

# MAHAMAYA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCE, NUAPADA

LESSON PLAN-6<sup>TH</sup> SEMESTER (2022)

SEMESTER FROM DATE: 10.03.2022 TO 10.06.2022

NUMBER OF WEEKS: 15

SUBJECT:-AUTOMOBILE ENGINEERING AND HYBRID VEHICLES (TH. 2)

NAME OF THE FACULTY:- Er. BINAYA BHUSAN PANDA

CHAPTER /UNIT	COURSE TO BE COVERED	CLASSES REQUIRED	REMARKS (IF ANY)
<b>Chapter-1</b>	<b>INTRODUCTION &amp; TRANSMISSION SYSTEM</b>	<b>12</b>	
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	
<b>Chapter-2</b>	<b>BRAKING SYSTEM</b>	<b>05</b>	
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	
<b>Chapter-3</b>	<b>IGNITION &amp; SUSPENSION SYSTEM</b>	<b>10</b>	
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	
<b>Chapter-4</b>	<b>COOLING AND LUBRICATION</b>	<b>8</b>	
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	
<b>Chapter-5</b>	<b>FUEL SYSTEM</b>	<b>10</b>	
5.1	Describe Air fuel ratio	1	
5.2	Describe Carburetion process for Petrol Engine	2	

