CBCS SCHEME

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BME302

Third Semester B.E./B.Tech. Degree Examination, Dec.2024/Jan.2025
Manufacturing Process

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.	Define manufacturing process. Classify manufacturing process.	8	L1	CO1
	b.	Define pattern and explain with a neat sketches any four pattern allowances.	6	L2	CO1
	c.	With a neat sketch explain Jolt machine.	6	L2	CO1
		OR			
Q.2	a.	Discuss briefly the requirements of base sand in sand mould preparation.	6	L2	CO1
	b.	List the commonly mixed ingredients in moulding sand. Illustrate the properties contribute by each of them to the sand mould.	10	L2	CO1
	c.	What is core? List the different types of cores.	4	L1	CO1
		Module – 2			
Q.3	a.	With a neat sketch explain resistance furnace.	10	L2	CO2
	b.	Explain with a neat sketch CUPOLA furnace.	10	L2	CO2
		OR			
Q.4	a.	With a neat sketches explain casting defects and remedies.	10	L2	CO2
	b.	With a neat sketches explain slush casting.	10	L2	CO2
		Module – 3			
Q.5	a.	Define Forming. With sketches explain the classification of forming process.	10	L2	CO3
	b.	Differentiate between Hot Working and Cold Working.	10	L2	CO3
		OR			
Q.6	a.	Explain the principle of : i) Forging ii) Extrusion.	10	L2	CO3
	b.	Explain : i) Blanking ii) Piercing.	10	L2	CO3
		Module – 4			
Q.7	a.	Define Welding. Explain oxy-acetylene gas welding.	10	L2	CO4
	b.	With a neat sketch explain TIG welding.	10	L2	CO4
		OR			
Q.8	a.	With a neat sketch explain Submerged Arc Welding (SAW).	10	L2	CO4
	b.	With a neat sketches explain types of flames produced in oxy-acetylene gas welding.	10	L2	CO4
		Module – 5			
Q.9	a.	With suitable sketches explain defects in welding and their remedial measures.	10	L2	CO5
	b.	With a neat sketch, explain : i) Soldering ii) Brazing.	10	L2	CO5
		OR			
Q.10	a.	With a neat sketches explain resistance welding process.	10	L2	CO5
	b.	With a neat sketch, explain friction stir welding process.	10	L2	CO5