Project Design Phase-I
Proposed Solution Template

Date	19 September 2022
Team ID	PNT2022TMID26592
Project Name	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
1.	Problem Statement (Problem to be solved)	Hazardous Area Monitoring for Industrial Plant
2.	Idea / Solution description	Hazardous Area Monitoring for Industrial Plant project is based on Providing a wearable device which collects the data(temperature) via beacon sensors and displays it. An alert message is also sent to mobile whenever high temperature (or) toxic gases are detected within the area through SMS using API. Ensuring precautions and safety of the workers..
3.	Novelty / Uniqueness	Condition monitoring is integral in industrial operations to avoid downtime, to implement maintenance and to reduce the risk of failure. Remote condition monitoring has previously been limited in hazardous areas due to the lack of cost-effective and easy to install solutions – and the often-challenging environments in which this equipment exists.
4.	Social Impact / Customer Satisfaction	● Causalities ● Property damage ● Business interruption ● Loss of customers ● Financial loss ● Environment contamination

		● Fines and penalties
5.	Business Model (Revenue Model)	Raspberry - Pi3 Temperature Sensor - DS18B20 Gas Sensor - MQ 5/9 Breadboard OS (Running on Rpi-3) Simple push API Thingspeak Cloud Platform
6.	Scalability of the Solution	The solution is scalable and can be tailored to the size of any customers operation and according to specific needs. For instance, it can be started with only a few assets in a small area or can be introduced to an area with 100's of assets.