GOVERNMENT POLYTECHNIC JAJPUR DEPARTMENT OF MECHANICAL ENGINEERING LESSON PLAN

Discipline: Mechanical	Semester: 4th	Name of the Teaching faculty: Suprava Behera
Subject: ME LAB- II	No of Days/Week class alloted: 2	Semester from Date: 14.02.2023 To Date: 23.05.2023 No of weeks:
Week	Class Day	Topics
1st	1st(3p, Gr 1)	Study of 2-S, 4-S petrol & diesel engine models
		i) Aim of the expt, Basic theory, parts of engine model
	1st(3p, Gr 2)	Study of 2-S, 4-S petrol & diesel engine models
	15t(3p, Gr 2)	i) Aim of the expt, Basic theory, parts of engine model
		Study of 2-S, 4-S petrol & diesel engine models
	2nd(3p, Gr 1)	i) Opearting principle
		(ii) Animations and videos of 2-S and 4-S petrol and diesel engine models.
		Study of 2-S, 4-S petrol & diesel engine models
	2nd(3p, Gr 2)	/ - Francisco
		(ii) Animations and videos of 2-S and 4-S petrol and diesel engine models.
	1-1/2- (-1)	Study of 2-S, 4-S petrol & diesel engine models
	1st(3p, Gr 1)	i) Record submission and checking
		ii) Viva, assessment
	1c+/2n C= 2)	Study of 2-S, 4-S petrol & diesel engine models
	1st(3p, Gr 2)	i) Record submission and checking
2nd		ii) Viva, assessment
	2nd(3p, Gr 1)	Verification of Bernoulli's theorem
	2na(3p, Gr 1)	i) Aim of the expt, theory, procedure, precautions
}		ii) Demonstration to conduct practical
	2nd(3p, Gr 2)	Verification of Bernoulli's theorem
	211d(5p, G1 2)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
		Verification of Bernoulli's theorem
	1st(3p, Gr 1)	i) Machine handling and Precautions ii)Taking readings, Observations table and calculation of the total head of incompressible fluid (ressure
		head+kinetic head+potential head) by students.
		Verification of Bernoulli's theorem
	1st(3p, Gr 2)	i) Machine handling and Precautions
3rd	131(36), 31 2)	ii)Taking readings, Observations table and calculation of the total head of incompressible fluid (ressure
310		head+kinetic head+potential head) by students.
		Verification of Bernoulli's theorem
	2nd(3p, Gr 1)	i) Record submission and checking
_		ii) Viva, assessment
		Verification of Bernoulli's theorem
	2nd(3p, Gr 2)	i) Record submission and checking
		ii) Viva, assessment
		Determination of Cd from venturimeter
	1st(3p, Gr 1)	i) Aim of the expt, theory, procedure, precautions
L		ii) Demonstration to conduct practical
	1st(3p, Gr 2)	Determination of Cd from venturimeter
		i) Aim of the expt, theory, procedure, precautions
4th		ii) Demonstration to conduct practical
	2nd(3p, Gr 1)	Determination of Cd from venturimeter
		i) Machine handling and Precautions
_		ii)Taking readings, Observations table and calculation by students



è	2 112	Determination of Cd from venturimeter
	2nd(3p, Gr 2)	i) Machine handling and Precautions
(machine removement are consequently)		ii)Taking readings, Observations table and calculation by students
		Determination of Cd from venturimeter
	1st(3p, Gr 1)	i) Record submission and checking
		ii) Viva, assessment
		Determination of Cd from venturimeter
	1st(3p, Gr 2)	i) Record submission and checking
		ii) Viva, assessment
5th	-	
	2nd(3p, Gr 1)	Determination of Cc, Cv, Cd from orifice meter
	- Lina(5p; G(1)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
	3=4/3= 6= 31	Determination of Cc, Cv, Cd from orifice meter
	2nd(3p, Gr 2)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
		Determination of Cc, Cv, Cd from orifice meter
	1st(3p, Gr 1)	i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation by students
		Determination of Cc, Cv, Cd from orifice meter
	1st(3p, Gr 2)	i) Machine handling and Precautions
6th		ii)Taking readings, Observations table and calculation by students
		Determination of Cc, Cv, Cd from orifice meter
	2nd(3p, Gr 1)	i) Record submission and checking
		ii) Viva, assessment
		Determination of Cc, Cv, Cd from orifice meter
	2nd(3p, Gr 2)	i) Record submission and checking
		ii) Viva, assessment
		Determination of the brake thermal efficiency of single cylinder petrol engine.
	1st(3p, Gr 1)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
		Determination of the brake thermal efficiency of single cylinder petrol engine.
	1st(3p, Gr 2)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
7th		Determination of the brake thermal efficiency of single cylinder petrol engine.
	2nd(3p, Gr 1)	i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation by students
		Determination of the brake thermal efficiency of single cylinder petrol engine.
	2nd(3p, Gr 2)	i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation by students
		Determination of the brake thermal efficiency of single cylinder petrol engine.
	1st(3p, Gr 1)	
	, , , , , , ,	ii) Viva, assessment
		Determination of the brake thermal efficiency of single cylinder petrol engine.
	1st(3p, Gr 2)	
	231(34), 01 2)	ii) Viva, assessment
8th	2nd(3p, Gr 1)	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
		(ii) Functions of different pressure measuring devices
	2nd(3p, Gr 2)	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
		(ii) Functions of different pressure measuring devices
	1st(3p, Gr 1)	Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
		i) Record submission and checking
		Study of pressure measuring devices (manometer, Bourdon tube pressure gauge)
	1ct/2n Gr 21	

