**PROJECT DESIGN PHASE - I**

**PROPOSED SOLUTION**

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| **DATE** | **27 OCTOBER 2022** |
| **TEAM - ID** | **PNT2022TMID26844** |
| **PROJECT NAME** | IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE |
| **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** |
|  | Problem Statement (Problem to be solved) | Develop affordable app-based solution for Soil health monitoring and suggest which crop to be sown based on it. (Technology Bucket: IOT, AI, ML etc.) |
|  | Idea / Solution description | Create app-based solution to detect soil parameters like moisture content, temperature, relative humidity, nutrient, Ph, CEC, NPK etc. and provide crop suggestions to be produced based on soil parameters & environment values. |
|  | Novelty / Uniqueness | Role of SENSORS : 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. |
|  | Social Impact / Customer Satisfaction | Water conservation . Saves lot of time . Increased quality of production. Real time data and production insight. Remote monitoring. |
|  | Scalability of the Solution | Scalability in smart farming refers to the adaptability of a system to increase the capacity , the number of technology devices such as sensors and Fluctuators. |