

AUTOMOBILE ENGINEERING LESSON PLAN

Discipline : Mechanical Engg.	Semester : 4th	Name of the Teachnig Faculty : SRI. PRIYABRATA P. PRADHAN
Course : A & E	No.of days/Per weeks Class Alloted Weeks :4	Semester From Date: 16th JAN 2024 To Date: 26 APR 2024
Weeks	Class day	Theory
3RD(JAN-2024)	1st	Automobiles: Definition, need and classification: Layout of automobile chassis with major components (Line diagram)
	2nd	Layout of automobile chassis with major components (Line diagram)
	3rd	Clutch System: Need, Types (Single & Multiple)
	4th	Working principle with sketch
4TH(JAN-2024)	1st	Gear Box: Purpose of gear box,
	2nd	Construction and working of a 4 speed gear box
	3rd	Construction and working of a 4 speed gear box
	4th	Construction and working of a 4 speed gear box
1ST(FEB-2024)	1st	Concept of automatic gear changing mechanisms
	2nd	Concept of automatic gear changing mechanisms
	3rd	Propeller shaft,Constructional feature
	4th	Differential: Need,Types and Woerking Principle
2ND(FEB-2024)	1st	Braking systems in automobiles: Need,Types
	2nd	Mechanical Brake
	3rd	Hydraulic Brake
	4th	Air Brake
3RD(FEB-2024)	1st	Air assisted Hydraulic Brake
	2nd	Vacuum Brake
	3rd	IGNITION SYSTEM
	4th	Describe the Battery ignition
4TH(FEB-2024)	1st	Magnet ignition system
	2nd	Spark plugs: Purpose, construction,specifications
	3rd	State the common ignition troubles,remedies
	4th	The conventional suspension system
1ST(MAR-2024)	1st	Description of the conventional suspension system for Rear
	2nd	Description of the conventional suspension system for Front Axle
	3rd	Description of independent suspension system
	4th	Coil Spring,Shock Absorber, Tension Bars
	1st	Constructional features and working of a telescopic shock absorber

2ND(MAR-2024)	2nd	Constructional features and working of a telescopic shock absorber
	3rd	Engine cooling: Need
	4th	and classification
3RD(MAR-2024)	1st	Describe defects of cooling
	2nd	Describe defects of cooling
	3rd	Their remedial measures
	4th	Their remedial measures
4TH(MAR-2024)	1st	Describe the Function of lubrication
	2nd	Describe the lubrication System of I.C. engine
	3rd	Describe Air fuel ratio 5.2 Describe Carburetion process for Petrol Engine
	4th	Describe Multipoint fuel injection system for Petrol Engine
1ST(APR-2024)	1st	INTERNAL ASSESSMENT
	2nd	INTERNAL ASSESSMENT
	3rd	Describe Multipoint fuel injection system for Petrol Engine
	4th	Describe the working principle of fuel injection system for multi cylinder Engine 5
2ND(APR-2024)	1st	Describe the working principle of fuel injection system for multi cylinder Engine 5
	2nd	Filter for Diesel engine
	3rd	Describe the working principle of Fuel feed pump and Fuel Injector for Diesel
	4th	Introduction, Social and Environmental importance of Hybrid and Electric Vehicle
3RD(APR-2024)	1st	Description of Electric Vehicles, operational advantages
	2nd	applications of Electric Vehicles
	3rd	Battery for Electric Vehicles, Battery types and fuel cells
	4th	Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Series, Parallel and
4TH(APR-2024)	1st	Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Series, Parallel and
	2nd	Solar powered vehicles
	3rd	Series configurations;6.5 Drive train
	4th	Solar powered vehicles

Priyabrata Priyadarshi Pradhan
 16/01/2024.