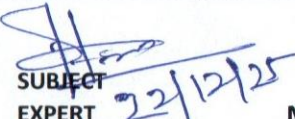
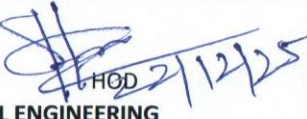


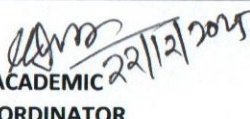
GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

DISCIPLINE : MECHANICAL ENGG.		Semester: 6th		Name of the Teaching Faculty :Thakura Hansdah	
Subject :Automobile Engg& Hybrid Vehicle(C311)		No. of Days / per week class allotted : 04	CHAPTER	Semester From date : 22,12.2025 To Date : 18.04.2026	
MONTH	Week	Day		Topics	
JANUARY	1ST	1st	CHAPTER-1	1.0 INTRODUCTION & TRANSMISSION SYSTEM:	
		1ST		Automobiles: Definition, need	
		2nd		Classification: Layout of automobile chassis with major components (Line diagram)	
		2nd		Classification: Layout of automobile chassis with major components (Line diagram)	
	2nd	3rd		Clutch System: Need, Types	
		4th		Working principle with sketch of single clutch	
		3rd		1st	Working principle with sketch of Multiple clutch
				2nd	Gear Box: Purpose of gear box, Construction and working of a 4 speed gear box
	3rd			Gear Box: Purpose of gear box, Construction and working of a 4 speed gear box	
	4th	1st		Construction and working principle of Sliding mesh gear box	
		2nd		Construction and working principle of Constant mesh gear box	
		3rd		Construction and working principle of Syncro mesh gear box	
		4TH		REVISION	
		5TH		1st	Propeller shaft: Constructional features
				2nd	Differential: Need, Types and Working principle
				3rd	REVISION
4TH					
FEBRUARY	2nd	1st	CHAPTER-2	2.OBRAKING SYSTEM:	
		2nd		Braking systems in automobiles: Need and types	
		4th		Mechanical Brake	
		4th		Hydraulic Brake	
	3rd	1st	Air Brake & Air assisted Hydraulic Brake		
		2nd	Vacuum Brake		
		3rd	CLASS TEST-1		
		4TH	CLASS TEST-1		
	4th	1st	CHAPER-3	3.OIGNITION & SUSPENSION SYSTEM	
		2nd		Describe the Battery ignition	
		3rd		DescribeMagnet ignition system	
		4th		Spark plugs: Purpose, and Spark plugs: construction,Spark plugs: specification	
	5TH	4th	State the common ignition troubles and its remedies		
		1st	Description of the conventional suspension system for Rear and Front axle		
		2nd	Description of the conventional suspension system for Rear and Front axle		
		2nd			

MARCH	2nd	3rd	CHAPTER-4	Description of independent suspension system used in cars (coil spring and tension bars)
		1st		Constructional features and working of a telescopic shock absorber
		2nd		4.0COOLING AND LUBRICATION:
		3rd		Engine cooling: Need and classification
		4th		Describe defects of cooling and their remedial measures
	3RD	1st		Describe the Function of lubrication
		2nd		Describe the lubrication System of I.C. engine
		3rd		FUEL SYSTEM: Describe Air fuel ratio
	4th	4th		INTERNAL EXAMINATION.
		1st		INTERNAL EXAMINATION.
		2nd		Describe Carburetion process for Petrol Engine
		3rd		Describe Carburetion process for Petrol Engine
		4TH		Describe Carburetion process for Petrol Engine
	5TH	1st		Describe Multipoint fuel injection system for Petrol Engine
		2nd		Describe the working principle of fuel injection system for multi cylinder Engine
		3rd		Filter for Diesel engine
		4th		Describe the working principle of Fuel feed pump for Diesel engine
4th		Describe the working principle of Fuel Injector for Diesel engine		
APRIL	1ST	1st	CHAPTER-6	5.0ELECTRIC AND HYBRID VEHICLES: Introduction
		2nd		Social and Environmental importance of Hybrid and Electric Vehicles
		3rd		Description of Electric Vehicles,
		4th		operational advantages, present performance of Electric Vehicles
	2nd	1st		applications of Electric Vehicles
		2nd		Battery for Electric Vehicles, Battery types and fuel cells
		3rd		Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Series, Parallel and Series configurations
	3rd	4th		Hybrid vehicles, Types of Hybrid and Electric Vehicles: Parallel, Series, Parallel and Series configurations
		1st		Solar powered vehicles
		2nd		Solar powered vehicles
		3rd		CLASS TEST-2
		4th		CLASS TEST-2


 SUBJECT EXPERT
 G.P. MAYURBHANJ


 HOD
 MECHANICAL ENGINEERING
 G.P. MAYURBHANJ


 ACADEMIC COORDINATOR
 G.P. MAYURBHANJ