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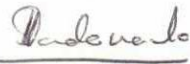
Department of Bio-Sciences
Mangalagangothri-574199
Karnataka, India

Certificate

This is to certify that the project work entitled "**Production and Characterization of Bacterial Protease from paddy soil**" is a bona fide work of **Ms. Aishwarya S. Shetty** (Reg. No. 201611400101) towards the partial fulfillment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mrs. Annapoorna**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: **Mangalagangothri**
Date: **11/10/2022**


Co-ordinator

M.Sc. Microbiology Course
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Mangalore University
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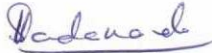
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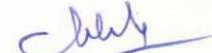
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This is to certify that the project work entitled “**Bacterial diversity of building surfaces**” is a bona fide work of **Ms. Anjana A V (Reg. No. 201611400102)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Nannu Shafakatullah**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri
Date: 10/10/2022


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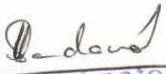
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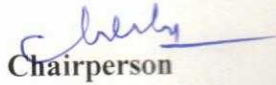
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This is to certify that the project work entitled "Fungal mediated synthesis of gold nanoparticles" is a bonafide work of Ms. Anusha Bhat (Reg. No. 201611400103) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of Dr. Srinath B.S., Assistant Professor, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri
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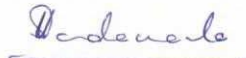
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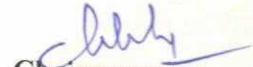
This is to certify that the project work entitled “**A study on rhizosphere bacteria and fungi of medicinal plants**” is a bona fide work of **Ms. Anusha. S (Reg. No. 201611400104)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mr. Dhanush N. Begur**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

Date: 10/10/2022


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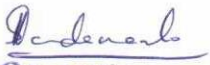
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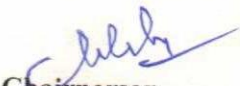
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This is to certify that the project work entitled "**Phytochemical Analysis and Antimicrobial Properties of Neem**" is a bona fide work of Ms. Chaithra K(Reg. No.201611400105) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mr. Dhanush N. Begur**, faculty, Microbiology Course, Department of Biosciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

Date: 10/10/2022


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This is to certify that the project work entitled "**Isolation and characterization of hydrocarbon degrading bacteria**" is a bona fide work of **Ms. Deekshitha (Reg. No. 201611400107)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mrs. Chaitrapriya C M**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

Date: 12.10.2022

Deekshitha
Co-ordinator
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This is to certify that the project work entitled "Characterization and Application of Biosynthesized Silver Nanoparticles by Pigmented Marine Bacterium" is a bonafide work of **Ms. Evita Lewis (Reg. No. 201611400110)** towards the partial fulfillment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mrs. Annapoorna**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: *Mangalagangothri*

Date: *12-10-2022*

A. Devar
Co-ordinator
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This is to certify that the project work entitled “**Evaluation of antimicrobial and antioxidant activities of some folk medicinal plants**” is a bonafide work of **Ms. Harshitha K V (Reg. No. 201611400111)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Rizwana Abid**, faculty, Microbiology Course, Department of Biosciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri
Date: 11/10/2022

D. S. S. S.
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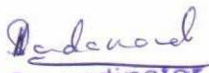
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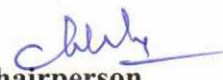
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This is to certify that the project work entitled “A study on the nitrogen fixing bacteria from marine sources” is a bona fide work of Ms. Jyothsna K (Reg. No. 201611400112) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of Dr. Nannu Shafakatullah, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri
Date: 10/10/2022


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This is to certify that the project work entitled **"Evaluation of herbicidal potentials of rhizosphere bacteria for weed management"** is a bona fide work of **Mr. Karthik Laxman K (Reg. No. 201611400113)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Nannu Shafakatullah**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri *[Signature]*
Date: 12/10/2022
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This is to certify that the project work entitled “**Effect of medicinal plant on microbial growth**” is a bona fide work of **Ms. Khadeeja Noureen (Reg. No. 201611400114)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mr. Dhanush N. Begur**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri
Date: 10/10/2022

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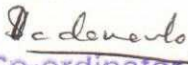
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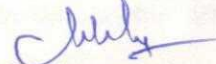
This is to certify that the project work entitled “Isolation and identification of bacteria from Yana caves” is a bona fide work of Ms. Laura Liza Menezes (Reg. No. 201611400115) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of Mrs. Chaitrapriya C M, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: MANGALAGANGOTTHRI

