Project Design Phase-I
Proposed Solution

Date	21 October 2022
Team ID	PNT2022TMID07167
Project Name	Real-time River water quality monitoring and control system
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Water is a finite resource that is necessary for agriculture, industry and the survival of all living things on the planet, including humans. Poor water allocation, inefficient consumption, lack of competent and integrated water management are all factors that contribute to this problem.
2.	Idea / Solution description	• Using accessible sensors at a distant location, monitor water parameters such as pH, dissolved oxygen, turbidity, conductivity, and so on. • Testing the water samples and the data uploaded over the Internet are analyzed.
3.	Novelty / Uniqueness	• Many unregulated methods waste more water. • So, this technique will be more effective to predict the quality of water.
4.	Social Impact / Customer Satisfaction	• It can be expanded to track hydrologic, air pollution, industrial, and agricultural output, among other things. • It prevents people from affecting various diseases.
5.	Business Model (Revenue Model)	• Large scale deployment of monitoring equipment along rivers and lakes, with IoT technology as the carrier, big data, cloud computing technology as the starting point. • It is used through the establishment of a system management platform, to provide a full range of water quality monitoring plan.
6.	Scalability of the Solution	• The remote sensing technology is the cornerstone of IoT-based water quality monitoring. • Efficient use and water monitoring are potential constraint for home or office water management system.