



Reg. No. :

Name :

Sixth Semester B.Tech. Degree Examination, May 2013
(2008 Scheme)
08.606.13 : ADVANCED MANUFACTURING PROCESSES (MU)

Time : 3 Hours

Max. Marks : 100

Instruction : Answer **all** questions from Part – **A** and one **full** question from **each** Module in Part – **B**.

PART – A

1. Explain vacuum casting.
2. Explain finishing of sintered parts.
3. Write short note on ceramic shell investment casting.
4. Explain compression and vacuum bag in plastic moulding.
5. Describe processing of reinforced plastics and composites.
6. Explain laminated object manufacturing.
7. Explain crystal growing and wafer preparation.
8. Describe wire bonding and packaging in PC board.
9. Explain solid free form fabrication.
10. Describe fused deposition molding.



(10x4=40 Marks)

PART – B
Module – I

11. a) Explain squeeze casting and semisolid metal forming. 10
- b) Describe various methods of blending of metal powders. 10

OR

12. Explain various steps involved in powder metallurgy. 20

**Module – II**

13. a) Explain Transfer moulding process. 10
- b) Explain blow and rotational moulding of plastics. 10

OR

14. a) Briefly explain direct manufacturing and rapid tooling. 10
- b) Explain the term filament winding. 10

Module – III

15. a) Explain manufacturing process for MEMS. 10
- b) Describe film and film deposition. 10

OR

16. a) Explain SCREAM and SIMPLE. 10
- b) Describe the advantage of etching combined with fusion bonding. 10