



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, April 2014
(2008 Scheme)
08.804 : COMPUTER INTEGRATED MANUFACTURING (MU)**

Time : 3 Hours

Max. Marks : 100

- Instructions :**
- 1) Answer **all** questions from Part – A.
 - 2) Answer **one** question **each** Module in Part – B.
 - 3) **Each** question in Part – A carries 4 marks.
 - 4) **Each** question in Part – B carries 20 marks.

PART – A

1. Define the concept of CIM.
2. What do you meant by manufacturing data ?
3. What are the different types of manufacturing systems ?
4. What are the advantages of CAPP systems ?
5. Explain the stick-slip phenomena.
6. Explain any four G-codes used in CNC system.
7. Explain the canned cycle in NC programming.
8. What are the various types of AGV's in common use ?
9. What do you under stand by JIT concept in manufacturing ?
10. Explain the various aspects of Concurrent Engineering.



PART – B

Module – I

11. a) Explain MAP and its applications.
b) Explain the requirements of a good data base system.

OR



12. a) Explain the CAPP systems and its various types and applications.
b) Define the term MRP. What are the various stages of MRP and its implementation in CIM environment ? Explain briefly.

Module – II

13. a) Explain the various components of CNC system for a machine tools.
b) Explain Adaptive control in machining environment. Its various types and applications.

OR

14. a) Explain the various drive systems used in CNC machine tools. What are the comparisons for AC and DC systems ?
b) Explain the different types of NC machines controls.

Module – III

15. a) Explain the various steps for implementing the JIT manufacturing system.
b) What are the various methods used in vehicle traffic control in AGV's systems ? Explain in detail.

OR

16. a) Explain the various components of machine vision system.
b) What are the different steps for implementing Group technology in a manufacturing environment ? Explain.