

**A COMPARATIVE STUDY OF THE  
PHYSICOCHEMICAL PARAMETERS AND POLLUTION  
STATUS OF KARAMANA RIVER AND VAMANAPURAM  
RIVER**

*(DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF  
SCIENCE IN ZOOLOGY)*

SUBMITTED BY  
**ANAGHA HARIKUMAR**

Candidate Code : 65021118001

Examination Code : 650 20 402

Subject Code : ZO 201



**POST GRADUATE DEPARTMENT OF ZOOLOGY  
AND RESEARCH CENTRE  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM – 65004, KERALA**

**AUGUST 2023**



A handwritten signature in blue ink, consisting of stylized initials and a long horizontal line extending to the right.

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DEPT. OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM.**

**PSYCHOMOTOR SKILL ENHANCEMENT AMONG  
STUDENTS OF AGE GROUP 19 TO 22 THROUGH  
EMERGENCY SKILL ACQUISITION STRATEGY**

**Dissertation submitted to the University of Kerala in partial fulfilment  
of the requirements for the Degree of Master of Science in Zoology**

**By**

**ANAGHA P**

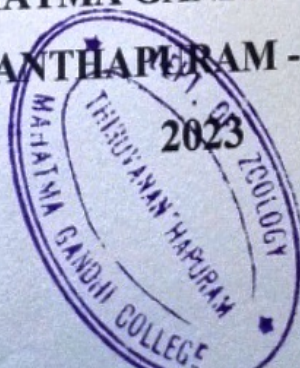
**Candidate Code : 65021118002**

**Exam Code : 65020402**

**Subject Code : ZO201**



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THIRUVANANTHAPURAM**

**"ODONATES DIVERSITY OF SELECTED  
WETLAND ECOSYSTEM ( PADDY FIELD )AT  
KESAVADASAPURAM IN  
THIRUVANANTHAPURAM DISTRICT KERALA"**

DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN THE PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN  
ZOOLOGY

SUBMITTED BY

GOPIKA B NAIR

CANDIDATE CODE : 65021118003

EXAMINATION CODE : 65020402

SUBJECT CODE : ZO 201



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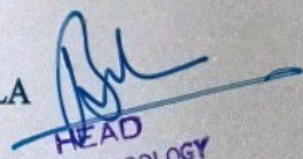
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THIRUVANANTHAPURAM

STUDY ON THE CORRELATION BETWEEN ATMOSPHERIC  
TEMPERATURE & RELATIVE HUMIDITY ON THE  
DISTRIBUTION & POPULATION DENSITY OF Aedes Aegypti  
& Aedes albopictus MOSQUITOES

*Dissertation submitted to the University of Kerala in partial  
fulfilment of the requirements for the degree of*

MASTER OF SCIENCE

IN

ZOOLOGY

BY

GOPIKA V NAIR

CANDIDATE CODE : 65021118004

EXAMINATION CODE : 650 20 402

SUBJECT CODE : ZO 201



POSTGRADUATE DEPARTMENT OF ZOOLOGY & RESEARCH CENTRE

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KESAVADIASAPURAM

THIRUVANANTHAPURAM 695 004

AUGUST 2023

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DEPT. OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM

A handwritten signature in blue ink, appearing to be 'R', written over a horizontal line.

# A STUDY ON ISOLATION, IDENTIFICATION AND CHARACTERISATION OF GUT FLORA OF EARTHWORMS

Dissertation submitted to the University of Kerala in the partial fulfillment of the requirements for the Degree of Master Science in Zoology.



By

L. SREELEKSHMI

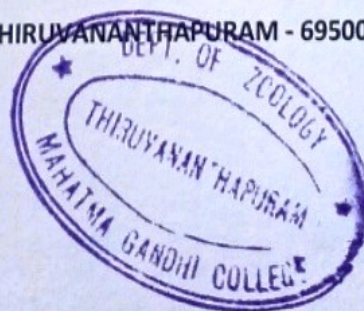
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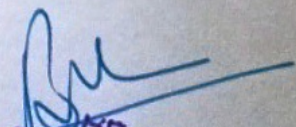


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THIRUVANANTHAPURAM - 695004



  
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MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM

**A STUDY ON AIR QUALITY INDEX AND MAJOR AIR  
POLLUTANTS IN THIRUVANANTHAPURAM CITY  
WITH SPECIAL REFERENCE TO PUBLIC HEALTH**

