PROJECT DESIGN PHASE 1

PROPOSED SOLUTION TEMPLATE

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| Date | October 2022 |
| Team ID | PNT2022TMID19330 |
| Project Name | Real-Time River Water Quality Monitoring Monitoring and Control System |
| Maximum Marks | 2 Marks |

PROPOSED SOLUTION TEMPLATE :

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| S.NO | PARAMETER | DESCRIPTION |
| 1. | Problem statement | The main issue with river water quality monitoring is that water is not qualified on a regular basis because water containers are unaware of the overflow of aqua containers. |
| 2. | Idea / solution description | The main aim is to develop a system for continuous monitoring of river water quality at remote places using wireless sensor networks with low power consumption, low-cost and high detection accuracy |
| 3. | Novelty / Uniqueness | To measure water parameters such as pH, dissolved oxygen, turbidity, conductivity, etc. using available sensors at a remote place.  To assemble data from various sensor nodes and send it to the base station by the wireless channel.  To simulate and evaluate quality parameters for quality control.  To send SMS to an authorized person routinely when water quality detected does not match the preset standards, so that, necessary actions can be taken. |
| 4. | Business Model | Real-Time Quality Monitoring system generates revenue by providing residential, commercial, industrial, and municipal clients with a variety of quality monitoring services and recycling solutions. |