

**RAJA KISHORE CHANDRA ACADEMY OF
TECHNOLOGY,NILGIRI,BALASORE
DEPARTMENT OF MECHANICAL ENGINEERING
LESSON PLAN**

SUBJECT- PRODUCTION TECHNOLOGY

NAME OF THE FACULTY-ER.BADRI NARAYAN PATRA

SEMESTER-3RD

BRANCH- MECHANICAL ENGINEERING

SESSION-

UNIT	DATE	LECTURE NO.	TOPIC TO BE COVERED
1		1	Extrusion: Definition & Classification
		2	Explain direct extrusion process
		3	Explain indirect extrusion process
		4	Explain impact extrusion process
		5	Define rolling. Classify it
		6	Differentiate between cold rolling and hot rolling process
		7	List the different types of rolling mills used in Rolling process,
2		8	Define welding and classify various welding processes
		9	Explain fluxes used in welding
		10	Explain Oxy-acetylene welding process
		11	Explain various types of flames used in Oxy-acetylene welding process
		12	Explain Arc welding process
		13	Specify arc welding electrodes
		14	Resistance welding
		15	Define resistance welding and classify it
		16	Describe resistance welding processes
		17	Describe resistance welding processes such as butt welding, spot welding,
		18	Explain TIG welding process,
		19	Explain MIG welding process
		20	State different welding defects, Different welding defects with causes, Remedies .
		21	Doubt clearing class
		22	Question and answer discuss
3		23	Define Casting and Classify the various Casting processes
		24	Explain the procedure of Sand mould casting
		25	Explain different types of moulding sands with their composition and properties
		26	Different pattern and allowances
		27	Explain different types of moulding sands with their composition and properties
		28	Classify different pattern and state various pattern allowances
		29	Classify core.
		30	Describe construction and working of cupola furnace
		31	Describe construction and working of crucible furnace
		32	Explain die casting method

		33	Explain centrifugal casting such as true centrifugal casting,
		34	centrifuging with advantages, limitation and area of application
		35	Explain various casting defects with their causes and remedies
		36	Explain various casting defects with their causes and remedies
		37	Doubt clearing class (Describe construction and working of cupola furnace)
		38	Doubt clearing class (Describe construction and working of crucible furnace)
		39	Question answer discussed
4		40	Define powder metallurgy process
		41	State advantages of powder metallurgy technology technique
		42	Describe the methods of producing components by powder metallurgy technique
		43	Describe the methods of producing components by powder metallurgy technique
		44	Explain sintering
		47	Economics of powder metallurgy
		48	Doubt clearing (Explain sintering)
5		49	Describe Press Works: blanking, piercing and trimming
		50	Describe Press Works trimming
		51	List various types of die
		52	List various types of punch
		53	Explain simple dies, Compound dies, Progressive dies
		54	Describe the various advantages & disadvantages of above dies
		55	Quiz Test
		56	Doubt clearing
6		57	Define jigs and fixtures
		58	State advantages of using jigs and fixtures
		59	State the principle of locations
		60	Describe the methods of location with respect to 3-2-1 point location of rectangular jig
		61	3-2-1 point location of rectangular jig
		62	List various type of jig
		63	List various type of fixtures
		64	Doubt clearing (Explain centrifugal casting)
		65	Explain various casting defect with their causes and remedies
		66	Explain MIG welding process
		67	Explain TIG welding process
		68	Explain ARC welding process
		69	Doubt clearing
		70	Previous year question discussion

Bachhi Narayan Patra

SIGNATURE OF FACULTY MEMBER

SIGNATURE OF H.O.D

