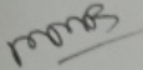


## Certificate

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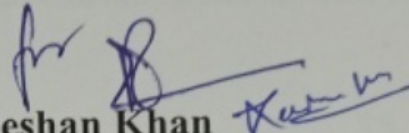
This is to certify that the project report entitled "Analysis of micro irrigation over free flooding irrigation" being submitted by VINOD KUMAR (18CE-45L) for the partial fulfillment of the award of the degree of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING by Lingaya's Vidyapeeth, Faridabad is a record of a bonafide work carried out by them under my supervision during the year 2018-22.

The contents of this report have not been submitted to any other University or institute for award of any degree or diploma.



**Dr Maniraj M.**

(Head of Department)  
Department of Civil Engineering  
Lingaya's Vidyapeeth  
Faridabad



**Zeeshan Khan**

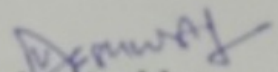
Asst (Professor)  
Department of Civil Engineering  
Lingaya's Vidyapeeth  
Faridabad

## DECLARATION

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I VINOD KUMAR (18CE-45L) the student of Bachelor of Technology in Civil Engineering during session 2018-22 at Lingaya's Vidyapeeth, Faridabad, Haryana, hereby declare that the work presented in this report entitled "**Analysis of micro irrigation over free flooding irrigation**" is the outcome of our own bonafide work and is correct to the best of my knowledge and this work has been undertaken taking care of Engineering Ethics.

It contains no material previously published without referring or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

  
Submitted by:

VINOD KUMAR (18CE-45L)

## ACKNOWLEDGMENTS

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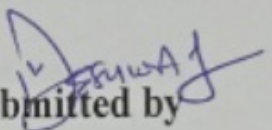
I would like to thank my guide, Zeeshan Khan for his very valuable guidance, his support and his critical suggestions throughout the completion of our project.

It was a privilege to study under his supervision. His vision and broad knowledge played an important role in the project work. I also like to thank him for pushing me to the stage that I thought I could never accomplish.

Allow me to express my sincere gratitude to Dr. Maniraj M, for his tremendous and selfless support in design of the project and time management skills while fabricating the product.

It is my great honor to have had the opportunity to work with these great minds and their remarkable characters. Their spirit of enthusiasm and commitment even in the times when we students found it hard to do is commendable.

Also I appreciate the moral support of Chitranjan Kumar (Professor) during our project work.

  
Submitted by

VINOD KUMAR (18CE-45L)

## Abstract

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Now a days in India there is crisis of water, not only in India but whole the world is facing this problem. There is a maximum demand of water in irrigation sector. In India the most adopting pattern of irrigation is free flooding. There is a lot of water is waste due to this pattern. Now in modern times there are many pattern for irrigates the crops. In these methods micro irrigation is more effective method to irrigate the crops. In this method we can save upto 50% of water in irrigation sector.

Micro irrigation is the slow application of continuous drips, tiny streams or miniature sprays of water above or below the soil surface. In this Session, you will learn about the main features of micro irrigation system and its classification.

Micro irrigation system is effective in saving water and increasing water use efficiency as compared to the conventional surface irrigation method. Besides, it helps reduce water consumption, growth of unwanted plants (weeds), soil erosion and cost of cultivation.

Micro irrigation can be adopted in all kinds of land, especially where it is not possible to effectively use flooding method for irrigation. In flooding method of irrigation, a field is flooded with water. This results in significant run-off, anaerobic conditions in the soil and around the root zone, and deep irrigation below the root zone, which does not supply sufficient water to the plants. It is, therefore, one of the most inefficient surface irrigation methods.

The aim of this project is to save the water and growing more crops.