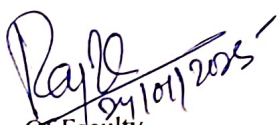


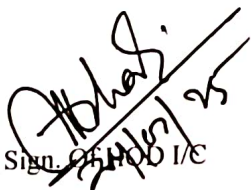


GOVERNMENT POLYTECHNIC, NABARANGPUR
DEPARTMENT OF MECHANICAL ENGINEERING

Discipline: MECHANICAL ENGG	Semester: 4 th	Name of the Teaching Faculty: Sri Ravi Bihari Nayak
Subject: ME LAB -II	No. of days/per week class allotted: 06	Semester From date: 04.02.2025 To Date: 17.05.2025 No. of Weeks: 15
COURSE OUTCOMES	1. Comprehending required material properties for cutting tools 2. Comprehending machining mechanism principle and factors affecting machining performance 3. Comprehending working principle and components in machining tools including lathe, milling, shaping, planning, slotting machines 4. Comprehending requirement of surface finish and realize principles involved in grinding and super finishing operations	
Week	Class Day	Theory/Practical Topics
1 st	1-3	INTRODUCTION
	4-6	1 Study of 2-S, 4-S petrol & diesel engine models
2 nd	1-3	2 Determine the brake thermal efficiency of single cylinder petrol engine.(Contd...)
	4-6	2 Determine the brake thermal efficiency of single cylinder petrol engine.
3 rd	1-3	3 Determine the brake thermal efficiency of single cylinder diesel engine.(Contd...)
	4-6	3 Determine the brake thermal efficiency of single cylinder diesel engine.
4 th	1-3	QUIZ AND ASSIGNMENT
	4-6	4 Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.(Contd...)
5 th	1-3	4 Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.(Contd...)
	4-6	4 Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
6 th	1-3	QUIZ AND ASSIGNMENT
	4-6	5 Determine the mechanical efficiency of an air Compressor.(Contd...)
7 th	1-3	5 Determine the mechanical efficiency of an air Compressor.(Contd...)
	4-6	QUIZ AND ASSIGNMENT
8 th	1-3	5 Determine the mechanical efficiency of an air Compressor.
	4-6	6 Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)(Contd...)
9 th	1-3	6 Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)(Contd...)
	4-6	6 Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
10 th	1-3	7 Verification of Bernoulli's theorem(Contd...)
	4-6	7 Verification of Bernoulli's theorem(Contd...)
11 th	1-3	7 Verification of Bernoulli's theorem

	4-6	QUIZ AND ASSIGNMENT
12 TH	1-3	8 Determination of Cd from venturimeter(Contd...)
	4-6	8 Determination of Cd from venturimeter
13 TH	1-3	QUIZ AND ASSIGNMENT
	4-6	9 Determination of Cc, Cv, Cd from orifice meter(Contd...)
14 TH	1-3	9 Determination of Cc, Cv, Cd from orifice meter
	4-6	10 Determine of Darcy's coefficient from flow through pipe(Contd...)
15 TH	1-3	10 Determine of Darcy's coefficient from flow through pipe
	4-6	LAB RECORD SUBMISSION


 Sign. Of Faculty
 Concerned


 Sign. Of HOD I/C


 Academic Coordinator


 Principal
 7.2.25