C 28756

Name.....

Reg. No.....

SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2012

ME 04 603 – COMPUTER INTEGRATED MANUFACTURING (CIM)

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*

I. (a) Describe the difference between incremental and absolute systems.

(b) Briefly describe the tool holders used in CNC machines.

(c) Describe briefly post processor.

(d) Describe briefly the post processor commands in APT.

(e) Briefly describe PLC.

(f) Write short notes on :

(i) Bar code technology.

(ii) Automatic data capture.

(g) What are the applications of FMS?

(h) Discuss the types of drive systems used in robots.

(8 × 5 = 40 marks)

Part B

II. (a) Explain briefly the open loop and closed loop systems.

Or

(b) Explain the features of CNC machine tools.

III. (a) Explain briefly the fixed block word address format is part programming with a suitable example.

Or

(b) Explain the steps involved in computer aided part programming.

IV. (a) Describe briefly the functions of computer control in CIM.

Or

(b) Discuss the advantages and applications of PLC with suitable examples.

V. (a) Explain the material handling and storage systems used in FMS.

Or

(b) Describe briefly the different methods of robot programming.

(4 × 15 = 60 marks)