O.P.Code: 20ME0308	R20	H.T.No.

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech II Year II Semester Regular & Supplementary Examinations June-2024

MANUFACTURING PROCESSES

(Mechanical Engineering)

Time: 3 Hours **Max. Marks: 60**

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	a	With neat sketch explain centrifugal casting process.	CO1	L2	6M
	b	With neat sketch explain stir casting process.	CO1	L2	6M
		OR			
2		Explain the different types of moulding machines with neat sketch and its applications.	CO1	L2	12M
		UNIT-II			
3	a	Illustrate the working principle of spot welding.	CO2	L2	6M
	b	Write short notes on : i) Seem welding ii) Projection welding	CO2	L2	6M
		OR			
4	a	Elucidate the working of Gas Tungsten Arc Welding (GTAW) with its merits & demerits.	CO2	L2	6M
	b	Demonstrate the working principle of electro slag welding with a neat Sketch.	CO2	L2	6M
		UNIT-III			
5	a	Discuss the principle of extrusion process.	CO4	L2	6M
	b	Differentiate the hot and cold extrusion processes.	CO4	L2	6M
		OR			
6	a	Distinguish roll forging and rotary forging.	CO4	L4	6M
	b	List out various advantages and disadvantages of forging process.	CO4	L2	6M
		UNIT-IV			
7	a	What are the characteristics of sheet metal?	CO4	L1	6M
	b	What are the various types of shearing operations?	CO4	L1	6M
		OR			
8	a	Explain bending operations with suitable sketches.	CO4	L2	6M
	b	Sketch & explain the Drawing operation.	CO4	L2	6M
		UNIT-V			
9	a	What are the major considerations in the design of plastic parts?	CO5	L1	6M
	b	Explain briefly about calendaring with neat sketch.	CO5	L2	6M
		OR			
10	a	State how joining and machining of plastics are carried out.	CO6	L3	6M
	b	what are the foamed plastics and state how foaming is done.	CO6	L3	6M

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