

**B.E DEGREE EXAMINATIONS: NOV/DEC 2014**

(Regulation 2009)

Seventh Semester

**MECHANICAL ENGINEERING**

MEC120: Computer Integrated Manufacturing

**Time: Three Hours**

**Maximum Marks: 100**

**Answer ALL Questions**

**PART A (10 x 1 = 10 Marks)**

1. MRP II stands for

- (a) Manufacturing resources planning                      (b) Material Requirements Planning  
(c) Material resources planning                              (d) Market resource planning

2. CAD/CAM Functions with Business functions can be called as

- (a) Manufacturing                      (b) Planning                      (c) CIM                      (d) CAPP

3. 12345 6789 ABCD sequence is followed for the following coding system

- (a) Optiz                      (b) MICLASS                      (c) RNC                      (d) DCLASS

4. Retrieval CAPP is also called as

- (a) Variant CAPP                      (b) CAPP                      (c) Generative CAPP                      (d) Standard CAPP

5. MPS stands for

- (a) Manufacturing Plan schedule                      (b) Master plan sequence  
(c) Master Production Schedule                      (d) Master Plan Schedule

6. Driverless train in industry is a type of

- (a) AGV (b) Train for public  
(c) higher official vehicle (d) Tool control device

7. The model that is used for describing the dynamics of the system is

- (a) IDEF 0 (b) IDEF 2 (c) IDEF 1 (d) ACD

8. A data communication system covering a long distance transmission

- (a) LAN (b) WAN (c) MAN (d) VAN

9. The OSI Layer allows users on different machines to establish sessions between them is

- (a) Data link (b) Net work (c) Session (d) Application

10. A data model that uses the tree concept to represent data and the relationship among them is

- (a) Hierarchical data model (b) Relational data model  
(c) object oriented data model (d) Network data model

**PART B (10 x 2 = 20 Marks)**

11. Define CIM.

12. What is production planning and control?

13. What is cellular manufacturing?

14. Explain the term CAPP.

15. Differentiate between MRP II and capacity planning.

16. What is the philosophy of Just in Time?

17. What is a data dictionary?

18. Define LAN.

19. List the components of a data communication system.

20. Define an 'open system' with respect to data communications.

**PART C (5 x 14 = 70 Marks)**

21. a) Explain the Process Planning activities in detail.

**(OR)**

b) Explain about the network management and installations.

22. a) Explain about Group technology in detail.

**(OR)**

b) Explain about the future development of CAPP.

23. a) Write short notes on shop floor control and its benefits.

**(OR)**

b) Define FMS and explain the components of FMS.

24. a) What is CIMOSA? Explain.

**(OR)**

b) Explain about the technical aspect of LAN.

25. a) What is the function of MAP?

**(OR)**

b) Write short notes on DBMS and its components.

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