**PATIENT MONITORING SYSTEM WITH AUTOMATIC SMS ALERT**

**AIM:**

The main aim of this project is to monitor and detect the patient’s real-time body temperature, heart rate information’s, and transmit them to the concerned doctor.

**PURPOSE:**

By utilizing the wireless technique the patient body condition can be messaged to the concerned doctor during emergency situation.

**PATIENT SECTION:**

**MICRO CONTROLLER**

**AT89S52**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**MAX 232**

**PULSE SENSOR**

**TEMPERATURE**

**SENSOR**

**GSM**

**BUZZUR**

**ADC**

**Power Supply:**

**STEP DOWN**

**TRANSFORMER**

**BRIDGE**

**RECTIFIER**

**FILTER**

**CIRCUIT**

**REGULATOR SECTION**

**DESCRIPTION:**

Now a day with the increase of biomedical sensor we are going into this process of detecting the patient’s real-time body temperature, heart rate and other physiological information’s. The temperature sensor and pulse sensor module are used for acquiring medical information from the outside, and then converts them to digital signals. From the medical monitoring unit patient’s temperature is taken and given to the ADC.

ADC converts this analog data into digital format and sends to the microcontroller, microcontroller will process this data and whenever parameters exceeds threshold value than buzzer sound is provided for indication purpose. Here the microcontroller initiates with GSM module and send the data as wireless paging to the concerned doctor during emergency situation.

**HARDWARE COMPONENTS:**

1. Microcontroller (AT89S52)
2. Power supply
3. MAX 232
4. GSM
5. Pulse sensor
6. Temperature sensor
7. LCD display (16\*2 lines)
8. Buzzer
9. ADC0804

**SOFTWARE TOOLS:**

1. Kiel U vision
2. Express PCB
3. ISP

**ADVANTAGES:**

1. Patient condition can be continuously monitored through sensors.
2. Intimation through wireless communication (GSM).

**APPLICATIONS:**

1. Medical Application
2. Made easy to handle Emergency conditions

**RESULT:**

Hence, by implementing this project the monitoring terminal can precisely check the heart rate and body temperature of patients, and send them to concerned Doctor during emergency situation.