

CONSTRUCTION OF A.N.M MEDICAL CENTER, JODA, KENDUJHAR

A PROJECT REPORT

Submitted by

CHANDAN KUMAR: 180301110014

ABHISEK MISHRA: 180301110003

KAUSTUVA PRASAD DAS: 180301110001

DILLIP NAYAK: 180301111021

ASHISH PATEL: 180301110002

in partial fulfilment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

CIVIL ENGINEERING



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities!*

DEPARTMENT OF CIVIL ENGINEERING

CENTURION INSTITUTE OF TECHNOLOGY: BHUBANESWAR

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT: ODISHA

JANUARY 2022 / MAY 2022

DEPARTMENT OF CIVIL ENGINEERING

**SCHOOL OF ENGINEERING AND TECHNOLOGY
BHUBANESWAR -752050**

BONAFIDE CERTIFICATE

Certified that this project report “CONSTRUCTION OF A.N.M MEDICAL CENTER, JODA, KENDUJHAR” is the bonafide work of ABHISEK MISHRA, CHANDAN KUMAR, KAUSTUVA PRASAD DAS, DILLIP NAYAK & ASHISH PATEL who carried out the project work under my supervision. This is to further certify to the best of my knowledge, that this project has not been carried out earlier in this institute and the university.

Deepak Kumar Sahu

SIGNATURE

MR. DEEPAK SAHU

(Assistant Professor, Dept. of CE)

Certified that the above mentioned project has been duly carried out as per the norms of the college and statues of the university

Deepak Kumar Sahu



Siba Prasad Mishra

SIGNATURE

**INTERNAL EXAMINER (DR. KAMAL KUMAR BARIK)
HEAD OF THE DEPARTMENT**

SIGNATURE

SIGNATURE

EXTERNAL EXAMINER

DEPARTMENT SEAL

ACKNOWLEDGEMENT

I wish to express my profound and sincere gratitude to Asst. Prof. Deepak Sahu, Department of Civil Engineering, CUTM Bhubaneswar, who guided me into the intricacies of this project non-chalantly with matchless magnanimity.

I thank Dr. Kamal Kumar Barik, Head of the Dept. of Civil Engineering, CUTM Bhubaneswar and Prof. Prashant Mohanty, DEAN, SOET CUTM for extending their support during Course of this investigation.

I am indebted to Asst. Prof. Deepak Sahu for their constant encouragement, co-operation and help. Words of gratitude are not enough to describe the accommodation and fortitude which they have shown throughout my endeavour.

CHANDAN KUMAR: 180301110014

ABHISEK MISHRA: 180301110003

KAUSTUVA PRASAD DAS: 180301110001

DILLIP NAYAK: 180301111021

ASHISH PATEL: 180301110002

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**PLANNING, DESIGNING, ESTIMATION AND
SIMULATION of G+40 MULTISTORY HIGH
RISE BUILDING, PARALAKHEMUNDI**

A project report submitted towards partial
Fulfilment of the requirement for award of the degree of

Bachelor of Technology

In

CIVIL ENGINEERING

By

ADARSH KUMAR MISHRA (170101111015)

MATHIYAS THATAL (170101111017)

INDRA MAN LIMBU (170101111018)

ADITAYT RAJ PRADHAN (170101130019)

Under the Guidance of

Prof. M. Vignesh

Assistant Professor, Dept. of Civil Engineering

CUTM, Paralakhemundi



**Centurion
UNIVERSITY**

DEPARTMENT OF CIVIL ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY PARLAKHEMUNDI ODISHA

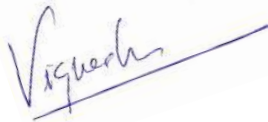
(2020 – 2021)

CENTURION UNIVERSITY OF TECHNOLOGY &
MANAGEMENT Paralakhemundi, Odisha 761211. Department
of Civil Engineering

CERTIFICATE

This is to certify that the project work titled “**PLANNING, DESIGNING, ESTIMATION AND SIMULATION of G+40 MULTISTORY HIGH RISE BUILDING, PARALAKHEMUNDI**” is a bonafied work of **ADARSH KUMAR MISHRA (170101111015), MATHIYAS THATAL (170101111017), INDRA MAN LIMBU (170101111018), ADITAYT RAJ PRADHAN (170101130019)** submitted in partial fulfilment of the requirements for the award of Bachelor of Technology in "CIVIL ENGINEERING" during the academic year 2020-21.

Certified that the above-mentioned project was completed in accordance with the college's and university's rules and regulations.



Prof. M. Vignesh
Dept. of Civil Engineering
CUTM, Paralakhemundi
(Guide)



Head of the Department
Dept. of Civil Engineering
CUTM, Paralakhemundi.



Rajib Kumar Majhi
External

ACKNOWLEDGEMENT

We would want to use this occasion to convey our heartfelt gratitude to all of the people who served as lighthouses for us during this project, guiding us to a successful and satisfactory conclusion. We would like to convey our heartfelt gratitude to Prof. M. Vignesh, Department of Civil Engineering, CUTM, Paralakhemundi, who patiently guided us through the complexities of this project with unmatched magnanimity. We would also like to express our gratitude to all of our department's faculty members, particularly Dr. Prafulla Kumar Panda. We express our gratitude and respect to the laboratory personnel for explaining the lab equipment and its operation, for completing the project, and for all of the college's resources. We express our heartfelt gratitude to all members of the Civil Engineering Department's teaching and non-teaching personnel for their support and encouragement. Last but not least, we'd want to express our gratitude to all of the people whose names I couldn't reveal but who were kind enough to assist me with my endeavour.

Adarsh K. Mishra

ADARSH KUMAR MISHRA (170101111015)

M. Thatal

MATHIYAS THATAL (170101111017)

Indra Mani Limbu

INDRA MANI LIMBU (170101111018)

Aditya Raj Pradhan

ADITAYT RAJ PRADHAN (170101130019)

**PLANNING, DESIGNING, ESTIMATION AND
3D MODELLING OF FARM HOUSE IN
ROLLAVAKA VILLAGE, VIZIANAGARAM**

A project report submitted towards partial
Fulfilment of the requirement for award of the degree of

Bachelor of Technology

In

CIVIL ENGINEERING

By

TAPASWINI PANDA (170101110005)

DEBARATA BAROI (170101110007)

MUHAMMED DANISH (170101110013)

AJIT KUMAR NAYAK (170301111056)

SASWAT SAIRAM NAYAK (170301111057)

Under the Guidance of

Prof. M. Vignesh

Assistant Professor, Dept. of Civil Engineering

CUTM, Paralakhemundi



**Centurion
UNIVERSITY**

DEPARTMENT OF CIVIL ENGINEERING

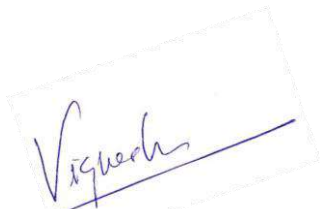
SCHOOL OF ENGINEERING & TECHNOLOGY PARLAKHEMUNDI ODISHA
(2020 – 2021)

CENTURION UNIVERSITY OF TECHNOLOGY &
MANAGEMENT Paralakhemundi, Odisha 761211. Department
of Civil Engineering

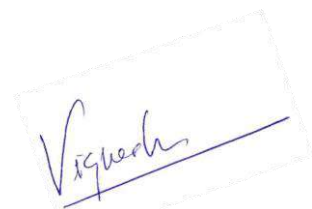
CERTIFICATE

This is to certify that the project work titled “**PLANNING, DESIGNING, ESTIMATION AND 3D MODELLING OF FARM HOUSE IN ROLLAVAKA VILLAGE, VIZIANAGARAM**” is a bonafied work of **TAPASWINI PANDA (170101110005), DEBARATA BAROI (170101110007), MUHAMMED DANISH (170101110013), AJIT KUMAR NAYAK (170301111056) and SASWAT SAIRAM NAYAK (170301111057)** submitted in partial fulfilment of the requirements for the award of Bachelor of Technology in "CIVIL ENGINEERING" during the academic year 2020-21.

Certified that the above-mentioned project was completed in accordance with the college's and university's rules and regulations.



Prof. M. Vignesh
Dept. of Civil Engineering
CUTM, Paralakhemundi
(Guide)



Head of the Department
Dept. of Civil Engineering
CUTM, Paralakhemundi.



Rajib Kumar Majhi
External

ACKNOWLEDGEMENT

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Tapaswini Panda

TAPASWINI PANDA (170101110005)

D. Baroi

DEBARATA BAROI (170101110007)

M. Danish

MUHAMMED DANISH (170101110013)

A. K. Nayak

AJIT KUMAR NAYAK (170301111056)

Saswat S. Nayak

SASWAT SAIRAM NAYAK (170301111057)

PROJECT REPORT

ON

OBJECT DETECTION WITH OPENCV

Submitted to

Centurion University of Technology & Management

in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

ALISHA DASH

REG NO-190301120018

Under the Guidance of

MRS. MAMATA GARANAYAK



DEPT. OF COMPUTER SCIENCE & ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY,

Centurion University of Technology & Management, Odisha

APRIL 2022



CERTIFICATE

This is to be certified that the project entitled “**OBJECT DETECTION WITH OPENCV**” has been submitted for the Bachelor of Technology in Computer Science Engineering, School of Engineering & Technology, CUTM, Jatni during the academic year 2021-2022 is a persuasive piece of project work carried out by “**ALISHA DASH**” towards the partial fulfillment for award of the degree (B.Tech.) under the guidance of “**Prof. MAMATA GARANAYAK**” and no part there has been submitted by them for any degree to the best of my knowledge.

