Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID30750
Project Name	Project – SmartFarmer - IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution :

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	▪ Ideally, each field should get just the right amount of water at just the right time. ▪ Under-watering causes crop stress and yield reduction. ▪ Overwatering can also cause yield reduction and consumes more water and fuel than necessary and leads to soil erosion and fertilizer, herbicide, and pesticide runoff.
2.	Idea / Solution description	▪ Smart Farming systems uses modern technology to increase the quantity and quality of agricultural products. ▪ This enables the farmers better to monitor the fields and maintain the humidity level accordingly.
3.	Novelty / Uniqueness	▪ The development of lightweight and powerful hyperspectral snapshot cameras that can be used to calculate biomass development and fertilization status of crops. ▪ Moreover, decision-tree models are available now that allow farmers to differentiate between plant diseases based on optical information

		▪ Virtual fence technologies allow cattle herd management based on remote-sensing signals and sensors or actuators attached to the livestock.
4.	Social Impact / Customer Satisfaction	▪ Iot helps in improving customer relationships by enhancing customers overall performance ▪ It also saves a lot of Time ▪ This technology reduces the works to be done by the farmers
5.	Business Model (Revenue Model)	▪ The revenue model represents a gradual rise in both no of users and the income
6.	Scalability of the Solution	▪ Scalability in smart farming refers to the adaptability of a system to increase the capacity.