*(DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE  
IN ZOOLOGY)*

SUBMITTED BY  
LEKSHMI NANDANA.S

Candidate Code : 65021118006

Examination Code : 650 20 402

Subject Code : ZO 201



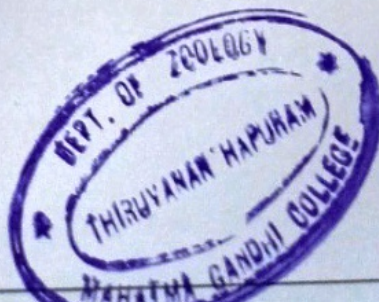
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**THIRUVANANTHAPURAM – 65004, KERALA**

**AUGUST 2023**



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DEPT. OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM

# ISOLATION & IDENTIFICATION OF SOIL MICROBIOTA

Dissertation submitted to the  
**University of Kerala**  
in partial fulfilment of the requirements for the  
**Master of Science**  
In  
**Zoology**

By

**Shilpa Raj**

Candidate Code : 65021118007

Examination Code : 65021401

Subject Code : ZO 201



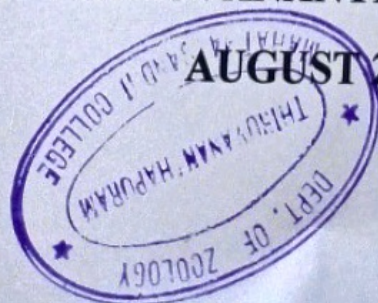
**POSTGRADUATE DEPARTMENT OF ZOOLOGY &  
RESEARCH CENTRE**

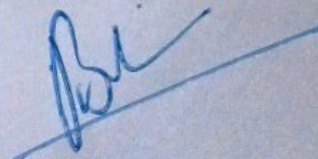
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**THIRUVANANTHAPURAM**

**AUGUST 2023**



  
DEPT. OF ZOOLOGY  
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THIRUVANANTHAPURAM

# EFFECT OF SUBLETHAL CONCENTRATION OF A HERBICIDE & A FUNGICIDE IN A SPRINGTAIL COLLEMBOLAN

DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN THE PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN  
ZOOLOGY

SUBMITTED BY

SONA R S

CANDIDATE CODE : 65021118008

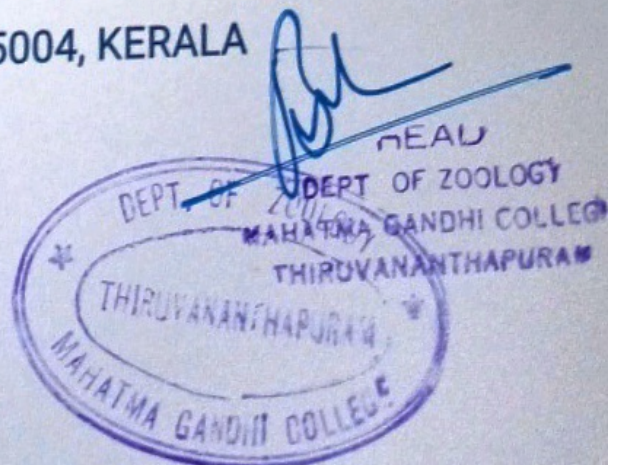
EXAMINATION CODE : 65020402

SUBJECT CODE : ZO 201



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**AUGUST 2023**





**EFFECT OF TEMPERATURE ON SOME ANTIOXIDANTS OF  
THIRD INSTAR LARVAE OF *Aedes albopictus***

DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN THE PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

SUBMITTED BY

UMAMAHESWARY V I

CANDIDATE CODE : 65021118009

EXAMINATION CODE : 65020402

SUBJECT CODE : ZO 201



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THIRUVANANTHAPURAM

**APTITUDE TOWARDS EMERGENCY MANAGEMENT  
AMONG STUDENTS OF AGE GROUP 19 TO 22 IN AN  
ARTS AND SCIENCE COLLEGE**

**Dissertation submitted to the University of Kerala in partial fulfilment  
of the requirements for the Degree of Master of Science in Zoology**

