GOVERNMENT POLYTECHNIC, NABARANGPUR

DEPARTMENT OF AUTOMOBILE ENGINEERING

Discipline: **AUTOMOBILE ENGG**	Semester: **4TH**	Name of the Teaching Faculty: Lect. Rabindra Prasad Rath
Subject: **auto machine shop**	No. of days/per week class allotted: **06**	Semester From date: 14.02.2023 To Date: No. of Weeks: **15**
COURSE OUTCOMES	Student should be able to operate different machine tools required in an automobile machine shop and use relevant measuring instruments.	

Week	Class Day	Theory/Practical Topics
1ST	1-3	INTRODUCTION
	4-6	1 Checking flatness and squareness using a try square and filling the Same if not leveled.
2ND	1-3	1 Checking flatness and squareness using a try square and filling the Same if not leveled.
	4-6	1 Checking flatness and squareness using a try square and filling the Same if not leveled.
3RD	1-3	2 Sharpening of cutting tools like chisels, twist drill bit and punch through double ended grinder.
	4-6	2 Sharpening of cutting tools like chisels, twist drill bit and punch through double ended grinder
4TH	1-3	2 Sharpening of cutting tools like chisels, twist drill bit and punch through double ended grinder
	4-6	2 Sharpening of cutting tools like chisels, twist drill bit and punch through double ended grinder
5TH	1-3	2 Sharpening of cutting tools like chisels, twist drill bit and punch through double ended grinder
	4-6	3 Internal threading of hole/ blind holes using hand taps.
6TH	1-3	3 Internal threading of hole/ blind holes using hand taps.
	4-6	4 Measurement of hole and slots using telescopic gauges and inside micrometer
7TH	1-3	4 Measurement of hole and slots using telescopic gauges and inside micrometer
	4-6	4 Measurement of hole and slots using telescopic gauges and inside micrometer
8TH	1-3	5 Measurement of size / depth and roundness of a object with a Vernier calliper
	4-6	5 Measurement of size / depth and roundness of a object with a Vernier calliper
9TH	1-3	5 Measurement of size / depth and roundness of a object with a Vernier calliper
	4-6	6 Measurement of crank pins, main journal of crank shaft.
10TH	1-3	6 Measurement of crank pins, main journal of crank shaft.
	4-6	7 Measurement of cylinder bore by inside micrometer Crank shaft Grinding M/C.
11TH	1-3	7 Measurement of cylinder bore by inside micrometer Crank shaft Grinding M/C.

	4-6	8 Determination of ovality and taper by using dial gauge.
12TH	1-3	8 Determination of ovality and taper by using dial gauge.
	4-6	9 Measurement of fillet radius.
13TH	1-3	9 Measurement of fillet radius.
	4-6	10 Operating various Workshop equipment such as: Valve refacing M/C, Cylinder Honing M/C, Twin head M/C, Horizontal Boring bar, Surface grinding M/C,
14TH	1-3	10 Operating various Workshop equipment such as: Valve refacing M/C, Cylinder Honing M/C, Twin head M/C, Horizontal Boring bar, Surface grinding M/C,
	4-6	10 Operating various Workshop equipment such as: Valve refacing M/C, Cylinder Honing M/C, Twin head M/C, Horizontal Boring bar, Surface grinding M/C,
15TH	1-3	10 Operating various Workshop equipment such as: Valve refacing M/C, Cylinder Honing M/C, Twin head M/C, Horizontal Boring bar, Surface grinding M/C,
	4-6	LAB RECORD SUBMISSION

Sign. Of HOD 13/2/2023

Principal 13/2/23

Academic Coordinator

Sign. Of Faculty Concerned