**Project Design phase -1**

**Proposed solution Template**

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| Date | 23september2022 |
| 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** |
| 1. | Ammonia, Ammonium | Ammonia in water is either un-ionized ammonium or the ammonium ion. Typically the value reported is the sum of both forms and is reported as total ammonia or simply ammonia |
| 2. | Biochemical Oxygen Demand-BOD | Biological oxygen demand directly affects the amount of dissolved oxygen in rivers and streams and the type of organic and inorganic material in the water |
| 3. | Blue Green algae -BGA | BGA can reduce nitrogen and carbon in water, but can also deplete dissolved oxygen when overabundant. monitoring BGA is important because that pose a serious threat to water quality |
| 4. | CDOM-FDOM | Chromo dissolved organic matter or colored dissolved organic matter (CDOM): both refer to organic matter in water that absorb in UV spectrum |
| 5. | Chlorophyll in water | Chlorophyll in various forms in bound within living cells or photosynthesis organism such as phytoplankton and bacteria |
| 6. | Colorimetry & photometry | Colorimetry allow you to easily take reading directly in the multiple parameters power pack reagents are also 37% larger than other brands and the easy to open pouches have a pre-tear |