Register Number…….

M.E. DEGREE EXAMINATIONS: NOVEMBER 2009

Third Semester

CAD / CAM

P07CCE08 - Flexible Competitive Manufacturing Systems

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

Answer ALL the Questions:-

PART A (10 x 2 = 20 Marks)

1. Define the term Numerical control
2. Give the Classification of Sensors
3. Give examples for part design attributes.
4. What is meant by Production Flow Analysis Method
5. Write down the benefits of FMS.
6. Define: Dedicated FMS
7. Define the Simulation and justify its need.
8. Name few Simulation Software Packages.
9. Write the effects of JIT production
10. Write the benefits of JITs

PART B (5 x 16 = 80 Marks)

11.a) Explain the general configuration of NC, CNC and DNC. Compare NC, CNC and DNC.

(OR)

b) Give an account on Industrial Robots.

12. a) Explain Multiclass system of parts classification and coding with a relevant example.

(OR)

b) Explain the Machine Cell Design including types of Machine Cells and Layouts.

13.a) Explain the components of Flexible Manufacturing Systems.

(OR)

b) Explain the types of FMS based on (i) Flexibility (ii) No. of. machines

14.a) Give an account on FMS software specification and selection.

(OR)

b) Elucidate the meaning and importance of a database in Flexible Manufacturing Systems with a typical system design and corresponding database layout.

15.a) Explain how Kanban system works and the various Kanban Rules.

(OR)

b) Explain the JIT purchasing, Steps in Implementation.

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