Signature of HOD

Signature of Project Guide

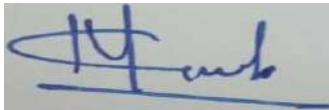
Signature of Coordinator

Signature of Dean, SOET

EVALUATION SHEET

Title of the Project: **OBJECT DETECTION WITH OPENCV**

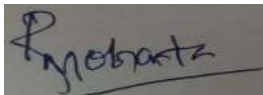
1. Year of submission:2022
2. Name of the degree: BTech
3. Date of Examination: APRIL 2022
4. Student Name with Regn No.: **ALISHA DASH REG NO-190301120018**
5. Name of the Guide: **Prof. MAMATA GARANAYAK**
6. Result: [APPROVED]



Signature of Project Guide



Signature of HOD



Signature of Coordinator



Signature of External Examiner



Signature of Dean, SOET

PROJECT REPORT
ON
NETWORK DESIGN USING LAN AND INTEGRATION
OF DIFFERENT SERVERS

Submitted to

Centurion University of Technology & Management

in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

AYUSH NAMAN PATI

REG NO- 190301200004

DIBYADARSHAN CHAKRA

REG NO- 190301200005

Under the Guidance of

PROF. SHREELA DASH



DEPT. OF COMPUTER SCIENCE & ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY,

Centurion University of Technology & Management, Odisha

APRIL 2022

A

Minor Project report on

SOLAR TREE

Submitted by
B-tech EEE 4th Semester

In the partial fulfillment for the award of the degree Of
Bachelor of Technology

In
Electrical and Electronics Engineering

Academic Year- 2021-2022

Under the Esteemed Guidance of
Prof. Rama Prasanna Dalai



Centurion
UNIVERSITY

Department of Electrical and Electronics Engineering
Centurion University of Technology & Management
(Bhubaneswar, Ramchandrapur, Jatani, Khurda, Odisha-752050)

SPECIMEN CERTIFICATE

*DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERINGCENTURION UNIVERSITY OF TECHNOLOGY
AND MANAGEMENT, BHUBANESWAR-752050*

BONAFIDE CERTIFICATE

Certified that this project report **SOLAR TREE** is the Bonafide work of **B Sai** who carried out the project work under my supervision This is to further certify to the best of my knowledge, that this project has not been carried out earlier in this institute and the university.



SIGNATURE

(Signature of Supervisor)

Certified that the above-mentioned project has been duly carried out as per the norm of the college and statutes of the university



SIGNATURE

HEAD OF THE DEPARTMENT

ACKNOWLEDGEMENTS

It is our pleasure to be indebted to various people, who directly or indirectly contributed in the development of this work and who influenced my/our thinking, behavior and acts during the course of study.

We are thankful to **Prof. Rama Prasanna Dalai** for her support, cooperation, and motivation provided to us during for constant inspiration, presence and blessings.

We also extend our sincere appreciation to **Prof. Sudhansu Kumar Samal**, Head of Department who provided his valuable suggestions and precious time in accomplishing our academic project.

B Sai (200301151015)

DETECTION OF THE STRUCTURE CHANGES IN AUTOCAD OF MBA BUILDING BY FIELD INSPECTION

A MINOR PROJECT REPORT

Submitted by

BIBHU DHAL (180301110005)

ANSUMAN MOHAPATRA (180301110005)

SATYAJIT KHUNTIA (180301110010)

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

CIVIL ENGINEERING



DEPARTMENT OF CIVIL ENGINEERING

CENTURION INSTITUTE OF TECHNOLOGY: BHUBANESWAR

**CENTURION UNIVERSITY OF
TECHNOLOGY&MANAGEMENT::ODISHA**

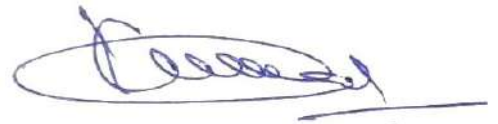
DECEMBER 2021- MAY 2022

DEPARTMENT OF CIVIL ENGINEERING

**CENTURION INSTITUTE OF TECHNOLOGY
AND MANAGEMENT, BHUBANESWAR-752050**

BONAFIDE CERTIFICATE

Certified that this project report “**DETECTION OF THE STRUCTURE CHANGES IN AUTOCAD OF MBA BUILDING BY FIELD INSPECTION**” is the bonafide work of “**BIBHU DHAL, ANSUMAN MOHAPATRA, SATYAJIT KHUNTIA**” who carried out the project work under my supervision. This is to further certify to the best of our knowledge, that this project has not been carried out earlier in this institute and the university.



DR. KAMAL KUMAR BARIK
(HEAD OF THE DEPARTMENT, Dept. of CIVIL)

Certified that the above mentioned project has been duly carried out as per the norms of the college and statues of the university.



Internal Examiner



Head of the Department



External Examiner

ACKNOWLEDGEMENT

I wish to express my profound and sincere gratitude to MRS. SAINI SIKTA DAS , who guided me into the intricacies of this project non-chalantly with matchless magnanimity.

I thank ASST.PROFESSOR, DR. KAMAL KUMAR BARIK, Head of the Department of Civil Engineering, CUTM Bhubaneswar and PROF.PRASHANT MOHANTY DEAN, SOET CIT for extending their support during course of this investigation.

I am indebted to MR. SUBHENDRA BALIYARSINGH for their constant encouragement co-operation and help. Words of gratitude are not enough to describe the accommodation and fortitude which they have shown throughout our Endeavour.

BIBHU DHAL

ANSUMAN MOHAPATRA

SATYAJIT KHUNTIA

PROJECT REPORT
ON
ENTERPRISE NETWORK DESIGN FOR IPV4

Submitted to

Centurion University of Technology & Management

in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

AMIT KUMAR DAS REG NO- 190301200002
BINAYAK MOHAPATRA REG NO- 190301200003

Under the Guidance of

PROF. SHREELA DASH



DEPT. OF COMPUTER SCIENCE & ENGINEERING
SCHOOL OF ENGINEERING & TECHNOLOGY,
Centurion University of Technology & Management, Odisha

APRIL 2022



CERTIFICATE

This is to be certified that the project entitled “**ENTERPRISE NETWORK DESIGN FOR IPV4**” has been submitted for the Bachelor of Technology in Computer Science Engineering, School of Engineering & Technology, CUTM, Jatni during the academic year 2021-2022 is a persuasive piece of project work carried out by “**AMIT KUMAR DAS, BINAYK MOHAPATRA**” towards the partial fulfillment for award of the degree (B.Tech.) under the guidance of “**Prof. SHREELA DASH**” and no part there has been submitted by them for any degree to the best of my knowledge.

Signature of HOD

Signature of Project Guide

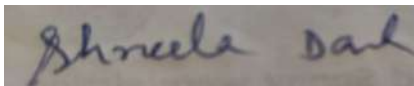
Signature of Coordinator

Signature of Dean, SOET

EVALUATION SHEET

Title of the Project: **ENTERPRISE NETWORK DESIGN FOR IPV4**

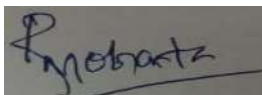
1. Year of submission:2022
2. Name of the degree: BTech
3. Date of Examination: April2022
4. Student Name with Regn No.: **AMIT KUMAR DAS,REG NO-190301200002**
BINAYK MOHAPATRA,REG NO-190301200003
5. Name of the Guide: **Prof. SHREELA DASH**
6. Result: [APPROVED]



Signature of Project Guide



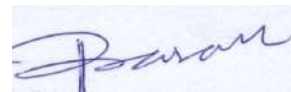
Signature of HOD



Signature of Coordinator



Signature of External Examiner



Signature of Dean, SOET

A Project report on

**CONSTRUCTION PROJECT MANAGEMENT AND MONITORING OF
H.L BRIDGE OVER RIVER “JALANGA” FROM P.W.D. ROAD TO
SANATUNDI ROAD, RAYAGADA BLOCK, GAJAPATI, ODISHA**

To fulfilment of the requirement for award of the degree of

**Bachelor of Technology
in
Civil Engineering**

Domain – Construction, Planning, Monitoring and Project Management

Submitted By

Sridhar Kumar Panda (180101110001) Bundi Purandhar Reddy (190101110001)
Alok Kumar Patra (180101110003) Biswajit Singh (190101110003)
Sai Soumya Shubhankar (180101170023) Kundan Kumar (190101110023)
Palli Chandrashekar (180101111006)

Under the Supervision of

Dr. Rajib Kumar Majhi

Department of Civil Engineering, CUTM, Paralakhemundi

Prof. Deepak Sahu

Department of Civil Engineering, CUTM, Bhubaneswar



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UNIVERSITY**

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Empowering Communities...*

**DEPARTMENT OF CIVIL ENGINEERING
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
MAY-2022**

Centurion University of Technology & Management

(A UGC recognized State University by the Act of Assembly)

Department of Civil Engineering

P.O: R. Sitapur, Paralakhemundi,
Pin: 761211, Dist.: Gajapati, Odisha
(India), www.cutm.ac.in



Phone No. - +919438269572
E-mail: prafullapanda@cutm.ac.in

**Centurion
UNIVERSITY**
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Empowering Communities

CERTIFICATE

This is to certify that the project work entitled "Construction Project Management and Monitoring of H.L Bridge Over River "JALANGA" from P.W.D Road to Sanatundi Road, Rayagada Block, Gajapati District, Odisha" is a bonafide work carried out by Sridhar Kumar Panda(180101110001), Alok Kumar Patra(180101110003), Sai Soumya Shubhankar(180101170023), Palli Chandrashekar(180101111006), Bundi Purandhar Reddy(190101110001), Biswajit Singh(190101110003) and Kundan Kumar(190101110023) for the partial fulfilment of the requirements for the award of Bachelor of Technology in Civil Engineering during the academic year 2020- 2022.

It is certified that the Project Report has not been submitted to any other College/University for the award of Diploma/Degree.

Deepak Kumar Sahu

Prof. Deepak Kumar Sahu

Asst. Professor
Department of Civil Engineering
CUTM, Bhubaneswar
(Supervisor)

Dr. Rajib Kumar Majhi

Dr. Rajib Kumar Majhi

Asst. Professor
Department of Civil Engineering
CUTM, Paralakhemundi
(Supervisor)

Dr. Prafulla Kumar Panda

Dr. Prafulla Kumar Panda

HOD, Civil Engineering
CUTM, Paralakhemundi



External Examiner

External Examiner

ACKNOWLEDGEMENT

With great solemnity and sincerity, we offer our profuse thanks to **Centurion University of Technology and Management** for providing all the resources to complete my project successfully.

We wish to express my deep sense of gratitude to **Dr. Rajib Kumar Majhi**, Department of Civil Engineering, CUTM PKD for his wholehearted co-operation, unfailing inspiration and valuable guidance. Throughout the project work, his useful suggestions, constant encouragement has given a right direction and shape to my learning. Really, we are indebted to his for his excellent and enlightened guidance.

We consider OUR privilege to express deepest gratitude to **Prof. Deepak Sahu**, Department of Civil Engineering, CUTM BBSR for his valuable suggestions and constant motivation that greatly helped the project work to get successfully completed.

It is our pleasure to acknowledge the help and support of all the teaching and Non-teaching faculty of Civil Department. We thank all those who contributed directly or indirectly in successfully carrying out this work.

Sridhar Kumar Panda
Sridhar Kumar Panda

Alok Kumar Patra
Alok Kumar Patra

Sai Soumya Shubhankar
Sai Soumya Shubhankar

P. Chandrashekar
Palli Chandrashekar

B. Purandhar Reddy
B. Purandhar Reddy

Biswajit Singh
Biswajit Singh

Kundan Kumar
Kundan Kumar

DECLARATION

We hereby declare that this project entitled "Construction Project Management and Monitoring of H.L Bridge over River "JALANGA" from P.W.D. Road to Sanatundi Road, Rayagada Block, Gajapati, Odisha" is entirely original and has been carried out in the Department of Civil Engineering, Centurion University of Technology & Management. This is being submitted in partial fulfillment for the award of Degree of Bachelor of Technology in Structural Detailing and Drawing from Centurion University of Technology & Management, Paralakhemundi, Odisha.