Date: 12/10/2022


Co-ordinator

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This is to certify that the project work entitled “**A study on the bacterial contaminants from the spoiled bananas**” is a bona fide work of **Ms. M S Ashwitha (Reg. No. 201611400116)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Nannu Shafakatullah**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: *Mangalagangothri*
Date: *11/10/2022*

Devedul
Co-ordinator
M.Sc. Microbiology Course
DEPARTMENT OF BIO-SCIENCES
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Karnataka, India

Certificate

This is to certify that the project work entitled “**A Study on Lipase-Producers from Oil-Contaminated Soil**” is a bonafide work of **Ms. Megha** (Reg. No. 201611400118) towards the partial fulfillment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mrs. Annapoorna**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: *Mangalagangothri*
Date: *12/10/2022*

Pardeep
Co-ordinator
M.Sc. Microbiology Course
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This is to certify that the project work entitled **“Isolation, characterization and screening of antibiotic-producing soil actinomycetes”** is a bonafide work of Ms. RASHMI NEELAVARA (Reg. No. 201611400120) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Rizwana Abid**, faculty, Microbiology Course, Department of Biosciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

Date: 11/02/22

D. Rizwana Abid
Co-ordinator

M.Sc. Biotechnology Course
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This is to certify that the project work entitled “**Optimization and production of amylase by *Bacillus spp.* using fruit peel as a substrate under submerged fermentation**” is a bona fide work of **Ms. Rashmi Shettigar (Reg. No.201611400121)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mr. Dhanush N. Begur**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri
Date: 10-10-2022

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This is to certify that the project work entitled "Characterization and Application of Biosynthesized Gold Nanoparticles by Pigmented Marine Bacterium" is a bonafide work of **Ms. Sanjana (Reg. No. 201611400125)** towards the partial fulfillment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mrs. Annapoorna**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: *Mangalagangothri*

Date: *12-10-2022*

Deven
Co-ordinator
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This is to certify that the project work entitled "Isolation and characterization of pathogenic microorganisms from different street foods and their susceptibility test" is a bonafide work of Ms. SHREEKAVYA A (Reg. No. 201611400126) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of Dr. Rizwana Abid, faculty, Microbiology Course, Department of Biosciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

Date: 12.10.2022

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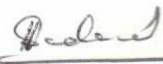
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This is to certify that the project work entitled "**Isolation, identification, characterization and screening of antibiotic producing *Nocardia* from soil sample**" is a bona fide work of **Ms. Shruthi (Reg. No. 201611400127)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mrs. Chaitrapriya C M**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: *Mangalagangothri*

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This is to certify that the project work entitled **"Isolation and identification of *Azospirillum* sp. from different paddy fields of Dakshina Kannada district, Karnataka"** is a bona fide work of **Ms. Sushmitha (Reg. No. 201611400128)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Nannu Shafakatullah**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: *mangalagangothri*
Date: *10-10-2022*

Dedunesh
Co-ordinator
M.Sc. Microbiology Course
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This is to certify that the project work entitled “**A study on bacteria and fungi associated with commercially available powdered spices**” is a bonafide work of **Ms. Thanooriya (Reg. No. 201611400129)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Mr. Dhanush N. Begur**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

Date: 11/10/2022

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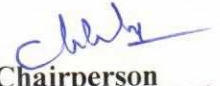
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This is to certify that the project work entitled “**Biosynthesis of Silver nanoparticles from *Staphylococcus saprophyticus*: their antimicrobial and catalytic applications**” is a bonafide work of **Mr.Vilas(Reg. No.201611400131)** towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of **Dr. Srinath B. S.**, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University. This work is original and has not been submitted in part or full to any other University for any degree or diploma.

Place: Mangalagangothri

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Certificate

This is to certify that the project work entitled “A study on the antimicrobial agents producing microbes from the soil” is a bona fide work of Ms. Vridhi K S (Reg. No. 201611400132) towards the partial fulfilment of M.Sc., degree in Microbiology, Mangalore University, carried out during the academic year 2021-22, under the guidance of Dr. Nannu Shafakatullah, faculty, Microbiology Course, Department of Bio-Sciences, Mangalore University.

