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Total Number of Pages : 01

M.TECH

AR-19

M.TECH 1<sup>ST</sup> SEMESTER EXAMINATIONS NOV/DEC 2019

MT, MPEMT1052

COMPUTER INTEGRATED MANUFACTURING

Time: 3 Hours

Max Marks : 70

The figures in the right hand margin indicate marks.

PART-A

(10 X 2=20 MARKS)

1. Answer the following questions.

- a. Explain Flexible automation?
- b. What are the benefits of automation?
- c. Classify various processing Operation.
- d. Give the definition of material handling and its objective.
- e. Explain Error recovery:
- f. What are the various types of Automated Guided Vehicles?
- g. What is work volume?
- h. What the major issues in the construction of a coding system?
- i. List the four tests for flexibility in FMS research.
- j. What is accuracy and repeatability in industrial robots?

PART-B

(5 X 10=50 MARKS)

Answer any five questions from the following.

- 2) Explain the basic elements an automated system.
- 3) Explain some ground rules that must be followed in formulating an APT geometry.
- 4) Explain various Principles of Material Handling.
- 5) Explain flexibility and its types.
- 6) Explain the methods for grouping part families?
- 7) Explain the types of mechanical joints commonly used in industrial robot construction, with neat sketch
- 8) Write short note on group technology?