

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(ME) (E-I 2012 Onwards) (Sem.-6)**NON-TRADITIONAL MACHINING****Subject Code : DE/ME-2.0****M.Code : 71252****Time : 3 Hrs.****Max. Marks : 60****INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A**1) Answer briefly :**

- (a) Briefly write about Flexible Manufacturing System.
- (b) How are non conventional machining processes classified?
- (c) Write the major application of non conventional machining processes.
- (d) Write the advantages and applications of EDM.
- (e) Explain how the abrasive selection made in USM.
- (f) What are the functions served by dielectric fluid in EDM?
- (g) With suitable examples write the applications of LBM.
- (h) Briefly write about material removal in EBM.
- (i) What possible errors are caused in EDM?
- (j) What are hybrid machining processes? Enlist any four processes.

SECTION-B

2. Describe the factors that should be considered in selecting the electrolyte in ECM.
3. Explain the working principle of Photochemical machining.
4. Explain the various methods used for preparing the masks for Chemical Machining.
5. Explain the disadvantages of relaxation circuit and show the alternative arrangement of pulse generator used in EDM.
6. Differentiate between Dual gas torch and Water-Injected torch in PAM.

SECTION-C

7. With suitable diagrams explain element of abrasive flow machining and write the applications and limitation of this process.
8. With suitable diagram explain the working principle of USM. Briefly explain the elements of the process.
9. Explain the electrolyte flow methods used in ECM giving their relative merits and applications.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.