## Project Design Phase-I Proposed Solution

| Date          | 17 October 2022                        |
|---------------|----------------------------------------|
| Team ID       | PNT2022TMID34698                       |
| Project Name  | IOT Based Smart Crop Protection System |
| Maximum Marks | 2 Marks                                |

## **Proposed Solution:**

| S.No. | Parameter                                | Description                                                                                                                                                                                                                                                                                                                      |
|-------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| •     | Problem Statement (Problem to be solved) | Crops in farms are ravaged by local animals like buffaloes, cows, goats, birds etc. This leads to huge losses for the farmers. It is not possible for farmers to barricade entire fields or stay on field 24 hours and guard it.                                                                                                 |
| •     | Idea / Solution description              | Here we propose an automatic crop protection system from animals. This system uses a motion sensor to detect wild animals approaching near the field.                                                                                                                                                                            |
| •     | Novelty / Uniqueness                     | Motion sensor, Temperature sensor, Humidity sensor, Moisture sensor, Alarm, GSM.                                                                                                                                                                                                                                                 |
| •     | Social Impact / Customer Satisfaction    | Crop protection combines strategies, tools, and products that protect against various pests. These include diseases, viruses, weeds, and insects. All of them can significantly lower or even kill plants. The best decision is to control the situation by reducing the risks rather than deal with the problem's consequences. |
| •     | Business Model (Revenue Model)           | Monitor the crop 24/7, Avoid animals, Check the weather condition, Alert the farmer.                                                                                                                                                                                                                                             |

| • | Scalability of the Solution | Scalability is an aspect or rather a                  |
|---|-----------------------------|-------------------------------------------------------|
|   |                             | functional quality of a system, software or solution. |