



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