

R18

Code No: 157AP

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year I Semester Examinations, February/March - 2022

AUTOMATION IN MANUFACTURING

(Mechanical Engineering)

Time: 3 Hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

1. Explain mechanical feeding and tool changing system in detail. [15]
2. Discuss machine tool control transfer the automaton in detail. [15]
3. Analyze the methods of work part transport transfer with neat diagram. [15]
4. Illustrate the analysis of transfer lines without and with buffer storage. [15]
5. Evaluate the assembly process and systems assembly line in detail. [15]
6. Discuss the ways of improving line balance methods. [15]
- 7.a) Discuss interfacing handling and storage with manufacturing.
b) Explain the automated guided vehicle systems with neat sketch. [7+8]
- 8.a) Discuss LAN in Manufacturing.
b) Explain various types of actuators used for industrial controls. [7+8]

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