**By**

**VARSHA S**

**Candidate Code : 65020118010**

**Exam Code : 65020402**

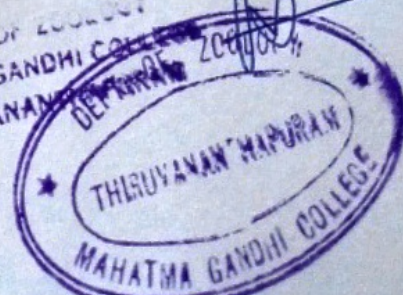
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THIRUVANANTHAPURAM



**ECOTOXICOLOGICAL EFFECT OF SELECTED PESTICIDES  
ON A TERRESTRIAL SOIL MACRO INVERTEBRATE OF  
COLEMBOLAN GROUP**

DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN THE PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN ZOOLOGY

SUBMITTED BY

VARSHA SOMAN

CANDIDATE CODE : 65021118011

EXAMINATION CODE : 65020402

SUBJECT CODE : ZO 201



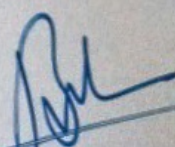
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**"BUTTERFLIES DIVERSITY OF SELECTED  
WETLAND ECOSYSTEM ( PADDY FIELD )AT  
KESAVADASAPURAM IN  
THIRUVANANTHAPURAM DISTRICT KERALA"**

DISSERTATION SUBMITTED TO THE UNIVERSITY OF KERALA IN THE PARTIAL  
FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN  
ZOOLOGY

SUBMITTED BY

VEENA PRASAD

CANDIDATE CODE : 65021118012

EXAMINATION CODE : 65020402

SUBJECT CODE : ZO 201



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AND RESEARCH CENTRE

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THIRUVANANTHAPURAM-695004, KERALA

**AUGUST 2023**

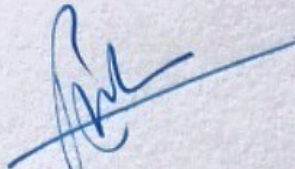


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DEPT. OF ZOOLOGY  
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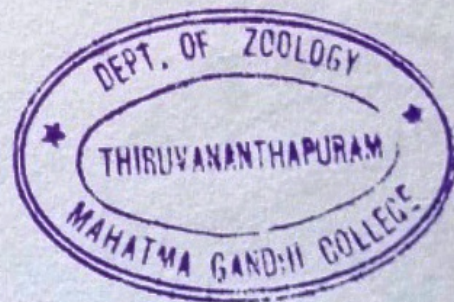
**DEPARTMENT OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "**Comparative study of the physicochemical parameters and pollution status of karamana River and Vamanapuram river**" was submitted by Anagha Harikumar (Candidate code: 65021118001) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



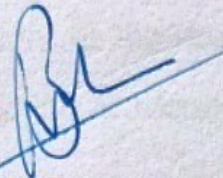
Head of the Department



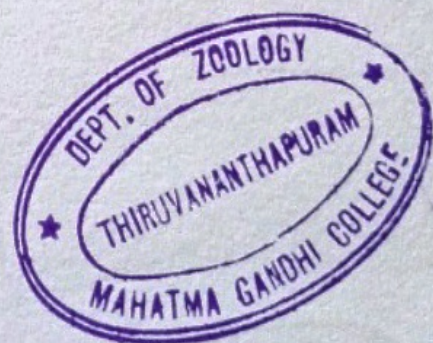
**DEPARTMENT OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled “Psychomotor skill enhancement among students of the age group 19 to 22 through emergency skill acquisition strategy” was submitted by Anagha .P ( Candidate code: 65021118002) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



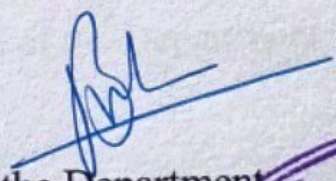
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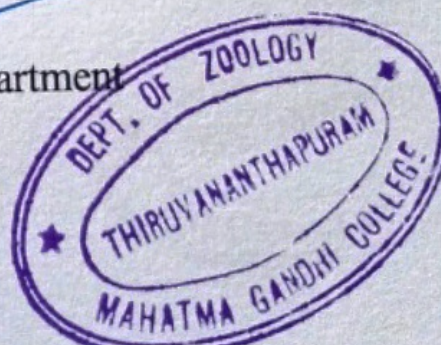


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**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled “**Odonate diversity of selected wetland ecosystems (paddy fields) at Kesavadasapuram in Thiruvananthapuram District, kerala**” was submitted by Gopika.B.Nair( Candidate code: 65021118003) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.

