

LESSON PLAN

DEPARTMENT OF MECHANICAL ENGINEERING, ITT, CHOUDWAR

SUBJECT: PRODUCTION TECHNOLOGY

Periods: 4 per week

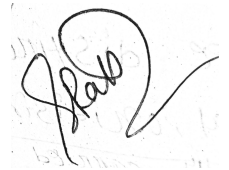
NAME OF FACULTY: SONALI RATH, LECT(MECH)

No. of weeks: 15

SEMESTER: 3rd

Week	Class Day	Theory / Practical Topics
1 st	1 st	Metal Forming Process Extrusion: Definition & Classification
	2 nd	Explain direct, indirect and impact extrusion process
	3 rd	Define rolling. Classify it.
	4 th	Differentiate between cold rolling and hot rolling process.
2 nd	1 st	Doubt clearing class
	2 nd	List the different types of rolling mills used in Rolling process.
	3 rd	Welding Define welding and classify various welding processes.
3 rd	4 th	Explain fluxes used in welding.
	1 st	Doubt clearing class
	2 nd	Explain Oxy-acetylene welding process.
	3 rd	Explain various types of flames used in 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. Specify arc welding electrodes
	2 nd	Define resistance welding and classify it.
	3 rd	Describe various resistance welding processes such as butt welding
	4 th	Spot welding, flash welding, projection welding and seam welding.
5 th	1 st	Explain TIG and MIG welding process
	2 nd	State different welding defects with causes and remedies.
6 th	3 rd	Casting Define Casting and Classify the various Casting processes.
	4 th	Explain the procedure of Sand mould casting.
	1 st	Explain different types of molding sands with their composition and properties
	2 nd	Classify different pattern and state various pattern allowances
7 th	3 rd	Classify core.
	4 th	Describe construction and working of cupola and crucible furnace
	1 st	Explain die casting method.
	2 nd	Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application
	3 rd	Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages,
8 th	4 th	Explain limitation and area of application
	1 st	Doubt clearing class
	2 nd	Explain various casting defects with their causes and remedies
	3 rd	Powder Metallurgy Define powder metallurgy process.
9 th	4 th	State advantages of powder metallurgy technology technique
	1 st	Revision
	2 nd	Describe the methods of producing components by powder metallurgy

		technique.
	3 rd	Describe the methods of producing components by powder metallurgy technique.
	4 th	Explain sintering.
10 th	1 st	Doubt clearing class
	2 nd	Economics of powder metallurgy
	3 rd	Economics of powder metallurgy
	4 th	Press Work Describe Press Works: blanking
11 th	1 st	piercing
	2 nd	trimming
	3 rd	List various types of die and punch
	4 th	Doubt clearing class
12 th	1 st	Explain simple, Compound dies
	2 nd	Explain Progressive dies
	3 rd	Describe the various advantages & disadvantages of above dies
	4 th	Describe the various advantages & disadvantages of above dies
13 th	1 st	Revision
	2 nd	Jigs and Fixtures Define jigs
	3 rd	Define fixtures
	4 th	State advantages of using jigs and fixtures
14 th	1 st	Doubt clearing class
	2 nd	State the principle of locations
	3 rd	Describe the methods of location with respect to 3-2-1 point location of rectangular jig
	4 th	3-2-1 point location of rectangular jig
15 th	1 st	List various types of jig and fixtures
	2 nd	Explain jigs
	3 rd	Explain fixtures
	4 th	Remedial class



Sign. of Faculty