Code No: 127AR/117AR/57032

Time: 3 Hours   Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks
- - -

1.a)   What factors are to be considered in the design of parts for feeding at regular intervals to various locations?

  b)   Describe with a pneumatic circuit the past feeding and clamping?   [7+8]

2.a)   What are the various types of automation existing in practice and explain about flexible automation?

  b)   What factors are to be considered in the design of parts for automatic feeding?   [7+8]

3.a)   How the transfer lines are designed to improve production rate and line efficiency?

  b)   What is upper bound analysis of transfer lines without any storage?   [7+8]

4.a)   What are the advantages of storage buffers in the automated flow lines and explain its effect on line efficiency?

  b)   How the average production time, average production and line efficiency can be found for automated flow lines?   [7+8]

5.a)   What are the various assembly processes exist in industry and explain methods to automate mechanical festering?

  b)   What are the factors to be considered in the selection of particular assembly system?

                                                                                             [7+8]

6.a)   What are the various methods available for line-balancing and explain about largest candidate rule used in line-balancing?

  b)   What are the various material handling systems used in Automation and explain about selection criterion for a particular task?   [7+8]

7.a)   What are the objectives for installation and working of AGV in Assembly process?

  b)   How to design automated storage and retrieval system for custom planned and each individual application?   [7+8]

8.a)   What are the various actuators used in Automated assembly and mention their features?'

  b)   How the material requirement planning is useful in computer integrated production planning system?   [7+8]

--ooOoo--