

# CBCS SCHEME

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BMR306A

## Third Semester B.E./B.Tech. Degree Examination, June/July 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.	What are the industrial needs for Non-Traditional machining?	10	L1	CO1
	b.	How the Non-Traditional machining processes are classified? Explain.	10	L2	CO2
OR					
Q.2	a.	List the applications of Ultrasonic machining.	10	L1	CO1
	b.	With a neat sketch, explain the working principle of USM.	10	L2	CO2
Module – 2					
Q.3	a.	List the applications and limitations of Abrasive Jet machining.	10	L1	CO1
	b.	How do the operating parameters affect the machining process in AJM process? Explain.	10	L2	CO2
OR					
Q.4	a.	List the advantages, disadvantages and applications of electro chemical machining.	10	L1	CO1
	b.	Explain the dynamics of ECM process.	10	L2	CO2
Module – 3					
Q.5	a.	With a neat sketch, explain working principle of chemical machining.	10	L2	CO3
	b.	Identify the sequence of operation in photo-chemical milling explain.	10	L3	CO4
OR					
Q.6	a.	Explain the working principle of plasma Arc machining process.	10	L2	CO3
	b.	Analyze the parameters affecting the cutting processing in PAM.	10	L3	CO4
Module – 4					
Q.7	a.	Explain the operating principles of EDM process.	10	L2	CO3
	b.	Identify the different types of flushing and explain the pressure flushing.	10	L3	CO4
1 of 2					

OR

Q.8	a.	Explain the machining applications of laser.	10	L2	CO3
	b.	Identify the special characteristics of laser beam and discuss.	10	L3	CO4

Module – 5

Q.9	a.	Choose various hole drilling and surface machining capabilities of electron beam and explain.	10	L3	CO3
	b.	Analyze the current control in EBM process.	10	L4	CO4

OR

Q.10	a.	Select the various processes for hybrid machining and give the importance.	10	L3	CO3
	b.	Inference the details of electrochemical discharge machining.	10	L4	CO4

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