We hereby state that this report is not submitted to any other College/University or published at any time before.

Sridhar Kumar Panda.
Sridhar Kumar Panda

Alok K. Patra
Alok Kumar Patra

Sai soumya Subhakar
Sai Soumya Shbbhankar

P. Chandrashekar
Palli Chandrashekar

B. Purandhar
B. Purandhar Reddy

Biswajit Singh
Biswajit Singh

Kundan Kumar
Kundan Kumar

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CHANDAN KUMAR: 180301110014

ABHISEK MISHRA: 180301110003

KAUSTUVA PRASAD DAS: 180301110001

DILLIP NAYAK: 180301111021

ASHISH PATEL: 180301110002

in partial fulfilment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

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UNIVERSITY**

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Empowering Communities!*

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CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT: ODISHA

JANUARY 2022 / MAY 2022

DEPARTMENT OF CIVIL ENGINEERING

**SCHOOL OF ENGINEERING AND TECHNOLOGY
BHUBANESWAR -752050**

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Deepak Kumar Sahu

SIGNATURE

MR. DEEPAK SAHU

(Assistant Professor, Dept. of CE)

Certified that the above mentioned project has been duly carried out as per the norms of the college and statues of the university

Deepak Kumar Sahu



Siba Prasad Mishra

SIGNATURE

INTERNAL EXAMINER (DR. KAMAL KUMAR BARIK)

SIGNATURE

HEAD OF THE DEPARTMENT

SIGNATURE

EXTERNAL EXAMINER

DEPARTMENT SEAL

ACKNOWLEDGEMENT

I wish to express my profound and sincere gratitude to Asst. Prof. Deepak Sahu, Department of Civil Engineering, CUTM Bhubaneswar, who guided me into the intricacies of this project non-chalantly with matchless magnanimity.

I thank Dr. Kamal Kumar Barik, Head of the Dept. of Civil Engineering, CUTM Bhubaneswar and Prof. Prashant Mohanty, DEAN, SOET CUTM for extending their support during Course of this investigation.

I am indebted to Asst. Prof. Deepak Sahu for their constant encouragement, co-operation and help. Words of gratitude are not enough to describe the accommodation and fortitude which they have shown throughout my endeavour.

CHANDAN KUMAR: 180301110014

ABHISEK MISHRA: 180301110003

KAUSTUVA PRASAD DAS: 180301110001

DILLIP NAYAK: 180301111021

ASHISH PATEL: 180301110002

PLANNING, DESIGNING AND PREPARATION OF DETAILED REPORT OF AN APARTMENT

A PROJECT REPORT

Submitted by

CHANDAN TARA: 180301110015

In partial fulfilment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

CIVIL ENGINEERING



**Centurion
UNIVERSITY**

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Empowering Communities!*

DEPARTMENT OF CIVIL ENGINEERING

CENTURION INSTITUTE OF TECHNOLOGY: BHUBANESWAR

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT:: ODISHA

APRIL 2022 / MAY 2022

DEPARTMENT OF CIVIL ENGINEERING

SCHOOL OF ENGINEERING AND TECHNOLOGY

BHUBANESWAR -752050

BONAFIDE CERTIFICATE

Certified that this project report "***PLANNING, DESIGNING AND PREPARATION OF DETAILED REPORT OF AN APARTMENT***" is the bonafide work of CHANDAN TARA I who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute and the university.

Deepak Kumar Sahu

SIGNATURE

MR. Deepak kumar sahu
(Assistant Professor)

Certified that the above mentioned project has been duly carried out as per the norms of the college and statues of the university

Deepak Kumar Sahu

SIGNATURE
INTERNAL EXAMINER

Dr. Kamal Kumar Barik

SIGNATURE
(DR. KAMAL KUMAR BARIK)

Siba Prasad Mishra

SIGNATURE
EXTERNAL EXAMINER

DEPARTMENT SEAL

ACKNOWLEDGEMENT

I wish to express my profound and sincere gratitude to Asst. Prof. Surya Narayan, Department of Electrical Engineering, CUTM Bhubaneswar, who guided me into the intricacies of this project non-chalantly with matchless magnanimity.

I thank Dr. Kamal Kumar Barik, Head of the Dept. of Civil Engineering, CUTM Bhubaneswar and Prof. Prashant Mohanty, DEAN, SOET CUTM for extending their support during Course of this investigation.

I am indebted to Asst. Prof. Deepak kumar sahu for their constant encouragement, co-operation and help. Words of gratitude are not enough to describe the accommodation and fortitude which they have shown throughout my endeavour.

CHANDAN TARA I - 180301110015

**PLANNING, DESIGNING, ESTIMATION AND
3D MODELLING OF FARM HOUSE IN
ROLLAVAKA VILLAGE, VIZIANAGARAM**

A project report submitted towards partial
Fulfilment of the requirement for award of the degree of

Bachelor of Technology

In

CIVIL ENGINEERING

By

TAPASWINI PANDA (170101110005)

DEBARATA BAROI (170101110007)

MUHAMMED DANISH (170101110013)

AJIT KUMAR NAYAK (170301111056)

SASWAT SAIRAM NAYAK (170301111057)

Under the Guidance of

Prof. M. Vignesh

Assistant Professor, Dept. of Civil Engineering

CUTM, Paralakhemundi



**Centurion
UNIVERSITY**

DEPARTMENT OF CIVIL ENGINEERING

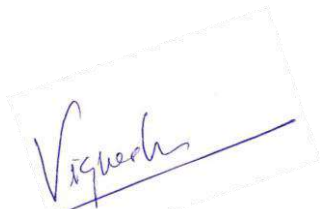
SCHOOL OF ENGINEERING & TECHNOLOGY PARLAKHEMUNDI ODISHA
(2020 – 2021)

CENTURION UNIVERSITY OF TECHNOLOGY &
MANAGEMENT Paralakhemundi, Odisha 761211. Department
of Civil Engineering

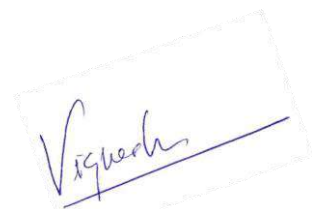
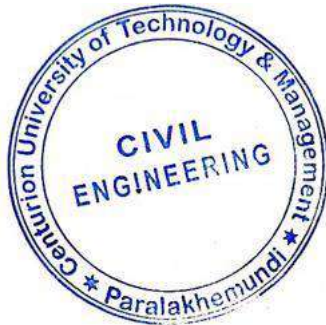
CERTIFICATE

This is to certify that the project work titled “**PLANNING, DESIGNING, ESTIMATION AND 3D MODELLING OF FARM HOUSE IN ROLLAVAKA VILLAGE, VIZIANAGARAM**” is a bonafied work of **TAPASWINI PANDA (170101110005), DEBARATA BAROI (170101110007), MUHAMMED DANISH (170101110013), AJIT KUMAR NAYAK (170301111056) and SASWAT SAIRAM NAYAK (170301111057)** submitted in partial fulfilment of the requirements for the award of Bachelor of Technology in "CIVIL ENGINEERING" during the academic year 2020-21.

Certified that the above-mentioned project was completed in accordance with the college's and university's rules and regulations.



Prof. Vignesh
Dept. of Civil Engineering
CUTM, Paralakhemundi
(Guide)



Head of the Department
Dept. of Civil Engineering
CUTM, Paralakhemundi.



Rajib Kumar Majhi
External

ACKNOWLEDGEMENT

We would want to use this occasion to convey our heartfelt gratitude to all of the people who served as lighthouses for us during this project, guiding us to a successful and satisfactory conclusion. We would like to convey our heartfelt gratitude to Prof. M. Vignesh, Department of Civil Engineering, CUTM, Paralakhemundi, who patiently guided us through the complexities of this project with unmatched magnanimity. We would also like to express our gratitude to all of our department's faculty members, particularly Dr. Prafulla Kumar Panda. We express our gratitude and respect to the laboratory personnel for explaining the lab equipment and its operation, for completing the project, and for all of the college's resources. We express our heartfelt gratitude to all members of the Civil Engineering Department's teaching and non-teaching personnel for their support and encouragement. Last but not least, we'd want to express our gratitude to all of the people whose names I couldn't reveal but who were kind enough to assist me with my endeavour.

Tapaswini Panda

TAPASWINI PANDA (170101110005)

D. Baroi

DEBARATA BAROI (170101110007)

M. Danish

MUHAMMED DANISH (170101110013)

A. K. Nayak

AJIT KUMAR NAYAK (170301111056)

Saswat S. Nayak

SASWAT SAIRAM NAYAK (170301111057)

A PROJECT REPORT
On
AUTOMATIC VOLTAGE REGULATOR
Submitted By:
Ranjan Kumar Pal(180301150004)



Centurion
UNIVERSITY

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**
**CENTURION UNIVERSITY OF TECHNOLOGY &
MANAGEMENT**
ODISHA
YEAR-2021-22



Centurion UNIVERSITY

CERTIFICATE

It is certified that this project report “Automatic Voltage Regulator”, which will be submitted for the award of project report, is the bona-fide work of Raj Kumar Pal (190301150004) and under my guidance and supervision. This is to further certify to the best of my knowledge that this project has not been out elsewhere for the award off any degree.

Signature of Guide

Signature of HoD, EEE



Project report of
Repair of 5KV Transformer

Submitted by

B-tech 6th Semester

Rajendra prasad dash

In the partial fulfillment for the award of the degree Of

Bachelor of Technology

In

Electrical and Electronics Engineering

Academic Year- 2019-2023

Under the Esteemed Guidance of

MR. Swakantik Mishra

Department of Electrical and Electronics Engineering
Centurion University of Technology & Management
(Bhubaneswar, Ramchandrapur, Jatani, Khurda, Odisha-752050)

ACKNOWLEDGEMENTS

It is our pleasure to be indebted to various people, who directly or indirectly contributed in the development of this work and who influenced my/our thinking, behavior and acts during the course of study.

We are thankful to **Mr. SWAKANTIK MISHRA** for her support, cooperation, and motivation provided to me/us during for constant inspiration, presence and blessings.

We also extend our sincere appreciation to **ASUTOSH MOHAPATRA** , who provided his valuable suggestions and precious time in accomplishing our academic project.

DECLARATION

I hereby declare that entire work embodied in this project report entitled “5 KVA TRANSFORMER REPAIR” has been carried out by us. No part of it has been submitted for any institution previously.

