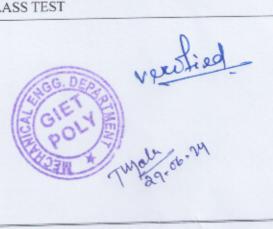
Discipline: MECHANICAL ENGG	Semester :3 rd	Name of the Teaching Faculty: TIMASWAR MALIK
Subject: Production Technology(Th-1)	No. of days/per week class allotted:04	Semester From date: 01.07.2024 To date: 8.11.2024 No. of Weeks: 15
Week	Class Day	Theory Topics
1ST	1 ST	Extrusion: Definition &Classification
	2 ND	Explain direct, indirect and impact extrusion process.
	3 RD	Define rolling. Classify it.
	4 TH	Define rolling. Classify it.
2 ND	1 ST	Differentiate between cold rolling and hot rolling process.
	2 ND	List the different types of rolling mills used in rolling process.
	3 RD	List the different types of rolling mills used in rolling process.
	4 TH	Define welding and classify various welding processes.
3 RD	1 ST	Define welding and classify various welding processes.
	2 ND	Explain fluxes used in welding.
	3 RD	Explain Oxy-acetylene welding process.
	4 TH	Explain various types of flames used in Oxy-acetylene welding process.
4 TH	1 ST	Explain Arc welding process.
	2 ND	Specify arc welding electrodes.
	3 RD	Define resistance welding and classify it.
	4 TH	Define resistance welding and classify it.
5 TH	1 ST	Describe various resistance welding processes such as butt welding, spotwelding, flashwelding, projection welding and seamwelding
	2 ND	Describe various resistance welding processes such as butt Welding, spot welding, flash welding, projection welding and seam welding.
	3RD	Describe various resistance welding processes such as butt
		Welding, spot welding, flash welding, projection welding and seam welding.
	4 TH	Explain TIG and MIG welding process.
6 TH	1 ST	State different welding defects with causes and remedies.
	2 ND	State different welding defects with causes and remedies.
	3RD	CLASS TEST
	4 TH	Define Casting and Classify the various Casting processes.
	1ST	Define Casting and Classify the various Casting processes.
	2 ND	Define Casting and Classify the various Casting processes.
7ТН	3RD	Explain the procedure of Sand mould casting.
7.0	4 TH	Explain different types of molding sands with their composition and properties
8 TH	1 ST	Explain different types of molding sands with their composition and properties
	2 ND	Classify different pattern and state various pattern allowances
	3RD	Classify different pattern and state various pattern allowances
	4 TH	Classify core.

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	1 ST	Describe construction and working of cupola and crucible furnace
9 ^{ТН}	2 ND	Describe construction and working of cupola and crucible furnace.
	3 RD	Explain die casting method.
	4 TH	Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.
10 TH	1 ST	Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application.
	2 ND	Explain various casting defects with their causes and remedies.
	3 RD	Explain various casting defects with their causes and remedies.
	4 TH	CLASS TEST
11 TH	1 ST	Define powder metallurgy process.
	2 ND	State advantages of powder metallurgy technology technique.
	3 RD	Describe the methods of producing components by powder metallurgy technique.
	4 TH	Describe the methods of producing components by powder metallurgy technique
12 TH	1 ST	Explain sintering.
	2 ND	Economics of powder metallurgy
	3 RD	Describe Press Works: blanking piercing and trimming.
	4 TH	Describe Press Works: blanking piercing and trimming.
13 TH	1 ST	List various types of die and punch.
	2 ND	Explain simple, Compound & Progressive dies.
	3 RD	Explain simple, Compound & Progressive dies.
	4 TH	Describe the various advantages &disadvantages of above dies.
14 TH	1 ST	Describe the various advantages &disadvantages of above dies.
	2 ND	Define jigs and fixtures.
	3 RD	State advantages of using jigs and fixtures.
	4 TH	State the principle of locations
15TH	1 ST	Describe the methods of location with respect to 3-2-1 point location of rectangular jig
	2 ND	Describe the methods of location with respect to 3-2-1 point location of rectangular jig
	3 RD	List various types of jig and fixtures.
	4 TH	CLASS TEST



Learning Resouces:

- 01. Production Technology, Vol-I& II by O.P.Khanna, Dhanpat Rai Publication
- 02. Workshop Technology, Vol-I&II by B.S Raghuwanshi, Dhanpat Rai &Co
- 03. Manufacturing Technology, Vol-&II by P.N.Rao, TMH

04. Manufacturing Technology ,Vol-I by P.C.Sharma, S.Chand.

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