

CBCS SCHEME

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BAU303

Third Semester B.E./B.Tech. Degree Examination, Dec.2025/Jan.2026 Manufacturing Processes

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module – 1			M	L	C
Q.1	a.	Explain the steps involved in casting.	10	L2	CO1
	b.	Sketch and explain split pattern and cope and drag pattern.	10	L2	CO1
OR					
Q.2	a.	Sketch and explain balance core and Hanging core.	10	L2	CO1
	b.	With a neat sketch explain the elements of gating system.	10	L2	CO1
Module – 2					
Q.3	a.	Sketch and explain pressure die casting.	10	L2	CO1
	b.	Sketch and explain the casting process which is preferred for producing components that required precision and detailed shapes, such as a turbine blade or jewellery.	10	L2	CO1
OR					
Q.4	a.	Sketch and explain CO ₂ casting.	10	L2	CO1
	b.	Sketch and explain Cupola furnaces.	10	L2	CO1
Module – 3					
Q.5	a.	Sketch and explain shielded arc welding.	10	L2	CO2
	b.	Sketch and explain the welding technique relies on granular flux to shield the arc.	10	L2	CO2
OR					
Q.6	a.	Sketch and explain Thermit welding.	10	L2	CO2
	b.	Sketch and explain Laser welding	10	L2	CO2
Module – 4					
Q.7	a.	Sketch and explain Impression die forging.	10	L2	CO3
	b.	With a neat sketch explain the working of Board hammer.	10	L2	CO3
OR					
Q.8	a.	Explain : i) Blanking ii) Lancing.	10	L2	CO3
	b.	Differentiate Hot rolling and cold rolling.	10	L2	CO3
Module – 5					
Q.9	a.	Explain desirable properties and characteristics of cutting tool.	10	L2	CO4
	b.	Explain : i. Rough turning ii. Boaring.	10	L2	CO4
OR					
Q.10	a.	Find the time required for one complete cut on a piece of work 350 mm long and 50 mm diameter. The cutting speed is 35 m/min and feed is 0.5 mm/rev.	10	L2	CO4
	b.	Explain the milling process, where feed direction is opposite to cutter rotation.	10	L2	CO4
