U.S.N.										

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

February / March 2023 Semester End Main Examinations

Programme: B.E. **Semester: V**
Branch: Mechanical Engineering **Duration: 3 hrs.**
Course Code: 20ME5DENTM **Max Marks: 100**
Course: Non Traditional Machining **Date: 09.03.2023**

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may suitably be assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

UNIT - I

1	a)	Give comparison between conventional and non- conventional machining process.		**10**
	b)	With a neat diagram explain principle and working of Ultrasonic Machining (USM) process.		**10**

UNIT - II

2	a)	Discuss process characteristics, application and advantages of Abrasive jet Machining (AJM).		**10**
	b)	With a neat diagram explain principle and working of Abrasive Water Jet Machining (AWJM).		**10**

UNIT - III

3	a)	With a neat diagram explain electrochemical grinding process.		**10**
	b)	Explain different process characteristics of Electrochemical machining with its advantages.		**10**

OR

4	a)	Explain in detail the steps involved in chemical blanking process.		**10**
	b)	List advantages, limitations and applications of chemical machining process.		**10**

UNIT - IV

5	a)	Explain principle and working of Electrical Discharge Machining (EDM).		**10**
	b)	List and explain different process parameters of EDM and also write its advantages and limitations.		**10**

OR

6	a)	With a neat diagram explain the process of laser drilling process.		**10**
	b)	With a neat diagram explain the process of laser Engineered Net shaping process (LENS).		**10**

UNIT - V

7	a)	Explain principle and working of Electron Beam Machining (EBM).	**10**
	b)	With a neat diagram, explain principle and working of Fused Deposition Modelling (FDM).	**10**

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