



**K.S. SCHOOL OF ENGINEERING AND MANAGEMENT  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**CERTIFICATE**

This is to certify that the seminar "Time Series Analysis Of Mangroves Of Sita River Basin Udupi district Using Geospatial Techniques" is a bonafide work carried out by

<b>KRUTHIK R</b>	<b>1KG16CV027</b>
<b>HARSHITH BABU N</b>	<b>1KG17CV012</b>
<b>HARSHITHA V</b>	<b>1KG17CV013</b>
<b>KAVYAPRIYA J</b>	<b>1KG17CV016</b>

In partial fulfillment for the award of Bachelor of Engineering Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2020-2021. It is certified that all the suggestions indicated during internal assessment have been incorporated.

*Vyshali*

**Dr. Vyshali**

Associate Professor

Dept. of Civil

*Vijayalakshmi Akella*

**Dr. Vijayalakshmi Akella**

Head Dept. of Civil  
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K.S. Group of Institutions

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*K. Rama Narasimha*

**Dr. K. Rama Narasimha**

**KSSEM NARASIMHA**  
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Name and Signature of Examiner-1

*[Signature]*  
12/08/2021

Name and Signature of Examiner-2

**K.S. School of Engineering and Management**  
No. 15, Mallasandra, off Kanakapura Road, Bengaluru-560109



**KSSEM**

**Department of Civil Engineering**

## Certificate

*This is to certify that the project work entitled "Feasibility studies on geopolymers concrete structural elements with bamboo reinforcement for rural housing" is a bonafide work carried out by*

NIKHIL C	1KG17CV026
NISHANTH V	1KG17CV028
RAVITEJA S P	1KG17CV032
VYSHAK S PRASAD	1KG17CV043

*In partial fulfilment for the award of "Bachelor of Engineering in Civil Engineering" of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.*

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of  
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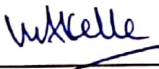
**Department of Civil Engineering**

*Certificate*

This is to certify that the project work entitled “**DEVELOPMENT OF DAVANAGERE AS SMART CITY**” is a bonafide work carried out by

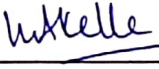
SUJAN L	1KG16CV053
SYED RIYAZ	1KG17CV036
UDAY GOWDA N	1KG17CV039
NAVEED TAREEN PATHAN	1KG17CV044

in partial fulfilment for the award of “**BACHELOR OF ENGINEERING**” of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.

  
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Name and Signature of Examiner-2



**K.S. SCHOOL OF ENGINEERING AND MANAGEMENT  
DEPARTMENT OF CIVIL ENGINEERING**

**CERTIFICATE**

This is to certify that the Project work entitled "Morphometric Analysis Using SRTM-DEM, GIS of Kali River Basin" is a bonafide work carried out by

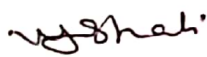
KRUPA L	1KG17CV017
RAHUL S BUDLE	1KG17CV030
SUMAN N	1KG17CV035
VINAY H L	1KG17CV041

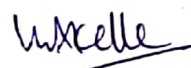
In partial fulfillment of award degree of Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi, during the year 2020-21. It is certified that all the suggestions/corrections indicated for internal assessment have been incorporated.


**Internal Guide**

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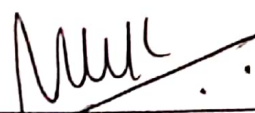
  
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**Department of Civil Engineering**

*Certificate*

This is to certify that the project work entitled "ANALYSIS AND DESIGN OF CONCRETE CHECK DAM" is a bonafide work carried out by

ARAVINDH.S	1KG17CV005
MANI.C	1KG17CV019
MANOJ T.V	1KG17CV022
TARUN.S	1KG17CV037

in partial fulfilment for the award of "BACHELOR OF ENGINEERING" of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.

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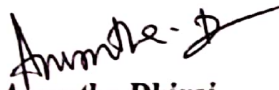
**K.S. SCHOOL OF ENGINEERING AND MANAGEMENT  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**CERTIFICATE**

This is to certify that the seminar "SUITABILITY OF TREE POD EXTRACT FOR USE AS A NATURAL PLASTICIZER IN CONCRETE" is a Bonafede work carried out by


SARAJUDDIN	1KG16CV049
VISHAL KUMAR D	1KG17CV042
GANESH M S	1KG15CV013
TUSHSR SINGH J	1KG18CV414


In partial fulfillment for the award of **Bachelor of Engineering Civil Engineering of Visvesvaraya Technological University, Belagavi**, during the year 2020-2021. It is certified that all the suggestions indicated during internal assessment have been incorporated.

  
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Name and Signature of Examiner-2



**K.S. SCHOOL OF ENGINEERING AND MANAGEMENT  
DEPARTMENT OF CIVIL ENGINEERING**

**CERTIFICATE**

This is to certify that the seminar **DYNAMIC ANALYSIS OF RESIDENTIAL BUILDINGS IN VARIOUS ZONES** is a technical report presented by in partial fulfillment for the award of **Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi**, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement with respect to **Seminar (17CVS86)** prescribed for the degree.

*SHASHI PRASAD.N*  
*Shashi Prasad N*

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**Examiners**

*M. K. M. K.*  
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*M. K. M. K.*  
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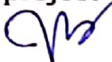
**Department of Civil Engineering**

## Certificate

This is to certify that the project work entitled “**Comparison of conventional retaining wall with segmental retaining wall**” is a bonafide work carried out by

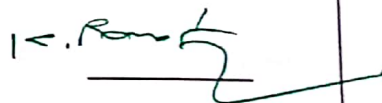
**RAKSHITH MAHESH 1KG16CV043**  
**DARSHITH G 1KG17CV007**  
**CHAYIPRAKASH R 1KG18CV403**  
**SARANYA D 1KG18CV416**

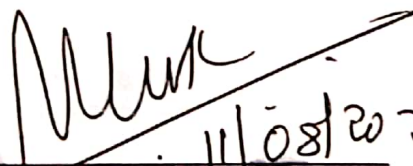
in partial fulfilment for the award of **Bachelor of Engineering in Civil Engineering** of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.

