Project Design Phase-I
Proposed Solution
Template

Date	20 September 2022
Team ID	PNT2022TMID47383
Project Name	Project - Real-Time River Water Quality Monitoring and Control System
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)	Using real-time monitoring, instant data allows pre-cursors to potential issues (such as corrosion) to be flagged up and immediately be addressed before major issues occur. The ability to make real-time decisions during critical moments can be vital in preventing expensive repairs and breakdown. Water quality analysis is to measure the required parameters of water, following standard methods, to check whether they are in accordance with the standard. If the water quality is poor and it is below the permissible level it makes decision by comparing it with the previous reading date. By timing update we can save to many lives and even save the livestock like cows etc by preventing them from drinking river water. The river water is bound to get polluted from various pollutants such as the urban waste water, agricultural waste and industrial waste, thus making it unusable for anthropogenic activities. The traditional manual technique that is under use is a very slow process. It requires staff to collect the water samples from the site and take them to the laboratory and then perform the analysis on various water parameters which is costly and time-consuming process. The timely information about water quality is thus unavailable to the people in the river basin area. This creates a perfect opportunity for swift real-time water quality check through analysis of water samples collected from the river. IoT is one of the ways with which real-time monitoring of water quality of river can be done in quick time
2.	Idea / Solution description	To improve the water quality all over the country.
3.	Novelty / Uniqueness	Anytime monitoring system and It gives the Quantitative analysis of composition present in the stream
4.	Social Impact / Customer Satisfaction	Gives people the awareness of their water body condition real time and motivates them to improve water quality
5.	Business Model (Revenue Model)	Makes the cost efficient to a whole level since it whether to implement the large-scale water treatment.

6.	Scalability of the Solution	Good as working application at all rivers and remote locations.