### Project Report

On

### SMART IRRIGATION SYSTEM

Submitted to

Department of

### **ELECTRONICS & COMMUNICATION ENGINEERING**

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**Under the Esteemed Supervision of** 

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# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING SUMATHI REDDY INSTITUTE OF TECHNOLOGY FOR WOMEN

(Approved by AICTE, New Delhi, Affiliated to JNTUH, Accredited by NBA)

Ananthasagar (Vill), Hasanparthy (M), Warangal.

2022-23



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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### CERTIFICATE

This is to certify that the project entitled "SMART IRRIGATION SYSTEM" carried out by the following students of III Year B.Tech in Electronics and Communication Engineering during the academic year 2022-23.

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### **ABSTRACT**

As agriculture is the backbone of Indian economy, it deserves to be modernized. To overcome backwardness of traditional methods of agriculture and to enhance the crop production, to avoid the risk of damaging crops, and to do efficient use of water resources, the latest technology of Internet of things (IoT) is playing a crucial role nowadays. So, this paper "smart irrigation system" is proposed where the soil sensor is used to collect large number of real-time data from the agricultural fields. The sensors interact with each other through Internet connection. The data collected from the sensors sent to the Web server using wireless sensor network. IoT framework analyzes and processes the sensed data. Then, notifications are sent to the farmer's smartphone application periodically. The farmer can track changes in soil moisture. In this way, unnecessary wastage of water can be avoided. This paper discusses the various experiments done in this context and a comparatively low cost system module with sensors and wireless networks for modernized irrigation is represented.

FOR WOAKEZ

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