U.S.N.										

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

June 2025 Semester End Main Examinations

Programme: B.E. **Semester: IV**
Branch: Mechanical Engineering **Duration: 3 hrs.**
Course Code: 19ME4DCMFT **Max Marks: 100**
Course: Manufacturing Technology

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

			UNIT - I	*CO*	*PO*	Marks
1	a)		Explain effect of cutting parameters on tool life.	*CO1*	*PO1*	**10**
	b)		List and explain properties of cutting fluids.	*CO1*	*PO1*	**10**
			OR			
2	a)		Differentiate between Capstan and turret lathe.	*CO1*	*PO1*	**10**
	b)		Explain Merchant's circle diagram with neat sketch.	*CO1*	*PO1*	**10**
			UNIT - II			
3	a)		Explain any two quick return motion mechanism used in shaper with illustration	*CO2*	*PO1*	**10**
	b)		Differentiate between shaper and planner.	*CO2*	*PO1*	**10**
			OR			
4	a)		Explain any five milling operations performed on milling machine.	*CO2*	*PO1*	**10**
	b)		Explain the concept of truing and dressing in grinding.	*CO2*	*PO1*	**10**
			UNIT - III			
5	a)		Explain operations performed in forging with illustration.	*CO3*	*PO1*	**10**
	b)		List and explain defects in forged component.	*CO3*	*PO1*	**10**
			OR			
6	a)		Explain two high and three high roll mills with illustration.	*CO3*	*PO1*	**10**
	b)		Explain any five defects in rolled components.	*CO3*	*PO1*	**10**
			UNIT - IV			
7	a)		Explain any two shearing and non-shearing operations performed in sheet metal forming with illustration.	*CO3*	*PO1*	**10**
	b)		Explain with figure, explosive forming and state its applications.	*CO3*	*PO1*	**10**

			OR			
	8	a)	Explain with a neat sketch, electromagnetic forming	*CO3*	*PO1*	**10**
		b)	Explain the process of stretch forming & deep drawing with lustration.	*CO3*	*PO1*	**10**
			UNIT - V			
	9	a)	Explain Abrasive water machining with neat sketch.	*CO3*	*PO1*	**10**
		b)	Describe ultrasonic machining with illustration.	*CO3*	*PO1*	**10**
			OR			
	10	a)	Explain the process of LBM with a neat sketch.	*CO3*	*PO1*	**10**
		b)	Describe the process of EDM with an illustration.	*CO3*	*PO1*	**10**

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