

<p style="text-align: center;">GOVERNMENT POLYTECHNIC JAJPUR A/ P: Ragadi, Block: Korei, Dist.: Jajpur, Odisha- 755019 Website: https://www.gpjajpur.org E-mail: principalgpjajpur@yahoo.co.in Contact: 9437155107</p>		
DEPARTMENT OF MECHANICAL ENGINEERING		
LESSON PLAN		
Discipline:		
MECHANICAL ENGG.	Semester: 4TH	Name of the Teaching faculty: Sushanta Kumar Mohanta
Subject: T E LAB-II	No of Days/Week class allotted: 4	Semester from Date: 22/12/25 To Date: 18/04/25 No of weeks: 15
Week	Class Day	Topics
1st	Group1(2p)	Study of high-pressure boiler with model
	Group2(2p)	Study of high-pressure boiler with model
	Group1(2p)	Study of high-pressure boiler with model
	Group2(2p)	Study of high-pressure boiler with model
2nd	Group1(2p)	Study of boiler mountings and accessories
	Group2(2p)	Study of boiler mountings and accessories
	Group1(2p)	Study of boiler mountings and accessories
	Group2(2p)	Study of boiler mountings and accessories

3rd	Group1(2p)	VIVA & LAB RECORD CHECK
	Group2(3p)	VIVA & LAB RECORD CHECK
	Group1(2p)	Conduct performance test on VCR test rig to determine COP of the refrigerator
	Group2(3p)	Conduct performance test on VCR test rig to determine COP of the refrigerator
4th	Group1(2p)	Conduct performance test on VCR test rig to determine COP of the refrigerator
	Group2(3p)	Conduct performance test on VCR test rig to determine COP of the refrigerator
	Group1(2p)	Conduct performance test on multi stage reciprocating compressor
	Group2(3p)	Conduct performance test on multi stage reciprocating compressor
5th	Group1(2p)	Conduct performance test on multi stage reciprocating compressor
	Group2(3p)	Conduct performance test on multi stage reciprocating compressor
	Group1(2p)	VIVA & LAB RECORD CHECK
	Group2(3p)	VIVA & LAB RECORD CHECK
	Group1(2p)	Conduct Morse test to determine the indicated power of individual cylinders
		Conduct Morse test to determine the indicated power of

6th	Group2(3p)	Conduct Morse test to determine the indicated power of individual cylinders
	Group1(2p)	Conduct Morse test to determine the indicated power of individual cylinders
	Group2(3p)	Conduct Morse test to determine the indicated power of individual cylinders
7th	Group1(2p)	VIVA & LAB RECORD CHECK
	Group2(3p)	VIVA & LAB RECORD CHECK
	Group1(2p)	Conduct Performance test on 2-S CI/SI engine.
	Group-2(3p)	Conduct Performance test on 2-S CI/SI engine.
8th	Group1(2p)	Conduct Performance test on 2-S CI/SI engine.
	Group2(3p)	Conduct Performance test on 2-S CI/SI engine.
	Group1(2p)	Conduct Performance test on 4-S CI/SI engine
	Group2(3p)	Conduct Performance test on 4-S CI/SI engine
9th	Group1(2p)	Conduct Performance test on 4-S CI/SI engine
	Group2(3p)	Conduct Performance test on 4-S CI/SI engine

	Group1(2p)	Conduct Heat balance test on CI/SI engine
	Group2(3p)	Conduct Heat balance test on CI/SI engine
10th	Group1(2p)	Conduct Heat balance test on CI/SI engine
	Group2(3p)	Conduct Heat balance test on CI/SI engine
	Group1(2p)	VIVA & LAB RECORD CHECK
	Group2(3p)	VIVA & LAB RECORD CHECK
11th	Group1(2p)	Conduct Economical speed test on 4-S CI/SI engine.
	Group2(3p)	Conduct Economical speed test on 4-S CI/SI engine.
	Group1(2p)	Conduct Economical speed test on 4-S CI/SI engine.
	Group2(3p)	Conduct Economical speed test on 4-S CI/SI engine.
12th	Group1(2p)	Thermal conductivity test on 1) Thick slab 2) Composite wall 3) Thick cylinder
	Group2(3p)	Thermal conductivity test on 1) Thick slab 2) Composite wall 3) Thick cylinder
	Group1(2p)	Thermal conductivity test on 1) Thick slab 2) Composite wall 3) Thick cylinder

	Group2(3p)	Thermal conductivity test on 1) Thick slab 2) Composite wall 3) Thick cylinder
13th	Group1(2p)	Leak detection of refrigeration equipment
	Group2(3p)	Leak detection of refrigeration equipment
	Group1(2p)	Leak detection of refrigeration equipment
	Group2(3p)	Leak detection of refrigeration equipment
14th	Group1(2p)	VIVA & LAB RECORD CHECK
	Group2(3p)	VIVA & LAB RECORD CHECK
	Group1(2p)	Conduct performance test on A/C test rig to determine COP of the refrigerator
	Group2(3p)	Conduct performance test on A/C test rig to determine COP of the refrigerator
15th	Group1(2p)	Conduct performance test on A/C test rig to determine COP of the refrigerator
	Group2(3p)	Conduct performance test on A/C test rig to determine COP of the refrigerator
	Group1(2p)	VIVA & LAB RECORD CHECK

Group2(3p)

VIVA & LAB RECORD CHECK

REFERENCES:

1. Mechatronics – W. Bolton, Pearson Education India.
2. A Text Book on Mechatronics – R.K.Rajput, S.Chand& Co, New Delhi.
3. Mechatronics – M.D.Singh & Joshi, Prentice Hall of India.
4. Mechatronics – HMT, Tata McGraw Hill, New Delhi.
5. Mechatronics System – Devadas Shetty, PWS Publishing
6. Exploring Programmable Logic Controllers with applications – Pradeep Kumar Srivastava, BPI



Signature of Faculty

B Publications.

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