Project Design Phase-I Proposed Solution Template

| Date | 19 September 2022 |
|---------------|---------------------------------|
| Team ID | PNT2022TMID10955 |
| Project Name | Project - Hazardous Area |
| | Monitoring for Industrial Plant |
| | powered by IOT |
| Maximum Marks | 2 Marks |

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

| S.No. | Parameter | Description |
|-------|-----------------------------|---------------------------------------|
| • | Problem Statement | To monitoring industrial parameter |
| | (Problem to be solved) | monitoring and power |
| | | consumption control. |
| • | Idea / Solution description | The industrial devices are |
| | | controlled using cloud server which |
| | | alerts the admin about uneven |
| | | conditions using |
| | | Bluetooth.In short automation has |
| | | become an important term, |
| | | whether at home or the industries. |
| • | Novelty / Uniqueness | Relays can switch AC and DC, |
| | | transistors can only switch DC. |
| | | Relays can switch high voltages, |
| | | transistors cannot. |
| • | Social Impact / Customer | Relays are bulkier than transistors |
| | Satisfaction | for switching small currents. |
| | | Relays cannot switch rapidly |
| | | (except reed relays), transistors can |
| | | switch many times per second. |
| | | Relays use more power due to the |
| | | current flowing through their coil. |
| • | Business Model (Revenue | Industrial parameters are |
| | Model) | temperature, humidity, gas and fire. |
| | | These parameters are continuously |

| | | monitored by ARM7 and send |
|---|-----------------------------|-----------------------------------|
| | | values to the android app using |
| | | WIFI module.If any value goes |
| | | above the threshold then it send |
| | | SMS to supervisor and start the |
| | | output devices. |
| • | Scalability of the Solution | We implement a GSM module based |
| | | Embedded System concept. This |
| | | Arduino based embedded system |
| | | concept is to monitor and control |
| | | industrial parameter such as |
| | | (temperature, gas, fire,humidity) |
| | | and inform to responsible person. |