PRN:		Course Code :	UME 303

Second Year **B. Tech** End Semester Examination Winter 2024

Manufacturing Technology-I 000296

Day and Date: Wed 27 NOV 2024 Max Marks: **50**

Time : 10:30AM To 12:30PM Duration: **02** hrs

Instructions: All questions are compulsory.

		Marks	Bloom's Level	CO
Q.1	**Attempt any two from the following**			
a)	Explain in brief steps involved in sand molding process. State the parts manufactured for an automobile using sand casting process.	06	2	1
b)	Describe in brief the need for the different types of allowances to be considered for metal casting process.	06	2	1
c)	List different types of casting defects. Suggest suitable remedial actions to eliminate these defects.	06	2	1
Q.2	**Attempt any two from the following**			
a)	Explain any one with neat sketch spot welding process. State its advantages and limitations.	06	2	2
b)	Describe the following three types of flames used in gas welding process. i. Carburizing ii. Neutral iii. Oxidizing	06	2	2
c)	Compare Tungsten Inert Gas (TIG) welding and Metal Inert Gas (MIG) Welding.	06	2	2
Q.3	**Attempt the following**			
a)	Draw neat sketch for different rolling process for manufacturing of Steel tubes.	06	2	3
b)	Explain with neat sketch the extrusion process.	07	2	3
	OR			
b)	Explain in details open die forging and closed die forging.	07	2	3
Q.4	**Attempt the following**			
a)	Explain with neat sketch any six operations performed on sheet metal.	06	2	4
b)	Explain the process of Electro Discharge Machining (EDM) with its applications.	07	2	4
	OR			
b)	State the working principle and applications of Laser Beam Machining (LBM).	07	2	4

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