## **Ideation Phase**

Date	19 Octoberr 2022
Team ID	PNT2022TMID23758
Project Name	Efficient Water Quality Analysis and Prediction using Machine
	Learning
Maximum Marks	4 Marks

## Efficient water quality analysis & prediction using machine learning

- 1. Water makes up about 70% of the surface and is one of the most important sources vital to sustaining life.
- 2. Water quality has been conventionally estimated through expensive and time consuming lab and statical analysis.
- 3. With this motivation, we explore a series of supervised machine learning algorithm to estimate the water quality.

## Big Idea:

Temperature suited with 52-70 degree is healthy.

Biosensor method to detect the bacteria and virus.

Hardness is measured caused by calcium and magnesium.

Ph level 7 is consider as pure water.

Memberance Filtration to remove the impurities.

Dissolved oxygen meter can measure the concentration.

Total dissolved solids of 75 to 90 is ideal for drinking.

Color of water decayed from organic matter.

Using ppm amount of minerals and gases dissolved in purifies.

Quality analysis by taste.

Turbitity measurement using nephelometer.

Water level sensor to remove impurities.

## Idea prioritization:

Color of water decayed from Water level sensor to remove Quality analysis by taste. organic matter. impurities. Using ppm amount of minerals Total dissolved solids of 75 to 90 is Temperature suited with 52-70 and gases dissolved in purifies. degree is healthy. ideal for drinking. Memberance Filtration to Ph level 7 is consider as pure water. Dissolved oxygen meter can measure remove the impurities. the concentration. Biosensor method to detect the Hardness is measured caused Turbitity measurement using bacteria and virus. nephelometer. by calcium and magnesium.