| Date | 03 October 2022 |
|--------------|--|
| Team ID | PN2022TMD41919 |
| Project name | Smart Farmer-IoT enabled Smart Farming Application |
| Marks | 4 Marks |

| S.NO | TITLE | AUTHOR AND YEAR OF PUBLICATIONS | METHODOLOGY USED | LIMITATIONS |
|------|--|--|--|---|
| 1. | Mobile Integrated Smart Irrigation Management and Monitoring System Using IOT | S. Vaishali et.al, 08 February [2018] | In order to control and monitor the irrigation process, smart and automated irrigation system is developed, Implemented and tested. There is a need for automated irrigation system because it is simple and easy to install. This system uses values ON and OFF to control water motor. Python programming language is been used for automation purpose. | In this paper they implemented the automatic ON and OFF to control water motor but the farmer doesn't know about the current state of the motor. |
| 2. | IoT based Intelligent irrigation support system for smart farming applications | Neha Kailash Nawandar Vishal Satpute [2019] | This paper presents an irrigation management system with sensor data fetching and compression, compressed data transfer, data processing, decision making and action invoke capabilities. A network of sensors implanted for the plants and three basic blocks form the whole system, compress the sensed data, send it to the FTP server which reconstructs it back into original form. A 2-layer Neural Network that utilizes the 4 inputs is used here for decision making. The proposed system monitors the test object 24×7 and it is capable to monitor a farm for its water and other | The output is notified to user via email which might cause unwanted power and storage usage which in turn might reduce battery life. The use of neural networks for decision making increases the system complexity and the data flow process might get difficult to understand. |

| | | | requirements. It has | |
|----|--------------------|-----------------------|-------------------------------|--------------------------------------|
| | | | compression and decision | |
| | | | making capabilities which | |
| | | | makes it useful for home | |
| | | | gardens, greenhouses, etc. | |
| 3. | lot based smart | Yash Sharma, visudeep | In this paper IOT is the main | This technique is used to sense all |
| | Agriculture | tyagi, Priyanka data | objective to ensure the | the environmental parameters at |
| | monitoring system | July 2020 | information is sent to the | the right time. This asset allows |
| | | | right people at the right | the farmer to boost the cultivation |
| | | | time. To save power | during the plant's need. |
| | | | resources and time it is | |
| | | | often used in rightway in | |
| | | | the right manner | |
| 4. | Monitoring and | Marco Grossi | In the system, the plant | provide many benefits to the |
| | Control Systems in | 19 Dec 2018 | grows around the year | grower such as full control of |
| | Agriculture Using | | adjusting and controlling | nutrient concentration and supply |
| | Intelligent Sensor | | the surrounding | and prevention of many soil-borne |
| | Techniques | | environment. Parameters | diseases and infections to plant, |
| | | | monitor: temperature, CO2 | thus resulting in increased plant |
| | | | (carbon dioxide), humidity, | yield with significant returns, high |
| | | | light intensity, intelligence | quality, and more efficient use of |
| | | | sensor by artificially | available natural resources |
| 5. | IoT based Smart | Akshay Atole Amar | IoT plays a vital role in | .Improved data collection driving |
| | Farming System | Biradar Apurva Asmar | smart farming applications. | farming efficiency. The agricultural |
| | | Nikhil Kothawade | To ensure a power saving | sector is in a race today. |
| | | April-2017 | method it is often used in | |
| | | | rightway | |