To the best of our knowledge, the matter embodied in the thesis has not been submitted to any other university for award any Degree.

DOMAIN

OPERATION AND MAINTENANCE OF ELECTRICAL GRID SYSTEM AND TRANSFORMER

PROJECT: - REPAIR OF 5KV TRANSFORMER

GROUP MEMBERS: -

MANISH KUMAR	(190301140004 EE)
RANJAN KUMAR	(190301140005 EE)
DEBASHIS TRIPATHY	(190301141006 EE)
ABHISHEK TRIPATHY	(190301141007 EE)
SAURAV SUMAN	(190301150006 EEE)
SWAGAT KR. PANDA	(190301150007 EEE)
RAJENDRA PRASAD DASH	(1903011510011 EEE)

A PROJECT REPORT

On

HYDRAULIC DISC BRAKES

In partial fulfilment for the award of the degree

Of

BACHELOR OF TECHNOLOGY

In

MECHANICAL ENGINEERING

MALLIPURAM SRINU	(180101161016)
G. MANIKANTA	(180101160001)
P. SHYAM	(180101160002)
O. DILLESWAR	(180101160010)
P. SAIKIRAN	(180101160007)
R. AKHIL	(180101160006)



Centurion
UNIVERSITY

DEPARTMENT OF MECHANICAL ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

PARALAKHEMUNDI, ODISHA

2021-2022

DEPARTMENT OF MECHANICAL ENGINEERING
SCHOOL OF ENGINEERING & TECHNOLOGY
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
PARALAKHEMUNDI -761211

BONAFIDE CERTIFICATE

Certified that this project report entitled

“HYDRAULIC DISC BRAKES”

is the bonafide work of

MALLIPURAM SRINU	(180101161016)
G. MANIKANTA	(180101160001)
P. SHYAM	(180101160002)
O. DILLESWAR	(180101160010)
P. SAIKIRAN	(180101160007)
R. AKHIL	(180101160006)

Who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has not been carried out earlier in this institute.

Santosh Patro
Signature of the supervisor
6.12.21

Mr. Santosh Patro & Mrs. G Sri Devi

Certified that the above-mentioned project has been duly carried out as per the norms of the college and statutes of the university.

HEAD OF THE DEPARTMENT
Mr. Sujit Mishra



Status: Approved/Not Approved

INTERNAL EXAMINER

EXTERNAL EXAMINER

A PROJECT REPORT

On

FABRICATION OF BOTTLE STAND

In partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

In

MECHANICAL ENGINEERING

Tapan Barado	(180101161014)
Mallipuram Srinu	(180101161016)
Menda Tarak	(180101161017)
G Dileep Kumar	(180101110002)



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DEPARTMENT OF MECHANICAL ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

PARALAKHEMUNDI, ODISHA

2021-2022

DEPARTMENT OF MECHANICAL ENGINEERING
SCHOOL OF ENGINEERING & TECHNOLOGY
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
PARALAKHEMUNDI, ODISHA

BONAFIDE CERTIFICATE

Certified that the project report entitled

“FABRICATION OF BOTTLE STAND”

is a bonafide work of

TAPAN BARADO	(180101161014)
MALLIPURAM SRINU	(180101161016)
MENDA TARAK	(180101161017)
G DILEEP KUMAR	(180101110002)

Who carried out the project work under my supervision and guidance, submitted to our college in partial fulfillment for the award of the degree of Bachelor of Technology in Mechanical Engineering.


Signature of the supervisor

Dr. Santosh Patro

Certified that the above mentioned project has been duly carried out as per the norms of the college and statutes of the university.


HEAD OF THE DEPARTMENT

Dr. Sujit Mishra

Status: Approved/Not Approved


INTERNAL EXAMINER


EXTERNAL EXAMINER



A PROJECT REPORT

On

FABRICATION OF STOOL

In partial fulfillment for the award of the degree

Of

BACHELOR OF TECHNOLOGY

In

MECHANICAL ENGINEERING

P.Sai Kiran Kumar	(180101160005)
O.Dilleswar Rao	(180101160010)
Yeshi Wangchuck	(180101160011)



Centurion
UNIVERSITY

DEPARTMENT OF

PROJECT REPORT

ON

EVENT CALENDAR WITH TO DO LIST

Submitted to

Centurion University of Technology & Management

in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

AYAN BISWAS

REG NO-1903011200

HIMANSU SEKHAR JENA

REG NO-190301120076

Under the Guidance of

MR. NILAMADHAB DASH



DEPT. OF COMPUTER SCIENCE & ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY,

Centurion University of Technology & Management, Odisha

APRIL 2022



CERTIFICATE

This is to be certified that the project entitled “**EVENT CALENDAR WITH TO DO LIST**” has been submitted for the Bachelor of Technology in Computer Science Engineering, School of Engineering & Technology, CUTM, Jatni during the academic year 2021-2022 is a persuasive piece of project work carried out by “**AYAN BISWAS, HIMANSHU SEKHAR JENA**” towards the partial fulfillment for award of the degree (B.Tech.) under the guidance of “**Prof. NILAMADHAB DASH**” and no part there has been submitted by them for any degree to the best of my knowledge.

Signature of HOD

Signature of Project Guide

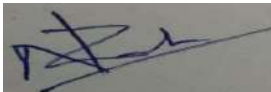
Signature of Coordinator

Signature of Dean, SOET

EVALUATION SHEET

Title of the Project: **EVENT CALENDAR WITH TO DO LIST**

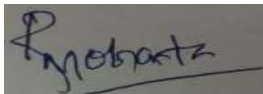
1. Year of submission:2022
2. Name of the degree: BTech
3. Date of Examination: APRIL 2022
4. Student Name with Regn No.: **AYAN BISWAS REG NO-1903011200010**
HIMANSHU SEKHAR JENA REG NO-180301200076
5. Name of the Guide: **Prof. NILAMADHAB DASH**
6. Result: [APPROVED]



Signature of Project Guide



Signature of HOD



Signature of Coordinator



Signature of External Examiner



Signature of Dean, SOET

A

Minor Project report on

SOLAR TREE

Submitted by
B-tech EEE 4th Semester

In the partial fulfillment for the award of the degree Of
Bachelor of Technology

In
Electrical and Electronics Engineering

Academic Year- 2021-2022

Under the Esteemed Guidance of
Prof. Rama Prasanna Dalai



Centurion
UNIVERSITY

Department of Electrical and Electronics Engineering
Centurion University of Technology & Management
(Bhubaneswar, Ramchandrapur, Jatani, Khurda, Odisha-752050)

SPECIMEN CERTIFICATE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING CENTURION UNIVERSITY OF TECHNOLOGY
AND MANAGEMENT, BHUBANESWAR-752050

BONAFIDE CERTIFICATE


Certified that this project report **SOLAR TREE** is the Bonafide work of **Hitesh Kumar Nath**, who carried out the project work under my supervision This is to further certify to the best of my knowledge, that this project has not been carried out earlier in this institute and the university.



SIGNATURE

(Signature of Supervisor)

Certified that the above-mentioned project has been duly carried out as per the norm of the college and statutes of the university



SIGNATURE

HEAD OF THE DEPARTMENT

ACKNOWLEDGEMENTS

It is our pleasure to be indebted to various people, who directly or indirectly contributed in the development of this work and who influenced my/our thinking, behavior and acts during the course of study.

We are thankful to **Prof. Rama Prasanna Dalai** for her support, cooperation, and motivation provided to us during for constant inspiration, presence and blessings.

We also extend our sincere appreciation to **Prof. Sudhansu Kumar Samal**, Head of Department who provided his valuable suggestions and precious time in accomplishing our academic project.

Hitesh Kumar Nath (200301150005)

A PROJECT REPORT

On

FABRICATION OF BIRD SHELTER

In partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

In

MECHANICAL ENGINEERING

Gajjivelli Manikanta (180101160001)

P Shyam Sundar Rao (180101160002)

Palli Pavan Kumar (180101160003)

Routu Chaitanya (180101160004)



Centurion
UNIVERSITY

DEPARTMENT OF MECHANICAL ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

PARALAKHEMUNDI, ODISHA

2021-2022

DEPARTMENT OF MECHANICAL ENGINEERING
SCHOOL OF ENGINEERING & TECHNOLOGY
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
PARALAKHEMUNDI, ODISHA

BONAFIDE CERTIFICATE

Certified that the project report entitled

“FABRICATION OF BIRD SHELTER”

is a bonafide work of

GALJVELLI MANIKANTA (180101160001)
P SHYAM SUNDAR RAO (180101160002)
PALLI PAVAN KUMAR (180101160003)
ROUTU CHAITANYA (180101160004)

Who carried out the project work under my supervision and guidance, submitted to our college in partial fulfillment for the award of the degree of Bachelor of Technology in our Mechanical Engineering.

Signature of the ~~supervisor~~ *Dr. Santosh Patro*

Dr. Santosh Patro

Certified that the above mentioned project has been duly carried out as per the norms of the college and statutes of the university.

Signature of the ~~supervisor~~ *Dr. Sujit Mishra*
HEAD OF THE ~~DEPARTMENT~~

Dr. Sujit Mishra

Stamp: Approved/Not Approved

[Signature]
INTERNAL EXAMINER

[Signature]
EXTERNAL EXAMINER



A Project report on

**Hydrological Modelling Simulation using SWAT - A Case
Study of Vamsadhara River Basin, Odisha**

submitted towards partial fulfilment of the requirement for award of the degree of

Bachelor of Technology

in

Civil Engineering

(Domain - Aerial Surveying and Remote Sensing Application)

Submitted By

Pradip Kumar Sharma (190101110018) Arvind Kumar (190101110011)
Md Gulam Raza (190101110034) Nitesh Kumar Patel (190101110019)
Suhaila Gulami (190101110040)

Under the guidance of

Dr. Prafulla Kumar Panda

Associate Professor, Department of Civil Engineering
Centurion University of Technology & Management, Paralakhemundi

Dr. Kamal Kumar Barik

Associate Professor, Department of Civil Engineering
Centurion University of Technology & Management, Bhubaneswar



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Empowering Communities!*

Department of Civil Engineering
School of Engineering & Technology, Paralakhemundi Campus
Centurion University of Technology & Management, Odisha
May-2022

Centurion University of Technology & Management, Odisha
Department of Civil Engineering

P.O: R. Sitapur, Paralakhemundi,
Pin: 761211, Dist: Gajapati, Odisha
(India), cutm.ac.in



Phone No. - +919438269572

E-mail: prafullapanda@cutm.ac.in

CERTIFICATE

This is to certify that the project work titled "**Hydrological Modelling Simulation using SWAT - A Case Study of the Vamsadhara River Basin, Odisha**" is a bonafied work carried out by Pradeep Kumar Sharma (190101110018), Arvind Kumar (190101110011), Md Gulam Raza (190101110034), Nitesh Kumar Patel (190101110019), and Suhaila Gulami (190101110040), submitted in partial fulfilment of the requirements for the award of Bachelor of Technology in "Civil Engineering" during the academic year 2021-22. It is also certified that this project report has not been submitted to any other College/University for the award of any degree/diploma.

