GOVERNMENT POLYTECHNIC, NABARANGPUR

DEPARTMENT OF MECHANICAL ENGINEERING

Discipline: MECHANICAL ENGG	Semester: 5TH	Name of the Teaching Faculty: DEEPAK RANJAN PATTNAIK
Subject: HYDRAULIC MACHINES &INDUSTRIAL FLUID POWER LAB	No. of days/per week class allotted: 04	Semester From date: 1.08.2023 To Date: No. of Weeks: 15
COURSE OUTCOMES	CO.1: Conducting performance test on impulse and reaction turbines. C0.2:Conducting Performance test on centrifugal pump Co.3: Designing and operating pneumatic circuits CO.4:Designing and operating industrial fluid power circuits .	

WEEK	CLASS DAY	THEORY/ TOPIC
1ST	1	1.0 Performance test on impulse turbine and to find out the efficiency
	2	1.0 Performance test on impulse turbine and to find out the efficiency
2ND	1	1.0 Performance test on impulse turbine and to find out the efficiency
	2	RECORD SUBMISSION & SESSIONAL
3RD	1	2.0 Performance test on Kaplan turbine and to find out the efficiency
	2	2.0 Performance test on Kaplan turbine and to find out the efficiency
4TH	1	RECORD SUBMISSION & SESSIONAL
	2	3.0 Performance test on Francis turbine &to find out the efficiency
5TH	1	3.0 Performance test on Francis turbine &to find out the efficiency
	2	3.0 Performance test on Francis turbine &to find out the efficiency
6TH	1	RECORD SUBMISSION & SESSIONAL
	2	4.0 Performance test on centrifugal pump and to find out the characteristic curves
7TH	1	4.0 Performance test on centrifugal pump and to find out the characteristic curves
	2	RECORD SUBMISSION & SESSIONAL
8TH	1	5.0 Direct operation of single & double acting pneumatic cylinder
	2	5.0 Direct operation of single & double acting pneumatic cylinder
9TH	1	5.0 Direct operation of single & double acting pneumatic cylinder
	2	RECORD SUBMISSION & SESSIONAL
10TH	1	6.0 Operating double acting Pneumatic cylinder with quick exhaust valve
	2	6.0 Operating double acting Pneumatic cylinder with quick exhaust valve
11TH	1	6.0 Operating double acting Pneumatic cylinder with quick exhaust valve
	2	RECORD SUBMISSION & SESSIONAL

12TH	1	7.0 Speed control double acting pneumatic cylinder using metering in and metering out circuits
	2	7.0 Speed control double acting pneumatic cylinder using metering in and metering out circuits
13TH	1	8.0 Direct operation of single &double acting hydraulic cylinder
	2	8.0 Direct operation of single &double acting hydraulic cylinder
14TH	1	9.0 Direct operation of Hydraulic motor
	2	9.0 Direct operation of Hydraulic motor
15TH	1	10.0 Speed control double acting hydraulic cylinder using metering in & metering out circuits
	2	FINAL RECORD SUBMISSION

Deepak ranjan pattnaik. 1.08.2023
Sign. Of Faculty concerned

Academic coordinator 31/7/23

Sign. Of HOD I/c 31/7/23

Principal, GP Nabarangpur 31/7/23