24484

B. Tech. 7th Semester (ME) F. Scheme
Examination, December–2017

COMPUTER INTEGRATED MANUFACTURING

Paper–ME-425-F

Time allowed : 3 hours]　　　　　　[Maximum marks : 100

Note : *Q. No. 1 is compulsory. Students have to attempt five questions in total, at least one question from each section.*

1. (a) Define the automation. What are different types of automation ? 　　　　　　　　　　　　10

   (b) What is work volume in robotic technology ? 10

   (c) What is computer aided testing ? 　　　　10

Section–A

2. (a) What are basic components of NC system ? 　10

   (b) What are basic components of CNC system ? 10

3. (a) What are different types of memory ? 　　10

   (b) What are different advantages of CNC ? 　10

Section–B

4. (a) Discuss the computer assisted part programming. 　　　　　　　　　　　　　　　　10

   (b) Discuss the APT language geometry. 　　10

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5. Explain the following :

(i) Part programmer job

(ii) Tape coding and forward.   20

Section–C

6. (a) What are different types of robot control ?   10

(b) Explain the different types of FMS workstation.   10

7. Explain the following :

(i) Sensors in robatics

(ii) FMS components   20

Section–D

8. (a) Explain the role of computer in QC.   10

(b) What is material handling system ?   10

9. Explain the following :

(i) Function of computor in CIMS

(ii) Contact inspection method.   20