

CONTENT

Chapter	Title	Page No.
	HISTORICAL	
I	1. Evolution of microprocessors.	1
	2. What is a M.P.	1
	3. Architecture	4
	4. Microcomputer organisation	8
	5. Buses	6
	6. Why M.P.	8
	7. Orientation of the work	9
	References.	10
II	Temperature transducers	
	2.1 Introduction	12
	2.2 Temperature sensors	12
	2.3 Experimental procedure	17
	2.4 Furnace construction	21
	References	23
III	Architecture of 8085 and temperature control techniques.	
	3 Introduction	25
	3.1 8085 microprocessor	25
	3.2 8085 Processor signals	28
	3.3 Registers	33
	3.4 The ALU	35
	3.5 Timing and the control unit	35
	3.6 Why 8085	36
	3.7(a) Some techniques of temperature measurement and control	36

Chapter	Title	Page No.
	3.7(b) Microprocessor based control systems.	42
	References.	50
IV	Temperature control system	53
	4.1 Theoretical development	53
	4.2 Discontinuous controller modes	54
	4.3 Continuous controller mode	54
	4.4 Temperature control system	63
	4.5 Microprocessor based system	67
	4.6 Analog to digital converter	69
	4.7 Display and driving circuit	70
	4.8 Support chips	78
	4.9 74193	82
	4.10 2732	82
	4.11 8155	85
	4.12 MC 14433	92
	References	98
V	Summary and conclusion.	100