  
DR. ARAVIND VIJAY

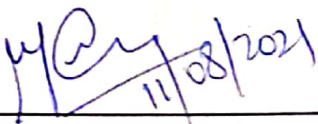
Name and Signature of  
Internal Guide

  
Head of the department  
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**KSSEM**  
K.S. SCHOOL OF ENGINEERING AND MANAGEMENT

**Department of Civil Engineering**

*Certificate*

This is to certify that the project work entitled "EFFECT OF WIND ON TALL BUILDING FRAMES ON DIFFERENT ASPECT RATIO" is a bonafide work carried out by

<b>GANESH S</b>	<b>1KG17CV010</b>
<b>MUKESH M</b>	<b>1KG17CV024</b>
<b>NANDAN GOWDA VA</b>	<b>1KG17CV025</b>
<b>VIKAS VENKATESH</b>	<b>1KG17CV040</b>

in partial fulfilment for the award of "BACHELOR OF ENGINEERING" of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.

*Manjunath B*  
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*B. Prashanth M*  
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*Vijayalakshmi Akella*

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*N. N. N.*  
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K.S. Group of Institutions

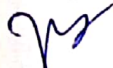
K.S. School of Engineering and Management  
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**CERTIFICATE**

This is to certify that the project work entitled "A Study on Forensic Geotechnical Engineering" is a bonafide work carried out by

Jayanth NJ	1KG17CV014
Madeeha Banu	1KG17CV018
Rohith PG	1KG17CV033
Sree Venkat C	1KG17CV034


in partial fulfillment for the award of **Bachelor of Engineering in Civil Engineering of Visvesvaraya Technological University, Belagavi**, during the year 2020-2021. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement with respect to Project Work (17CVP78) prescribed for the degree.

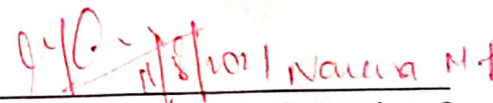
  
**Dr. Arifal Vijay**  
Internal Guide

  
**Head of the Department**  
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Name and Signature of Examiner-1

  
11/8/2021  
Name and Signature of Examiner-2

**K.S. School of Engineering and Management**  
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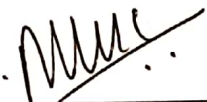
**Department of Civil Engineering**

*Certificate*

This is to certify that the project work entitled "USE OF SUGARCANE MOLASSES AS ADMIXTURE FOR CEMENT CONCRETE" is a bonafide work carried out by

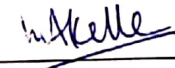
AKARSH HARI	1KG17CV002
ANIRUDH S	1KG17CV004
MANIKANTA P	1KG17CV020
ASHWATH K	1KG18CV401

In partial fulfilment for the award of "BACHELOR OF ENGINEERING" of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.

  
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Name and Signature of  
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Head of the Department

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\_\_\_\_\_


Principal/ Director

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Principal  
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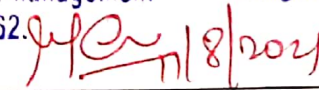
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Principal/Director

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University Examiners:

  
11/8/2021  
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Name and Signature of Examiner-1

  
11/8/2021  
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Name and Signature of Examiner-2



**KSSEM**

Department of Civil Engineering

**Certificate**

This is to certify that the project work entitled "Experimental study on development of geopolymer paver blocks for pedestrian facility" is a bonafide work carried out by

SAI KRISHNA BALUSU 1KG15CV004

ARUN .M 1KG18CV400

HARSHAVARDHAN KC 1KG18CV404

LOKESH M 1KG18CV407

In partial fulfillment for the award of "Bachelor of Engineering in Civil Engineering" of Visvesvaraya Technological University, Belgaum, during the year 2020-21. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this thesis satisfies the academic requirement in respect of project work prescribed for the degree.

*Sushma M*  
*Naveena M.P.*

*W. Kelle*

*15. Rama*

Name & Signature of Internal Guide	Head of the Department	Principal / Director
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and  
**SUSHMA M**  
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*M. M. P.*  
*12/8/21*

*Naveena M.P.*  
*12/8/21*

Name and Signature of Examiner-1

Name and Signature of Examiner-2



**K.S. SCHOOL OF ENGINEERING AND MANAGEMENT  
DEPARTMENT OF CIVIL ENGINEERING**

**CERTIFICATE**

This is to certify that the project work entitled **OPTIMIZATION OF BITUMINOUS MIX WITH DIFFERENT TYPES OF BITUMEN WITH LOCAL AGGREGATES** is a Bonafede work carried out by

<b>HEMANTHA N</b>	<b>1KG16CV019</b>
<b>CHANDAN R</b>	<b>1KG18CV402</b>
<b>LAVANYA M</b>	<b>1KG18CV406</b>
<b>YASHWANTH V</b>	<b>1KG18CV415</b>

in partial fulfillment for the award of **Bachelor of Engineering in Civil Engineering** of **Visvesvaraya Technological University, Belagavi**, during the year 2020-2021. It is certified that all the suggestions indicated during internal assessment have been incorporated in the report and this report satisfies the academic requirement with respect to **Project Work (17CSP85)** prescribed for the degree.

**Internal Guide**

**Head of the Department**

**Principal**

**M Veerendra Kumar**  
Associate professor  
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**Prof. Vijayalakshmi Akela**  
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Name and Signature of Examiner-2