# VISVESVARAYA TECHNOLOGICAL UTILI DELLA BELAGAVI - 590 018



#### A PROJECT REPORT ON

## "DESIGN AND FABRICATION OF AUTOMATIC DRAINAGE SYSTEM USING SOLAR PANEL"

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

BACHELOR OF ENGINEERING IN MECHANICAL ENGINEERING

Submitted by:

NAVEEN KUMARA (1SV18ME404) RAVINDRANATHA K (1SV18ME406)

Under the Guidance of:

Mr B H Vasudevamurthy
BE, M Tech, Ph D
Assistant Professor & Head of the Department
Department of Mechanical Engineering
SIET, Tumkur

Some lamost

PRINCIPAL SILL HUMAKURU





Department of Mechanical Engineering Shridevi Institute of Engineering and Technology

(Recognized by Government of Karnataka, Affiliated to VTU, Belagavi & Approved by AICTE, New Delhi)

Sira Road, TUMAKURU – 572 106

2021 – 22

Sri Shridevi Charitable Trust (R.)

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

Sira Road, Tumkur - 572 106, Karnataka, India.

Phone: 0816 - 2212629 | Principal: 0816 - 2212627, 9686114899 | Telefax: 0816 - 2212628

Email: info@shrideviengineering.org, principal@shrideviengineering.org | Website; www.shrideviengineering.org

pproved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi)



### CERTIFICATE

This is to certify that the Project Work entitled "Design And Fabrication Of Automatic Drainage System Using Solar Panel" is carried out by Mr Naveen Kumara (1SV18ME404) and Mr Ravindranatha K (1SV18ME406), bonafide students of the Department of Mechanical Engineering in partial fulfillment of the requirements for the award of the degree of Bachelor of Engineering in Mechanical Engineering of the Visvesvarava Technological University, Belagavi during the year 2021 - 22. It is also certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in theReport 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 said Degree.

(Mr B H Vasudevamurthy)

**Project Guide** 

(Mr B H Vasudevamurthy)

Head of the Department

(Dr Narendra Viswanath) Principal

External Viva

SIET., TUMAKURU

Name of the Examiners

1. DA NAKENDRA VISWANATH

2 Not RH. VASUDEVANUETHY

Signature with Date

### ABSTRACT

Impurities present in water can cause serious health issues that can damage the life of human beings. The chief function of the automatic drainage system is to collect, transport, as well as dispose the solid waste in the waste bucket with the help of claws. Solid waste in drainage water includes empty bottles, polythene bags, papers etc. It may lead to blockage of the drainage system. Drain can be cleaned by the help of IR sensor to drive the system automatically to remove the solid waste and threw it into waste bucket. It even reduces the cost of manual labor as well as reduces the threat to human life. In this research paper the proposed concept is to replace the manual work in drainage cleaning by automated system. Now-a-days even though automation plays a vital role in all industrial applications in the proper disposal of sewages from industries and commercials are still a challenging task. Drainage pipes are using for the disposal and unfortunately sometimes there may be loss of human life while cleaning the blockages in the drainage pipes. To overcome this problem and to save human life. The device is place across drain so that only water flow through lower grids. Waste like bottle, etc.

PRINCIPAL SIET. TUMAKURU