

Code : R7410309

R07

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012

UNCONVENTIONAL MACHINING PROCESSES

(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

1. Classify various modern machining processes. Compare the process economy of various processes.
2. Discuss the applications, limitations advantages and disadvantages of ultrasonic machining. Enumerate various process parameters.
3. Discuss the working principle of abrasive jet machining. Enumerate variables influencing metal removal rates.
4. Discuss the fundamental working principle of chemical machining. What are its advantages and limitations?
5. Discuss the selection of tool material, dielectric fluids, judgment of surface finish in EDM process.
6. Draw a general comparison between thermal and non thermal machining process. Describe the working principle of electron beam machining.
7. Discuss working principle of plasma machining and application of it in manufacturing.
8. Write short notes on:
 - (a) Magnetic abrasive finishing.
 - (b) Etchants and Muskants.