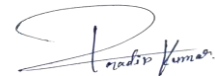
Dr. Prafulla Kumar Panda
Department of Civil Engineering
CUTM, Paralakhemundi
(HOD & Guide)

External Examiner

DECLARATION

It is hereby declared that the project report titled "**Hydrological Modelling Simulation using SWAT - A Case Study of the Vamsadhara River Basin, Odisha**" is completely unique and was carried out at Department of Civil Engineering of Centurion University of Technology & Management, Paralakhemundi Campus for the partial fulfilment of the requirements of the degree of Bachelor of Technology in Civil Engineering. This report has not been submitted to any other College/University or published at any time before.

Signature of the Students



Pradip kumar sharma



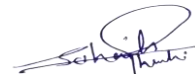
Arvind kumar



Md Gulam Raza



Nitesh kumar Patel



Suhaila Gulami

ACKNOWLEDGEMENT

We would like to convey our heartfelt gratitude to **Dr. Prafulla Kumar Panda**, Department of Civil Engineering, CUTM, Paralakhemundi, & **Dr. Kamal Kumar Barik**, Department of civil engineering, CUTM, Bhubaneswar who patiently guided us through the complexities of this project with unmatched magnanimity.

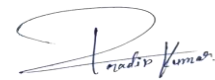
Dr. Prafulla Kumar Panda, Department of Civil Engineering, CUTM, Paralakhemundi, & Dr. Kamal Kumar Barik, Department of civil engineering, CUTM, Bhubaneswar has been extremely helpful throughout our inquiry.

We would also like to express our gratitude to other members who have helped us in various aspects particularly **Dr. Sonam Sandeep Dash, Mr. Pratyush Kumar Behera, Mr. Sovan Sankalp**

We express our gratitude and respect to the laboratory personnel for explaining the lab equipment and its operation, for completing the project, and for all of the college's resources. We express our heartfelt gratitude to all members of the Civil Engineering Department's teaching and non-teaching personnel for their support and encouragement.

Last but not least, we'd want to express our gratitude to all of the people whose names I couldn't reveal but who were kind enough to assist me with my endeavour.

Signature of the Students



Pradip kumar sharma



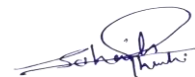
Arvind kumar



Md Gulam Raza



Nitesh kumar Patel



Suhaila Gulami

UNDERGROUND PARKING STRUCTURE A PROJECT REPORT

Submitted by

SAHU PRAGATI: 180301111024

In partial fulfilment for the award of the degree of

**BACHELOR OF TECHNOLOGY
in
CIVIL ENGINEERING**



DEPARTMENT OF CIVIL ENGINEERING

CENTURION INSTITUTE OF TECHNOLOGY: BHUBANESWAR

**CENTURION UNIVERSITY OF
TECHNOLOGY & MANAGEMENT:: ODISHA**

APRIL 2022 / MAY 2022

**DEPARTMENT OF CIVIL ENGINEERING
SCHOOL OF ENGINEERING AND TECHNOLOGY**

BHUBANESWAR -752050

BONAFIDE CERTIFICATE

Certified that this project report “UNDERGROUND PARKING STRUCTURE” is the bonafide work of PRAGATI SAHU who carried out the project work under my supervision. This is to further certify to the best of my knowledge that this project has

not been carried out earlier in this institute and the university.

Deepak Kumar Sahu

SIGNATURE
MR. Deepak kumar sahu
(Assistant Professor)

Certified that the above mentioned project has been duly carried out as per the norms of the college and statues of the university



Deepak Kumar Sahu



Internal

Examiner Head of the Department External Examiner

DEPARTMENT SEAL

ABSTRACT

The increasing rate of private car use in urban areas as a result of fast growing economy, derelict policies and subsidies are the main causes making car parking one of the main concerns

for transport and traffic management all over the world. As there be comes scar city of available and, underground parking be comes more and more appealing day by day, especially in urban locations. Multi-storey car parks, underground or basement car parks, and car parks in a multi – function building are common. Even though multi-storey car parks are mainly

PROJECT REPORT
ON
TRANSPORTATION MANAGEMENT BASED WEB
APPLICATION

Submitted to

Centurion University of Technology & Management

in partial fulfillment of the requirement for award of the degree of

B. TECH.

in

COMPUTER SCIENCE & ENGINEERING

Submitted By

PRITAM KUMAR NAYAK

REG NO-190301121115

SURMA NIBEDITA

REG NO- 190301121116

Under the Guidance of

PROF. RAJ KUMAR MOHANTA



DEPT. OF COMPUTER SCIENCE & ENGINEERING
SCHOOL OF ENGINEERING & TECHNOLOGY,
Centurion University of Technology & Management, Odisha

APRIL 2022



CERTIFICATE

This is to be certified that the project entitled “**TRANSPORTATION MANAGEMENT BASED WEB APPLICATION**” has been submitted for the Bachelor of Technology in Computer Science Engineering, School of Engineering & Technology, CUTM, Jatni during the academic year 2021-2022 is a persuasive piece of project work carried out by “**PRITAM KUMAR NAYAK, SURMA NIBEDITA**” towards the partial fulfillment for award of the degree (B.Tech.) under the guidance of “**Prof. RAJ KUMAR MOHANTA**” and no part there has been submitted by them for any degree to the best of my knowledge.

Signature of HOD

Signature of Project Guide

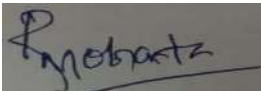
Signature of Coordinator

Signature of Dean, SOET

EVALUATION SHEET

Title of the Project: **TRANSPORTATION MANAGEMENT BASED WEB APPLICATION**

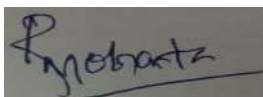
1. Year of submission:2022
2. Name of the degree: BTech
3. Date of Examination: April 2022
4. Student Name with Regn No.: **PRITAM KUMAR NAYAK REG NO-190301121115**
SURMA NIBEDITA REG NO-190301121116
5. Name of the Guide: **Prof. RAJ KUMAR MOHANTA**
6. Result: [APPROVED]



Signature of Project Guide



Signature of HOD



Signature of Coordinator



Signature of External Examiner



Signature of Dean, SOET

**PLANNING, DESIGNING, ESTIMATION AND
3D MODELLING OF FARM HOUSE IN
ROLLAVAKA VILLAGE, VIZIANAGARAM**

A project report submitted towards partial
Fulfilment of the requirement for award of the degree of

Bachelor of Technology

In

CIVIL ENGINEERING

By

TAPASWINI PANDA (170101110005)

DEBARATA BAROI (170101110007)

MUHAMMED DANISH (170101110013)

AJIT KUMAR NAYAK (170301111056)

SASWAT SAIRAM NAYAK (170301111057)

Under the Guidance of

Prof. M. Vignesh

Assistant Professor, Dept. of Civil Engineering

CUTM, Paralakhemundi



**Centurion
UNIVERSITY**

DEPARTMENT OF CIVIL ENGINEERING

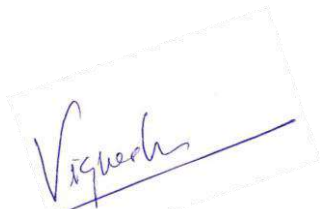
SCHOOL OF ENGINEERING & TECHNOLOGY PARLAKHEMUNDI ODISHA
(2020 – 2021)

CENTURION UNIVERSITY OF TECHNOLOGY &
MANAGEMENT Paralakhemundi, Odisha 761211. Department
of Civil Engineering

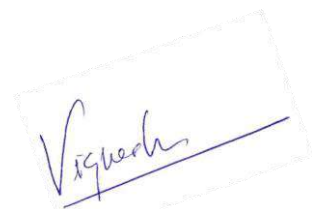
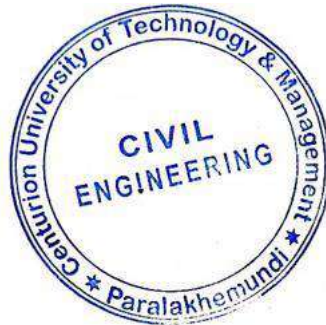
CERTIFICATE

This is to certify that the project work titled “**PLANNING, DESIGNING, ESTIMATION AND 3D MODELLING OF FARM HOUSE IN ROLLAVAKA VILLAGE, VIZIANAGARAM**” is a bonafied work of **TAPASWINI PANDA (170101110005), DEBARATA BAROI (170101110007), MUHAMMED DANISH (170101110013), AJIT KUMAR NAYAK (170301111056) and SASWAT SAIRAM NAYAK (170301111057)** submitted in partial fulfilment of the requirements for the award of Bachelor of Technology in "CIVIL ENGINEERING" during the academic year 2020-21.

Certified that the above-mentioned project was completed in accordance with the college's and university's rules and regulations.



Prof. M. Vignesh
Dept. of Civil Engineering
CUTM, Paralakhemundi
(Guide)



Head of the Department
Dept. of Civil Engineering
CUTM, Paralakhemundi.



Rajib Kumar Majhi
External

ACKNOWLEDGEMENT

We would want to use this occasion to convey our heartfelt gratitude to all of the people who served as lighthouses for us during this project, guiding us to a successful and satisfactory conclusion. We would like to convey our heartfelt gratitude to Prof. M. Vignesh, Department of Civil Engineering, CUTM, Paralakhemundi, who patiently guided us through the complexities of this project with unmatched magnanimity. We would also like to express our gratitude to all of our department's faculty members, particularly Dr. Prafulla Kumar Panda. We express our gratitude and respect to the laboratory personnel for explaining the lab equipment and its operation, for completing the project, and for all of the college's resources. We express our heartfelt gratitude to all members of the Civil Engineering Department's teaching and non-teaching personnel for their support and encouragement. Last but not least, we'd want to express our gratitude to all of the people whose names I couldn't reveal but who were kind enough to assist me with my endeavour.

