

Total No. of Questions : 4]

SEAT No. :

PD-199

[Total No. of Pages : 2

[6410]-525

T.E. (Robotics & Automation) (Insem.)
FLEXIBLE MANUFACTURING SYSTEMS
(2019 Pattern) (Semester - II) (311510 A)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates :

- 1) Solve Q.1 or Q.2, Q.3 or Q.4.
- 2) Figure to the right indicates full marks.
- 3) Neat Diagram must be drawn wherever necessary.
- 4) Assume Suitable data if necessary.
- 5) Use of Logarithmic Table, Slide rule is Electronic pocket calculator is allowed.

- Q1)** a) Define FMS, and explain, different types of FMS. [7]
b) What are the major elements of FMS? State the applications of FMS. [8]

OR

- Q2)** a) Discuss the benefits and limitations of FMS. [7]
b) Discuss components of FMS and their integration in the data processing system. [8]

- Q3)** a) Explain the cellular manufacturing in detail.
Four machines will constitute a GT cell. The from-to data for the machine are as follows. [7]

b)

		From			
		1	2	3	4
To	1	0	5	0	45
	2	0	0	0	0
	3	50	0	0	0
	4	0	45	0	0

Determine the most logical sequence of machines for these data by Hollier's method. [8]

P.T.O.

OR

- Q4)** a) Explain the role of group technology in FMS? [7]
b) Differentiate between Cellular versus flexible manufacturing. [8]

