

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

Autonomous Institute Affiliated to VTU

## August 2024 Semester End Main Examinations

Programme: B.E.

Branch: Mechanical Engineering

Course Code: 22ME4PCMFT

Course: Manufacturing Technology

Semester: IV

Duration: 3 hrs.

Max Marks: 100

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

<b>Important Note:</b> Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			<b>UNIT - I</b>	<b>CO</b>	<b>PO</b>	<b>Marks</b>
	1	a)	Explain the nomenclature of a single point cutting tool with a sketch.	CO2	PO1	10
		b)	Determine percentage change in cutting speed required to give 50% reduction in tool life (i.e., to reduce tool life to 1/5 of its previous value). Take $n = 0.2$ .	CO2	PO1	10
			<b>OR</b>			
	2	a)	List any ten properties of cutting fluids	CO1	PO1	10
		b)	Enumerate the difference between Shaper and a Planer	CO1	PO1	10
			<b>UNIT - II</b>			
	3	a)	Explain the parts of a radial drilling machine with a sketch.	CO1	PO1	10
		b)	Explain the parts of a Column and Knee milling machine with a sketch	CO2	PO1	10
			<b>UNIT - III</b>			
	4	a)	What is Hot and Cold working?	CO2	PO2	5
		b)	What is Forging and list some of the defects in forged parts	CO2	PO1	5
		c)	What are the different forging processes? Explain	CO2	PO2	10
			<b>OR</b>			
	5	a)	List and explain types of Roll mill configurations	CO1	PO2	12
		b)	Explain the applications of rolling	CO1	PO2	
			<b>UNIT - IV</b>			
	6	a)	What is Extrusion Process and types of extrusion	CO2	PO1	10
		b)	Explain Electro hydraulic forming and Electromagnetic forming	CO2	PO1	10
			<b>OR</b>			
	7	a)	What is Blanking, Punching, piercing and Nibbling ?	CO2	PO2	08
		b)	Explain the types of drill jigs	CO1	PO1	12

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