R20 Regulation *Subject code:3E6CE*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, December 2024

NON-TRADITIONAL MACHINING PROCESS

(ME)

Maximum Marks: 70 Date:07.01.2025 Duration: 3 hours

Note: 1.This question paper contains two parts A and B.
2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

	Part-A		
All the following questions carry equal marks (10X2M=20) Marks)		CO	Bloom Tx
1	Define non-traditional machining process	1	L1
2	Write any two advantages of non-traditional machining process	1	L1
3	Define the term MRR	2	L1
4	Define the term Surface finish	2	L1
5	Write any two applications of electric stream drilling	3	L1
6	List out the desirable properties of a good dielectric fluid	3	L1
7	Write any two industrial Applications of PAM	4	L1
8	What are the applications of laser beam machining	4	L1
9	What are the applications of plasma machining process	5	L1
10	Define shaped tube electrolyte machining	5	L1
	Part-B		
Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	Explain the Classification of modern machining processes. [10M]	1	L2
	OR		
12	Explain the elements of Ultrasonic machining process with neat sketch[10M]	1	L2
13	Describe the principle and equipment for Water Jet Machining. [10M]	2	L2
	OR		
14	How does AJM differ from conventional sand blasting process? [10M]	2	L2
15	Explain EDM process with neat sketch. [10M]	3	L2
	OR		
16	Identify the mechanism of material removal, transfer media and energy source for EDM. [10M]	3	L2
17	Explain the principle of Electron Beam Machining Process? [10M]	4	L2
	OR		
18	Explain EDM process with neat sketch. [10M]	4	L2
19	Explain with neat diagram of shaped tube electrolyte machining. [10M]	5	L2
	OR		
20	Explain working principle of PAM with neat sketch. [10M]	5	L2