

School of Electronics and Communication Engineering

Second Year B. Tech. (ECE)

Trimester VI

Microcontrollers Course Code: ECE214A

Synopsis

1. Details of Group No:

Sr. No.	Name of Student	Div	Roll No.	Email Address	Mobile No.
1	Radhika Desai	A	PA34	1032191361@mitwpu.edu.in	9422313300
2	Piyush Pamnani	A	PA35	1032191471@mitwpu.edu.in	7509245660
3	Ruchin Shroff	A	PA36	1032191501@mitwpu.edu.in	8793514266

2. Title:

Automated Plant Watering System

3. Problem Definition and Details:

This system is designed to irrigate/water plants automatically in a domestic environment. Such a design can be used to irrigate large fields as well. It is necessary to keep track of the water given to plants in order for them to grow healthy. Manually we might make errors while watering plants, sometimes too much or too less and in some cases forget to water them completely. Although no harm is done in a domestic environment, in cases of error in watering fields, the whole crop can go bad. To prevent such errors on a major scale, and make everyday life easier on a domestic scale, we can use an automated plant watering system. This also contributes in less usage of water.

4. Resources Required:

- a) Microcontroller C8051F340/F380
- b) Power Supply
- c) Relay
- d) Transformer
- e) Rectifier
- f) Filter
- g) Moisture Sensor
- h) Temperature Sensor
- i) LCD

- j) LED
- k) DC Motor
- 1) ADC Converter

Signature of Student/s with Date:

1. Radhika Desai

Pasai 10/5/21

2. Piyush Pamnani

10/05/2021

3. Ruchin Shroff 10/5/21

Signature of Subject teacher: