

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

|               |   |
|---------------|---|
| Date          | 19 september 2022   |
| Team ID       | PNT2022TMID21802  |
| Project Name  | Project – Smart Farmer-IoT enabled smart farming application. |
| Maximum Marks | 2 Marks   |

**Proposed Solution Template:**

| S.No. | Parameter                                | Description  |
|-------|--|--|
| 1.    | Problem Statement (Problem to be solved) | <ul style="list-style-type: none"> <li>✓ In Village Side, the power supply may vary. The Biggest Challenges Faced by IoT in the Agricultural Sector are Lack of Information, High Adoption, Cost and Security Concerns, etc</li> <li>✓ To make farming easier by choosing several constraints in agriculture and to overcome those constraints, to increase production quality and quantity using IOT.</li> </ul>  |
| 2.    | Idea / Solution description              | <ul style="list-style-type: none"> <li>✓ Using smart techniques like monitoring farms climate, smart irrigation and soil analysis.</li> <li>✓ The Data collected by sensors, In terms of humidity, temperature, moisture, and dew detections help in determining the weather pattern in Farms. So cultivation is done for suitable crops.</li> </ul>   |
| 3.    | Novelty / Uniqueness                     | <ul style="list-style-type: none"> <li>✓ Solar power smart irrigation system which helps you to monitor temperature, moisture ,humidity using smart sensors.</li> <li>✓ It helps the farmer to operate the motor from anywhere</li> </ul>  |
| 4.    | Social Impact / Customer Satisfaction    | <ul style="list-style-type: none"> <li>✓ It is better than the present modern irrigation system by using this method we can control soil erosion. There will be better production yield.</li> <li>✓ It saves a lot of time.</li> <li>✓ IoT can help improve customer relationships by enhancing the customer's overall experience.</li> <li>✓ Easily identify maintenance needs, build better products, send personalized communications, and more.</li> </ul> |
| 5.    | Business Model (Revenue Model)           | <ul style="list-style-type: none"> <li>✓ As the productivity increases customer satisfaction also increases and hence need for the application also increases,</li> </ul>  |

|    |                             |   |
|----|-----------------------------|---|
|    |                             | which increases the revenue of the business.  |
| 6. | Scalability of the Solution | <ul style="list-style-type: none"> <li>✓ It is definitely scalable we can increase the constraints when the problem arises.</li> <li>✓ It is adaptability of a system to increase the capacity, for example, the number of technology devices such as sensors and actuators, while enabling timely analysis.</li> </ul> |