Project Design Phase-I
Proposed Solution.

DATE	27 October 2022
TEAM ID	PNT2022TMID14780
PROJECT NAME	IoT Based Smart Crop Protection System For Agriculture
MAXIMUM MARKS	2 Marks

S.NO.	Parameter	Description
1.	Problem Statement. (Problem to be solved)	✓ Crops are not irrigated properly due to insufficient labour forces. ✓ Improper maintenance of crops against various environmental factors such as temperature climate, topography and soil quantity which results in crop destruction. ✓ Requires protecting crops from wild animals attacks birds and pests.
2.	Idea /Solution Description.	✓ We have used PIR sensor for motion detection. After processing if motion is detected, camera will be automatically turned on and command will be sent to capture the image ✓ If it is due to animal interference, sound will be produced by buzzer to scare away that animal, and an alert email containing that image will be sent to the farmer. ✓ Flashlight will be used during the night time to capture better image and to simulate the presence of human during the night time. ✓ If the motion detection is due to human being then the system continues to sense the motion

3.	Novelty / Uniqueness.	✓ Automatic crop maintenance and protection using embedded and IOT Technology.
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).	✓ 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 solution sensors and transmitting the data through Wireless Sensor Network and Analysing the data in cloud and operation is performed using robots.