## **INDEX**

1.	INTRO	DUCTION	
	1.1 Introd	uction	1
	1.2 Need	of Project	4
	1.3 Object	tives of Project	4
2.	LITER	ATURE SURVEY	
	2.1 Nation	nal Survey	5
	2.2 Comp	arison between Old model & Proposed model	5
	2.3 Component Survey		
3.	SYSTE	M DEVELOPMENT	
	3.1 Block Diagram.		
	3.2 Functional Partition.		14
	3.2.1	Microcontroller Block	14
	3.2	2.1.1 Arduino Uno	14
	3.2	2.1.2 Power Supply	15
	3.2.2	Acquisition Block	16
	3.2.3	Automatic functional Block	17
	3.2	2.3.1 Relay Module	18
	3.2	2.3.2 Water pump	19
	3.2.4	Monitoring Block	20
	3.3 Power	Supply Design	21
	3.4 Hardware Specification		23
	3.4.1	Arduino Uno	23
	3.4.2	Moisture Sensor	27
	3.4.3	LCD Display	28
	3.4.4	Water Pump (Motor)	31
	3.4.5	Relay	33
	3.5 Circui	t Diagram	34

## 4. PCB MANUFACTURING

	4.1 PCB manufacturing process	35
	4.2 PCB layout	38
	4.3 Model Photograph	39
	5. SOFTWARE DESIGN	
	5.1 Steps to How to Debug Arduino Project.	40
	5.2 Flowchart.	46
	5.3 Program	47
6.	CONCLUSIONS	
	6.1 Advantages	49
	6.2 Conclusion.	46
	6.3 Future scope	50
	6.4 Applications	50
References		51
Da	ata Sheet	53
A۵	cknowledgement	59