

List of Figures

Figure No.	Title
1.1	Fuzzy set of temperature
1.2	Infinite triangular fuzzy set
1.3	Trapezoidal fuzzy set
1.4	Exponential fuzzy set.
1.5	A graphical representation of the height defuzzyfication method.
1.6	Centroid defuzzification method
1.7	Weighted average method of defuzzyfication.
1.8	Min max membership defuzzyfication method.
1.9	Center of sum method.
1.10	Centre of largest area method.
1.11	First of maxima method.
2.1	Characteristics of Thermistors
2.2	(a) Inexpensive timer configuration (b) Output waveforms at pins 3 and 2,6.
2.3	Design chart
2.4	(a) Membership function for frequency (b) Membership function for time constant
2.5	Variation of frequency with temperature
3.1	General Schematics of Fuzzy Temperature Controller
3.2	System block diagram of Fuzzy Logic Temperature Controller
3.3	Zero Crossing Detector Circuit
3.4	Heater Control Circuit using Opto-coupler and Triac
3.5	Fuzzy membership function for temperature.
3.6	Fuzzy membership function for count as temperature sense.
3.7	Fuzzy membership function for the output % duty cycle.
3.8	(a) Temp. Sense
3.8	(b) Defuzzyfication of Duty Cycle
3.9	System Software Flow Chart
3.10	(a) Membership function for Temperature
to	
3.13	(a) Membership function for Temperature
3.10	(b) Membership function for % Duty Cycle
to	
3.13	(b) Membership function for % Duty Cycle