**MANGALORE UNIVERSITY**

**MANGALAGANGOTRI – 574199**

**MSc. GEOINFORMATICS**

# CERTIFICATE

This is to certify that dissertation entitled **"Land Use/Land Cover change detection analysis using landsat imageries in western part of Kanyakumari District, Tamilnadu, India"** Submitted by **Mr. Ankith V V (Reg.No:201661395101)** in partial fulfilment of the award of the **Master of science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place : Mangalagangothri
Date : 24/09/2022

**Prof.B.R Manjunatha**
**Co-ordinator**
Department of Marine Geology
Mangalore University
Mangalagangothri-574199

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**PERIYAR UNIVERSITY**
**DEPARTMENT OF GEOLOGY**
**SALEM**

*Lr. No: 942 / Geos / PU / 2022* **Date: 14.09.2022**

*Prof. Dr. S. VENKATESWARAN., Ph.D.,*
Professor and Head

# BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "**Land Use/Land Cover change detection analysis using landsat imageries in western part of Kanyakumari District, Tamilnadu, India**" submitted for the fulfillment of the requirement of the Degree of Master of Science in Geoinformatics in the Department of Marine Geology ,Mangalore University, Mangalagangotri is a bonafide research work carried out by Mr. Ankith.V.V, under my supervision and guidance and then no part of the dissertation has been submitted for the award of any degree ,diploma, fellowship or other similar titles of prizes and that the work has not been published in part or full in any scientific or popular journals or magazine.

Prof. Dr. S. VENKATESWARAN, M.Sc.
Professor and Head
Department of Geology
Periyar University
Salem - 636 011 Tamilnadu

Place : Salem

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# Mangalore University

**Department of Marine Geology**
**Mangalagangotri,**
**Karnataka.**

## Supervisor's Certificate

I certify that the dissertation work titled ***Dam Break Analysis of Thenmala Dam, Kerala Using HEC-RAS and GIS*** is carried out by Ms. Arundhathy T P, IV Semester, M.Sc. course in Geoinformatics under my guidance for the partial fulfilment of M.Sc. Degree in Geoinformatics during the year 2020-22. Further, I certify that this work or a part thereof has not been the basis for the award of any degree or diploma.

**Place:** Mangalagangothri
**Date:** 27/09/2022

**Prof. Manjunatha B R**
Dept. of Marine Geology
Mangalore University
Mangalore, Karnataka

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**KSCSTE - NATIONAL TRANSPORTATION PLANNING AND RESEARCH CENTRE**
(An Institution of Kerala State Council for Science, Technology & Environment)
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Website: www.natpac.kerala.gov.in, Phone: 0471 – 2551282

No. PG/12/NATPAC/140/2022

Date 14/09/2022

## CERTIFICATE

This is to certify that the thesis report titled "**Dam Break Analysis of Thenmala Dam, Kerala using HEC-RAS and GIS**" is a record of the work carried out by Ms **Arundhathy T P** (Registration No.**201661395102**) of the Department of Marine Geology, Mangalore University, Mangalagangotri during the year **2022** under my guidance and supervision as part of the requirement for obtaining her **Master of Science** degree in **Geoinformatics.**

**M S Saran**
**Scientist**
**Water Transport/GIS Division**
**Project Guide**

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# MANGALORE UNIVERSITY

## MANGALAGANGOTRI 674199

## DEPARTMENT OF MARINE GEOLOGY

## CERTIFICATE

This is to certify that dissertation work entitled **"URBAN FLOOD VULNERABILITY ASSESSMENT USING GEOSPATIAL ANALYSIS : CASE STUDY OF CALICUT CITY, INDIA"** is carried out by **Aswin Saji (Reg No. 201661395103)** partial fulfilment of the requirement for the award of **Master of Science** in **Geoinformatics** from Mangalore University, Mangalagangotri. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place: Mangalagangotri

