

VENUS GROUP OF EDUCATIONAL & RESEARCH INSTITUTE,BAHANAGA,BALASORE

LESSON PLAN- 6TH SEMESTER (2023-2026)

SUBJECT:- AUTOMOBILE ENGINEERING AND HYBRID VEHICLES

From 22/12/26 to 18/04/26

NAME OF THE FACULTY:-Er. BISWAJIT MOHANTY

MONTH	CHAPTER /UNIT	COURSE TO BE COVERED	CLASSES REQUIRED	REMARKS(IF ANY)
	Chapter-1	INTRODUCTION&TRANSMISSIONSYSTEM	12	
	1.1	Automobiles: Definitions ,need and classification :Layout of automobile chassis with major components (Line diagram)	2	
	1.2	Clutch System: Need, Types(Single &Multiple)and working Principle with sketch	2	
	1.3	Gear Box: Purpose of gear box, Construction and working of a 4 speed gear box	2	
	1.4	Concept of automatic gear changing mechanics	2	
	1.5	Propeller shaft: Constructional features	2	
	1.6	Differential :Need, Types and Working principle	2	
	Chapter-2	BRAKINGSYSTEM	05	
	2.1	Braking systems in automobiles: Need and types	1	
	2.2	Mechanical Brake	1	
	2.3	Hydraulic Brake		
	2.4	Air Brake	1	
	2.5	Air assisted Hydraulic Brake	1	
	2.6	Vacuum Brake	1	
	Chapter-3	IGNITION&SUSPENSIONSYSTEM	10	
	3.1	Describe the Battery ignition and Magnet ignition system	2	
	3.4	Description of the conventional suspension system for Rear and Front axle	2	
	3.6	Constructional features and working of a telescopic shock absorber	2	
	Chapter-4	COOLINGANDLUBRICATION	8	
	4.1	Engine cooling: Need and classification	2	
	4.2	Describe defects of cooling and their remedial measures	2	
	4.3	Describe the Function of lubrication	2	
	4.4	Describe the lubrication System I.C. engine	2	
	Chapter-5	FUELSYSTEM	10	
	5.1	Describe Air fuel ratio	1	
	5.2	Describe Carburetion process for Petrol Engine	2	
	5.3	Describe Multipoint fuel injection system for Petrol Engine	2	

	5.4	Describe the working principle of fuel injection system for multi cylinder Engine	2	
	5.5	Filter for Diesel engine	1	
	5.6	Describe the working principle of fuel feed pump and Fuel Injector for Diesel Engine	2	