



Reg. No. :

Name :

**Eighth Semester B.Tech. Degree Examination, April 2016
(2008 Scheme)**

08.804 : COMPUTER INTEGRATED MANUFACTURING (MU)

Time : 3 Hours

Max. Marks : 100

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

PART – A

- I. a) Define the concept of CIM.
b) What are the different types of manufacturing system ?
c) Enumerate the application of computer in design.
d) Compare manual process planning and computer assisted process planning.
e) Differentiate between absolute and incremental positioning system with example.
f) Explain any four G-codes used in NC system.
g) Define the terms resolution, accuracy and repeatability.
h) Enumerate the features of JIT manufacturing.
i) List out the functions of material handling units in manufacturing industry.
j) Enumerate the features of adaptive control system. **(10×4 = 40 Marks)**

PART – B

Module – 1

- II. a) Explain the important elements of CIM.
b) Explain data base management system. **20**

OR

- III. a) Explain the integration of CAD and CAM.
b) Explain variant (retrieval) method of process planning. **20**

P.T.O.



Module – 2

IV. a) Explain the different types of motion controls in NC machines.

b) Explain linear interpolation in NC machines.

20

OR

V. a) Explain the various components of CNC machines.

b) Explain the working of stepper motors used in NC machines.

20

Module – 3

VI. a) Explain any two physical configuration of industrial robot with neat sketches.

b) Explain the path control of Automated guided vehicle.

20

OR

VII. a) Explain Automated storage and retrieval system.

b) Compare concurrent engineering and sequential engineering.

20
