R18 Regulation

Subject code: 2E7CD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, November 2022

UNCONVENTIONAL MACHINING PROCESSES

(Mechanical Engineering)

Maximum Marks: 70 Date:09.12.2022 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.
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)

1 Define non-traditional machining process
2 Write any two application of non-traditional machining process
3 Define the term electrochemical grinding
4 Write any two applications of electrochemical machining process
5 Write any two names of abrasives in EDM Grinding machining
6 Write the applications of EDM
7 Define the term accuracy
8 Define the term electrolyte
9 Write the applications of MASKANT
10 Write the applications of Abrasive flow finishing

Part-B

Answer all the questions (5X10M=50Marks)

11 Briefly explain the need for non-traditional machining methods. [10]

OR

12 Explain the working principle of Ultrasonic machining process with neat sketch. [10]
13 Explain the application, advantages, disadvantages and limitations of Abrasive Jet Machine. [10]

OR

14 Explain the working principle of electrochemical grinding with neat sketch. [10]
15 Explain working principle of Wire cut EDM with neat sketch. [10]

OR

16 Working principle of EDM Grinding machining with neat sketch. [10]
17 Explain the elements of EBM with neat sketch. [10]

OR

18 Write the advantages, disadvantages, applications and limitations of laser beam machining. [10]
19 Explain with neat diagram of shaped tube electrolyte machining. [10]

OR

20 Briefly explain about maskants and its applications. [10]