**Experiment 3:-**

Design a mobile phone controlled light system.

**Block diagram:-**

**BLUETOOTH MODULE**

**ARDUINO UNO**

**TRANSMITTER**

**(android application device)**

**Theory:-**

Concepts used:-

**Bluetooth HC-05**

* For the communication between mobile and microcontroller Bluetooth module HC-05 is used.
* Low power 1.8V operation, 1.8 to 3.6 I/O.
* It consist of 4 pins:-
* Rx,Tx,G,+5V out of which except Rx all are connected as follows:

Tx of BT – Rx of Arduino

Ground of BT – Ground of Arduino

+5V of BT – +5V of Arduino

**Learning:-**

* I have learned through this project the use of Bluetooth controlled lighning system practically.

**Observations:-**

* When we pass electrical signals through our code the LED glows.
* When the Bluetooth device sends the data to Arduino through our code then LED glows.

**Problems faced:-**

The problems I faced:-

* The circuit was not working because the connections were not proper.
* The LED was in a bad condition.

**Precautions:-**

The precautions that should be taken while doing this experiment are:-

* The connections should not be loose.
* Every stuff should be joined at their appropriate place and it should be properly closed.
* The code should be written properly.

**Learning Outcomes:-**

* I have learned how to control lighning system with Bluetooth module by mobile and use it with Arduino board.
* I have learned how all the hardwares should be connected to make them work in a proper condition.