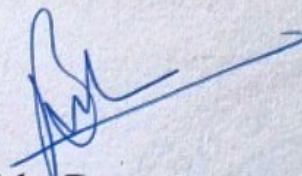
  
Head of the Department



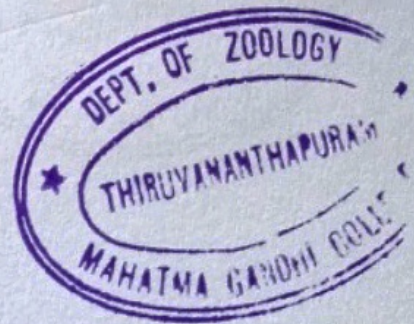
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**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled “Study on the correlation between atmospheric temperature and relative humidity on the distribution and population density of *Aedes aegypti* and *Aedes albopictus* mosquitoes” was submitted by Gopika.v.Nair ( Candidate code: 65021118004) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



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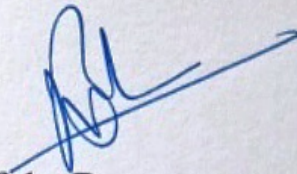




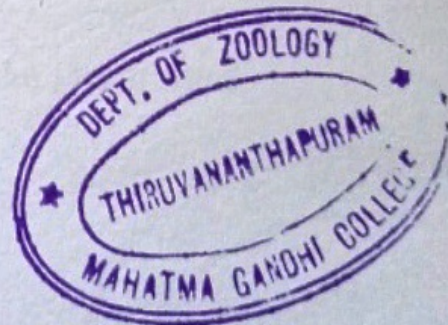
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**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "A study on the isolation, identification and characterization of gut flora of earthworms" was submitted by L.Sreelekshmi( Candidate code: 65021118005) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



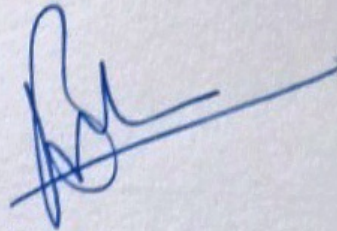
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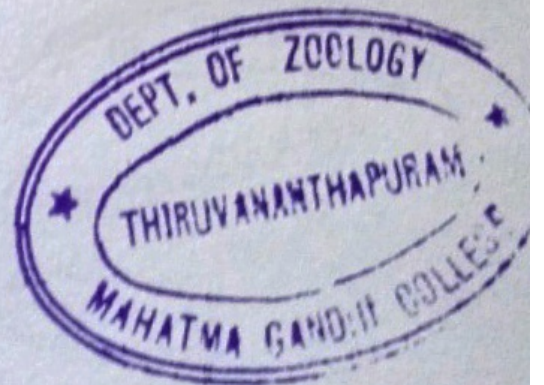
**DEPARTMENT OF ZOOLOGY  
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THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "**A study on air quality index and major air pollutants in Thiruvananthapuram city with special reference to public health**" was submitted by **Lekshminandana.S** (Candidate code: 65021118006) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



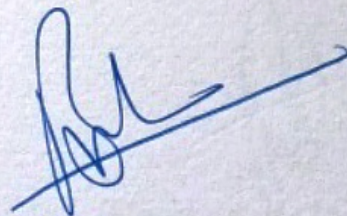
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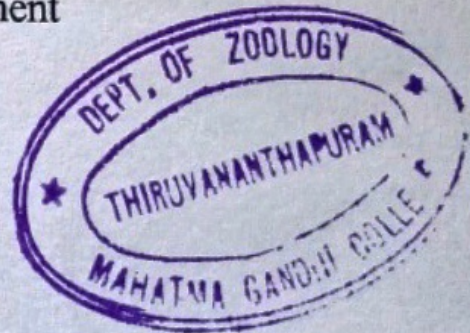
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THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "Isolation and identification of soil microbiota" was submitted by Silpa Raj( Candidate code: 65021118007) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



