

Register Number:.....

**B.E., DEGREE EXAMINATIONS MAY/JUNE 2013**

Seventh Semester

**MECHANICAL ENGINEERING**

MEC120: Computer Integrated Manufacturing

**Time: Three Hours**

**Maximum Marks: 100**

**Answer ALL Questions:-**

**PART A (10x1=10 Marks)**

1. The process of making decisions and directing the activities of personnel to achieve stated objectives is known as \_\_\_\_\_  
A. Marketing      B. Management      C. Manufacturing      D. Engineering analysis
2. A product focused process is commonly used to produce  
A. High-volume, high-variety products  
B. Low-volume, high-variety products  
C. High-volume, low-variety products  
D. Low-variety products at either high- or low-volume
3. In Opitz classification system, the second four digits are called  
A. Supplementary code      B. Form code      C. Secondary code      D. Operation code
4. Result of process planning is  
A. Part family      B. Plant Layout      C. Routing      D. Manufacturing method
5. Which one of the following technologies is used only for material handling, not actual production or assembly?  
A. Robots      B. CNC      C. CAD      D. AGVs.
6. "Operators simply load new programs, as necessary, to produce different products" describes  
A. Automated guided vehicles      B. Flexible manufacturing systems (FMS)  
C. Vision systems      D. Process control
7. The process of separating the original information signal from the carrier signal is known as  
A. Modulation      B. De-Modulation      C. Signal attenuation      D. Signal Transmission
8. Telephone networks is a example of  
A. Analog transmission of analog data      B. Digital transmission of digital data  
C. Analog transmission of digital data      D. Digital transmission of analog data



**(OR)**

b) (i) What are the components of PMS? Explain briefly about the various types of FMS layout. (8)

(ii) With neat sketch, discuss the horizontal carousel system. (6)

24. a) (i) Explain the CIMOSA model with a neat diagram. (6)

(ii) Discuss about the product data management. (8)

**(OR)**

b) Explain the components of a Local Area Network and network topologies.

25. a) With aid of neat sketch, explain the manufacturing automation protocol and technical office protocol.

**(OR)**

b) Explain the features of a database management system and database model.

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