# Project Design Phase-I
## Proposed Solution Template

| Date | 01-10-2022 |
|---|---|
| Team ID | PNT2022TMID26021 |
| Project Name | SmartFarmer – IOT  Enabled Smart Farming Application. |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

| S. No. | Parameter | Description |
|---|---|---|
| 1. | Problem Statement (Problem to be solved) | Farmers are under pressure to produce more food AND use less energy and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures. |
| 2. | Idea / Solution description | IOT solutions in agriculture are precision farming, Irrigation monitoring system, Climate conditions monitoring, Soil pattern, Pest and Crop disease monitoring, Agricultural drones and Farm management system, etc, |
| 3. | Novelty / Uniqueness | IoT smart agriculture products are designed to help monitor crop fields using sensors and by automating irrigation systems. As a result, farmers and associated brands can easily monitor the field conditions from anywhere without any hassle. |
| 4. | Social Impact / Customer Satisfaction | Increased production, Water Saving, Better Quality, Reduced Costs, Pest detection and Better Sustainability. |
| 5. | Business Model (Revenue Model) | IOT agricultural business approach is not still vigorous because it consists of a set of essential elements with the latest requirements like new operational policies and processes to transform the organizational structure. |
| 6. | Scalability of the Solution | Billions of IoT devices have been increased gradually, due to which more devices are getting connected. Therefore, large number of gateways and protocols are needed to support IoT devices. Moreover, IoT agricultural backend databases and network applications should be reliable and scalable because with the addition of diverse application related operations becomes more complex. Therefore, design a highly scalable security scheme and an intelligent IoT system for each end device. |