

**Project Design Phase-I**  
**Proposed Solution**

Date	20 October 2022
Team ID	PNT2022TMID43363
Project Name	Hazardous Area Monitoring for Industrial Plant Powered by IoT
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	➤ Hazardous Area Monitoring for Industrial Plant Powered by IoT
2.	Idea / Solution description	<ul style="list-style-type: none"><li>➤ Using sensors to read the required parameters such as temperature, humidity that can be monitored</li><li>➤ If the sensor readings exceed safety threshold, alert message is sent to users SMS using services.</li><li>➤ These sensor values are stored in cloud and can be viewed from the mobile device.</li></ul>
3.	Novelty / Uniqueness	<ul style="list-style-type: none"><li>➤ If a parameter is violated, the system sends an immediate notification to a set of preset list of users on their smartphones, and continues logging and monitoring data for further analysis to suggest improvements in the safety regulations of the industry.</li><li>➤ The sensors used in this model can be modified with industry requirements whenever the need arises.</li></ul>
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"><li>➤ The system requires just minimum components to run and runs with minimal space and resource requirements.</li><li>➤ It is configured in a such a way that it recovers and reconnects itself after a crash and can resume working immediately</li></ul>

		<ul style="list-style-type: none"> <li>➤ Notification parameters and user access control can be adjusted to suit your requirements.</li> <li>➤ Cost effective model</li> </ul>
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> <li>➤ Device has the day-to-day applications where it is used in domestic to industrial and this yields more attraction among the industry people.</li> <li>➤ Device can be obtained by paying for the IBM clou/Watson subscription.</li> <li>➤ It can be yearly or monthly.</li> </ul>
6.	Scalability of the Solution	<ul style="list-style-type: none"> <li>➤ The project scope can be expanded such that emissions, radiations and weather condition can also be monitored.</li> </ul>