

Total No. of Questions : 4]

SEAT No. :

P-5360

[Total No. of Pages : 1

[6188]-313

B.E. (E & TC) (Honors) (Insem.)

INDUSTRIAL ROBOTICS & AUTOMATION

(2019 Pattern) (Semester - VII) (404181)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Attempt Q.1 or Q.2 & Q.3 or Q.4.
- 2) Figures to the right indicate full marks.
- 3) Assume suitable data, if necessary.

- Q1)** a) What is the cycle time in a Manufacturing operation. [5]  
b) What is production capacity? How can plant capacity be increased or decreased in short term. [5]  
c) What is computer integrated manufacturing. [5]

OR

- Q2)** a) Define Automation. Explain basic elements of an Automated System in production system. [5]  
b) Define control system and its types with suitable block diagram. [5]  
c) Explain levels of Automation related to production system. [5]

- Q3)** a) What is the difference between a processing operation and an assembly operation. [5]  
b) What is the difference between a single model production line and mixed-line production line. [5]  
c) What is manufacturing lead time explain in details. [5]

OR

- Q4)** a) Explain partial Automation with reference to manufacturing. [5]  
b) Explain the reasons and strategies of Automation. [5]  
c) Give different types of automated assembly systems. [5]

