

GOVERNMENT POLYTECHNIC JAJPUR
At/ Po: Ragadi, Block: Korei, Dist.: Jajpur, Odisha- 755019
DEPARTMENT OF MINING ENGINEERING LESSON PLAN

Discipline: MINING	Semester: 3 rd	Name of the Teaching: Suprava Behera
Subject: MOM LAB	No of Days/Week class allotted:2	Semester starts from Date: 01/08/2023 To 30/11/2023 No of weeks: 15
Week	Class Day	Topics
1st	1st (3p)	Bernoulli's Theorem by Bernoulli's Verification Apparatus.
		i) Aim of the expt, theory, procedure (ii) Details of machine parts, machine handling and precautions
	2nd (3p)	Bernoulli's Theorem by Bernoulli's Verification Apparatus.
		i) setting of machine and how to take readings (Demo) ii) taking readings for Bernoulli's Theorem by students
2nd	1st (3p)	Bernoulli's Theorem by Bernoulli's Verification Apparatus.
		i) calculations for Bernoulli's Theorem by students
	2nd (3p)	Bernoulli's Theorem by Bernoulli's Verification Apparatus.
		i) viva, record submission and checking
3rd	1st (3p)	Determine rate of flow through the venturimeter set-up.
		i) Aim of the expt, theory, procedure (ii) Details of machine parts, machine handling and precautions
	2nd (3p)	Determine rate of flow through the venturimeter set-up.
		i) setting of machine and how to take readings (Demo) ii) taking readings for Venturimeter by students
4th	1st (3p)	Determine rate of flow through the venturimeter set-up.
		i) calculations for Venturimeter by students
	2nd (3p)	Determine rate of flow through the venturimeter set-up.
		i) viva, record submission and checking
5th	1st (3p)	Conduct tensile test of a mild steel specimen and plot stress-stain curve, show salient points on it.
		i) Aim of the expt, theory, procedure (ii) Details of machine parts, machine handling and precautions
	2nd (3p)	Conduct tensile test of a mild steel specimen and plot stress-stain curve, show salient points on it.
		i) Tools and equipments required ii) setting of machine and how to take readings and plot stress-strain curve
6th	1st (3p)	Conduct tensile test of a mild steel specimen and plot stress-stain curve, show salient points on it.
		iii) taking readings for tensile test of a mild steel and plot stress-strain curve by
	2nd (3p)	Conduct tensile test of a mild steel specimen and plot stress-stain curve, show salient points on it.
		i) calculations for tensile test of a mild steel specimen by students
7th	1st (3p)	Conduct tensile test of a mild steel specimen and plot stress-stain curve, show salient points on it.
		i) viva, record submission and checking
	2nd (3p)	Determine volumetric efficiency of air- compressor.
		i) Aim of the expt, theory, procedure (ii) Details of machine parts, machine handling and precautions

		i) setting of machine and how to take readings (Demo)
8th		ii) taking readings for air-compressor by students
	2nd (3p)	Determine volumetric efficiency of air- compressor. i) calculations for volumetric efficiency of air- compressor by students
9th	1st (3p)	Determine volumetric efficiency of air- compressor. i) viva, record submission and checking
	2nd (3p)	Study of 2-stroke & 4-stroke diesel engines. i) Aim of the expt, theory, working principle ii) Animations and videos for working principle 2-stroke and 4-stroke diesel
10th	1st (3p)	Study of 2-stroke & 4-stroke diesel engines. i) Details of diesel engine parts and classification
	2nd (3p)	Study of 2-stroke & 4-stroke diesel engines. ii) Animations and videos for working principle 2-stroke and 4-stroke diesel
11th	1st (3p)	Study of 2-stroke & 4-stroke diesel engines. i) Demonstarion of experiment ii) application of 2-stroke & 4-stroke diesel engines.
	2nd (3p)	Study of 2-stroke & 4-stroke diesel engines. i) viva, record submission and checking
12th	1st (3p)	Conduct I/C engine testing on single cylinder diesel engine & find out I.H.P., B.H.P. & mechanical i) Aim of the expt, theory, procedure
	2nd (3p)	Conduct I/C engine testing on single cylinder diesel engine & find out I.H.P., B.H.P. & mechanical i) Details of diesel engine parts, machine handling and precautions
13th	1st (3p)	Conduct I/C engine testing on single cylinder diesel engine & find out I.H.P., B.H.P. & mechanical efficiency. i) setting of machine and how to take readings (Demo)
	2nd (3p)	Conduct I/C engine testing on single cylinder diesel engine & find out I.H.P., B.H.P. & mechanical efficiency. i) taking readings for single cylinder diesel engine by students
14th	1st (3p)	Conduct I/C engine testing on single cylinder diesel engine & find out I.H.P., B.H.P. & mechanical efficiency. i) calculations for I.H.P., B.H.P. & mechanical efficiency of single cylinder diesel engine by students
	2nd (3p)	Conduct I/C engine testing on single cylinder diesel engine & find out I.H.P., B.H.P. & mechanical i) viva, record submission and checking
15th	1st (3p)	i) Doubt clearing, Remedial and leftout practicals ii) viva on overall practicals
	2nd (3p)	i) Doubt clearing, Remedial and leftout practicals ii) viva on overall practicals

Suprava Behera
 Dt. 31.07.23
 Signature of Faculty