIT – 01

Introduction To Basic Structure of An Automobile

Sr.no	Topic to be covered	Proposed date	Actual Date	Remarks
1	Cylinder block and cylinder head	27.01.2026		
2	Gaskets	28.01.2026		
3	Cylinder liners & types of cylinder liners	30.01.2026		
4	Piston and Piston Pin	03.02.2026		
5	Piston Rings and Types of Piston Rings	04.02.2026		
6	Connecting Rod, Crankshaft, Camshaft	6.02.2026		
7	Crank Case, Engine Valves	10.02.2026		
8	Flywheel & Governors	11.02.2026		

UNIT – 02

Cooling And Lubrication System & Fuler Feed System

Sr.no	Topic to be covered	Proposed date	Actual Date	Remarks
1	Necessity of Cooling System	13.02.2026		
2	Types Of Cooling System	17.02.2026		
3	Types of Wate Cooling System	18.02.2026		
4	The components of water cooling system	20.02.2026		
5	The necessity of lubrication system	24.02.2026		

6	Types of lubrication systems	25.02.2026		
7	Conventional fuel and alternative fuels	27.02.2026		
8	Types of carburetor	3.03.2026		
9	Working of simple carburetor	6.03.2026		
10	Multi Point and Single Point Fuel Injection System	10.03.2026		
11	CLASS TEST 01	11.03.2026		
12	Different fuel transfer pumps	13.03.2026		
13	Fuel injection pumps	17.03.2026		

UNIT – 03

Ignition System & Transmission and Steering System

Sr.no	Topic to be covered	Proposed date	Actual Date	Remarks
1	Introduction to Battery Ignition System	18.03.2026		
2	Electronic Ignition System	20.03.2026		
3	Construction and working of Lead Acid Battery	24.03.2026		
4	Elements of starting system, Types of lights used in automobile	25.03.2026		
5	General Arrangement of Clutch	27.03.2026		
6	Construction of Single Plate Clutch And Multi Plate Clutch	31.03.2026		
7	Construction of Centrifugal Clutch	01.04.2026		
8	Types of Gear Box, Working of Sliding Mesh Gear Box	7.04.2026		

9	Working of Propeller Shaft And Differential	8.04.2026		
10	Types of Rear Axle	10.04.2026		
11	Necessity of Steering System, Caster, Camber and King Pin Inclination	17.04.2026		
12	Revision of Unit 3	21.04.2026		

UNIT – 04

Suspension System

Sr.no	Topic to be covered	Proposed date	Actual Date	Remarks
1	Necessity of Suspension system system, Torsion Bar suspension system	22.04.2026		
2	Leaf Spring & Coil Spring Suspension System	24.04.2026		
3	CLASS TEST-2	28.04.2026		
4	Working of telescopic shock absorber	29.04.2026		
5	Function of Brakes	01.05.2026		
6	Types of Brakes and working of Internal Expanding Brake	5.05.2026		
7	**HOUSE TEST**	6.05.2026		
8	**HOUSE TEST**	8.05.2026		
9	**HOUSE TEST**	12.05.2026		
10	Working of External Expanding Brakes & Disc Brake	13.05.2026		
11	Revision of Unit 4	15.05.2026		

UNIT- 05

Special Vehicles & Hybrid and Electric Vehicles

Sr.no	Topic to be covered	Proposed date	Actual Date	Remarks
1	Introduction to Special Vehicles	19.05.2026		
2	Introduction to Hybrid vehicles	20.05.2026		
3	Social and Environmental Importance of Hybrid Vehicles	22.05.2026		
4	Electric Drive Train	26.05.2026		
5	Revision of Unit 5	27.05.2026		

Signature of Course Teacher with name. 30.1.2026

Approved by principle.