

GOVT. POLYTECHNIC MAYURBHANJ			
ACADEMIC SESSION-2023-24		LESSON PLAN	
Discipline : Mechanical Engg.		Semester: 3rd Sem	Name of the Teaching Faculty : Mihir mohanta
SUBJECT- Production Technology		No. of Days / per week class allotted : 04	Semester From date : 01.08.2023 To Date : 30.11.2023
MONTH	Week	Day	Topics
AUGUST	1ST	3RD	<b>1. Metal forming Processes:</b> Discuss about metal forming process Extrusion: Definition & Classification
		3RD	Explain direct, indirect and impact extrusion process
		5TH	Define rolling. Classify it.
		6TH	Differentiate between cold rolling and hot rolling process
	2ND	3RD	List the different types of rolling mills used in Rolling process
		3RD	Revision
		5TH	<b>2. Welding :</b> Define welding and classify various welding processes.
		6TH	Explain fluxes used in welding
	3RD	3RD	Explain Oxy-acetylene welding process.
		3RD	Explain various types of flames used in Oxy-acetylene welding process.
		5TH	Explain Arc welding process.
		6TH	Specify arc welding electrodes.
	4TH	3RD	Define resistance welding and classify it
		3RD	Describe various resistance welding processes such as butt welding, spot welding,
		5TH	flash welding, projection welding and seam welding
		6TH	Explain TIG & MIG
SEPTEMBER	1ST	5TH	State different welding defects with causes and remedies.
		6TH	Revision
	2ND	5TH	<b>3. Casting :</b> Define Casting and Classify the various Casting processes
		6TH	Explain the procedure of Sand mould casting
	3RD	3RD	Explain different types of molding sands with their composition and properties.
		3RD	Classify different pattern
		5TH	Class test-1
		6TH	Class test-1
	4TH	5TH	state various pattern allowances
		6TH	Classify core.
	5TH	3RD	Describe construction and working of cupola furnace
		3RD	Describe construction and working crucible furnace
6TH		Explain die casting method.	
		3RD	Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.

OCTOBER	1ST	3RD	Explain various casting defects with their causes and remedies	
		5TH	Revision	
		6TH	<b>4.Powder Metallurgy :</b> Define powder metallurgy process	
	2ND	3RD	State advantages of powder metallurgy technology technique	
		3RD	Describe the methods of producing components by powder metallurgy technique.	
		5TH	Internal	
		6TH	Explain sintering.	
	3RD	3RD	Economics of powder metallurgy.	
		3RD	Revision	
		5TH	<b>5. Press Work :</b> Describe Press Works: blanking, piercing and trimming.	
	NOVEMBER	1ST	3RD	List various types of die and punch
			3RD	Explain simple, Compound dies
5TH			Explain Progressive dies	
6TH			Describe the various advantages & disadvantages of above dies	
2ND		3RD	Revision	
		3RD	<b>6. Jigs and fixtures:</b> Define jigs and fixtures, State advantages of using jigs and fixtures	
		5TH	State the principle of locations	
3RD		6TH	Describe the methods of location with respect to 3-2-1 point location of rectangular jig	
		3RD	Describe 3-2-1 principle of location	
		3RD	Describe 3-2-1 principle of location	
		5TH	List various types of jig	
4TH		6TH	Types of fixture	
		3RD	Revision	
		3RD	Previous year question discussion	
		5TH	Previous year question discussion	
5TH		6TH	Previous year question discussion	
		3RD	Classtest-2	

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