



**NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY  
ELECTRICAL DEPARTMENT**



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**Internal Guide: - Mr. Nimesh Saxena**

**External Guide :- -**

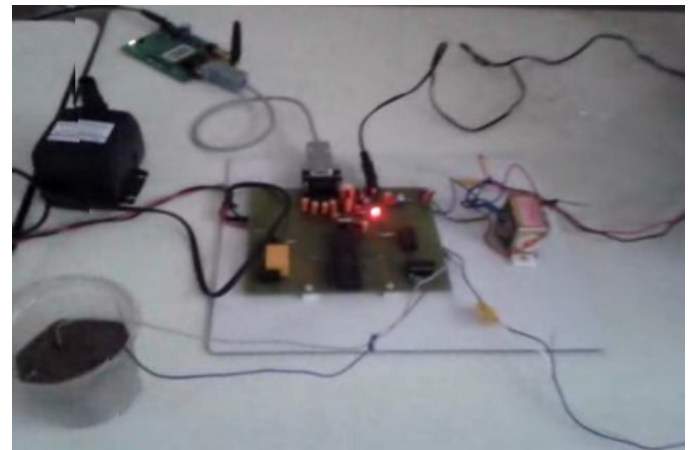
**Project Title: - FIELD IRRIGATION CONTROL SYSTEM USING GSM BASED**

**Abstract:-** The Field Irrigation Control Using GSM (General sim module) Based is a System that monitors and control the soil moisture content of Blueberry fields and water level of the well. It shows that the signal from soil moisture sensor and water level sensor will be conditioned and Amplified by Operational Amplifier before it reaches microcontroller to analog to digital converter. According to this input information the microcontroller will decide when to turn on the water pump and how long to keep it on. The operator can also communicate with the microcontroller through the keypad and a Display (mobile) to change settings such as on time and off time.

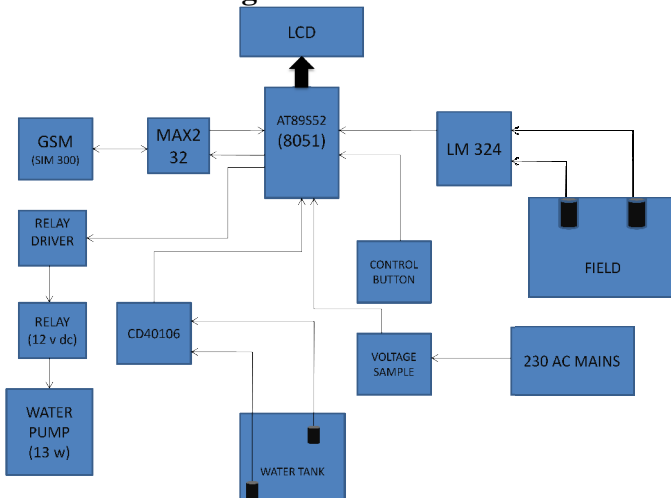
(3) People even with less technical knowledge can operate this system.

**Approx. Project Cost: -7000/-**

**Project Photo:-**



**Block /circuit Diagram:-**



**Major Hardware components used:-**

Microcontroller AT89S52, Max 232 OP-Amp, Sensor, relay, Humidity and Temperature Sensor, GSM (sim 300), LCD

**Software used:- Kail**

**Project Application:-**

- (1) We can know the status of the soil moisture and water level by receiving sms using GSM
- (2) We can turn on/turn off the water pump by sending sms using GSM