

Roll No.

Total No. of Questions : 09]

[Total No. of Pages : 02

Paper ID [A0231]

(Please fill this Paper ID in OMR Sheet)

B.Tech. (Sem.- 7th/8th)

COMPUTER INTEGRATED MANUFACTURING (PE-402)

Time : 03 Hours

Maximum Marks :60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Two** questions from Section - C.

Section - A

Q1)

(10 × 2 = 20)

- a) Describe output devices used in CAD.
- b) What is function of computer in CNC?
- c) What is CAD and CAM?
- d) What is data base?
- e) Define computerized production process planning.
- f) What is part inspection using CMM.
- g) Define the types of CNC?
- h) Explain the canned cycle.
- i) What is APT language?
- j) What are various softwares used in CAD/CAM?

Section - B

(4 × 5 = 20)

- Q2) Discuss the basic elements of NC system.
- Q3) Explain detail integration of CAD with CAM.
- Q4) How did you classify statistical quality control?
- Q5) Explain the different types of computer aided process planning.
- Q6) Explain parts classification and coding systems used in group technology.

Section - C

(2 × 10 = 20)

- Q7) Compare NC, CNC and DNC. What are advantages of combining CNC and DNC?
- Q8) What are the advantages and disadvantages of noncontact inspection methods? Explain the machine vision system.
- Q9) Define the different types of manufacturing systems. Discuss the benefits of computer integrated manufacturing systems.