

Code: ME7T3

**IV B.Tech - I Semester – Regular / Supplementary Examinations  
November 2016**

**ADVANCED MACHINING PROCESSES  
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Explain the importance of non-traditional machining process. 7 M  
  
b) Discuss the classification of modern machining processes. 7 M
  
2. a) Explain in detail the principle of metal removal process in detail in ultrasonic machining. 8 M  
  
b) Explain applications of Ultra sonic Machining. 6 M
  
3. Illustrate the process of Abrasive and water jet machining. 14 M
  
4. Elaborate and discuss electric discharge grinding process with neat sketch. 14 M

5. a) Describe and emphasize the operation of electro chemical machining. 8 M
- b) Identify various applications of electro chemical process. 6 M
6. a) Explain generation and control of electron beam machining processes. 7 M
- b) Write brief note on comparison of thermal and non-thermal processes. 7 M
7. a) Elaborate and discuss metal removal mechanism in plasma in machining. 10 M
- b) Applications of Plasma in manufacturing industries. 4 M
8. a) Write short note on magnetic abrasive finishing. 7 M
- b) Write basic principle of shaped tube electrolytic machining operation. 7 M