

Register Number:

M.E.DEGREE EXAMINATIONS: JANUARY 2011

First Semester

INDUSTRIAL ENGINEERING

IEE552: Computer Integrated Manufacturing System

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 2 = 20 Marks)

1. Define Computer Integrated Manufacturing.
2. What are the benefits of CIM?
3. Define Group Technology.
4. Define generative approach.
5. Define Material Requirements Planning.
6. What is meant by Master Production Schedule?
7. Differentiate contact and non contact inspection.
8. What are the advantages of CMM?
9. Define Flexible Manufacturing System.
10. What is the difference between CNC and DNC?

PART B (5 x 16 = 80 Marks)

11. (a) What is a CIM wheel? Explain its different segments in relation to CIM's scope.
(OR)
(b) Discuss the stages in product development cycle and the importance of each stage.
12. (a) Explain the OPTIZ coding system with example.
(OR)
(b) Briefly describe the benefits of Group Technology.
13. (a) Draw and explain the bar-code technology.
(OR)
(b) What is production planning and control? Describe the various activities of PPC system.

14. (a) Explain the quality control system with block diagram.

(OR)

(b) Draw and explain the working and different types of CMM.

15. (a) With suitable sketches explain the various FMS layout configurations.

(OR)

(b) Explain the different types of material handling equipments.
