**Project Design Phase-I**

**Proposed Solution Template**

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| Date | 19 September 2022 |
| Team ID | PNT2022TMID47977 |
| 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.

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | This project helps to identify the quality of the real-time river water monitoring and control system. |
|  | Idea / Solution description | * This paper proposes a sensor-based water quality monitoring system. The main components of Wireless Sensor Network (WSN) include a microcontroller for processing the system, communication system for inter and intra node communication and several sensors. * Real-time data access can be done by using remote monitoring and Internet of Things (IoT) technology. |
|  | Novelty / Uniqueness | * The uniqueness of our proposed paper is to obtain the water monitoring system with high frequency, high mobility, and low powered. * Therefore, our proposed system will immensely help populations to become conscious against contaminated water as well as to stop polluting the water. |
|  | Social Impact / Customer Satisfaction | * The wireless sensor node in the system is designed for monitoring the pH of water, which is one of the main parameters that affect the quality of water. * Water quality refers to the chemical, biological, radiological, and biological parameters of the water * For example, for aquariums, it is necessary to maintain the temperature, pH level, dissolved oxygen level, turbidity, and the level of the water in a certain normal range in order to ensure the safety |
|  | Business Model (Revenue Model) | Business -To-Business Model (B2B) |
|  | Scalability of the Solution | Most of the river are polluted by people. They were undetected .It must be pre-detected  . So that, the river water monitoring and  Control system is needed. The purpose of this  system is to detect the quality of the water river and prevent the river water. |