## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi - 590 010



#### **PROJECT REPORT ON**

# "DESIGN AND IMPLEMENTATION OF NOVEL DRIP IRRIGATION SYSTEM USING PANI"

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

### BACHELOR OF ENGINEERING IN ELECTRONICS & COMMUNICATION ENGINEERING

#### Submitted By

Name	USN
KRISHNA SWETHA	4AL16EC032
MAMATHA M	4AL16EC035
монітн s	4AL16EC038
PRINCIA MELITA DSOUZA	4AL17EC075

Under the Guidance of Mr. SUDHAKARA HM Senior Assistant Professor Department of E&C Engineering



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY MOODBIDRI – 574 225.

2020-2021

# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY **MOODBIDRI – 574 225**

(Affiliated to VTU, BELAGAVI)

# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

#### CERTIFICATE

Certified that the project work entitled "DESIGN AND IMPLEMENTATION OF NOVEL DRIP IRRIGATION SYSTEM USING PANI" is a bona fide work carried out by

> 4AL16EC032 KRISHNA SWETHA 4AL16EC035 MAMATHA M 4AL16EC038 **MOHITH S** PRINCIA MELITA DSOUZA. 4AL17EC075

in partial fulfillment for the award of BACHELOR OF ENGINEERING in ELECTRONICS & VISVESVARAYA TECHNOLOGICAL COMMUNICATION ENGINEERING of the 2020-2021. It is certified year UNIVERSITY, BELAGAVI during the corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree

Signature of the Guide Mr. Sudhakara HM

Signature of the H.O.D

Dr. D V Manjunatha H. O. D.

Alva' - Institute of Enga. & Tachnelogy Mites, MOODEIDRI - 574 225

Signature of the Principal

Dr. Peter Fernandes PRINCIPAL

Dept. Of Electronics & Communication Alva's Institute of Engg. & Technology, Mijar. MOODBIDRI - 574 225, B.K.

EXT	TER	N	AT.	VIX	7 A
T		U.		711	

Name of the Examiners	Signature with date
1	
2	

#### ABSTRACT

Drip Irrigation proposes a mobile incorporated, smart irrigation system that uses raspberry pi and polyaniline-based polymer humidity sensor and IoT supported application monitoring system. The foremost goal of this project is to control the installation and monitor the plants via a smartphone. The sensor is often used for controlling the water contained within the soil and so the irrigation of plants automatically where the need for human intervention reduced.

The main goal targeted the wattage of water, which can be a concern of the stylish generation. It is costs effectiveness, low maintenance, time-saving, environmental protection, disbursal, and efficient irrigation service. Raspberry pi is within the planning of the prototype model in making the system compact and sustainable. The system contains a sensor that measures the moisture of the soil and switches which control solenoid valves to keep with the requirement. The model demonstrated expected results at the diverse moisture tiers. This project discussed the strategy used for the spotting of plants diseases using their leaves images. Recognition of plants diseases is the key to preventing the losses within the yield and amount of the agricultural product. It is hard to observe plants diseases manually. Hence, image processing is for the discovery of plants diseases. Disease recognition involves image segmentation, feature extraction. After image-processing, if the plants is found infected, this tool activates the valves, which medicine supply is enabled or disabled automatically to the plant place via a sprinkler or drip irrigation technique.