Seat No.:	Enrolment No.

## GUJARAT TECHNOLOGICAL UNIVERSITY ME SEMESTER – I EXAMINATION – SUMMER 2017

Subject Code:2710312 Date:10/05/2017

**Subject Name: INTELLIGENT SYSTEMS AND CONTROL** 

Time:02:30 p.m. to 05:00 p.m. Total Marks: 70

**Instructions:** 

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.

Q.1		Discuss about fuzzy control design with suitable example in detail	14
Q.2	(a) (b)	Discuss about fuzzy PID controller design.  Discuss about Process Reaction Curve method for tuning of PID controller  OR	07 07
	<b>(b)</b>	Discuss about Relay feedback method for tuning of PID controller	07
Q.3		Give explanation on ADALINE in detail.	14
Q.3		<b>OR</b> Discuss about single layer perceptron for linear classification in detail with example.	14
Q.4		Discuss about multilayer layer perceptron for classification in detail with example.	14
		OR	
Q.4		Discuss about delta traing rule with some example in detail.	14
Q.5		Discus about assessment of PI/PID Control Performance in detail .	14
0.5		<b>OR</b> Discuss about Genetic algorithm methods in the tuning of PID controller.	14

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