Register Number: …….

B.E DEGREE EXAMINATIONS: NOV/DEC 2010

Seventh Semester

MECHATRONICS ENGINEERING

U07MH702: Computer Integrated Manufacturing

Time: Three Hours **Maximum Marks: 100**

Answer ALL Questions:-

PART A (10 x 1 = 10 Marks)

1. Geometric modeling is type of

a) CAD system b) CAM system c) CAPP system d) CMPP system

2. Manufacturing Resource Planning is represented by

a) MRP b) MRP II c) MREP d) None.

3. Attribute code can be called as

a) Monocode b) Hybrid code c) Polycode d) decision code

4. Retrieval CAPP is also called as

a) Generative b) FMS c) none d) Variant

5. Shop Floor Control (SFC) is also called as

a) PAC b) PPC c) FMS d) PAP

6. Just In Time is useful in

a) Maintenance b) Inventory c) Production d) Transport

7. Integrated computer aided manufacturing definition is represented by

a) ICMD b) INCOM c) IDEF d) ICM

8. When two or more networks are connected it become

a) huge network b) Intranet c) none d) Internet

9. Modem is a network component of

a) Hardware b) software c) application d) none

10. In a Hierarchical data model lower level record is called

a) lower record b) child c) parent d) ground

PART B (10 x 2 = 20 Marks)

11. Draw a Product Life cycle.

12. What is dedicated and open system?

13. Define Part family.

14. Define cellular manufacturing.

15. What are all the types of bar codes?

16. What is FMS workstation?

17. What is data communication?

18. What are all the types of Net works?

19. What is Net Work Architecture?

20. What are all the types of data associations?

PART C (5 x 14 = 70 Marks)

21. a) List the product related activities of a company. Explain them.

(OR)

b) (i) Explain the island of automation with example. (7)

(ii) Explain about the changing manufacturing and management scene. (7)

22. a) Describe the general procedure of Generative CAPP system and compare it with Variant approach.

(OR)

b) How can we form the part family and explain the OPTIZ classification and codification system.

23. a) What are all the technologies available for use in automatic identification systems and explain.

(OR)

b) Explain the components of FMS with neat diagrams.

24. a) What is CIMOSA and explain about CIMOSA

(OR)

b) Explain Product Data Management with neat sketches.

25. a) Explain the following

(i) Manufacturing Automation Protocol (7)

(ii) Technical Automation Protocol (7)

(OR)

b) Explain the following

(i) Relational Data Model (7)

(ii) Hierarchical data model (7)

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