Tapaswini Panda

TAPASWINI PANDA (170101110005)

D. Baroi

DEBARATA BAROI (170101110007)

M. Danish

MUHAMMED DANISH (170101110013)

A. K. Nayak

AJIT KUMAR NAYAK (170301111056)

Saswat S. Nayak

SASWAT SAIRAM NAYAK (170301111057)

DETECTION OF THE STRUCTURE CHANGES IN AUTOCAD OF MBA BUILDING BY FIELD INSPECTION

A MINOR PROJECT REPORT

Submitted by

BIBHU DHAL (180301110005)

ANSUMAN MOHAPATRA (180301110005)

SATYAJIT KHUNTIA (180301110010)

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

CIVIL ENGINEERING



DEPARTMENT OF CIVIL ENGINEERING

CENTURION INSTITUTE OF TECHNOLOGY: BHUBANESWAR

**CENTURION UNIVERSITY OF
TECHNOLOGY & MANAGEMENT: ODISHA**

DECEMBER 2021- MAY 2022

DEPARTMENT OF CIVIL ENGINEERING

CENTURION INSTITUTE OF TECHNOLOGY

AND MANAGEMENT, BHUBANESWAR-752050

BONAFIDE CERTIFICATE

Certified that this project report “**DETECTION OF THE STRUCTURE CHANGES IN AUTOCAD OF MBA BUILDING BY FIELD INSPECTION**” is the bonafide work of “ **BIBHU DHAL, ANSUMAN MOHAPATRA, SATYAJIT KHUNTIA**” who carried out the project work under my supervision. This is to further certify to the best of our knowledge, that this project has not been carried out earlier in this institute and the university.



DR. KAMAL KUMAR BARIK
(HEAD OF THE DEPARTMENT, Dept. of CIVIL)

Certified that the above mentioned project has been duly carried out as per the norms of the college and statues of the university.

Deepak Kumar Sahu



Head of the Department External Examiner

Siba Prasad Mishra

Internal Examiner

A

Minor Project report on

SOLAR TREE

Submitted by
B-tech EEE 4th Semester

In the partial fulfillment for the award of the degree Of
Bachelor of Technology

In
Electrical and Electronics Engineering

Academic Year- 2021-2022

Under the Esteemed Guidance of
Prof. Rama Prasanna Dalai



Centurion
UNIVERSITY

Department of Electrical and Electronics Engineering
Centurion University of Technology & Management
(Bhubaneswar, Ramchandrapur, Jatani, Khurda, Odisha-752050)

SPECIMEN CERTIFICATE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERINGCENTURION UNIVERSITY OF TECHNOLOGY
AND MANAGEMENT, BHUBANESWAR-752050

BONAFIDE CERTIFICATE

Certified that this project report **SOLAR TREE** is the Bonafide work of **SK Azharul Haque**. who carried out the project work under my supervision This is to further certify to the best of my knowledge, that this project has not been carried out earlier in this institute and the university.



SIGNATURE

(Signature of Supervisor)

Certified that the above-mentioned project has been duly carried out as per the norm of the college and statutes of the university



SIGNATURE

HEAD OF THE DEPARTMENT

ACKNOWLEDGEMENTS

It is our pleasure to be indebted to various people, who directly or indirectly contributed in the development of this work and who influenced my/our thinking, behavior and acts during the course of study.

We are thankful to **Prof. Rama Prasanna Dalai** for her support, cooperation, and motivation provided to us during for constant inspiration, presence and blessings.

We also extend our sincere appreciation to **Prof. Sudhansu Kumar Samal**, Head of Department who provided his valuable suggestions and precious time in accomplishing our academic project.

SK Azharul Haque (200301151016)

ABSTRACT

With oil supplies decreasing and prices increasing, the pros and cons of other energy sources are being debated worldwide. Wind turbines produce high output, but people living near high-quality landscape don't want their views spoiled. Biomass –plant products burnt as fuel is a proven technology. But some researchers estimate that powering all the world's vehicles with biofuels means doubling the amount of land used for farming. Nuclear energy produces abundant power, but many, fear the repercussions of catastrophes such as Chernobyl. The benefits of fusion energy, produced when two atoms are fused, could last for millennia. But it requires some of the most complex machinery on earth.

IMPACT OF ORGANIC SEED TREATMENT ON GREEN GRAM

A Thesis
Submitted to

Centurion University of Technology and Management

In the partial fulfillment of the requirements for the degree of

**MASTER OF SCIENCE
IN
BOTANY**

By

CHINMAYEE SAHOO
Registration No.: 200705170071



**CENTURION
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*Shaping Lives...
Empowering Communities!*

Department of Botany

School of Applied Science

**Centurion University of technology and management, Ramachandrapur, Jatni-752050,
Odisha, India**

MAY 2022

DECLARATION

I declare that the thesis entitled “**Impact of organic seed treatment on green gram**” is my own work, which I completed under the supervision of Dr. Saurav Barman, Associate professor, Department of Soil Science, Mr. Lalichetti Sagar, Assistant professor, Department of Agronomy and Dr. B. Praveen, Associate professor and Head, Department of Plant pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: CUTM, Odisha

Date:

CHINMAYEE SAHOO

Registration no. 200705170071

M.Sc. in Botany

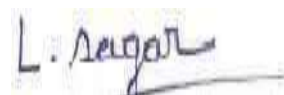
2020-2022

CERTIFICATE - I

This is to certify that the thesis entitled “**Impact of organic seed treatment on green gram**” submitted to School of Applied Science is a piece of research work done by **Chinmayee Sahoo** with Registration No. **200705170071** under my guidance and supervision for the partial fulfillment of the degree of Master of Science in Botany.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the MSc Botany in Post Graduate degree of the University.



Place: Bhubaneswar
Date: ___ May 2022

MR. LALICHETTI SAGAR

Assistant Professor
Department of Agronomy
M.S. Swaminathan School of Agriculture
Centurion University of Technology &
Management

CERTIFICATE - II

This is to certify that the thesis entitled “**Impact of organic seed treatment on green gram**” has been prepared and submitted by **Chinmayee Sahoo** with Registration No. **200705170071** in partial fulfillment of the requirements for the award of degree of Master of Science in Botany has been examined and approved by the Evaluation Committee after viva-voce.

Research Advisory Committee:

Guided by

Mr. Lalichetti Sagar

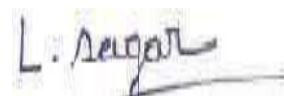
Asst. Prof

Department of Agronomy

M.S. Swaminathan School of
Agriculture

Centurion University of

Technology and Management
Paralakhemundi



Domain Co-coordinator

Dr. Saurav Barman

Associate Professor

Department of Soil Science

M.S. Swaminathan School of Agriculture



Centurion University of

Technology and Management
Paralakhemundi

Date of final external evaluation _____

Head

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

Dean

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

**EVALUATION OF QUALITY PARAMETERS OF GERBERA
CULTIVATED UNDER CONTROLLED CONDITIONS**

A Thesis

Submitted to

Centurion University of Technology and Management

*In partial fulfillment of the requirements for the award of the
degree of*

MASTER OF SCIENCE

IN

BOTANY

BY

DEEPAK KUMAR NAYAK

(Registration No.200705170097)



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Department of Botany

School of Applied Science

**Centurion University of technology and management,
Ramachandrapur, Jatni-752050, Odisha, India**

www.cutm.ac.in

May, 2022

DECLARATION

I declare that the thesis entitled "**Evaluation of Quality Parameters of Gerbera Cultivated under Controlled Conditions**" is my own work, which I completed under the supervision of guide Mr. Lalichetti Sagar, Assistant professor, Department of Agronomy and Dr. Sagar Maitra, Professor and Head Department of Agronomy and Argo Forestry, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place:

Signature of the Candidate

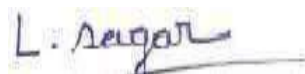
Date:

Deepak kumar Nayak

CERTIFICATE - I

This is to certify that the thesis entitled “**Evaluation of Quality Parameters of Gerbera Cultivated under Controlled Conditions**” submitted to School of Applied Science is a piece of research work done by **Deepak kumar Nayak** with Registration No.**200705170097** under my guidance and supervision for the partial fulfillment of the degree of Master of Science in Botany.

To the best of my knowledge and belief the thesis1. Embodies the work of candidate himself.2. Has duly been completed.3. Fulfils the requirement of the ordinance relating to the Msc Botany in Post Graduate degree of the University.



Place: Bhubaneswar

Date: ___ May 2022

MR. LALICHETTISAGAR

Assistant Professor
Department of Agronomy
M.S. Swaminathan School of Agriculture
Centurion University of Technology &
Management

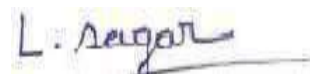
CERTIFICATE - II

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Research Advisory Committee:

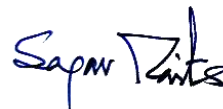
Guided by

Mr. Lalichetti Sagar
Asst. Prof
Department of Agronomy
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and Management
Paralakhemundi



Domain Co-ordinator

Dr. Sagar Maitra
Prof. and Head
Department of Agronomy
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and Management
Paralakhemundi



Date of final external evaluation _____

Head

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

Dean

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

IMPACT OF ORGANIC SEED TREATMENT ON GREEN GRAM

A Dissertation submitted in partial fulfillment of the requirements
For the degree of

**MASTER OF SCIENCE
IN
BOTANY**

BY

Mr.KANHEI NAIK

Registration No.: 200705170053

Under the supervision of

**Dr.SAURAV BARMAN
&
Mr.LALICHETTI SAGAR**



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UNIVERSITY**

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Empowering Communities...

**DEPARTMENT OF BOTANY
SCHOOL OF APPLIED SCIENCE
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA,INDIA**

MAY,2022

IMPACT OF ORGANIC SEED TREATMENT ON GREEN GRAM

A Thesis
Submitted to
Centurion University of Technology and Management

In partial fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE
IN
BOTANY**

BY

**KANHEI NAIK
(Registration No.200705170053)**



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Department of Botany

School of Applied Science

Centurion University of technology and management, Ramachandrapur, Jatni-752050,
Odisha, India

www.cutm.ac.in

May 2022

DECLARATION

I declare that the thesis entitled “**Impact of organic seed treatment on green gram**” is my own work, which I completed under the supervision of Dr.Saurav Barman, Associate professor, Department of Soil Science, Mr. Lalichetti Sagar, Assistant professor, Department of Agronomy and Dr. B. Praveen, Associate professor and Head, Department of Plant pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management ,Paralakhemundi, Odisha.

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Place: Bhubaneswar

Date: : 2 May 2022

Signature of the Candidate

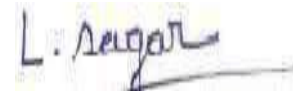
Kanhei Naik

CERTIFICATE - I

This is to certify that the thesis entitled “**Impact of organic seed treatment on green gram**” submitted to School of Applied Science is a piece of research work done by **Kanhei Naik** with Registration No. **200705170053** under my guidance and supervision for the partial fulfilment of the degree of Master of Science in Botany.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the MSc Botany in Post Graduate degree of the University.