Date : 19/9/2022

Dr. R. Nirmala

Assistant Professor

Dept. of Marine Geology

Mangalore University

Mangalagangotri 574199

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MANGALORE UNIVERSITY

MANGALAGANGOTHRI – 574199

MSc. GEOINFORMATICS

## SUPERVISOR'S CERTIFICATE

This is to certify that dissertation entitled **"SITE SUITABILITY FOR URBAN SOLID WASTE DISPOSAL IN PUTTUR, KARNATAKA, INDIA"** Submitted by **Mr ATHUL KRISHNAN K V (Reg. No: 201661395104)** in partial fulfilment of the award of the **Master of Science in GEO-INFORMATICS** from **Mangalore University, Mangalagangothri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

***Place: Mangalagangothri***

***Date:*** 24/09/2022

**Dr. B R Manjunatha**

Professor
Department of marine geology
Mangalore University
Mangalagangothri- 574199

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**DEPARTMENT OF POST-GRADUATE STUDIES AND RESEARCH IN GEOLOGY**

**GOVERNMENT COLLEGE KASARAGOD**

Vidyanagar P O., Kasaragod 671123.
Wwwgck.ac.in

# CERTIFICATE

This is to certify that dissertation entitled **"SITE SUITABILITY FOR URBAN SOLID WASTE DISPOSAL IN PUTTUR, KARNATAKA, INDIA"** Submitted by **Mr ATHUL KRISHNAN K V (Reg. No: 201661395104)** in partial fulfilment of the award of the **Master of Science in GEO-INFORMATICS** from **Mangalore University, Mangalagangothri.** It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

***Place: Kasaragod***

***Date: 14.09.2022***

**Dr. A.N. Manoharan**

Assistant Professor
Department of Geology,
Government College
Kasaragod- 671123

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**MANGALORE UNIVERSITY**

**MANGALAGANGOTRI – 574199**

**MSc. GEOINFORMATICS**

# CERTIFICATE

This is to certify that dissertation entitled **"CHANGE DETECTION ANALYSIS OF LAND USE LAND COVER BY USING GEOSPATIAL TECHNIQUES: A CASE STUDY OF SHARAVATHI-BADAGANI ESTUARY"** Submitted by **Mr. Gagan J Shetty (*Reg.No: 201661395105*)** in partial fulfilment of the award of the **Master of science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

**Place:** Mangalagangotri

**Date:** 23.09.2022

**Dr. Shivanna**

**Professor**

Department of Marine Geology,

Mangalore University

Mangalagangotri- 574199

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ಪರಿಸರ ನಿರ್ವಹಣೆ ಮತ್ತು ನೀತಿ
ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ

Environmental Management
& Policy Research Institute

ಅರಣ್ಯ, ಪರಿಸರ ಮತ್ತು ಜೀವಿಶಾಸ್ತ್ರ ಇಲಾಖೆಯಲ್ಲಿನ ಸ್ವಾಯತ್ತ ಸಂಸ್ಥೆ ಮತ್ತು ಕರ್ನಾಟಕ ಸೊಸೈಟಿಗಳ ನೋಂದಣಿ ಕಾಯ್ದೆ, 1960ರಡಿ ನೋಂದಾಯಿತ ಸಂಸ್ಥೆ
A society established under Forest, Ecology and Environment Department, Government of Karnataka and registered under Karnataka Societies Registration Act 1960

No. ADM/CR-16/ADM/2022-23/ 738 Date : 14.09.2022

**TO WHOMSOEVER IT MAY CONCERN**

**CERTIFICATE**

This is to certify that Sri. Gagan J Shetty student of Mangalore University, Mangalagangotri, has carried out his internship in the Office of Environmental Management & Policy Research Institute, from 01.06.2022 to 30.07.2022. During the internship he was assigned the task of Land Use/Land Cover mapping and "CHANGE DETECTION IN SHARAVATHI_BADGANI ESTUARY" and 10Km periphery for the period 2011-2021 using remote sensing and GIS. He has submitted the Project Completion Report for the assignment given to him.

