Project Design Phase-I
Proposed Solution
Template

Team ID	PNT2022TMID31392
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 powered by IOT
2.	Idea / Solution description	Hazardous Area Monitoring for Industrial Plant powered by IOT is a project report that focuses on the necessity of the monitoring of hazardous areas in industrial plants. Industrial plants are the ones that contain both hazardous and non-hazardous areas. The monitoring of the hazardous areas in industrial plants is important from time to time. If the damage that occurs in hazardous areas can result in the loss of property or lives.
3.	Novelty / Uniqueness	A hazardous area is any area with an atmosphere containing, or potentially containing, gases, vapor or dust which are flammable or explosive. These areas are rigorously analysed with condition monitoring when installing equipment to minimize the risk to individuals and assets. Conditions monitoring is integral in industrial operations to avoid downtime, to implement maintenance and to reduce the risk of failure.
4.	Social Impact / Customer Satisfaction	1. Real time plant monitoring 2. Reduced risk of disasters 3. Automated detection 4. Excellent customer experience

5.	Business Model (Revenue Model)	Raspberry -Pi 3 Temperature Sensor - DS18B20Gas Sensor - MQ 5/9 Breadboard Raspbian OS (Running on Rpi- 3)Simple push API Thing speak Cloud Platform
6.	Scalability of the Solution	This system can be deployed in many industrial areas like mining, underground factories, metal refineries, automatic welding factories and even heavy parts production lines. It will help to provide a safe and efficient working environment in which areas, while also opening new paths to improve the safety parameters of these places