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FINAL REPORT OF DIPLOMA PROJECT

AUTOMATIC REGULATED TEMPERATURE
WAX BATH

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ABSTRACT

Paraffin wax bath is used to soothe chronic arthritis joint pain, to relax stiff muscles, and also to increase range of motion. The purpose to choose this project because this project will be upgrade the equipment that already have from taking wax temperature manually to the automatically taking wax temperature. This way can be increase the safety to user to use it from danger when doing checking wax temperature. So, this project use temperature sensor, which is LM 35 to sense the presence of the temperature of the wax. When the sensor detects the temperature above the desired temperature, the heater will off automatically heat the water and the paraffin wax. If the temperature below desired temperature, the heater will automatically on.

This project uses many components, electronic components such as LCDs, PIC 16F876A, heater, relays, voltage regulator circuit. LCD function is to display the temperature reading so that users read the temperature of the wax quickly. Thus, this project is improvement version uses a sensor to measure the temperature of the wax is automatically and can save time.

TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	DECLARATION	i
	DEDICATION	iv
	ACKNOWLEDGEMENTS	v
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xi
	LIST OF FIGURES	xii
	LIST OF SYMBOLS	xvi
	LIST OF ABBREVIATIONS	xvii
	LIST OF APPENDICES	xviii
1	INTRODUCTION	1
	1.1 PROBLEM STATEMENT	2
	1.2 OBJECTIVE OF THE PROJECT	2
	1.3 SCOPE OF PROJECT	2
2	LITERATURE REVIEW	3
	2.1 ABLITY	3
	2.2 PIC16f876A	3
	2.3 LM35.DZ	4
	2.4 HEATER	5

2.5	RELAY	5
2.6	LIGHTING EMITTING DIODE (LED)	6
2.7	LIQUID CRYSTAL DISPLAY (LCD)	7
3	METHODOLOGY	9
3.1	FLOWCHART	10
3.2	CIRCUIT LAYOUT	11
3.3	CIRCUIT DIAGRAM	12
3.4	CIRCUIT IMPLEMENTATION	13-17
4	RESULTS AND DATA ANALYSIS	18-22
5	CONCLUSIONS	23
5.1	Discussions	23
5.2	Conclusions	24
5.3	Future Recommendations	24
	REFERENCES	25
	Appendices A – E	26-32
	DATASHEETS: PIC16F876A, CRYSTAL, LM35 DZ	