Place: Bhubaneswar

Date: 2 May 2022

MR. LALICHETTI SAGAR

Assistant Professor
Department of Agronomy
M.S. Swaminathan School of Agriculture
Centurion University of Technology &
Management

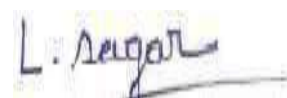
CERTIFICATE - II

This is to certify that the thesis entitled “**Impact of organic seed treatment on green gram**” has been prepared and submitted by **Kanhei Naik** with Registration No. **200705170053** in partial fulfilment of the requirements for the award of degree of Master of Science in Botany has been examined and approved by the Evaluation Committee after viva-voce.

Research Advisory Committee:

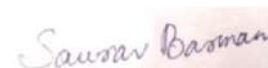
Guided by

Mr. Lalichetti Sagar
Asst. Prof
Department of Agronomy
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and Management
Paralakhemundi



Domain Co-ordinator

Dr. Saurav Barman
Associate Professor
Department of Soil Science
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and Management
Paralakhemundi



Date of final external evaluation _____

Head

School of Applied
Science Centurion University of
Technology and Management,
Bhubaneswar

Dean

School of Applied
Science Centurion University of
Technology and Management,
Bhubaneswar

**EFFECT OF ORGANIC SEED PRIMING ON SOIL
PARAMETERS OF BLACK GRAM**

A Thesis
Submitted to
Centurion University of Technology and Management

In partial fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE
IN
BOTANY**

BY

**MANISHA DASH
(Registration No.200705170046)**



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Department of Botany

School of Applied Science

Centurion University of technology and management, Ramachandrapur, Jatni-752050,
Odisha, India

www.cutm.ac.in

May, 2022

DECLARATION

I declare that the thesis entitled “**Effect of Organic Seed Priming on Soil Parameters of Black Gram**” is my own work, which I completed under the supervision of Dr. Saurav Barman, Associate professor, Department of Soil Science, Mr. Lalichetti Sagar, Assistant professor, Department of Agronomy and Dr. B. Praveen, Associate professor and Head, Department of Plant pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place:

Signature of the Candidate

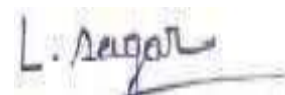
Date:

CERTIFICATE - I

This is to certify that the thesis entitled “**Effect of Organic Seed Priming on Soil Parameters of Black Gram**” submitted to School of Applied Science is a piece of research work done by **Manisha Dash** with Registration No.**200705170046** under my guidance and supervision for the partial fulfilment of the degree of Master of Science in Botany.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the MSc Botany in Post Graduate degree of the University.



Place: Bhubaneswar

Date: ___ May 2021

MR. LALICHETTI SAGAR

Assistant Professor
Department of Agronomy
M.S. Swaminathan School of Agriculture
Centurion University of Technology &
Management

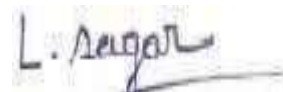
CERTIFICATE - II

This is to certify that the thesis entitled “**Effect of Organic Seed Priming on Soil Parameters of Black Gram**” has been prepared and submitted by **Manisha Dash** with Registration No. **200705170046** in partial fulfilment of the requirements for the award of degree of Master of Science in Botany has been examined and approved by the Evaluation Committee after viva-voce.

Research Advisory Committee:

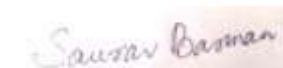
Guided by

Mr. Lalichetti Sagar
Asst. Prof
Department of Agronomy
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and Management
Paralakhemundi



Domain Co-ordinator

Dr. Saurav Barman
Associate Professor
Department of Soil Science
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and Management
Paralakhemundi



Date of final external evaluation _____

Head

School of Applied
ScienceCenturion University of
Technology and Management,
Bhubaneswar

Dean

School of Applied
ScienceCenturion University of
Technology and Management,
Bhubaneswar

NITROGEN USE EFFICIENCY OF PERMITTED MANURES IN ORGANIC FARMING OF FEW EXOTIC SPECIES OF LEAFY GREENS

**A Dissertation submitted in partial fulfillment of the requirements
For the degree of**

**MASTER OF SCIENCE
IN
BOTANY**

By

**MOHINI JENA
Registration No.: 200705170094**

Under the guidance of
Dr. SAGARIKA PARIDA



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Empowering Communities...*

**DEPARTMENT OF BOTANY
SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA, INDIA
MAY 2022**

DECLARATION

I do hereby declare that the work presented in this project is original and has been done by me under the supervision of **Dr. Sagarika Parida**, Associate Professor Department of Botany, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India. I further declare that this work has not been submitted partly/ fully elsewhere for the award of any other degree in this university or any other institutions.



Date:

Place: CUTM, Odisha

Mohini Jena

Registration No. 200705170094

Master of Science in Botany

Session: 2020-2022



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UNIVERSITY
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Empowering Communities...*

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**Nitrogen use efficiency of permitted manures in organic farming of few exotic species of leafy greens**” is a bonafide work done by Mohini Jena of M.Sc. (Botany) bearing Registration No. 200705170094 in partial fulfillment for the award of the degree of **Master of Science in Botany**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Supervisor

HOD

Dean

CERTIFICATE

This is to certify that the dissertation entitled “**Nitrogen use efficiency of permitted manures in organic farming of few exotic species of leafy greens**” is a bonafide work done by Mohini Jena of M.Sc. (Botany) bearing Registration No. 200705170094 for the award of the degree of **Master of Science in Botany** is carried out under my supervision. The results presented in this thesis have not been submitted partly / fully elsewhere for the award of any other degree in this university or any other institutions to the best of my knowledge. In my opinion, this work is fulfilling the requirements for the award of the degree mentioned in this certificate.



Dr. Sagarika Parida
Associate Professor
Department of Botany
School of Applied Sciences
CUTM, Odisha

IMPACT OF ORGANIC SEED TREATMENT ON GREEN GRAM

A Thesis
Submitted to

Centurion University of Technology and Management

In the partial fulfillment of the requirements for the degree of

**MASTER OF SCIENCE
IN
BOTANY**

By

**MONALISA PRADHAN
Registration No.: 200705170072**



**CENTURION
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*Shaping Lives...
Empowering Communities!*

Department of Botany

School of Applied Science

**Centurion University of technology and management, Ramchandrapur, Jatni-752050,
Odisha, India**

MAY 2022

DECLARATION

I declare that the thesis entitled “**Impact of organic seed treatment on green gram**” is my own work, which I completed under the supervision of Dr. Saurav Barman, Associate professor, Department of Soil Science, Mr. Lalichetti Sagar, Assistant professor, Department of Agronomy and Dr. B. Praveen, Associate professor and Head, Department of Plant pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: CUTM, Odisha

Date:

MONALISA PRADHAN

Registration no. 200705170072

M.Sc. in Botany

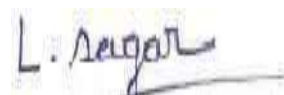
2020-2022

CERTIFICATE - I

This is to certify that the thesis entitled “**Impact of organic seed treatment on green gram**” submitted to School of Applied Science is a piece of research work done by **Monalisa Pradhan** with Registration No.**200705170072** under my guidance and supervision for the partial fulfillment of the degree of Master of Science in Botany.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the MSc Botany in Post Graduate degree of the University.



Place: Bhubaneswar
Date: ___ May 2022

MR. LALICHETTI SAGAR

Assistant Professor
Department of Agronomy
M.S. Swaminathan School of Agriculture
Centurion University of Technology &
Management

CERTIFICATE - II

This is to certify that the thesis entitled “**Impact of organic seed treatment on green gram**” has been prepared and submitted by **Monalisa Pradhan** with Registration No. **200705170072** in partial fulfillment of the requirements for the award of degree of Master of Science in Botany has been examined and approved by the Evaluation Committee after viva-voce.

Research Advisory Committee:

Guided by

Mr. Lalichetti Sagar

Asst. Professor

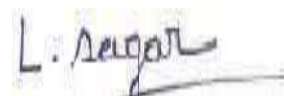
Department of Agronomy

M.S. Swaminathan School of
Agriculture

Centurion University of

Technology and Management

Paralakhemundi



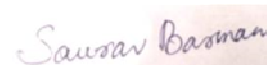
Domain Co-coordinator

Dr. Saurav Barman

Associate Professor

Department of Soil Science

M.S. Swaminathan School of Agriculture



Centurion University of

Technology and Management

Paralakhemundi

Date of final external evaluation _____

Head

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

Dean

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

**“FINDING SMALL MOLECULES TO TARGET ZIKA
VIRUS NS3 HELICASE”**

A Thesis

Submitted to

Centurion University of Technology and Management

In partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE (BOTANY)

IN

SCHOOL OF APPLIED SCIENCES

By

NIKITA DAS

(Registration No: - 200705170085)



Department of Botany

School of Applied Sciences

Centurion University of Technology and Management,

Bhubaneswar

Dist: khurdha– 752050, Odisha, India

www.cutm.ac.in

May, 2022

DECLARATION

I, declare that the thesis entitled “**FINDING SMALL MOLECULES TO TARGET ZIKA VIRUS NS3 HELICASE**” is my own work conducted under the supervision of Mrs. Preetha Bhadra, Associate Professor, Department of Biotechnology and Dr. Bibhudutta Mishra, Asst. Professor, Department of Zoology, School of Applied Science, Centurion University of Technology and Management, Bhubaneswar, Odisha.

I, furthermore declare that this thesis does not contain any part of any work which has been submitted for the award of any degree either in the University or in any other University without proper citation.

Place: Bhubaneswar

Date:()

Signature of the Candidate

CERTIFICATE - I

This is to certify that the thesis entitled “**FINDING SMALL MOLECULES TO TARGET ZIKA VIRUS NS3 HELICASE**” submitted to School of Applied Science is a piece of research work done by **NIKITA DAS** with **Registration No. 200705170085** under my guidance and supervision for the partial fulfilment of the degree of **Master of Science in Botany**.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate herself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the M. Sc. Botany in Post Graduate degree of the University.

Place: Bhubaneswar
Date: _____ May
2022



Mrs. Preetha Bhadra
Associate Professor
Department of Biotechnology
Centurion University of Technology and
Management, Odisha, India

CERTIFICATE II

This is to certify that the thesis entitled “**FINDING SMALL MOLECULES TO TARGATE ZIKA VIRUS NS3 HELICASE**” has been prepared and submitted by **NIKITA DAS** with **Registration No. 200705170085** in partial fulfilment of the requirements for the award of degree of **Master of Science in Botany** has been examined and approved by the Evaluation Committee after viva voce.