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Place: Mangalagangothri
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Karnataka State (India)



Yenepoya Research Centre

Yenepoya (Deemed to be University),

University Road, Deralakatte, Mangaluru - 575 018

Ph. : +91 8242204668 Extn : 2035 | Email : research@yenepoya.edu.in

Certificate of Compliance

ISO 17025:2017

Certificate No.: 21209

20 JAN 2020-17 JAN 2023

Certificate of Compliance

GLP (Good Laboratory Practices)

Certificate No.: 21210

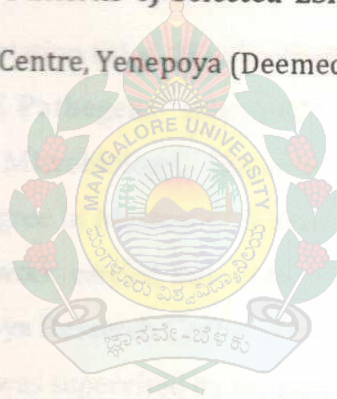
20 JAN 2020-19 JAN 2023

08.10.2022

CERTIFICATE BY THE GUIDE

This is to certify that **Ms. Chandana. H.C (Reg.No:201611400106)**, M.Sc Microbiology Student, Department of Biosciences, Mangalore University, Mangalagangothri, Mangalore has successfully completed her internship on the project titled **"Evaluation of Antibacterial Susceptibility Patterns of Selected ESKAPE Pathogens"** under my guidance at Yenepoya Research Centre, Yenepoya (Deemed to be University), Mangalore from June to August 2022.

Rekha P.D.
8/10/2022



Dr. Rekha P.D.
Professor & Director
Yenepoya Research Centre
Yenepoya (Deemed to be University)

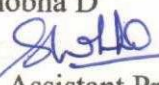
Director
Yenepoya Research Centre
Yenepoya (Deemed to be University)
Deralakatte, Mangaluru-575018

06.10.2022

CERTIFICATE

I hereby certify that this thesis entitled “**Antimicrobial activity and metabolomic profiling of *Semecarpusanacardium* nut extracts**” submitted by **Ms. Deekshitha**, M.Sc Microbiology, Department of Bioscience, Mangalore University, Mangalagangothri, Mangalore, for the award of degree in Masters of Science in Microbiology, embodies the results of bonafide research work carried out under my guidance and direct supervision in Yenepoya Research centre, Yenepoya (Deemed to be University), Mangalore during June to August 2022. I further certify that this thesis work in part or full, has not been submitted to any other University for any Degree/Diploma.

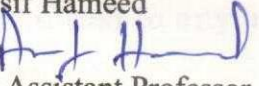
Name: Dr.Shobha D

Signature: 

Designation: Assistant Professor

Assistant Professor
Yenepoya Research Centre
Yenepoya (Deemed to be University)
Deralakatte, Mangaluru-575018

Name: Dr. Asif Hameed

Signature: 

Designation: Assistant Professor

Assistant Professor
Yenepoya Research Centre
Yenepoya (Deemed to be University)
Deralakatte, Mangaluru-575018

08.10.2022

CERTIFICATE

This is to certify that **Ms. Dhanyashree P (Reg.No:201611400109)**, M.Sc Microbiology Student, Department of Biosciences, Mangalore University, Mangalagangothri, Mangalore has successfully completed her internship on the project titled **"Evaluation of biofilm dynamics in selected uropathogens"** under my guidance at Yenepoya Research Centre, Yenepoya (Deemed to be University), Mangalore from June to August 2022.



Rekha P.D.
8/10/2022

Dr. Rekha P.D.
Professor & Director
Yenepoya Research Centre
Yenepoya (Deemed to be University)

Director
Yenepoya Research Centre
Yenepoya (Deemed to be University)
Deralakatte, Mangaluru-575018

Date: 07-10-2022

CERTIFICATE FROM THE PROJECT GUIDE

This is to certify that **Ms. Madhushree C.H.**, M.Sc. Microbiology (Second year), Department of Biosciences, Mangalore University, Mangalagangothri - 574 199, has undertaken the internship project entitled "**Isolation and Characterization of Meropenem and Cephalosporin Resistant Bacteria from Coastal Soil of Dakshina Kannada**". She finished her internship project at Yenepoya Research Centre, Yenepoya (Deemed to be University), Deralakatte, Mangalore-575018, Karnataka, under my supervision from June to September 2022.