Director (Research)
EMPRI 14/9/22

"ಹಸಿರು ಭವನ", ದೊರೆಸಾನಿಪಾಳ್ಯ ಅರಣ್ಯ ಆವರಣ, ವಿನಾಯಕ ನಗರ ವೃತ್ತ, ಜೆ.ಪಿ. ನಗರ ೫ನೇ ಹಂತ, ಬೆಂಗಳೂರು - ೫೬೦ ೦೭೮
"Hasiru Bhavana", Doresanipalya Forest Campus, Vinayakanagar Circle, J. P. Nagar 5th Phase, Bangalore - 560 078
Phone No: 080-2649 0747 /46; Email: empri.blr@gmail.com; Website: http://empri.karnataka.gov.in

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**MANGALORE UNIVERSITY**

**MANGALAGANGOTRI – 574199**

**MSc. GEOINFORMATICS**

# CERTIFICATE

This is to certify that dissertation entitled **"Determine Landslide Prone Areas in Harangi Subwatershed of Kodagu using Geomatics Tool"** Submitted by **Mr.Hemanth kumar(Reg.No:201661395106)** in partial fulfilment of the award of the **Master of science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place: Mangalagangothri

Date: 16/09/22.

Dr. R. Nirmala

Assistant professor

Department of Marine Geology

Mangalore University

Mangalagangotri- 574199

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# Horizon Ventures

## CERTIFICATE

This is to certify that dissertation entitled **"Determine Landslide prone areas in harangisubwatershed, Kodagu using geomatics tool"**Submitted by **Mr.Hemanthkumar(Reg.No:201661395106)**in partial fulfilment of the award of the **Master of Science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

For HORIZON VENTURES

Partner

Authorised signature

Place: Bangalore

Date: 24/08/2022

*Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS & GIS, Baseline Survey, Hydrological & Geological Studies, Mining Plan & ETS Survey*
Address: No. 4, Anaga, 3rd floor, Devasandra, New BEL Road, Opposite MS Ramaiah Hospital, Bengaluru - 560094
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# Mangalore University

**Department of Marine Geology**
**Mangalagangothri,**
**Karnataka.**

## Supervisor's Certificate

This is to certify that the dissertation work titled **ESTIMATION OF SOIL EROSION POTENTIAL ZONE IN THAMIRABARANI RIVER BASIN, SOUTH INDIA USING GIS BASED RUSLE MODEL** is carried out by Ms. Krishna Priya K P, IV Semester, M.Sc. course in Marine Geology under my guidance for the partial fulfilment of M.Sc. Degree in Marine Geology during the year 2020-22. Further, I certify that this work or a part thereof has not been the basis for the award of any degree or diploma.

**Place:** Mangalagangothri
**Date:** 26/09/2022

**Prof. Manjunatha B R**
Dept. of Marine Geology
Mangalore University
Mangalore, Karnataka

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राष्ट्रीय पृथ्वी विज्ञान अध्ययन केन्द्र
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*Ministry of Earth Sciences, Government of India*
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PB No. 7250, Akkulam, Thiruvananthapuram-695011, India

**Dr. S. Kaliraj**
**Scientist-C, NCESS**

**Date: 22.09.2022**

# Certificate

This is to certify that the dissertation work entitled **"Estimation of soil erosion potential zone in Thamirabarani River Basin, South India using GIS based RUSLE model"** submitted by **Krishna Priya K P (Reg. No. 201661395107)** in partial fulfilment of the requirement for the degree of Master of Science in Geoinformatics in Mangalore University, Mangalagangothri, Karnataka, is a record bonafide work carried out by her under my guidance at **National Centre for Earth Science Studies (NCESS), Ministry of Earth Sciences (MoES), Govt of India, Thiruvananthapuram - 695011, Kerala, India,** and this work has not been submitted for the award of any other degree, diploma, associateship, fellowship of any university or institution.

