

Code No: 09A70309

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B. Tech IV Year I Semester Examinations, November/December-2013

UNCONVENTIONAL MACHINING PROCESSES

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

1. List out the parameters to be considered while selecting non-traditional machining processes. Explain their role in selection process. [15]
2. Explain the influence of various controlling parameters on the metal removal rate in ultrasonic machining. [15]
3. Discuss the features of equipment used in water jet machining. [15]
4. With the help of a neat sketch explain the construction and working of electrochemical honing process. [15]
5. Explain the factors to be considered in selection of tool electrode and dielectric material. [15]
- 6.a) Differentiate between thermal and non-thermal processes.
b) Write a detailed note on the accuracy of cut and cutting speed of LASER. [15]
- 7.a) Discuss the accuracy and surface finish obtained in plasma machining.
b) List out the characteristics expected from the maskant used in chemical machining. [15]
8. With the help of a line diagram explain the construction, working and application of magnetic abrasive finishing. [15]
