

Code No: **R41034****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, March/April - 2016****UNCONVENTIONAL MACHINING PROCESSES****(Mechanical Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) Describe the various methods of classification of modern machining processes. [8]
b) Explain about, the need for non-traditional machining methods. [7]
- 2 a) Discuss in detail about ultrasonic machining process. [8]
b) Give in detail economic considerations, applications and limitations of ultrasonic machining. [7]
- 3 a) Discuss in detail about abrasive jet machining. [8]
b) Explain the differences between water jet machining and abrasive jet machining [7]
- 4 a) Discuss in detail about fundamentals of electro chemical machining, electrochemical grinding. [8]
b) Explain the fundamentals of chemical machining, advantages and applications. [7]
- 5 a) Describe Electric Discharge Grinding and wire EDM and Power circuits for EDM. [8]
b) Explain the characteristics of spark eroded surface. [7]
- 6 a) Describe about the Electron Beam Machining. [8]
b) List and explain the process parameters of EBM. [7]
- 7 a) With examples explain the application of plasma for machining. [8]
b) Discuss about metal removal mechanism. [7]
- 8 a) Discuss in detail about the electro stream drilling. [8]
b) Describe about abrasive jet machining. [7]

