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N B Arts and K C P Science College,
Vijayapur.

Department of M.Sc. (Computer Science)

A REPORT ON Project

Entitled

**“IoT based Emission Test System Using
Arduino UNO R3”**

Seed Money Funded by Alumni Association

Developed by

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comes pre-programmed with an AT command set firmware, meaning, we can simply connect to the Arduino device. The ESP8266 module is an extremely cost effective board.

MQ135 Gas Sensor

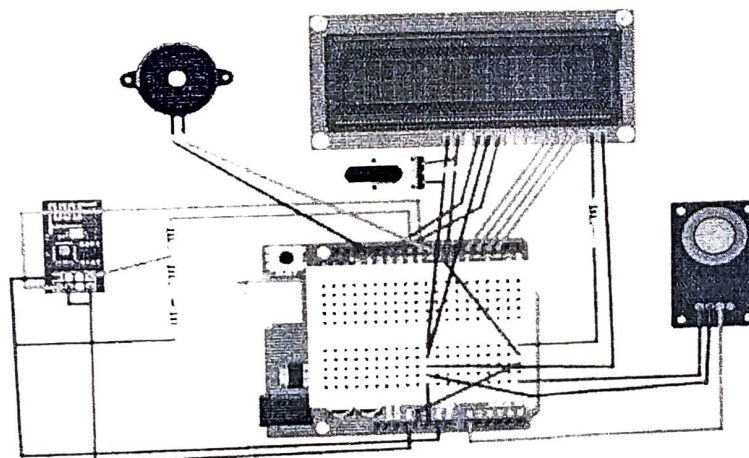
The Sensitive material used in MQ135 gas sensor is SnO₂. The conductivity of this material is lower in clean air. The sensor conductivity increases with the increasing concentration of target pollution gas. MQ135 can monitor different kinds of toxic gases such as sulphide, ammonia gas, benzene series steam and CO₂. The detection range is 1010,000 ppm with the voltage rate of about 5.0V±0.1V AC or DC.

4. CIRCUIT DIAGRAM AND EQUIPMENT

COMPONENTS and PRICE

Sl. No.	Component	Quantity	Price
1.	MQ135 Gas sensor	01	660
2.	Arduino Uno	02	1198
3.	Wi-Fi module ESP8266	01	357
4.	1K ohm resistors	02	--
5.	220 ohm resistor	02	--
6.	Buzzer	01	30
7.	External Hard Disk	01	4850
8.	Training fees	01	2000
9.	Future Scope(Use)	-	905
	TOTAL Expenses		10000

CIRCUIT DIAGRAM




WORKING


We start with connecting the ESP8266 with the Arduino. ESP8266 runs on 3.3V and if you will give it 5V from the Arduino then it won't work properly and it may get damage. Connect the VCC and the CH_PD to the 3.3V pin of Arduino. The RX pin of ESP8266 works on 3.3V and it

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