S. Kaliraj 22/9/2022
डॉ.एस. कालिराज / Dr.S. KALIRAJ
वैज्ञानिक, सी जी एल / Scientist, CGL
ई.एस.एस.ओ-राष्ट्रीय पृथ्वी विज्ञान अध्ययन केंद्र
ESSO-National Centre for Earth Science Studies
पृथ्वी विज्ञान मंत्रालय, भारत सरकार
Ministry of Earth Sciences, Govt. of India
तिरुवनन्तपुरम, केरल / Thiruvananthapuram, Kerala

दूरभाष/Phone : +91 - 471 - 2511502, 2511525, 2511721, 2917178
ई-मेल/E-mail : director.ncess@nic.in, chiefmanager.ncess@nic.in
फेक्स/Fax : +91 - 471 - 2412280 (Director), 471-2511525 (Chief Manager)
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ANGALORE UNIVERSITY

MANGALAGANGOTRI – 574199

MSc. GEOINFORMATICS

# CERTIFICATE

This is to certify that dissertation entitled **"Site suitability analysis for Identification of hospital Location using ArcGIS in Kasaragod district, Kerala"** Submitted by **Mr. MANEESH MM (Reg.No:201661395108)** in partial fulfilment of the award of the **Master of science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place : Mangalagangothri

Date : 26/09/2022

Prof.B.RManjunatha

**Co-ordinator**

Department of Marine Geology

Mangalore University

Mangalagangothri-574199

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MANGALORE UNIVERSITY

MANGALAGANGOTRI – 574199

MSc. GEOINFORMATICS

# CERTIFICATE

This is to certify that dissertation entitled **"Site selection for quarry and planning using open source GIS at Chandanamatti Village, Dharwad Taluk, Dharwad District, Karnataka"**

Submitted by **Mr.Sandesh Shetty M (Reg.No:201661395109)** in partial fulfilment of the award of the **Master of science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri.** It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place : Mangalagangothri

Date : 16/09/22

Dr.R. Nirmala

Assistant Professor

Department of Marine Geology

Mangalore University

Mangalagangothri- 574199

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# Horizon Ventures

## CERTIFICATE

This is to certify that dissertation entitled **"Site selection for quarry and planning using open source GIS at Chandanamatti Village, Dharwad Taluk, Dharwad District, Karnataka"**Submitted by **Mr.Sandesh Shetty M(Reg.No:201661395109)**in partial fulfilment of the award of the **Master of Science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

For HORIZON VENTURES

Authorised signature

Place: Bangalore

Date: 24/08/2022

Environmental Studies (EIA & EMP), Monitoring, Forest Diversion Planning, DPR, Wildlife Management Plan, Hazardous & Safety Studies, RS & GIS, Baseline Survey, Hydrological & Geological Studies, Mining Plan & LTS Survey
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MANGALORE UNIVERSITY

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MSc. GEOINFORMATICS

# CERTIFICATE

This is to certify that dissertation entitled **"LANDSLIDE SUSCEPTIBILITY MAPPING USING GIS AND WEIGHTED OVERLAY METHOD: A CASE STUDY OF KOZHIKODE"** Submitted by **Mr Sayanth Sajeevan (Reg. No: 201661395110)** in partial fulfilment of the award of the **Master of Science** in **GEOINFORMATICS** from Mangalore University, Mangalagangotri. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place : Mangalagangotri

Date : 26.09.2022

Dr. Shivanna

Professor

Department of Marine Geology

Mangalore university

Mangalagangotri- 574199

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# Mangalore University

**Department of Marine Geology**
**Mangalagangotri,**
**Karnataka.**


## Supervisor's Certificate

This is to certify that the dissertation work titled ***Identification of Landslide Hazard Zones of Malappuram District, Kerala using GIS*** is carried out by Ms. Sharmila Sherin M P, IV Semester, M.Sc. course in Geoinformatics under my guidance for the partial fulfilment of M.Sc. Degree in Geoinformatics during the year 2020-22. Further, I certify that this work or a part thereof has not been the basis for the award of any degree or diploma.

