

Roll No.

24484

B. Tech. 7th Semester (ME)

Examination – December, 2016

COMPUTER INTEGRATED MANUFACTURING

Paper : ME-425-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions. Question No. 1 is **compulsory**. Attempt any *one* question from each Section.

1. (a) Explain the different types of Computer Memory.
- (b) What do you mean by NC word ?
- (c) What do you mean by accuracy and repeatability ?
- (d) What is drive system in a robotics technology ?
- (e) What are the role of Computer in a manufacturing. 5 × 4 = 20

SECTION - A

2. Explain the NC motion, control system with their application, advantage and disadvantage of NC. 20
3. (a) What do you mean by Automation and their types? 10
(b) What is CAD, CAM, CPU and Binary System. 10

SECTION - B

4. Explain the following : 5 × 4 = 20
 - (a) APT Language
 - (b) Motion Statement
 - (c) Post Processor statement
 - (d) Auxiliary statement
5. What do you mean by NC part programming language and APT language? 20

SECTION - C

6. What is robotic technology ? Explain with their joint. Links, end effectors, work volume and drive system. 20

7. Explain the different types of conveyors and material Handling Equipment. 20

SECTION - D

8. Differentiate between the following : 10, 10
 - (a) Contact and Non-contact Inspection Method.
 - (b) Optical and Non optical Inspection Method
9. Explain the role of computer in CIMS and what are the benefit of computer in CIMS. 20