

# GOVT. POLYTECHNIC, NAYAGARH

## 4<sup>TH</sup> SEMESTER MECHANICAL ENGINEERING (2022-23)

w.e.f -14/02/2023

SUBJECTS – MECHANICAL ENGG. LAB –II (PR-2)

TOTAL PERIOD-90

NAME OF FACULTY- Mrs. Prafulla kumar mallick, lect. (PTGF)

Mr. Devasis Sahoo, lect. (PTGF)

THEORY-6P/WEEK

SL NO.	WEEK	DAY	TOPICS TO BE COVERED
1.	1 <sup>ST</sup>	1 <sup>ST</sup>	Study of 2-S, 4-S petrol & diesel engine models
		2 <sup>ND</sup>	Study of 2-S, 4-S petrol & diesel engine models
2.	2 <sup>ND</sup>	1 <sup>ST</sup>	Study of 2-S, 4-S petrol & diesel engine models
		2 <sup>ND</sup>	Determine the brake thermal efficiency of single cylinder petrol engine.
3.	3 <sup>RD</sup>	1 <sup>ST</sup>	Determine the brake thermal efficiency of single cylinder petrol engine.
		2 <sup>ND</sup>	Determine the brake thermal efficiency of single cylinder petrol engine.
4.	4 <sup>TH</sup>	1 <sup>ST</sup>	Determine the brake thermal efficiency of single cylinder diesel engine.
		2 <sup>ND</sup>	Determine the brake thermal efficiency of single cylinder diesel engine.
5.	5 <sup>TH</sup>	1 <sup>ST</sup>	Determine the brake thermal efficiency of single cylinder diesel engine.
		2 <sup>ND</sup>	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
6.	6 <sup>TH</sup>	1 <sup>ST</sup>	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
		2 <sup>ND</sup>	Determine the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
7.	7 <sup>TH</sup>	1 <sup>ST</sup>	Determine the mechanical efficiency of an air Compressor.
		2 <sup>ND</sup>	Determine the mechanical efficiency of an air Compressor.
8.	8 <sup>TH</sup>	1 <sup>ST</sup>	Determine the mechanical efficiency of an air Compressor.
		2 <sup>ND</sup>	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
9.	9 <sup>TH</sup>	1 <sup>ST</sup>	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
		2 <sup>ND</sup>	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)

10.	10 <sup>TH</sup>	1 <sup>ST</sup>	Verification of Bernoulli's theorem
		2 <sup>ND</sup>	Verification of Bernoulli's theorem
11.	11 <sup>TH</sup>	1 <sup>ST</sup>	Verification of Bernoulli's theorem
		2 <sup>ND</sup>	Determination of Cd from venturimeter
12.	12 <sup>TH</sup>	1 <sup>ST</sup>	Determination of Cd from venturimeter
		2 <sup>ND</sup>	Determination of Cd from venturimeter
13.	13 <sup>TH</sup>	1 <sup>ST</sup>	Determination of Cc, Cv, Cd from orifice meter
		2 <sup>ND</sup>	Determination of Cc, Cv, Cd from orifice meter
14.	14 <sup>TH</sup>	1 <sup>ST</sup>	Determination of Cc, Cv, Cd from orifice meter
		2 <sup>ND</sup>	Determine of Darcy's coefficient from flow through pipe
15.	15 <sup>TH</sup>	1 <sup>ST</sup>	Determine of Darcy's coefficient from flow through pipe
		2 <sup>ND</sup>	Determine of Darcy's coefficient from flow through pipe

Prafulla Kumar Mallik  
13/02/2023

Devasis Sahoo.  
Dt. 13/02/2023