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Reg. No. : .....

Name : .....

Eighth Semester B.Tech. Degree Examination, November 2015
(2008 Scheme)
08.806.10 : FLEXIBLE MANUFACTURING METHODS (MPU)

Time : 3 Hours Max. Marks : 100

***Instructions** : 1) Answer **all** questions from Part – **A**.*

*2) Answer **one full** question from **each** Module of Part – **B**.*

PART – A

1. What is a super computer ? What are its applications ?
2. Explain Programmable Logic Controller (PLC).
3. Explain NC coordinate system.
4. Write the steps in NC part programming.
5. What are the various types of material handling system used in FMS ?
6. Enumerate the applications of industrial robots.
7. Explain the relevance of Job coding.
8. List out the factors considered before implementing FMS.
9. What do you understand the term flexibility in FMS ?
10. Compare computer aided design and manual design. **(10×4=40 Marks)**

PART – B

Module – 1

11. a) Explain Cathode Ray Tube (CRT) display with neat sketch.

    b) Explain the motion control system of NC. **20**

12. a) Explain the important types of input devices used in computer graphics.

    b) Explain Computer Assisted Part Programming (CAPP). 20

Module – 2

13. a) Explain the architecture FMS workstation.

    b) Explain OPITZ coding system with an example. 20

14. a) Explain the physical configurations of fem types of Industrial Robots.

    b) Explain any one type of AGV guidance system. 20

Module – 3

15. a) Explain tool management system used in a manufacturing organisation.

    b) Differentiate between FMS and FML with sketch. 20

16. a) Explain FMS loop layout with neat sketch.

    b) Discuss the various aspects of economics of FMS. 20