Project Design Phase-I
Proposed Solution.

Project Name	IOT BASED SMART CROP PROTECTION SYSTEM FOR AGRICULTURE.
Team ID	PNT2022TNID40031
Date	21Oct 2022
Max 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.	• Moisture sensor is interfaced with Arduino Microcontroller to measure the moisture level in soil and relay is used to turn ON & OFF the motor pump for managing the excess water level. It will be updated to authorities through IOT. • Temperature sensor connected to microcontroller is used to monitor the temperature in the field. • Image processing techniques with IOT is followed for crop protection against animal attack.
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.