Project Design Phase-I
Proposed Solution Template

Date	28 September 2022
Team ID	PNT2022TMID33612
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.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To provide efficient decision support system using wireless sensor network which handle different activities of farm and gives useful information related to farm. Information related to Soil moisture, Temperature and Humidity content.
2.	Idea / Solution description	In IOT-based smart agriculture, a system is built for monitoring the crop field with the help of sensors (light, humidity, temperature, soil moisture, etc.) and automating the irrigation system.IOT (Internet of things) in an agricultural context refers to the use of sensors, cameras, and other devices to turn every element and action involved in farming into data
3.	Novelty / Uniqueness	This overcomes the manual operations required to monitor and maintain the agricultural farms in both automatic and manual modes. It should be able to measure the increase or decrease in level of water as well as moisture in the soil.
4.	Social Impact / Customer Satisfaction	Smart farming **helps farmers to better understand the important factors such as water, topography, aspect, vegetation and soil types**. This allows farmers to determine the best uses of scarce resources within their production environment and manage these in an environmentally and economically sustainable manner.
5.	Business Model (Revenue Model)	Smart farming **envisages the harnessing of Information and Communication Technologies as an enabler of more efficient, productive, and profitable farming enterprises**. Such technologies do not suffice on their own; rather they must be judiciously combined to deliver meaningful information in near real-time.
6.	Scalability of the Solution	It is very adaptive for farmers and it is very efficient in manner.