



GOVERNMENT POLYTECHNIC, NABARANGPUR
DEPARTMENT OF AUTOMOBILE ENGINEERING

Discipline: AUTOMOBILE ENGG.	Semester: 5th	Name of the Teaching Faculty: RABINDRA PRASAD RATH
Subject: AUTOMOTIVE TRANSMISSION	No. of days/per week class allotted: 4	Semester From date: 16-08-2024 To Date: 08-11-2024 No. of Weeks: 12
COURSE OUTCOMES	CO1: Functions, types, requirements & adjustment of clutch. CO2: Function, types & operation of gearbox. CO3: Functions of propeller shaft & types of joints CO4: Functions & types of differentials. CO5: Types & operation of real axel. CO6: Transmission of power in two-wheelers.	
Week	Class Day	Theory/Practical Topics
1 ST	1 ST	1. Clutch 1.1 Introduction, requirement of clutch,
	2 ND	types of clutches.
	3 RD	1.2 Clutch operation.
	4 TH	1.3 Clutch components, clutch facing.
2 ND	1 ST	1.4 Clutch problem & adjustment.
	2 ND	1.5 Fluids fly wheel & coupling.

	3 RD	2. Gear Box 2.1 Introduction functions, types of transmission.
	4 TH	types of transmission.
3 RD	1 ST	REVISION
	2 ND	2.2 Sliding mesh & constant mesh gearbox.
	3 RD	2.2 Sliding mesh & constant mesh gearbox.
	4 TH	2.3 Epicyclical gear box overdrive.
4 TH	1 ST	2.4 Free-wheel drive, selector mechanism.
	2 ND	2.4 Free-wheel drive, selector mechanism.
	3 RD	2.5 Fluid torque converter.
	4 TH	3. Propeller shaft 3.3 Introduction definition & types of propeller shaft.
5 TH	1 ST	3.2 Universal joints & its types.
	2 ND	3.2 Universal joints & its types. 3.4 Sliding joint.
	3 RD	4. Differential 4.1 Function of differential gear box.
	4 TH	4.2 Types of differentials.
6 TH	1 ST	4.2 Types of differentials.
	2 ND	4.3 Constructional details of a differential.
	3 RD	4.3 Constructional details of a differential.
	4 TH	4.3 Constructional details of a differential. 4.4 Study & inspection of differential.
7 TH	1 ST	REVISION
	2 ND	5. Rear Axle 5.1 Definition of rear axle, supporting of rear axle.

1. Automotive mechanics by Heitner. CBS publishers.
2. The automobile by Harbans Singh Revat, S. Chand & Co.
3. Automobile Engineering by G.B.S. Narang, Khanna publishers.
4. Automobile Engineering Volume-1 by Dr. Kipal singh, std Publisher.
5. Automobile Engineering & power Yrain by W.H.Crouse. Mc Graw Hills.
6. Motor manual (Transmission) by A.N.Judge.
7. Motor manual (Car mechanism) by A. N.Judge.

Subinjan Prasad Buti
SIGN OF FACULTY CONCERNED

ACADEMIC COORDINATOR

Ray B
21/08/2019
SIGN OF HOD

PRINCIPAL