



Reg. No. : .....

Name : .....

**Eighth Semester B.Tech. Degree Examination, January 2018  
(2013 Scheme)  
13.804 : COMPUTER INTEGRATED MANUFACTURING (MU)**

Time : 3 Hours

Max. Marks : 100

**PART – A**

Answer **all** questions, **each** carries **2** marks.

1. Differentiate between CAD/CAM and CIM.
2. What is Manufacturing automation protocol ?
3. Write down basic requirements for effective communication system.
4. Differentiate between Retrieval and regenerative approaches in CAPP.
5. What is cellular manufacturing ?
6. What are the advantages of Group Technology ?
7. Highlight the feedback devices in CNC systems.
8. What are the types of part programming ?
9. Write a sample program using Canned cycle.
10. What are the advantages of machine vision ? (10×2=20 Marks)

**PART – B**

Answer **any one full** question from **each** Module each carries **20** marks.

**Module – 1**

11. a) List the hardware and software systems required for CIM. 10
- b) Explain the reasons for automation in Factory. 10

OR



- 12. a) Discuss about architecture of database system. 10
- b) Classify different types of database system. 10

**Module – 2**

- 13. a) Explain the benefits of CAPP. 10
- b) Explain the various applications of Group Technology. 10

OR

- 14. a) Classify the different types of Coding system. 10
- b) With an example explain Optiz coding. 10

**Module – 3**

- 15. a) What are the three functions of adaptive control ? 10
- b) Define the term CNC. What are the general configurations of CNC ? 10

OR

- 16. a) Write notes on system Drives. 10
- b) Explain numerical control interpolation methods for Continuous path control. 10

**Module – 4**

- 17. a) What are the four basic components of FMS ? 10
- b) Differentiate between a dedicated FMS and a random order FMS. 10

OR

- 18. a) What are the various robot configurations ? 10
  - b) Illustrate the various applications of Robot. 10
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