## PROJECT DESIGN PHASE-II

## SOLUTION REQUIREMENTS (FUNCTIONAL & NON-FUNCTIONAL)

TEAM ID	PNT2022TMID44357
PROJECT DOMAIN	INTERNET OF THINGS
PROJECT TITLE	IoT BASED SMART CROP PROTECTION SYSTEM
	FOR AGRICULTURE
DATE	15 OCTOBER 2022
MAXIMUM MARKS	4 MARKS

## FUNCTIONAL REQUIREMENTS:

Following are the functional requirements of the proposed solution.

FR NO	FUNCTIONAL	SUB REQUIREMENT (STORY / SUB-TASK)
	REQUIREMENT (EPIC)	
FR-1	User Registration	Registration through Form
		Registration through Gmail
		Registration through LinkedIN
FR-2	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-3	User Profile	Log in
		Access the Profile.
FR-4	User dashboard	Enter the user details.
		Change the password.
FR-5	Analyze	Data from smart sensors can be analyzed for
		predictive analysis and automated decision-
		making.
FR-6	User Select The category	Select Display Option click IBM,
		consultant,Logut,Messanger.
FR-7	Recommend	Based on the farming the software
		recommends the automated irrigation
		practices and protection from birds and
		animals.

## NON-FUNCTIONAL REQUIREMENTS:

Following are the non-functional requirements of the proposed solution.

NFR NO	NON-FUNCTIONAL REQUIREMENT	DESCRIPTION
NFR-1	USABILITY	<ul> <li>Users can know the real-time status of the crops by capturing the data from sensors.</li> <li>Also monitor and control their connected farm using IOT applications on their smartphones or tablets.</li> </ul>
NFR-2	SECURITY	<ul> <li>Smart based agriculture can improve agricultural processes in a more productive, efficient and sustainable way.</li> <li>User information will keep securely and safely.</li> </ul>
NFR-3	RELIABILITY	The smart farm, embedded with IOT systems, could be called a connected farm, which can support a wide range of devices from diverse agricultural device manufactures and make easier for farmers.
NFR-4	PERFORMANCE	<ul> <li>It is a user-friendly software and have high performance.</li> </ul>
NFR-5	AVAILABILITY	Available for every user, visible for all users and farmer in an easy manner.
NFR-6	SCALABILITY	The proposed precision farming structure allows the implementation of a flexible methodology to preserve and protect the crops.