	1 231(34, 0, 2	i) Pocard cub-line
- 9th		i) Record submission and checking
	2nd(3p, Gr 1	
		i) Viva, assessment
	2nd(3p, Gr 2	
		i) Viva, assessment
	1st(3p, Gr 1)	Determination of the Darcy's coefficient from flow through pipe
	133(35), 0.11	, and empt, theory, procedure, preceditions
		ii) Demonstration to conduct practical
	1st(3p, Gr 2)	Determination of the Darcy's coefficient from flow through pipe
10th	131(36), 31 2/	The state of the s
		ii) Demonstration to conduct practical
	2nd(3p, Gr 1)	Determination of the Darcy's coefficient from flow through pipe i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation by students
		Determination of the Darcy's coefficient from flow through pipe
	2nd(3p, Gr 2)	
		ii) Machine handling and Precautions ii) Taking readings, Observations table and calculation by students
	+	
	1st(3p, Gr 1)	Determination of the Darcy's coefficient from flow through pipe i) Record submission and checking
	131(5p, 61 1)	
		ii) Viva, assessment
	1st(3p, Gr 2)	Determination of the Darcy's coefficient from flow through pipe
	15t(5p, Gr 2)	
11th		ii) Viva, assessment
	1st/2n Cs 1)	Determination of the brake thermal efficiency of single cylinder diesel engine.
	1st(3p, Gr 1)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
	1	Determination of the brake thermal efficiency of single cylinder diesel engine.
	1st(3p, Gr 2)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
		Determination of the brake thermal efficiency of single cylinder diesel engine.
	1st(3p, Gr 1)	i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation
		Determination of the brake thermal efficiency of single cylinder diesel engine.
	1st(3p, Gr 2)	i) Machine handling and Precautions
12th		ii)Taking readings, Observations table and calculation by students
12.11		Determination of the brake thermal efficiency of single cylinder diesel engine.
	2nd(3p, Gr 1)	i) Record submission and checking
		ii) Viva, assessment
		Determination of the brake thermal efficiency of single cylinder diesel engine.
	2nd(3p, Gr 2)	i) Record submission and checking
		ii) Viva, assessment
		Determination of the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
	1st(3p, Gr 1)	i) Aim of the expt, theory, procedure, precautions
	151(56, 0. 1)	
		ii) Demonstration to conduct practical
		Determination of the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
		i) Aim of the expt, theory, procedure, precautions
13th		ii) Demonstration to conduct practical
	2nd(3p, Gr 1)	Determination of the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
		i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation
	2nd(3p, Gr 2)	Determination of the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
		i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation
		Determination of the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test.
1	1st(3p, Gr 1)	i) Record submission and checking

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		ii) Viva, assessment
	1st(3p, Gr 2)	Determination of the B.H.P, I.H.P BSFC of a multi cylinder engine by Morse test. i) Record submission and the basis of the B.H.P. II.H.P BSFC of a multi cylinder engine by Morse test.
		i) Record submission and checking
14th		ii) Viva, assessment
	2nd(3p, Gr 1)	Determination of the mechanical efficiency of an air Compressor.
		i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
		Determination of the mechanical efficiency of an air Compressor.
	2nd(3p, Gr 2)	i) Aim of the expt, theory, procedure, precautions
		ii) Demonstration to conduct practical
	1st(3p, Gr 1)	Determination of the mechanical efficiency of an air Compressor.
		i) Machine handling and Precautions
		ii)Taking readings, Observations table and calculation by students
	1st(3p, Gr 2)	Determination of the mechanical official
		Determination of the mechanical efficiency of an air Compressor. i) Machine handling and Precautions
15th		ii)Taking readings, Observations table and calculation by students
	2nd(3p, Gr 1)	Determination of the mechanical efficiency of an air Compressor.
		i) Record submission and checking
		ii) Viva, assessment
	1	Determination of the mechanical efficiency of an air Compressor.
		i) Record submission and checking
		ii) Viva, assessment

Signature of faculty