

GOVT. POLYTECHNIC MAYURBHANJ

ACADEMIC SESSION-2021-22

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 : 01.10.2021 To Date : 08.01.2022
MONTH	Week	Day	Topics
	1ST	5TH	1. Metal Forming Processes - Discuss about metal forming process
OCTOBER	2ND	1ST	Extrusion: Definition & Classification ,
		2ND	Explain direct, indirect and impact extrusion process
		3RD	Define rolling. Classify it. Differentiate between cold rolling and hot rolling process
		5TH	List the different types of rolling mills used in Rolling process
	4TH	2ND	List the different types of rolling mills used in Rolling process
		3RD	REVISION
		5TH	2. Welding : Define welding and classify various welding processes.
	5TH	1ST	Explain fluxes used in welding , Explain Oxy-acetylene welding process.
		2ND	Explain various types of flames used in Oxy-acetylene welding process.
		3RD	Explain Arc welding process. Specify arc welding electrodes.
		5TH	Define resistance welding and classify it, Describe various resistance welding processes such as butt welding,
	NOVEMBER	1ST	1ST
2ND			Explain TIG & MIG
3RD			Explain TIG & MIG
5TH			Classtest-1
2ND		1ST	State different welding defects with causes and remedies.
		2ND	Revision
		3RD	3. Casting : Define Casting and Classify the various Casting processes
		5TH	Explain the procedure of Sand mould casting , Explain different types of molding sands with their composition and properties.
3RD		1ST	Classify different pattern and state various pattern allowances, 3.5 Classify core.
		2ND	Describe construction and working of cupola furnace and crucible furnace
		3RD	Explain die casting method.
4TH		1ST	Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.
		2ND	Explain various casting defects with their causes and remedies
		3RD	Revision
		5TH	4. Powder Metallurgy : Define powder metallurgy process, State advantages of powder metallurgy technology technique

	5TH	1ST	Describe the methods of producing components by powder metallurgy technique.	
		2ND	Explain sintering, 4.5 Economics of powder metallurgy.	
DECEMBER	1ST	3RD	Internal	
		5TH	Revision	
	2ND	1ST	5. Press Work : Describe Press Works: blanking, piercing and trimming.	
		2ND	List various types of die and punch	
		3RD	Explain simple, Compound & Progressive dies	
		5TH	Describe the various advantages & disadvantages of above dies	
	3RD	1ST	6. Jigs and fixtures : Discuss about Jigs and fixtures	
		2ND	Define jigs and fixtures	
		3RD	State advantages of using jigs and fixtures	
		5TH	State the principle of locations	
	4TH	1ST	Describe the methods of location with respect to 3-2-1 point location of rectangular jig	
		2ND	Describe 3-2-1 principle of location	
		3RD	Describe 3-2-1 principle	
		5TH	List various types of jig	
	JANUARY	2ND	1ST	Types of fixture
			2ND	Revision
3RD			Previous year question discussion	
5TH			Class test-2	

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