

CBCS SCHEME

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22MIA/MAR332

Third Semester M.Tech. Degree Examination, Dec.2023/Jan.2024 Non Traditional Machining

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 need for nontraditional machining process.	10	L2	CO1
	b.	Write in brief note on the selection of non-traditional machining process.	10	L3	CO3
OR					
Q.2	a.	With an illustration, explain working principle and operations of ultra sonic machining process.	10	L2	CO4
	b.	With an illustration, explain the operations of Abrasive Jet Machining Process.	10	L2	CO4
Module - 2					
Q.3	a.	With an illustration, explain operations of Water Jet Machining Process.	10	L2	CO4
	b.	Mention advantages, limitations and applications of water Jet machining process.	10	L2	CO4
OR					
Q.4	a.	Mention advantages, limitations and applications of EDM.	10	L2	CO3
	b.	With an illustration explain relaxation generator and mention its characteristic with respect to voltage and current.	10	L2	CO3
Module - 3					
Q.5	a.	With an illustration, explain working of ECM.	10	L2	CO2
	b.	Explain the characteristics required on electrolyte in ECM.	10	L2	CO3
OR					
Q.6	a.	Mention advantage, limitations and applications of ECM.	10	L2	CO3
	b.	With an illustration, explain electro chemical honing process.	10	L2	CO4
Module - 4					
Q.7	a.	Explain step by step process of chemical machining process.	10	L2	CO2

	b.	With an illustration, explain the operations of Plasma Arc Machining.	10	L2	CO2
OR					
Q.8	a.	With an illustration, explain Electron Beam Machining Process.	10	L2	CO4
	b.	Explain electron beam process characteristics.	10	L3	CO3
Module -5					
Q.9	a.	With an illustration, explain working of Laser Beam Machining Process.	10	L2	CO2
	b.	Mention the advantages, limitations and applications of LBM.	10	L2	CO3
OR					
Q.10	a.	With an illustration, explain Ion Beam Machining.	10	L2	CO4
	b.	Mention the advantages, limitations and applications of Ion Beam machining.	10	L2	CO3
