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Reg. No. :

Name :

**Seventh Semester B.Tech. Degree Examination, November 2015
(2008 Scheme)**

08.706.12 : NON CONVENTIONAL MACHINING TECHNIQUES (M)

Time : 3 Hours

Max. Marks : 100

- Instructions :** i) Answer **all** questions from Part – A.
ii) Answer **one** question from Module in Part – B.

PART – A



1. Briefly describe the working principle of USM.
2. What are the special features of LBM when compared to other non-conventional methods ?
3. What are the different tool materials used in EDM ? Explain.
4. Explain the mechanism of abrasive jet machining.
5. Discuss the factors affecting the metal removal rate in ECM.
6. What are the advantages of ECG over ordinary grinding methods ?
7. Describe the process parameters of EDM.
8. List out the applications of USM.
9. Write short notes on the laser parameters used in LBM.
10. Explain the working principle of AJM with a sketch. **(4×10=40 Marks)**

P.T.O.

**PART – B****Module – I**

11. Explain the working principle of EDM and PAM with the help of sketches. Discuss their merits and demerits. 20

OR

12. Describe how the process parameters affect the metal removal rate in EDM. Also explain the advantages of EDM. 20

Module – II

13. Explain the different process parameters which affect the process intensity of ECM. 20

OR

14. Describe the basic principle and working of EBM using a neat sketch. What are its advantages and limitations? 20

Module – III

15. Explain how USM is different from other non-conventional machining techniques. Describe the metal removing process with a sketch. 20

OR

16. What are the different variables which affect the metal removal rate in AJM? Explain each one of them by clearly mentioning its role. Also write the applications of AJM. 20