KSCST

Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ **Telefax:** 080-23348840

Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ **Website:** www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

27th March 2019

Ref: 7.1.01/SPP/1333

The Principal,
Alva's Institute of Engineering and Technology,
Shobavana Campus,
Mijar,
Moodbidri - 574 225.

Dear Sir/Madam,

Sub : Sanction of Student Project - 42nd Series: Year 2018-2019
Your Project Proposal Reference No. : 42S_BE_2931

Ref : Your Project Proposal entitled " **FLOOD INUNDATION MAPPING ALONG THE UPPER REACHES OF NETRAVATI RIVER USING RS AND GIS TECHNIQUES**

I am happy to inform that your student project proposal referred above, has been approved by the Council for "Student Project Programme - 42nd Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Mr. Harshith Hj and others	**Budget**	**Amount (Rs)**
		Materials/Consumables	4,000.00
Guide/s	Prof. Sanjay S	Labor	500.00
		Travel	500.00
Department	Civil Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	6,000.00
	SIX THOUSAND RUPEES ONLY		

The following are the guidelines to carryout the project work :

a) The project should be performed based on the objectives of the proposal sent by you.

b) The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.

c) Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.

d) Please quote your **project reference number printed above** in all your future correspondences.

e) **Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :

1) Title of the project
2) Name of the College & Department
3) Name of the students & Guide(s)
4) Keywords

6) Introduction / background
(with specific reference to the project, work done earlier, etc) - about 20 lines
6) Objectives (about 10 lines)
7) Methodology (about 20 lines)
(materials, methods, details of work carried out, including drawings, diagrams etc)
8) Results and Conclusions
(about 20 lines with specific reference to work carried out)
9) Scope for future work (about 20 lines).
(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

The sanctioned amount will be sent through NEFT by Accounts Department. Please furnish the bank account details as per the format enclosed with this letter.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,

H. Hemanth Kumar

(H. Hemanth Kumar)

Copy to:
1) The Head of the Department of
Civil Engineering
Alva'S Institute Of Engineering And Technology,
Shobavana Campus,
Mijar,
Moodbidri - 574 225.

2) Prof. Sanjay S
Department of Civil Engineering
Alva'S Institute Of Engineering And Technology,
Shobavana Campus,
Mijar,
Moodbidri - 574 225.

3) The Finance Officer, KSCST, Bangalore

Encl: As Above

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

Belgaum – 590 018

PROJECT REPORT

ON

"FLOOD INUNDATION MAPPING ALONG THE UPPER REACHES OF NETRAVATI RIVER USING RS AND GIS TECHNIQUES"

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

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

Submitted By

NAME	USN
HARSHITA S RYAGI	4AL15CV035
HARSHITH H J	4AL14CV035
RAKESH H	4AL14CV072

Under the Guidance of

Internal Guide
Prof. Sanjay S
Asst. Professor
Department of Civil Engineering

External Guide
Dr. H Gangadhara Bhat
Professor of Marine Geology
Mangalore University, Konaje

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY,
MOODBIDRI- 574225.
2018-19

ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

Mijar Moodbidri D.K. -574225 – Karnataka

Department Of Civil Engineering

CERTIFICATE

Certified that the project work entitled "Flood Inundation Mapping along the Upper Reaches of Netravati River Using RS and GIS Techniques" is a bonafide work carried out by

HARSHITA S RYAGI	**4AL15CV035**
HARSHITH H J	**4AL14CV035**
RAKESH H	**4AL14CV072**

Are bonafide students of Civil Department of Alva's Institute of Engineering and Technology in partial fulfillment for the award of BACHELOR OF ENGINEERING in **CIVIL ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2018–2019, it is certified that all 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.

H Gangadhara Bhat

13/5/19

Prof. Sanjay. S	**Dr. H Gangadhara Bhat**	**Dr. H Ajith Hegde**	**Dr. Peter Fernandes**
Project Guide	**External Guide**	**Head of the Department**	**Principal**

H.O.D.
Dept. of Civil Engineering
Alva's Institute of Engg. & Technology
Mijar, Moodbidri - 574 225

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

Department of Marine Geology
University
MANGALAGANGOTRI - 574 199

Name of the Examiners **Signature with Date**

1.

2.

ABSTRACT

Flood, inundation of land by the rise and overflow of a body of water. Floods occur most commonly when water from heavy rainfall, from melting ice and snow, or from a combination of these exceeds the carrying capacity of the river system, lake, or the like into which it runs. Usually the combined flow of several water-swollen tributaries causes flooding along a river bank or shoreline. Accounts of floods that destroyed nearly all life are found in the mythology of many peoples. These hazards and losses can be prevented and reduced by providing reliable information to the public about the flood risk through flood inundation maps. Flood inundation maps are very essential for municipal planning, emergency action plans, flood insurance rates and ecological studies.

In this study Base map, Drainage Network map, Slope map, Aspect map, Contour map and Land Use Land Cover maps have been generated by using RS and GIS techniques, ArcGis Software.

Keywords: Flood inundation, Netravati River, RS and GIS, ArcGIS.