07/10/2022
Dr. Bhagwan Rekadwad

Assistant Professor of Microbiology

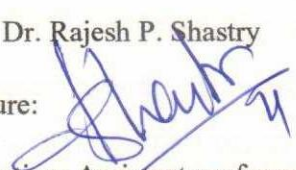
Division of Microbiology and Biotechnology

07.10.2022

CERTIFICATE

I hereby certify that this thesis entitled "*Expression of type III secretion system based SopB protein of Salmonella enterica serovar Typhimurium for development of subunit vaccine*" submitted by **Ms. Poornima S Bhat**, M.Sc. Microbiology, Department of Bioscience, Mangalore University, Mangalagangothri, Mangalore for the award of degree in Masters of Science in Microbiology, embodies the results of bonafide research work carried out under my guidance and direct supervision in Yenepoya Research Centre, Yenepoya (Deemed to be University), Mangalore during June to August 2022. I further certify that this thesis work in part or full has not been submitted to any other University for any Degree/Diploma.

Name: Dr. Rajesh P. Shastry

Signature: 

Designation: Assistant professor, Yenepoya Research Centre

Assistant Professor

Yenepoya Research Centre
Yenepoya (Deemed to be University)
Deralakatte, Mangaluru-575018



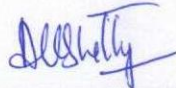
NITTE
(Deemed to be University)

**K S HEGDE
MEDICAL ACADEMY**

Certificate of Observership

This is to certify that **Ms. Rashmitha** , (Reg.No. 201611400122) 2nd year MSc. Microbiology student from Dept. of Biosciences, Mangalore University was under my guidance for the observership research project titled “**Synergistic effect of colistin and imipenem against carbapenem resistant Gram negative bacteria**”. The candidate has completed duration of the observership from 1st June to 15th September 2022 at Central Research Laboratory(CRL), K.S.Hegde Medical Academy (KSHEMA), Nitte (Deemed to be University) .

Date: 03/10/2022
Place: Mangaluru


Dr. A. Veena Shetty
Professor
Department of Microbiology
Central Research Laboratory
K. S. Hegde Medical Academy
Nitte (Deemed to be University)
Deralakatte, Mangaluru.



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YENEPLOYA
(DEEMED TO BE UNIVERSITY)
ACCREDITED BY NAAC WITH 'A' GRADE

Date: 07-10-2022

CERTIFICATE FROM THE PROJECT GUIDE

This is to certify that **Mr. Riyaz P. E.**, M.Sc. Microbiology (Second year), Department of Biosciences, Mangalore University, Mangalagangothri - 574 199, has undertaken the internship project entitled **"Screening, isolation, and characterization of meropenem and cephalosporin resistance bacteria from mangrove and estuarine environments"**. He finished his internship project at Yenepoya Research Centre, Yenepoya (Deemed to be University), Deralakatte, Mangalore-575018, Karnataka, under my supervision from June to September 2022.


07/10/2022
Dr. Bhagwan Rekadwad

Assistant Professor of Microbiology

Division of Microbiology and Biotechnology



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Certificate No.: 21210

20 JAN 2020-19 JAN 2023

Date: 07-10-2022

CERTIFICATE FROM THE PROJECT GUIDE

This is to certify that **Ms. Sahana K.**, M.Sc. Microbiology (Second year), Department of Biosciences, Mangalore University, Mangalagangothri - 574 199, has undertaken the internship project entitled "**Screening and characterization of antibiotic resistant bacterial diversity**". She finished her internship project at Yenepoya Research Centre, Yenepoya (Deemed to be University), Deralakatte, Mangalore-575018, Karnataka, under my supervision from June to September 2022.


07/10/2022
Dr. Bhagwan Rekadwad

Assistant Professor of Microbiology

Division of Microbiology and Biotechnology



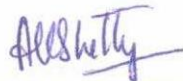
NITTE
(Deemed to be University)

**K S HEGDE
MEDICAL ACADEMY**

Certificate of Observership

This is to certify that **Ms. Vani K**, (Reg.No. 201611400130) 2nd year MSc Microbiology student from Dept. Of Biosciences, Mangalore University was under my guidance for the observership research project titled **“Synergistic effect of colistin and meropenem against carbapenem resistant Gram negative bacteria”**. The candidate has completed duration of the observership from 1st June to 15th September 2022 at Central Research Laboratory(CRL), K.S.Hegde Medical Academy (KSHEMA), Nitte (Deemed to be University) .

Date: 03/10/2022
Place: Mangaluru


Dr. A. Veena Shetty
Professor
Department of Microbiology
Central Research Laboratory
K. S. Hegde Medical Academy
Nitte (Deemed to be University)
Deralakatte, Mangaluru.