14

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANA SANGAMA", BELGAUM-590014

KARNATAKA

A Mini Project Report On:

"AUTOMATIC IRRIGATION SYSTEM ON SENSING SOIL MOISTURE "

Submitted in partial fulfilment of the requirements for the award of degree of

BACHELOR OF ENGINEERING

IN

ELECTRICAL & ELECTRONICS ENGINEERING

SUBMITTED BY:

NANDAN HIREMATH 1SV19EE009

SHANMUKHA NAIK M 1SV19EE014

UNDER THE GUIDENCE:

Mrs.TANUJA K S M.E(Ph.D),MISTE

Asst . Prof. Dept of EEE

SHRIDEVI EDUCATION

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sira Road ,Tumkur-572106

2021-2022

PRINCIPAL
SIET, TUMAKURU

Scanned with CamScanner

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(An ISO 9001:2008 Certified Institiution)

Sira Road, Tumkur -572106

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SHRIDEVI
EDUCATION

CERTIFICATE

Certified that the project work entitled " **Automatic Irrigation System on Sensing soil Moisture Content** " Carried out by **NANDAN HIREMATH 1SV19EE009 ,SHANMUKHA NAIK M 1SV19EE014** bonfide student of **SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TUMKUR 572106,** in partial fulfillment for the award of degree Bachelor of Engineering in **ELECTRICAL & ELECTRONICS ENGINEERING** of **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2021-2022. It is certified that all corrections / Suggestions indicated for Internal Assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of Automatic solar street light Project work prescribed for the said Degree.

Signature of the Guide	Signature of the HOD	Signature of the Principal
Mrs.TANUJA K S M.E(Ph.D),MISITE Assistant Professor Dept of Electrical & Electronics Engineering SIET ,Tumkur	Mr. G H RAVIKUMAR M.E(Ph.D),MISIT Professor & Head Dept of Electrical & Electronics Engineering SIET ,Tumkur	Dr.NARENDRAVISWANATH Ph.D Principal SIET ,Tumkur

External viva-voc

Name of Examiners	Signature with Date
1) Tanuja K.S	28/7/22
2) Shwetha TM	28/7/22

PRINCIPAL

Scanned with CamScanner

ACKNOWLEDGEMENT

I take this opportunity to convey my deep sense of gratitude to all those who have been kind enough to offer advice and assistance when needed which has led to the successful analysis and design of this project work.

I wish to thank **Dr. MR HULINAYKAR**, Founder and Managing Trustee, SIET Tumkur for providing me the opportunity to carry out my studies in the institution.

I extend my sincere thanks to our Principal **Dr. NARENDRA VISWANATH** for his co-operation and encouragement.

I am grateful to **Mr. G H RAVIKUMAR**, HOD for his constant encouragement and support.

It is my pleasure to express my deep sense of gratitude to my guide **Mrs. K S TANUJA** Asst., Professor, Department of Electrical & Electronics Engineering, SIET Tumkur for his much needed support and help in needed sphere, for his guidance, keen interest and ever available help during execution of this dissertation work.

I would like to express my profound sense of gratitude to our institution and management **"SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY, TUMKUR"**, which has provided me an opportunity in fulfilling my most cherished dream.

I thank all the Teaching Staff and Non-Teaching Staff of Electrical & Electronics Engineering Department, SIET Tumkur. Special thanks to my friends who have directly or indirectly helped during this dissertation work.

PRINCIPAL
SIET, TUMAKURU.

Scanned with CamScanner

ABSTRACT:

With the advancement of automation technology, life is getting simpler and easier in all aspects. In today's world Automatic systems are being preferred over manual system. Automatic system is a growing system of everyday object from industrial machine to consumer goods that can complete tasks while you are busy with other activities. The Smart irrigation system using Arduino is introduced to optimize the use of water supply for agricultural crops. This project made to design the water irrigation system based on Arduino microcontroller board. The need to automated for proper water supply and reduce farmer time and work. In case the farmer is not available for irrigation every time, then this system is very useful India's population is reached beyond 1.2 billion and the population rate is increasing day by day then after 25-30 years there will be serious problem of food, so the development of agriculture is necessary. Today, the farmers are suffering from the lack of rains and scarcity of water. The main objective of this system is to provide an automatic irrigation system thereby saving time, money & power of the farmer. The traditional farmland irrigation techniques require manual intervention. With the automated technology of irrigation the human intervention can be minimized. Whenever there is a change in humidity of the surroundings the sensors senses the change in humidity and gives an interrupt signal to the micro-controller and turn on/off water pump automatically. The aim of the implementation is to demonstrate that the water irrigation can be used to reduce water use.

PRINCIPAL
SIET, TUMAKURU

Scanned with CamScanner