**ADVANCED GREEN HOUSE FARMING**

**ABSTRACT:**

Our main aim is to monitor green house from anywhere without any need of working labor over there. It is done by interfacing microcontroller (8051) with several sensors (temperature, moisture, humidity) and GSM to communicate. Sim of user is placed in GSM module and the main module is powered with 230v AC (which is later converted to 5v dc to power all the peripherals) whereas the GSM module is separately powered by a 12v dc adapter, user can leave the whole setup and control it from anywhere using simple commands in the form of messages. In order to on the motor the user has to send ONM as message to the sim placed in GSM, this command ON the motor and send the status off the three sensors in return to the sender by this he can able to determine how much time he should on the motor and send the OFM command to off it and in return the user gets the status again so that the user can make sure that it is sufficient or not.

5v power supply to the 8051 , max232, adc0809 is provided by stepping down 230v ac to 12v dc by using a transformer followed by a full wave rectifier ,filters and a 7805 voltage regulator. Adc is used to convert analog output of sensors to digital output. Max232 is used to promote serial communication between 8051 and GSM . A 230v AC pump is used to demonstrate and is controlled by a 12v relay and by a BC547 transistor