**Proposed Solution Template**

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| Date | 18 OCTOBER 2022 |
| Team ID | PNT2022TMID14113 |
| Project Name | IOT Based Smart Crop Protection System For Agriculture |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

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| **S.No.** | **Parameter** | **Description** |
|  | Problem Statement (Problem to be solved) | * Crops are properly not irrigated due to insufficient labour forces. * Requires protecting crops from Wild animals attacks, birds and pests. * In environmental factors such as temperature climate, topography and soil quality which results in crop destruction because of crops against various. |
|  | Idea / Solution description | * Moisture sensor is interfaced with Arduino Microcontroller to measure the moisture level in soil and relay is used to turn ON and OFF. * The motor pump for managing the excess water level. It will be updated to authorities through IOT. * IOT based fertilizing methods are followed, to minimize the negative effects on growth of crops while using fertilizers. * Image processing techniques with IOT is followed for crop protection against animal attacks. |
| 3 | Novelty / Uniqueness | * Using the IoT Technology of Automated crop maintenance and protection of embedded system. * The increasing demand for qulity foor. |
| 4 | Social Impact / Customer Satisfaction | * This proposed system provides many facilities which helps the farmers to maintain the crop field without much loss. |
| 5 | Business Model (Revenue Model) | * As the product usage can be understand by everyone ,it is easy for them to use it properly for their saftest organisation * This prototype can be developed as product with minimum cost with high performance |
| 6 | Scalability of the Solution | * This can be developed to a scalable product by using sensors and transmitting the data through Wireless Sensor Network and Analysing the data in cloud and operation is performed using robots |