

Code No: 156DC**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year II Semester Examinations, August/September - 2021****UNCONVENTIONAL MACHINING PROCESSES****(Common to ME, MCT)****Time: 3 Hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- 1.a) Classify the conventional machining process on the type of energy employed in detail.
b) Briefly explain the effect of operating parameters on material removal rate in Unconventional Machining Process. [7+8]
- 2.a) What are the various aspects to be considered while selecting a UCM process?
b) Explain the reasons for the development of Unconventional Machining Process. [7+8]
- 3.a) With neat sketch, explain the process of AJM and list its applications.
b) Discuss about the electrochemical honing and deburring process. [7+8]
- 4.a) Explain the principle of working Electro Chemical Grinding and write its applications.
b) Explain the principle of AWJM. Mention some of the specific applications. [8+7]
5. With help of a neat sketch, describe the mechanism of material removal in EDM process. [15]
- 6.a) Explain the working principle, elements and characteristics of wire EDM process.
b) State the recent developments in EDM and Wire cut EDM in detail. [8+7]
- 7.a) Discuss the process parameters of EBM and their influence on machining quality.
b) Explain the production of laser beam and working principle of LBM process in detail. [7+8]
- 8.a) List out various maskants used in chemical machining and explain their merits in detail.
b) State the principle of magnetic abrasive finishing process and explain it briefly. [8+7]

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