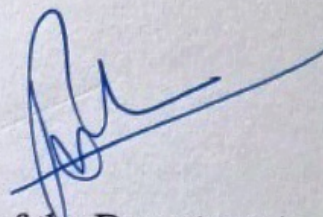
Head of the Department



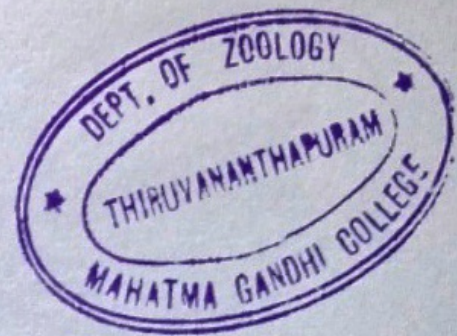
**DEPARTMENT OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "Effect of sublethal concentration of a herbicide and fungicide in springtail collembolan" was submitted by Sona.R.S( Candidate code: 65021118008) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



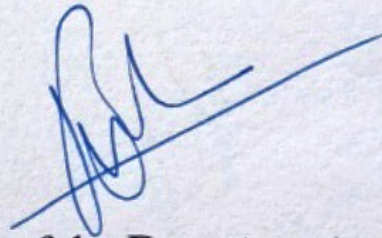
Head of the Department



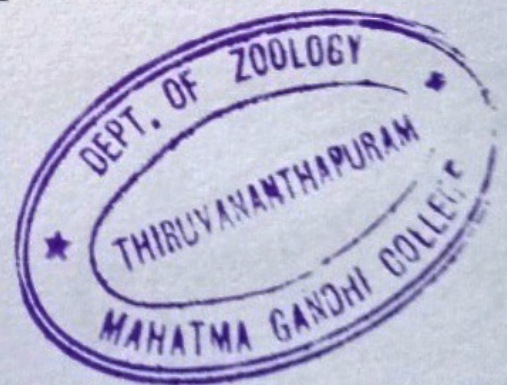
**DEPARTMENT OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "Effect of temperature on some antioxidants of 3rd instar larvae of *Aedes albopictus*" was submitted by Uma Maheswary ( Candidate code: 65021118009) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



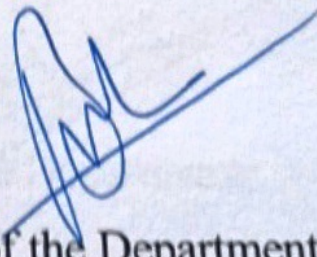
Head of the Department



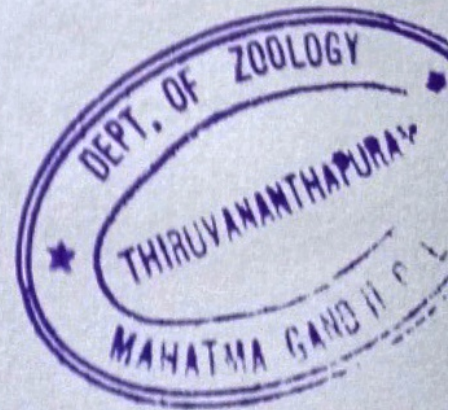
**DEPARTMENT OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "Aptitude towards emergency management skills among students of age groups 19 to 22 in an Arts and science College" was submitted by Varsha.S(Candidate code: 65021118010) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



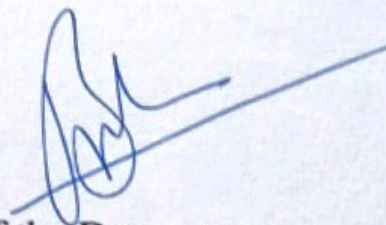
Head of the Department



**DEPARTMENT OF ZOOLOGY  
MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled” **Ecotoxicological effect of a selected pesticides on a terrestrial soil microinvertebrate of Collembolan group**”was submitted by Varsha Soman( Candidate code: 65021118011) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



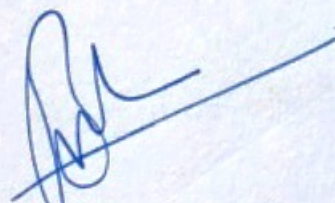
Head of the Department



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MAHATMA GANDHI COLLEGE  
THIRUVANANTHAPURAM**

**PROJECT COMPLETION CERTIFICATE**

This is to certify that the project entitled "**Butterfly diversity of selected wetland ecosystem ( paddyfield )at Kesavadasapuram district, Kerala**" was submitted by Veena Prasad( Candidate code: 65021118012) in partial fulfilment of the requirement for the award of degree of Masters in Science during the academic year 2022-23.



Head of the Department

