Project Design Phase-I
Proposed Solution

Date	17 October 2022
Team ID	PNT2022TMID16916
Project Name	Project – Smart farmer - IoT Enabled Smart Farming Application.
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 besolved)	Overuse of pesticides and fertilizer in agricultural fields leads to destruction of the crop as well as reduces the efficiency of the field increasing the soil vulnerability toward pest. IoT applications may be used to update the farmer/user about type & quantity of pesticide required by the crop.
2.	Idea / Solution description	The use of IoT in agriculture is commonly referred to as Smart Farming or Smart Agriculture. It uses various IoT sensors to send the farm's data, like humidity, temperature, soil moisture, etc. to the cloud which can be monitored and controlled from anywhere in the world.
3.	Novelty / Uniqueness	Monitoring information, such as soil condition, moisture, and temperature, and the prediction of natural factors, such as rainfall and weather, support the control of growing conditions of crops, helping farmers plan and make irrigation decisions to optimize pro- duction and reduce labour costs.
4.	Social Impact / Customer Satisfaction	IoT in agriculture is designed to help farmers monitor vital information like humidity, air temperature and soil quality using remote sensors, and to improve yields, plan more efficient irrigation, and make harvest forecasts.
5.	Business Model (Revenue Model)	The application is available on a subscription basis.
6.	Scalability of the Solution	IoT in agriculture uses robots, drones, remote sensors, and computer imaging combined with continuously progressing machine learning and analytical tools for monitoring crops, surveying, and mapping the fields, and providing data to farmers for rational farm management plans to save both time and money.