Project Design Phase-I
Proposed Solution
Template

Date	24 September 2022
Team ID	PNT2022TMID30534
Project Name	Real- Time River Water Quality Monitoring And Control System
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	River water is a finite resource that is necessary for agriculture, industry and the survival of all living things on the planet, including humans. Sometimes the dangerous particles or chemicals are mixed in the river water and general purpose water purifier cannot purify that. And it's impossible to check the quality of river water manually in every time. Bathing in contaminated river waters causes skin diseases, allergies, and other such ailments. So an automatic real-time river water quality monitoring and control system is required to monitor the water reserved in our river water. And we can check the quality of water anytime and from anywhere.
2.	Idea / Solution description	• River water quality can be monitored by the web application. • It can be able to know if there are any dust particles in the river water. • The PH level of the river water can be monitored. • Water temperature can be monitored. • Alerting the authorities if the water quality is not good so that they can go and announce the localities not to drink that river water.
3.	Novelty / Uniqueness	The uniqueness of river water monitoring and control system is to obtain the pure water from the river and get a pollutant free water from the river for agriculture field
4.	Social Impact / Customer Satisfaction	Increasing innovation and productivity. Gain a high field for farmer, common man and fisher man.

5.	Business Model (Revene Model)	Extreme weather events, such as periods of high temperature, heavystorms, or droughts, can severely disrupt crop production.
6.	Scalabilit yof the Solution	In coming decades, two most significant and important factors found to influence crop yield is increase in the global population and economy, which greatly demands the higher and sustainable agricultural based cropyields. The capacities of food production at global level is going to be very limited due to the less availability of cultivable land, water resources, difficulties in maintaining the sustainable crop production levels, effects of changes in the global climatic conditions and also by various biophysical parameters which influence the crop yield. Keeping an aim of discussing the impact of the various methods practicedin measuring the yield gaps with a spotlight on the local-to-global importance of outcomes, a research group carried out a survey on the various methods applied to estimate yield gaps.