

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY**

**"Jnana Sangama" Belagavi- 590018**



**PROJECT REPORT ON**  
**"MORPHOMETRIC ANALYSIS OF VARAHI RIVER BASIN"**

**Sponsored by Karnataka State Council for Science and Technology**

**Indian Institute of Science Campus, Bengaluru- 560012**

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

**BACHELOR OF ENGINEERING**

**IN**

**CIVIL ENGINEERING**

**Submitted by**

<b>ABDUL MUJEEB</b>	<b>4AL19CV001</b>
<b>DHEERAJ S SINDHE</b>	<b>4AL19CV007</b>
<b>MANOHAR M</b>	<b>4AL19CV017</b>
<b>KRUTHIK K</b>	<b>4AL20CV404</b>

**Under the Guidance of**  
**Dr. H.G Umeshchandra**  
**Associate Professor**



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**DEPARTMENT OF CIVIL ENGINEERING**

**ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**MIJAR, D.K- 574225**

**KARNATAKA**

**2022-23**

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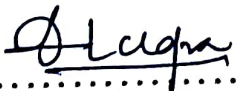
DEPARTMENT OF CIVIL ENGINEERING


## Certificate

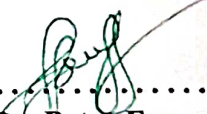
Certified that the project work entitled "**MORPHOMETRIC ANALYSIS OF VARAHI RIVER BASIN**" is the bona-fide work carried out by

ABDUL MUJEEB	4AL19CV001
DHEERAJ S SINDHE	4AL19CV007
MANOHAR M	4AL19CV017
KRUTHIK K	4AL20CV404

in partial fulfilment for the award of Bachelor of engineering in civil engineering of Visvesvaraya Technological University, Belagavi during the academic year 2022-2023, it is certified that all corrections and 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 requirement in respect of project work prescribed for the said degree.

  
..... 15.05.23  
Dr. H.G. Umeshchandra  
Project guide & Co-ordinator


  
Dept. of Civil Engineering  
Alva's Institute of Engineering & Technology  
Mijar, Moodbidri - 574 225  
Head of the Department

  
.....  
Dr. Peter Fernandes  
PRINCIPAL  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225 D.K.

External Examiners

- 1) Sumdra. P
- 2) Swapna. S.A

Signature with Date



Sug 25/5/23

## ABSTRACT

Drainage basin morphometry is a quantitative way of describing the characteristics of the surface form of drainage basin and provide important information about the region's topography and underlying geological structures. It plays an important role in selecting sites for construction of artificial recharge structures.

In present study has been made to discover the stream properties of Varahi River Basin, Dakshina Kannada district, Karnataka, using the various stream attributes such as the aerial, linear and relief parameters. The basin is having ten sub basins. The basin having elongated shape and coarse drainage texture indicates that the basin is in between the youth and the mature state.

In total 40 samples were collected from the various bore well. The samples were analyzed for various Physio-chemical parameters like pH, TDS, EC, Total hardness, Calcium, Magnesium, Sodium, Potassium, Chloride and Nitrates. Later test results are analyzed and compared with drinking water standards. concentration and quality of the potable water has deteriorated to a large extent at some sampling locations. Key words: Morphometry, Drainage basin, Topography, Geological structure.