**4.**Information from the sensors is transmitted to the arduino board. The arduino board consists of microcontroller ATMEGA328P which is responsible for controlling the switching on/off of the motor on which water sprinklers can be attached.

**5.**The GSM modem is a highly flexible plug and play quad bandSIM900A GSM modem for direct and easy integration to RS232 applications.

**7.** On or off and a button which redirects the user to a thing speak page which graphically depicts the sensor values.

**6.** This section comprises of a webpage which displays the current water sprinkler status.

**1.**Two YL-69 soil moisture sensors along with LM393 comparator modules were placed in different soil conditions for analysis.

**2.**The Atmega 328P-PU microcontroller used for the Arduino Uno contains an onboard 10-bit 6-channel analog-to-digital (A/D) converter.

**3.**The analog input pin of Arduino can read analog signals being sent from the sensor and return binary integers from 0 to 1023.

Moisture Sensing Section

Moisture Sensing Section

Smart Irrigation System

IOT Section

IOT Section

Control Section

Control Section

IOT based Smart Irrigation System