

UNIT - III

- 5 a. With a neat sketch, explain parts feeding system of an automated assembly system. 12
- b. With the help of neat sketches, explain in detail a carousel type and single station assembly system. 8
- 6 a. With a block diagram, explain retrieval type of process planning. 10
- b. Explain the inputs and outputs from MRP system. 10

UNIT - IV

- 7 a. Explain the categories of AGV's. 10
- b. Explain any five types of AS/RS. 10
- 8 a. Explain the basic components of PLC. 10
- b. Write short notes on:
- (i) Sensors 10
- (ii) Actuators

UNIT - V

- 9 a. What are Automatic Identification and Data Capture (AIDC)? Explain the three principal components of AIDC. 8
- b. Explain the classification of AIDC technology. 6
- c. List some of the common applications of AIDC technologies. 6
- 10 a. Explain with neat sketches, cantilever and horizontal arm types of CMM construction. 8
- b. With a simple sketch, explain basic function of a machine vision system. 12

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