

JIHARSUGUDA ENGINEERING SCHOOL, JIHARSUGUDA
MATHEMATICS & SCIENCE DEPARTMENT

Name of the Faculty: <i>P. Boskey / Himalay Meher</i>	Session: 2022-23
Course code.:	Course Name: Production Technology
Programme: Diploma	Department: Mechanical Dept.
Semester: 3rd	Section: M1&M2
Branch: MECHANICAL	

WEEK	PERIOD	Unit	Hours	Topic to be Covered	
1.		1	7	Extrusion: Definition & Classification	
	2.			Explain direct, indirect extrusion process	
	3.			Explain impact extrusion process	
	4.			Define rolling. Classify it	
2.	5.				Explain cold rolling and hot rolling process
	6.				Differentiate between cold rolling and hot rolling process
	7.				List the different types of rolling mills used in Rolling process
	8.				What is welding and classify various welding processes.
3.	9.		fluxes used in welding..		
	10.		Explain Oxy-acetylene welding process		
	11.		Explain various types of flames used in Oxy-acetylene welding		
	12.		Explain Arc welding process.		
4.	13.		Specify arc welding electrodes		
	14.		Defination of resistance welding and classification of resistance welding		
	15.		butt welding		
	16.		spot welding		
5.	17.		Flash welding		
	18.		Projection welding		
	19.	2	16	Seam welding	

	20.			TIG welding
6.	21.			MIG welding
	22.			different welding defects with causes
	23.			Remedies of welding defects
	24.			Define Casting and Classify the various Casting processes
	25.			Explain the procedure of Sand mould casting
7.	26.			Explain different types of molding sands with their composition and properties
	27.			Classify different pattern
	28.			state various pattern allowances
	29.			Classify core
	30.			Describe construction of cupola furnace.
8.	31.			Describe working of cupola furnace
	32.			Describe construction of crucible furnace
	33.			Describe working of crucible furnace
	34.			Explain die casting method.
	35.			Explain centrifugal casting
9.	36.			Explain true centrifugal casting
	37.			Advantages, limitation of centrifuging
	38.			Application of centrifuging
	39.	3	16	Explain various casting defects with their causes and remedies.
	40.			Define powder metallurgy process
11.	41.			State advantages of powder metallurgy technology technique
	42.			Methods of producing components by powder metallurgy technique
	43.			
	44.			
	45.	4	7	Sintering

Practicals				
13.	46.	5	7	Economics of powder metallurgy
	47.			Describe Press Works: blanking, piercing and trimming
	48.			List various types of die and punch
	49.			simple dies
	50.			Compoud dies
	51.			Progressive dies
14.	52.	5	7	Advantages of different dies
	53.			Disadvantages of different dies
	54.			Defination of jigs and fixtures
	55.			Advantages of using jigs
15.	56.	6	7	Advantages of using fixtures
	57.			State the principle of locations
	58.			methods of location with respect to 3-2-1 point location of rectangular jig
	59.			
	60.			List various types of jig and fixtures


Signature of faculty member

Signature of i/c HOD