**Place:** Mangalagangothri

**Date:**


**Prof. Manjunatha B R**
Dept. of Marine Geology
Mangalore University
Mangalore, Karnataka


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# KSCSTE - NATIONAL TRANSPORTATION PLANNING AND RESEARCH CENTRE

KSCSTE – NATPAC

(An Institution of Kerala State Council for Science, Technology & Environment)
K. Karunakaran Transpark, Akkulam, Thuruvikkal P.O
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Website: www.natpac.kerala.gov.in, Phone: 0471 — 2551282


No. PG/12/NATPAC/140/2022 Date 14/09/2022

## CERTIFICATE

This is to certify that the thesis report titled **"Identification of Landslide Hazard Zones of Malappuram District, Kerala using GIS "** is a record of the work carried out by **Ms Sharmila Sherin M P** (Registration No.**201661395111**) of the Department of Marine Geology, Mangalore University, Mangalagangotri during the year **2022** under my guidance and supervision as part of the requirement for obtaining her **Master of Science** degree in **Geoinformatics**.

**Ms Saran**
**Scientist**
**Water Transport/GIS Division**
**Project Guide**

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MANGALORE UNIVERSITY

MANGALAGANGOTRI - 574199

## M.Sc. GEOINFORMATICS

## CERTIFICATE

This is to certify that dissertation entitled "**STUDY OF TECTONIC GEOMORPHOLGY OF NETRAVTI RIVER BASIN, KARNATAKA USING GIS AND REMOTE SENSING**" submitted by **Master SOORAJ RAJ S (Reg No: 201661395112)**. During June 2022 - September 2022 is a record of research work carried out under my supervision during the fourth semester, in partial fulfilment of the award of the Master of Science in Geoinformatics from Mangalore University, Mangalore. It has not been submitted elsewhere for the award of any degree or diploma.

This project was carried out under my supervision and was found worthy of acceptance.

Place: Mangalagangotri

Date: 19/9/2022

Dr. R. Nirmala

**Assistant Professor**

Department of Marine Geology

Mangalore University

Mangalagangotri-574 199

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(खान मंत्रालय, भारत सरकार)
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बनशंकरी द्वितीय स्टेज
बेंगलुरु - ५६००७०

National Institute of Rock Mechanics
(Ministry of Mines, Govt. of India)
Outer Ring Road, Eshwar Nagar
Banashankari 2nd Stage
Bengaluru - 560070

Tele. No. +91-080-26934400 (Director), Others: 26934402-14, Fax: +91-080-26934401, E-mail: dto@nirm.in, Web: www.nirm.in

# Certificate

This is to certify that M.Sc dissertation entitled **"STUDY OF TECTONIC GEOMORPHOLOGY OF NETRAVATI RIVER BASIN, KARNATAKA USING GIS AND REMOTE SENSING TECHNIQUES"** is an authentic record of the work carried out by **Mr SOORAJ RAJ S** (201661395112) Department of Marine Geology (Geoinformatics), Mangalore university under the supervision and guidance (June 2022 to September 2022) in the Seismotectonic Group of National Institute of Rock Mechanics, Bangalore, Karnataka.

Dr. Yogendra Singh
(Supervisor, Scientist E-1, NIRM)

Dr. Biju John
(Head Seismotectonic Department)

विभागाध्यक्ष / HOD
भूकंपीय विवर्तनिकी / Seismotectonic
राष्ट्रीय शिला यांत्रिकी संस्थान / National Institute of Rock Mechanics
खान मंत्रालय, भारत सरकार / Ministry of Mines, Govt. of India
ईश्वर नगर, बनशंकरी द्वितीय चरण / Eshwar Nagar, Banashankari, II Stage
बेंगलुरु, कर्नाटक - ५६००७० / Bangalore, Karnataka- 560070

Date:

Place:



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MANGALORE UNIVERSITY

MANGALAGANGOTRI - 574199

## M.Sc. GEOINFORMATICS

## CERTIFICATE

This is to certify that dissertation entitled "**STUDY OF TECTONIC GEOMORPHOLOGY OF KALINADI BASIN, KARNATAKA USING GIS AND REMOTE SENSING**" submitted by **SUJITH P (Reg No: 201661395113)**. During September 2021 - October 2021 is a record of research work carried out under my supervision during the fourth semester, in partial fulfilment of the award of the Master of Science in Geoinformatics from Mangalore University, Mangalore. It has not been submitted elsewhere for the award of any degree or diploma.

This project was carried out under my supervision and was found worthy of acceptance.

