Project Design Phase-I
Proposed Solution

Date	19 September 2022
Team ID	PNT2022TMID34125
Project Name	Smart Farmer -IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Farmers are under pressure to produce more food and use less energy and water in the process. A remote monitoring and control system will help farmers deal effectively with these pressures.
2.	Idea / Solution description	It involves using various smart farming technologies, the internet of things (IoT) devices, big data analytics, remote sensing and robotics. It is scientifically proven that using these technologies increase profit, minimizes waste and maintains the environment's quality.
3.	Novelty / Uniqueness	➢ Remote Management with farms located in far-off areas and distant lands, farmers are seeking a better solution to their management issues. ➢ Real-Time Crop Monitoring ➢ Crop Protection ➢ Soil Testing & its Quality ➢ Management with farmers being Remote Real-Time Analysis of Soil Demand ➢ Smart Greenhouses

4.	Social Impact / Customer Satisfaction	The important of direct marketing for highquality farm products has increased during the past few years. This analyzes the impact of customer satisfaction and its driving forces for farmer-to-customer direct marketing. The result emphasize the role of store atmosphere, customer service and product quality as the main factors which influence customer satisfaction.
5.	Business Model (Revenue Model)	Models have been developed for many dimensions of the agricultural enterprise.
		Incorporating pertinent models whilst managing the trade-offs between complexity and usability is a key challenge for enabling a Smart Farm. 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	Scalability in smart farming refers to the adaptability of a system to increase the capacity. Scalability and scaling approach of a good solution will depend very much on the economic benefit and on the increased welfare of the farm inhabitants.