LESSION PLAN

Discipline: Mechanical Engg	Semester : 6th Sem Mech	Name of faculty: Biswajit Mishra
Sub: AE &HV	No of Days/ week class allotted :- 4	Total no of weeks:- 15 Session: 2024-25 (Summer)
No of Week	No Of Class Planned	Topic to be taught
1st	1st	Automobiles: Definition, need and classification
	2nd	Layout of automobile chassis with major components (Line diagram)
	3rd	Clutch: single plate clutch
	4th	Multiplate clutch
2nd	1st	Gear Box: Purpose of gear box, Construction and working of a manual transmission system
	2nd	Automatic transmission system
	3rd	Concept of automatic gear changing mechanisms
	4th	Propeller shaft: Constructional features
3rd	1st	Differential mechanism
	2nd	Rear axles: functions
	3rd	Visualisation of transmission system through animated videos: E-learning
	4th	Braking system: Introduction, classification
4th	1st	Mechanical braking system
	2nd	Hydraulic brakes
	3rd	Air brakes
	4th	Vacuum brakes: Bleeding of brakes
5th	1st	**Class Test-I**
	2nd	Ignition system : Introduction
	3rd	Ignition coil, spark plug
	4th	Battery ignition system
6th	1st	Magneto ignition system
	2nd	Diffrence between battery & magneto ignition system
	3rd	Common ignition troubles & remedies
	4th	Suspension system: Introduction
7th	1st	Coil springs
	2nd	Leaf springs
	3rd	Telescopic shock absorber
	4th	Engine cooling: Need & classification
8th	1st	Description of cooling system: Air cooling, oil cooling system
	2nd	Defects of cooling & their remedial measures
	3rd	Functions of lubricating system, lubricant grades
	4th	Lubricating system of automobile
9th	1st	Different types of engine cooling system

	2nd	Cooling & lubricating system animated videos: E-learning
	3rd	Fuel system functions
	4th	Carburretion
10th	1st	Air fuel ratio: Octane & cetane number
	2nd	Solex carburettor
	3rd	Ignition timing: firing order of 4- cyl inline engine
	4th	Fuel injection system: multi point injection system
11th	1st	Working of fuel injector
	2nd	Fuel feed pump
	3rd	Introduction, Social and Environmental importance of Hybrid and Electric Vehicles
	4th	Description of Electric Vehicles, operational advantages,
12th	1st	present performance and applications of Electric Vehicles
	2nd	Battery for Electric Vehicles,
	3rd	Battery types and fuel cells
	4th	Types of Hybrid and Electric Vehicles
13th	1st	Parallel, Series, Parallel and Series configurations
	2nd	Drive train
	3rd	Solar powered vehicles
	4th	Advantages of electric vehicles
14th	1st	Comparison of conventional versus EV
	2nd	Challenge present performance and applications of Electric Vehicles s to EV & Hybrid vehicles
	3rd	Social and Environmental importance of Hybrid and Electric Vehicles
	4th	Quiz test: previous year question answer
15th	1st	Previous year question answer
	2nd	Previous year question answer
	3rd	
	4th	

29/1/2025

(Faculty & H.O.D.)