

GOVERNMENT POLYTECHNIC JAIPUR

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DEPARTMENT OF MECHANICAL ENGINEERING

LESSON PLAN

Discipline: Mechanical	Semester: 4th	Name of the Teaching faculty: SUPRAVA BEHERA
Subject: TOM & M LAB	No of Days/Week class allotted: 6	Semester starts from Date: 16.01.2024 To 26.04.2024 No of weeks: 15
Week	Class Day	Topics
1st	1st (3p, Gr2)	LESSON PLAN, ASSESSMENT SCHEME, Cos, Exams.
		Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).
		i) Aim of the expt, theory, procedure ii) Tools and equipments required iii) setting of different types of governors (Hartnell, watt and porter)
	2nd (3p, Gr2)	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter).
		i) How to take readings for each type of governor(Demo) ii) Machine handling and precautions iii) Setting, observations
2nd	1st (3p, Gr2)	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter). i) Tabulation and calculations for centrifugal force by students
	2nd (3p, Gr2)	Determination of centrifugal force of a governor (Hart Nell / Watt/Porter). i) Record submission ii) Viva, assessment
3rd	1st(3p, Gr 2)	Study & demonstration of static balancing apparatus. i) Aim of the expt, theory, procedure ii) Tools and equipments required
		Study & demonstration of static balancing apparatus. i) Machine handling and precautions ii) Taking readings and calculation by students
	2nd (3p, Gr 2)	
4th	1st (3p, Gr 2)	Study & demonstration of static balancing apparatus. i) Viva, record submission and checking ii) Assessment
		Study & demonstration of journal bearing apparatus. i) Aim of the expt, theory, procedure ii) Tools and equipments required
	2nd (3p, Gr 2)	
5th	1st (3p, Gr 2)	Study & demonstration of journal bearing apparatus. i) Observations and calculation by students ii) Study of different types of journal bearings
		Study & demonstration of journal bearing apparatus. i) Viva, record submission and checking ii) Assessment
	2nd (3p, Gr 2)	
6th	1st(3p, Gr 2)	Study of different types of Cam and followers i) Aim of the expt, theory, procedure ii) Tools and equipments required iii) Animations and videos of cams and followers
		Study of different types of Cam and followers

	2nd (3p, Gr 2)	i) Demonstration of experiment i) Study of different types of Cam and followers
7th	1st (3p, Gr 2)	Study of different types of Cam and followers i) viva, record submission and checking ii) Assessment
		Study & demonstration of epicyclic gear train. i) Aim of the expt, theory ii) Tools and equipments required iii) Procedure iv) Observations and calculation of parameters by students
	2nd (3p, Gr 2)	Study & demonstration of epicyclic gear train. i) viva, record submission and checking ii) Assessment
		Determination of the thickness of ground M.S flat using Vernier Caliper. i) Aim of the expt, theory, parts of a Vernier caliper ii) How to find least count
8th	1st (3p, Gr 2)	Determination of the thickness of ground M.S flat using Vernier Caliper. i) precautions ii) handling and practice of taking readings using Vernier Caliper iii) Observations and calculation of thickness of a MS flat by students
		Determination of the thickness of ground M.S flat using Vernier Caliper. i) viva, record submission and checking ii) Assessment
	2nd (3p, Gr 2)	Determination of diameter of a cylindrical component using micrometer i) Aim of the expt, theory, parts of a micrometer ii) How to find least count iii) Procedure to measure diameter of a cylindrical component (Demo)
		Determination of diameter of a cylindrical component using micrometer i) Precautions ii) Handling and practice iii) Observations and calculation of dia by students
9th	1st (3p, Gr 2)	Determination of diameter of a cylindrical component using micrometer i) viva, record submission and checking ii) Assessment
		Determine the heights of gauge blocks or parallel bars using Vernier height gauge. i) Aim of the expt, theory, parts of a height gauge ii) How to find least count iii) Procedure to measure height (Demo)
	2nd (3p, Gr 2)	Determine the heights of gauge blocks or parallel bars using Vernier height gauge. i) Precautions ii) Handling and practice iii) Observations and calculation of height by students using height gauge
		Determine the heights of gauge blocks or parallel bars using Vernier height gauge. i) viva, record submission and checking ii) Assessment
10th	1st (3p, Gr 2)	Determine the thickness of ground MS plates using slip gauges. i) Aim of the expt, theory
	2nd (3p, Gr 2)	
11th	1st (3p, Gr 2)	
	2nd (3p, Gr 2)	
12th	1st (3p, Gr 2)	
	2nd (3p, Gr 2)	
	1st/3p Gr 2)	

13th	1st (3p, Gr 2)	ii) Slip gauges
		iii) Procedure and Demonstration of experiment
		Determine the thickness of ground MS plates using slip gauges.
2nd (3p, Gr 2)	i) Precautions	
	ii) Observations and calculation of thickness by students using slip gauges.	
14th	1st (3p, Gr 2)	Determine the thickness of ground MS plates using slip gauges.
		i) viva, record submission and checking
	2nd (3p, Gr 2)	Determination of angel of Machined surfaces of components using sin bar with slip gauges.
i) Aim of the expt, theory		
		ii) how to use sine bars and slip gauges (Demo)
15th	1st (3p, Gr 2)	Determination of angel of Machined surfaces of components using sin bar with slip gauges.
		i) Observations and calculation by students
	2nd (3p, Gr 2)	Determination of angel of Machined surfaces of components using sin bar with slip gauges.
i) viva, record submission and checking		
		ii) Assessment


 13.07.2024
 Faculty Signature