Project Design Phase-I
Proposed Solution Template

Date	24 September 2022
Team ID	PNT2022TMID06971
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)	Plant Manager who needs to be informed of possible hazardous areas because it could pose a risk to the lives of the workers in the facility.
2.	Idea / Solution description	hazard monitoring and mitigation is often overlooked in industrial areas. Therefore, this project specifically aims to make use of IoT to actively monitor and analyze various factors in a typical heavy industrial zone like temperature and levels of gases in the environment.
3.	Novelty / Uniqueness	The plant campus might be spread across a large area, it is difficult for a person to reach every nook and corner of the campus. By installing wireless monitoring solutions, they can view the live real-time data coming from the machines on their mobile screens or laptop. Some managers hop between plants inside or outside the country as part of their duty, so it is difficult to keep track of what is happening at their base plant. With the help of cloud-based solutions, they can view the real-time data from any part of the world
4.	Social Impact / Customer Satisfaction	we can measure these parameters wirelessly and remotely thereby maintaining the production uptime. You can read more about how plant managers can remotely monitor their equipment easily and conveniently. The system should be able to detect the issues early in the machines thereby preventing unwanted downtime. IoT enabled remote monitoring solutions offer much more than just reducing operational costs, it makes the whole supervising process smooth and easy to handle.
5.	Business Model (Revenue Model)	The sensor modules should be affordable for the manufacturers. It should be also easily replaceable. The software used should be open source so there is no vendor lock-in period.
6.	Scalability of the Solution	This can be achieved through implementing wireless remote monitoring solutions that will keep the concerned authorities well-informed of any faults along the line. These solutions can also predict failures proactively, even before they occur.