Project Design Phase-I
Proposed Solution Template

Date	September 2022
Team ID	PNT2022TMID01284
Project Name	IOT Based Real-time River Water Quality Monitoring and Control System
Maximum Marks	2 Marks

Proposed Solution:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To develop a IOT Based Real Time River Water Quality Monitoring and Control System
2.	Idea / Solution description	1. To keep track of the water's quality utilising sensors such as temperature, salinity, turbidity, pH, and others. 2. Data collection, cloud storage, and analysis are performed to determine whether the water is safe to drink. 3. If the water is polluted, a notification is sent to the user or local government through SMS or is always available through a web application.
3.	Novelty / Uniqueness	1. On the basis of the data gathered, a forecast is formed on whether the water is suitable for aquatic life and may be utilised to grow particular crops.
4.	Social Impact / Customer Satisfaction	All living things may be harmed by river pollution caused by algal growth, fertilisers, and pesticides. The health and vegetation might be greatly impacted by better monitoring and management strategies.
5.	Business Model (Revenue Model)	To assist the local population in determining the quality of water before ingesting it or utilising it for any other purpose, service-based products have been created. This avoids health problems or, at the worst, the loss of life.
6.	Scalability of the Solution	Since the product was created as a web and mobile application, data may be viewed from any location at any time. a workable option for rural or far-off locations without a water quality laboratory, as well as real-time monitoring.