## **Brainstorm & Idea Prioritization**

Date Team ID Project Name 19 September 2022 PNT2022TMID12872

Real-Time River Water Quality Monitoring and Control System

Maximum Marks 4 Marks

| M   | _ | ri | +0 |  |
|-----|---|----|----|--|
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| Consists of<br>multiple<br>sensors for<br>better<br>Accuracy | Less<br>ManPower                      | Reduce the<br>time to<br>check the<br>parameter |
|--|---------------------------------------|---|
| Economically<br>Affordable                                   | More<br>suitable to<br>Monitor        | Checks the<br>water<br>Nature of<br>River Water |
| Encryption<br>and<br>Decryption<br>Enabled                   | Data<br>Integrity<br>and<br>Secuirity | Conventional<br>Method for<br>Analysis          |

## Technology

| Modern<br>Sensors                            | Arduino<br>UNO as<br>Processor | Remote<br>Data<br>Access                    |
|--|--------------------------------|---|
| Monitor<br>Water<br>Quality                  | Thingspeak<br>Cloud            | Web Based<br>App                            |
| Water<br>Computing<br>Structure<br>Using IoT | Wireless<br>Data<br>transfer   | Wireless<br>Sensor<br>Network<br>Include mC |

## Features

| Water<br>Quality<br>Monitoring<br>System | Measures<br>Chemical &<br>Physical<br>Properties | pH and Temp<br>Measurement                           |
|--|--|--|
| Manually<br>Controlled<br>Device         | Collect<br>Data From<br>Sensors                  | Monitor and<br>Send<br>Notification<br>to Supervisor |
| Consistency is possible                  | Prevention<br>from<br>Disease                    | More<br>Accurate                                     |

## Content

| Consumes<br>less time | Cost<br>Efficient     | Long period performance                |
|-----------------------|-----------------------|--|
| Needs less<br>data    | Streaming<br>Analysis | Conventional<br>Method of<br>Analysing |
| Wireless<br>Data      | Networking            | Mobile data<br>access                  |