

Lesson Plan for PRODUCTION TECHNOLOGY, 3rd Sem. Mechanical Engg. (2022)

Discipline: Mechanical Engg	Semester: 3rd	Name of the Teaching Faculty: P.R SAMNTARAY
SUBJECT: PRODUCTION TECHNOLOGY	No. of Days/ week class allotted=4	Semester From date: 15.09.2022 To Date: 22.12.2022 No. of Weeks:
Week	Class Day	Theory / Practical Topics
1st	1st	Metal Forming Processes Introduction
	2nd	Extrusion: Definition & Classification
	3rd	Explain direct, indirect process
	4th	Explain impact extrusion process.
	1st	Define rolling. Classify it.
	2nd	Differentiate between cold rolling and hot rolling process
	3rd	List the different types of rolling mills used in Rolling process.
	4th	Welding Define welding
3rd	1st	classify various welding processes.
	2nd	Explain fluxes used in welding.
	3rd	Explain Oxy-acetylene welding process.
	4th	Explain various types of flames used in Oxy-acetylene welding process.
4th	1st	Explain Arc welding process.
	2nd	Specify arc welding electrodes.
	3rd	Define resistance welding
	4th	classify resistance welding

5th	1st	Describe various resistance welding processes such as butt welding, spot welding
	2nd	flash welding, projection welding and seam welding.
	3rd	Explain TIG welding process
	4th	Explain MIG welding process
6TH	1st	State different welding defects with causes and remedies.
	2nd	State different welding defects with causes and remedies.
	3rd	Doubt clearing
	4th	Class test
7th	1st	Casting Define Casting
	2nd	Classify the various Casting processes.
	3rd	Explain the procedure of Sand mould casting
	4th	Explain different types of molding sands with their composition and properties
8th	1st	Explain different types of molding sands with their composition and properties
	2nd	Classify different pattern and state various pattern allowances.
	3rd	Classify different pattern and state various pattern allowances.
	4th	Classify core
9th	1st	Describe construction and working of cupola furnace.
	2nd	Describe construction and working of crucible furnace.
	3rd	Explain centrifugal casting such as true centrifugal casting with advantage, limitation and area of application
	4th	Explain centrifugal casting such as centrifuging with advantages, limitation and area of application
10th	1st	Explain various casting defects with their causes and remedies.

	2nd	Explain various casting defects with their causes and remedies.
	3rd	Doubt clearing
	4th	Class test
11th	1st	Powder Metallurgy Define powder metallurgy process.
	2nd	State advantages of powder metallurgy technology technique
	3rd	Describe the methods of producing components by powder metallurgy technique.
	4th	Describe the methods of producing components by powder metallurgy technique.
12th	1st	Explain sintering.
	2nd	Economics of powder metallurgy.
	3rd	Economics of powder metallurgy.
	4th	Press Work Describe Press Works
13th	1st	Blanking, piercing and trimming.
	2nd	List various types of die
	3rd	List various types of punch
	4th	Explain simple dies
14th	1st	Explain Compound & Progressive dies
	2nd	Describe the various advantages & disadvantages of above dies
	3rd	Jigs and fixtures Define jigs and fixtures
	4th	State advantages of using jigs and fixtures
15th	1st	State the principle of locations

	2nd	Describe the methods of location with respect to 3-2-1 point location of rectangular jig
	3rd	Describe the methods of location with respect to 3-2-1 point location of rectangular jig
	4th	List various types of jig and fixtures.
16th	1st	Overall subject revision
	2nd	Overall subject revision
	3rd	Previous year question answer discussion
	4th	Previous year question answer discussion

P. R. Somantkay,
Concerned faculty

P. R. Somantkay

20/9/22

HOD

Govt. Polytechnic Kandhamal

20/9/22
Principal
Govt. Polytechnic Kandhamal
Phulbani