BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK
DEPARTMENT OF AUTOMOBILE ENGINEERING

LESSON PLAN

SUBJECT: AUTOMOTIVE TRANSMISSION (TH 2)

FACULTY: NILAKANTHA NAYAK

DATE-15/09/2022-22/12/2022

ACCADEMIC SESSION: 2022-23W

SEMESTER: 5TH

Sr. Lecturer
H.O.D(Auto. Engg.)
Automobile Engg. Dept.
BOSE. Cuttack

AUTOMOBILE ENGINEERING DEPATMENT

VISSION:

To develop competent, disciplined imaginative Automobile engineers, equipped with core competency and technical skills useful to the learning / teaching community and the industrial fraternity.

MISSION:

M1: To provide with operational and technical inputs to get innovative and research ideas in the field of automotive engineering.

M2: To give inputs for higher education with management qualities for the betterment of the society.

M3: Skilling with modern engineering tools necessary to meet and solve engineering problems.

PROGRAM EDUCATIONAL OBJECTIVES

PEO1: To provide technical skills to diagnose and apply the concept of automotive system

PEO2: To prepare to design, fabricate and innovate in automobile sector to face the industrial challenges.

PEO3: To inculcate with good communication skills, ethics and entrepreneurship skills to play the key role in automotive industry.

Discipline:-**Automobile Engg.**	Semester :-**5TH**	Name of the teaching faculty :- **NILAKANTHA NAYAK**
Subject Name :- **AUTOMOTIVE TRANMISSION**	No. Of Days/Week Class Allotted :- **04 Periods/Week (Monday, Tuesday , Thursday, Friday – 1 Period Each)**	Semester from Date -**15/09/2022** To Date -**22/12/2022** **No. of Weeks:16**
WEEK	Class Day	Theory topics
1ST	15/09/2022	Introduction of Automotive System
	16/09/2022	1. Clutch 1.1 Introduction, requirement of clutch, types of clutch.
	17/09/2022	1.1 Introduction, requirement of clutch, types of clutch.
2ND		
	22/09/2022	1.2 Clutch operation. 1.3 Clutch components, clutch facing.
3RD		
	23/09/2022	1.4 Clutch problem &adjustment.
	26/09/2022	1.5 Fluids fly wheel &coupling
	27/09/2022	**2. Gear Box** 2.1 Introduction, functions & types of transmission.
	28/09/2022	2.2 Sliding mesh & constant mesh gearbox.
4TH		
	29/09/2022	2.2 Sliding mesh & constant mesh gearbox.
	11/10/2022	2.3 Epicyclical gear box overdrive.
	13/10/2022	2.4 Free-wheel drive, selector mechanism.

5TH		
	17/10/2022	2.5 Fluid torque converter.
	18/10/2022	3. Propeller shaft 3.1 Introduction definition & types of propeller shaft.
	19/10/2022	3.1 Introduction definition & types of propeller shaft.
	20/10/2022	**CLASS TEST**
6TH		
	17/10/2022	3.2 Universal joints & its types.
	18/10/2022	3.3 Sliding joint.
	19/10/2022	3.3 Sliding joint.
	20/10/2022	3.3 Sliding joint.
7TH		
	25/10/2022	4. Differential 4.1 Function of differential gear box.
	26/10/2022	4.2 Types of differential.
	27/10/2022	4.2 Types of differential.
	01/11/2022	4.3 Constructional details of a differential.
8TH		
	02/11/2022	4.4 Study & inspection of differential
	03/11/2022	4.4 Study & inspection of differential
	07/11/2022	**Discussion of previous chapter and Assignment**
	09/11/2022	**CLASS TEST**

9TH		
	10/11/2022	5. Rear Axle 5.1 Definition of rear axle, supporting of rear axle.
	14/11/2022	5.2 Rear axle drives such as Hotchkiss drive, torque tube drive etc.
	15/11/2022	5.2 Rear axle drives such as Hotchkiss drive, torque tube drive etc.
	16/11/2022	5.3 Types of rear axle.
10TH		
	17/11/2022	5.4 Rear axle casing.
	21/11/2022	6. Two wheeler 6.1 Power transmission system of moped.
	22/11/2022	6.2 Power transmission system of scooter.
11TH	23/11/2022	6.3 Power transmission system of motorcycle.
	24/11/2022	6.4 Power transmission system of bullet.
	28/11/2022	7. Performance of Automobile 7.1 Power for propulsion resistances for vehicle.
	29/11/2022	7.2 Traction & tractive effort, road performance curves.
	30/11/2022	7.3 Acceleration grad ability & draw-bar pull.
12TH		
	05/12/2022	7.4 Calculation of equivalent weight.
	06/12/2022	7.4 Calculation of equivalent weight.
	07/12/2022	7.4 Calculation of equivalent weight

	08/12/2022	7.4 Calculation of equivalent weight
13TH		
	12/12/2022	7.5 Calculation of maximum traffic effort.
	13/12/2022	7.5 Calculation of maximum traffic effort.
	14/12/2022	7.5 Calculation of maximum traffic effort.
	15/12/2022	7.5 Calculation of maximum traffic effort.
14TH		
	19/12/2022	Class test
	20/12/2022	Previous year question paper Discussion
	21/12/2022	Doubt clearing class
	22/12/2022	MCQ TEST