Place: Mangalagangotri

Date: 23.09.2022

Dr. Shivanna

**Professor**

Department of Marine Geology

Mangalore University

Mangalagangotri-574 199

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राष्ट्रीय शिला यांत्रिकी संस्थान
(खान मंत्रालय, भारत सरकार)
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बनशंकरी द्वितीय स्टेज
बेंगलुरु - ५६००७०

National Institute of Rock Mechanics
(Ministry of Mines, Govt. of India)
Outer Ring Road, Eshwar Nagar
Banashankari 2nd Stage
Bengaluru - 560070

Tele. No. +91-080-26934400 (Director), Others: 26934402-14, Fax: +91-080-26934401, E-mail: dto@nirm.in, Web: www.nirm.in

# Certificate

This is to certify that M.Sc dissertation entitled **"STUDY OF TECTONIC GEOMORPHOLOGY OF KALINADI BASIN, KARNATAKA USING GIS AND REMOTE SENSING TECHNIQUES"** is an authentic record of the work carried out by **Mr SUJITH P (201661395113)**, Department of Marine Geology (Geoinformatics), Mangalore university under the supervision and guidance (June 2022 to September 2022) in the Seismotectonic Group of National Institute of Rock Mechanics, Bangalore, Karnataka.

Dr. Yogendra Singh
(Supervisor, Scientist E-1, NIRM)

Dr. Biju John
(Head Seismotectonic Department)

Date:

Place:



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MANGALORE UNIVERSITY

MANGALAGANGOTRI – 574199 MSc.

GEOINFORMATICS

# SUPERVISOR'S CERTIFICATE

I certify that the dissertation work titled, " **LAND USE / LAND COVER CHANGE DETECTION THROUGH GEOINFORMATICS APPROACH : A CASE STUDY OF MANGALURE COASTAL ZONE, SOUTHWEST COAST OF INDIA**" carried out by MS.Swathi kk , IV Semester, M.Sc. course in Geoinformatics under my guidance for the partial fulfilment of M.Sc Degree in Geoinformatics during the year 202122. Further, I certify that this work or a part there of has been for the award of any degree or diploma.

Dr. Shivanna

Professor

Department of Marine Geology

Place : Mangalagangotri

Date :- 23.09.2022

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**DEPARTMENT OF WATER RESOURCES AND OCEAN ENGINEERING**

(Formerly Department of Applied Mechanics and Hydraulics)

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

**P.O. Srinivasnagar, Mangaluru - 575 025, Karnataka State, India**

This is to certify that the P.G. Project Work Report entitled, " **LAND USE / LAND COVER CHANGE DETECTION THROUGH GEOINFORMATICS APPROACH : A CASE STUDY OF MANGALURE COASTAL ZONE, SOUTHWEST COAST OF INDIA**" submitted by Swathi kk(Reg no.201661395114) as the record of the work carried out by her. is accepted as the P.G. Project Work Report submission in partial fulfillment of the requirements for the award of the degree of Master of Science in Geo-informatics in the Department of marine geology at Manglore university during the academic year 2021-2022.

G.S. Dwarakish 13.9.22

**Prof.Dwarakish G S**

External Guide

Department of Water Resources and ocean Engeneering

NITK, SurathKal

**Prof. B M Dodamani**

Head of Department

Department of Water Resources and ocean Engeneering

NITK, SurathKal

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# Mangalore University

**MANGALAGANGOTRI – 574199**

**M.Sc. GEOINFORMATICS**

## SUPERVISOR'S CERTIFICATE

This is to certify that dissertation entitled "**LANDSLIDE SUSCEPTIBILITY MAPPING USING RS AND GIS: A CASE STUDY OF WAYANAD**" Submitted by **Mr Vijay Sojan (Reg. No:201661395115)** in partial fulfilment of the award of the **Master of Science** in **GEOINFORMATICS** from **Mangalore University, Mangalagangotri**. It has not been submitted elsewhere for the award of any degree or diploma.

The project was carried out under my supervision and was found worthy of acceptance.

Place: Mangalagangotri

Date: 23.09.2022

**Dr. Shivanna**

Professor

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