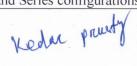
Discipline:	Semester:	Name of the Teaching Faculty:
MECHANICAL	6th	KEDAR PRUSTY.LECTURER(GF)
Subject: AE&HV	No. of days/per week class allotted:	Semester From date: 04.02.2025 To date: 17.05.2025 No of weeks: 15
Week	Class Day	Theory Topics:
1 st		INTRODUCTION & TRANSMISSION SYSTEM:
	1 st	
	2 nd	Automobiles: Definition, need and classification: Layout of automobil chassis
	3rd	Clutch System: Need, Types (Single & Multiple) and Working princip with sketch
	4 th	Gear Box: Purpose of gear box, Construction and working of a 4 speed gear box
	1st	Concept of automatic gear changing mechanisms
	2 nd	Propeller shaft: Constructional features
2 nd	3rd	Differential: Need, Types and Working principle
	4 th	BRAKING SYSTEM:
	1 st	Braking systems in automobiles: Need and types
	2 nd	Mechanical Brake
3rd	3rd	Hydraulic Brake
	4 th	Class Test
4 th	1 st	Air Brake
	2 nd	Air assisted Hydraulic Brake
	3 rd	Vacuum Brake
	4 th	IGNITION & SUSPENSION SYSTEM:
5 th	1st	Describe the Battery ignition and Magnet ignition system
	2 nd	Spark plugs: Purpose, construction and specifications
	3rd	State the common ignition troubles and its remedies
	4 th	Description of the conventional suspension system for Rear and Front axle



	1st	Description of independent suspension system used in cars (coil spring and tension
		Constructional features and working of a telescopic shock absorber
	2 nd	
		COOLING AND LUBRICATION:
	3rd	
6 th	4 th	Engine cooling: Need and classification
	1 st	Describe defects of cooling and their remedial measures
		Describe the Function of lubrication
	2nd	
	3rd	Describe the lubrication System of I.C. engine
7 th	4th	
	4	FUEL SYSTEM
	1st	Describe Air fuel ratio
	21 d	Describe Carburetion process for Petrol Engine
8 th	3rd	Describe Multipoint fuel injection system for Petrol Engine
	4 th	Describe the working principle of fuel injection system for multi cylinder Engine
	1 st	Filter for Diesel engine
	2 nd	Describe the working principle of Fuel feed pump and Fuel Injector for
		Diesel engine
9th	3rd	ELECTRIC AND HYBRID VEHICLES:
,	4th	Introduction, Social and Environmental importance of Hybrid and Electric Vehicles
	1 st	Introduction, Social and Environmental importance of Hybrid and Electric Vehicles
10 th	2 nd	Introduction, Social and Environmental importance of Hybrid and
	3rd	Electric Vehicles Description of Electric Vehicles, operational advantages, present
		performance and applications of Electric Vehicles
	4 th	Description of Electric Vehicles, operational advantages, present performance and applications of Electric Vehicles
-11 th	1/t	Description of Electric Vehicles, operational advantages, present performance and applications of Electric Vehicles
	2 nd	Description of Electric Vehicles, operational advantages, present
	3rd	performance and applications of Electric Vehicles
		Class Test
	4 th	Battery for Electric Vehicles, Battery types and fuel cells
4	1st	Battery for Electric Vehicles, Battery types and fuel cells
12 th	2 nd	Battery for Electric Vehicles, Battery types and fuel cells
	3rd	Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Serie Parallel and Series configurations
	4 th	Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Serie Parallel and Series configurations



	1 st	Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Series,
		Parallel and Series configurations
	2 nd	Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Series
		Parallel and Series configurations
	3rd	Drive train
13 th	4 th	Drive train
	1 st	Solar powered vehicles
14 th	2 nd	Solar powered vehicles
	3rd	Discussion PYQ
	4 th	Discussion PYQ
	1 st	Discussion PYQ
	2 nd	Doubt clearing class
15 th	3rd	Doubt clearing class
	4 th	Doubt clearing class

H.O.D. Mechanical

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