**Project Design Phase-I Proposed Solution Template**

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| Date | 24 September 2022 |
| Team ID | PNT2022TMID35929 |
| Project Name | 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** |
| 1. | Problem Statement (Problem to be solved) | To detect and monitor the quality of river water since river water pollution is a global environmental threat(To  save the river water) |
| 2. | Idea / Solution description | Developing an IOT based water quality monitoring system using Arduino and sensors which will check if the pollutants present in the river water are under the threshold value or not and displays whether the water is suitable  for consumption. |
| 3. | Novelty / Uniqueness | \*LPWAN Communication technology  \*Space and power optimization compared to existing system |
| 4. | Social Impact / Customer Satisfaction | Monitoring water quality is an important part of helping us determine whether or not we are making progress in cleaning up our waterways. It reveals the health and composition of streams, rivers, and lakes at a snapshot in time,  as well as over weeks, months, and years |
| 5. | Business Model (Revenue Model) | \*This proposed system can be implemented as an Government funded project to ensure the sanity of rivers across our nation.  \*Industrial effluents after waste water treatment can be monitored by the proposed  system before letting it into the river |