

CBCS SCHEME

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BAU303

Third Semester B.E./B.Tech Degree Examination, Dec.2023/Jan.2024 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.	With a neat sketch explain the different steps involved in casting.	10	L2	CO1
	b.	Explain the concept of gating and risering with a help of sketch.	10	L1	CO1
OR					
Q.2	a.	Briefly explain the types of allowances given to a pattern.	10	L2	CO2
	b.	With a neat sketch explain jolting machine.	10	L2	CO1
Module – 2					
Q.3	a.	Elaborate with a neat sketch hot chamber die casting process.	10	L3	CO2
	b.	With a neat sketch explain direct electric Arc furnace.	10	L2	CO2
OR					
Q.4	a.	With a neat sketch explain the working principle of cupola furnace.	10	L2	CO2
	b.	Elaborate with a neat sketch sweep moulding.	10	L3	CO2
Module – 3					
Q.5	a.	Define welding and list out the merits demerits and applications.	10	L1	CO1
	b.	With a neat diagram, explain the oxy acetylene gas welding process.	10	L2	CO2
OR					
Q.6	a.	What is brazing? Explain the difference methods of brazing with simple sketches.	10	L1	CO1
	b.	Define soldering. Compare the soldering and brazing process.	10	L1	CO1
Module – 4					
Q.7	a.	Write a note on : i) Elastic and plastic deformation ii) Strain hardening.	10	L2	CO3
	b.	With a neat sketches, describes various types of forging process.	10	L2	CO3
OR					
Q.8	a.	Explain the following terms : i) Blanking ii) Trimming iii) Notching iv) Lancing v) Piercing.	10	L2	CO2
	b.	Explain with a neat sketch hot rolling and cold rolling techniques.	10	L2	CO3
Module – 5					
Q.9	a.	Design a single point cutting tool for turning in a Lathe. Explain the tool nomenclature.	10	L4	CO4
	b.	List out the desirable properties of cutting tool materials.	10	L3	CO4
OR					
Q.10	a.	Outline the Capstan and turret lathe.	10	L4	CO2
	b.	Calculate the required rpm of a work piece of 100mm diameter to provide a cutting speed of 50mpm. Also find machining time if length of work is 400mm and feed is 0.4mm/rev.	10	L4	CO4
