Reg. No. : ....

Name : ....

Eighth Semester B.Tech. Degree Examination, December 2013
(2008 Scheme)
08.806.10 : FLEXIBLE MANUFACTURING METHODS (MPU)

Time : 3 Hours

Max. Marks : 100

Instructions :1) Answer **all** questions in Part **A**.
      2) Answer **one** full question from **each** Module of Part **B**.

PART – A

(10×4=40 Marks)

1. Name the input devices and output devices used for computer graphics.

2. Explain N.C. co-ordinate system.

3. Explain APT language.

4. Name the four elements of FMS and its function.

5. List out the features of Group technology.

6. Enumerate the factors considered before selecting a material handling equipment.

7. Write notes on FMS work station.

8. Listout the type of material handling and suitable handling equipment used in manufacturing industry.

9. Briefly discuss the Artificial Intelligence.

10. Sketch a jointed arm robot with three degrees of freedom.

PART – B

Module – 1

11. a) Explain raster seem technique of CRT screen.

    b) Explain CAM and its application.   **20**

12. a) Explain the basic elements of NC system.

    b) Explain motion control system used in N.C. machines.   **20**

Module – 2

13. a) With neat sketch explain the elements of FMS host computer.

    b) Explain Automated storage and retrieval system.   **20**

14. a) Explain a type of part feeder with neat sketch.   **20**

    b) Explain any two types of FMS layout.

Module – 3

15. a) Explain FMS control software in manufacturing control.

    b) Explain the different steps in implementing FMS.   **20**

16. a) Explain the tool management systems is used in FMS.

    b) Explain FMS with neat sketch.   **20**