Research Advisory Committee:

Member Mrs. Preetha Bhadra
Assistant Professor
Department of Biotechnology
M.S Swaminathan School of Agriculture
Centurion University of Technology and Management
Paralakhemundi

Member Dr. Bibhudutta Mishra
Assistant Professor
Department of Zoology
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Member Dr. Rukmini Mishra
Head of Botany Department
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Date of final viva voce _____

Head
Department of Botany
Centurion University of Technology and
Management

Dean
School of Applied Science
Centurion University of Technology and
Management



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Empowering Communities...*

CERTIFICATE

This is to certify that the dissertation entitled “**A review on environmental impact of non-biodegradable material**”.

Is a bona fide work done by **Roja Rani Sahu** of M.Sc. (Chemistry) bearing Registration No. **200705100011** in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

*Atia Arzoo
12/05/22*

Signature of supervisor
Dr. Atia Arzoo

*Atia Arzoo
12/05/22*

Signature of HOD

Dr. Atia Arzoo

H.O.D

Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha

*Y. Nayak
12/05/2022*

Signature of Dean

Dr. Yashaswi
Nayak



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School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**DESIGN, MANUFACTURING AND PROPERTIES OF FRP FISH BREEDING TANK**” is a bona fide work done by Akash Kumar Behera of M.Sc. (Chemistry) bearing Registration No.200705100046 in partial fulfilment for the award of the degree of **Master of Science in Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Dajalisa Sahu

Supervisor

Akash Kumar Behera

Name of the student

Graphene Oxide-MgO Nanocomposite For The Removal of Toxic Cr(VI) Ions

A Dissertation submitted in partial fulfilment of the requirement for the
degree of

MASTER OF SCIENCE IN

APPLIED CHEMISTRY

By

ANUPAMA SAHOO

Registration NO: 200705100002

Under the supervision of

Dr. SHRABAN KUMAR SAHOO



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DEPARTMENT OF CHEMISTRY
SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA-752050, 2020-22

DECLARATION

I hereby declare that the work presented in this project is original and has been done by me under the supervision of **Dr. Shraban Kumar Sahoo** in the Department of Chemistry, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India. I further declare that this work has not been submitted elsewhere for the award of any other degree in this university or any other institution.

Date: 05.05.2022

Place: CUTM, Odisha

Anupama Sahoo
ANUPAMA SAHOO

Registration No:200705100002

M.Sc. In Applied Chemistry

Session: 2020-2022



Centurion
UNIVERSITY

CERTIFICATE

This is to certify that the dissertation entitled “**Graphene oxide-MgO nanocomposite for the removal of toxic Cr(VI) ions**” being submitted by Ms. Anupama Sahoo of M.Sc. chemistry, bearing Registration No.200705100002 for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

SAS Sahoo
05-05-22
Supervisor

Alex
HOD
Aree
07/07/22

Y. S. Sahoo
Dean
5/5/2022

H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

ACKNOWLEDGEMENT

With deep regards and profound respect, I take this opportunity to express my deep sense of gratitude and indebtedness to Dr SHRABAN KUMAR SAHOO, School of Applied Sciences, Centurion University of Technology and Management, Bhubaneswar for introducing the topic and for inspiring guidance, constructive criticism and valuable suggestion throughout this research work. I am very much thankful to our HOD, Dr Atia Arzoo because it wouldn't have been possible for me to bring out this project report without her help and constant encouragement. I wish she will keep in touch with me in future and will continue to give her valuable advice.

I would also like to thank all the lab assistants and lab attendants who have helped us to complete this project successfully. Due to their guidance and help I was able to proceed the project towards completion.

It was a nice and memorable experience with all the things of my department. I wish to give them my heartfelt thanks for their constant help and support I would also like to thank my parents for constantly encouraging and supporting me to give my 100% and work hard till I achieve my goal above all, I thank God, the Almighty for giving me all these people to help and courage me, and also for providing skills and opportunity to complete this report.

Date: 05.05.2022

Place: CUTM, Odisha

Anupama Sahoo
ANUPAMA SAHOO

Registration No: 200705100002

M.Sc. Applied Chemistry



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Empowering Communities...*

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**DESIGN, MANUFACTURING AND PROPERTIES OF FRP FISH BREEDING TANK**” is a bona fide work done by Anwesha Samal of M.Sc. (Applied Chemistry) bearing Registration No.200705100040 in partial fulfilment for the award of the degree of Master of Science in Applied Chemistry, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Prajna Paramita Debata.

Supervisor

Anwesha Samal

Name of the student



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School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA

I

CERTIFICATE

This is to certify that the dissertation entitled "**Alteration in different chemical constituents present in banana juice due to addition of preservative (vinegar)**" is a bonafide work done by Arpita Patel of M.Sc. (Chemistry) bearing Registration No.200705100033 in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Atia Arzu
04/05/22
Supervisor

Atia Arzu
04/05/22
HOD
H.O.G

Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha

Y. Arzu
4/5/2022
Dean
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGI
Bhubaneswar, Odisha



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CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**DESIGN, MANUFACTURING AND PROPERTIES OF FRP FISH BREEDING TANK**” is a bona fide work done by Ashesh kumar nandi of M.Sc. (Applied Chemistry) bearing Registration No.200705100044 in partial fulfilment for the award of the degree of Master of Science in Applied Chemistry, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Pragna Paramita Debata.

Supervisor

Ashesh Kumar Nandi

Name of the student



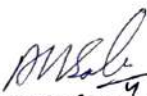
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Empowerment, Commitment*


School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**Role of biofilm in waste water treatment.**” is a bona fide work done by Ch Tanmayee of M.Sc. (Chemistry) bearing Registration No. **200705100050** in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.


Signature of supervisor
Dr. Ashish Kumar Sahoo


Signature of HOD
Dr. Atia Arzoo
H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha


Signature of Dean
Dr. Yashaswi Nayak
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

DECLARATION

I hereby declare that the work presented in this project is original and has been done by me under the supervision of **Dr Ashish Kumar Sahoo**, in the Department of Chemistry, School of Applied Sciences, Centurion University of Technology and Management, Bhubaneswar, Odisha, India. I further declare that this work has not been submitted elsewhere for the award of any other degree.

Date: 04/05/22

Place: CUTM, Odisha

Ch. Tanmayee

Ch Tanmayee

Registration No: **200705100050**

M.Sc. Applied Chemistry

Session: 2020-2022

ACKNOWLEDGEMENT

With deep regards and profound respect, I take this opportunity to express my deep sense of gratitude and indebtedness to **Dr. Ashish Kumar Sahoo**, School of Applied Sciences, Centurion University of Technology and Management, Bhubaneswar for introducing the research topic and for inspiring guidance, constructive criticism and valuable suggestion throughout this research work. I am very much thankful to our HOD, Dr. Atia Arzoo because it wouldn't have been possible for me to bring out this project report without her help and constant encouragement. I wish she will keep in touch with me in future and will continue to give her valuable advice.

I would also like to thank all lab assistants and lab attendants who have helped me to complete this project successfully. Due to their guidance and help I was able to proceed the project towards completion.

It was a nice and memorable experience with all things of my department. I wish to give them my heartfelt thanks for their constant help and support. I would also like to thank my parents for constant encouragement and support to achieve my goal. Above all, I thank God, the Almighty for giving me all these people to help and encourage me, and also for providing skills and opportunity to complete this report.

Date: 04/05/22

Place: CUTM, Odisha

Ch. Tanmayee

Ch Tanmayee

Registration No: **200705100050**

M.Sc. Applied Chemistry

**“Graphene as an advanced material for solar cell
application”**

**Dissertation submitted in partial fulfilment of the requirement
For the degree of**

**MASTER OF SCIENCE
IN
APPLIED CHEMISTRY**

By

Chittaranjan Sahoo

Registration No.: 200705100024

Under the supervision of

Dr. Shraban Kumar Sahoo



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**DEPARTMENT OF CHEMISTRY
SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA-752050
2020**

I
CERTIFICATE

This is to certify that the dissertation entitled "**Graphene as an advanced material for solar cell application**" being submitted by **Mr Chittaranjan Sahoo**, for the award of the degree of **Master of Science in Applied Chemistry** is carried out by him under my supervision in the Department of Chemistry, School of Applied Sciences, Centurion University of Technology and Management, Odisha. The results presented in this thesis have not been submitted elsewhere for the award of any other degree to the best of my knowledge. In my opinion, this work is fulfilling the requirements for the award of the degree mentioned.

S.K. Sahoo
17-05-22
Supervisor

Alia Arzoo
17/05/22
HOD
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Y. J. J.
17-05-2022
Dean
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

II

DECLARATION

I hereby declare that the work presented in this project is original and has been done by me under the supervision of Dr. **Shraban Kumar Sahoo** in the Department of Chemistry, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India. I further declare that this work has not been submitted elsewhere for the award of any other degree.

Date:

Place: CUTM, Odisha

Chittaranjan Sahoo
Chittaranjan Sahoo

Registration No: 200705100024
M.Sc. Applied Chemistry
Session: 2020-2022

III

ACKNOWLEDGEMENT

First and foremost, praises and thanks to the God, the Almighty, for His showers of blessings throughout my research work to complete the research successfully.

I would like to express my deep and sincere gratitude to my research supervisor, Dr. Shraavan kumar sahu, Associate Professor of the department of Chemistry, Centurion University of Technology and Management BBSR, for encouraging and guiding me in project and for giving valuable suggestions. I am also thankful to her for giving me the opportunity to do this wonderful project on "**Graphene as an advanced material for solar cell application**".

I also show a deep sense of gratitude towards Dr. Atia Arzoo head of the department of chemistry as well as Dr. Dipankar Bhattacharya dean school of applied sciences & Dr. Sushant Kumar Biswal senior professor department of chemistry who gave the golden opportunity to do this wonderful project.

I would also like to thank all the teaching staffs Dr. Ashish kumar Sahoo, Dr. Arun Kumar Pradhan, Dr. Shraavan Kumar Sahoo, Mr. Chittaranjan Routray & Dr. Suchismita Acharya, Dr. Pratap Kumar Chotray and Dr. Srikant Sahu department of chemistry helped me in successfully completing my project work.

and also to Laxmikanta sir Geetanjali mam for helping me with the setup for the project and gave valuable practical insight.

I specially acknowledge paramedics department of CUTM, BBSR, for sharing their laboratory to accomplish my project work.

Without thanking my parents for their unwavering support this acknowledgement would be incomplete.

Truly this project would not have come so far without you people. I'm indebted to you all.

Chittaranjan Sahoo

Chittaranjan Sahoo

Registration No: 200705100024
M.Sc. Applied Chemistry

Date:

Place: CUTM, Odisha

Elemental content present in banana wine and it's impact on human health

A dissertation submitted in partial fulfilment of the requirements

for the degree of

MASTER OF SCIENCE

IN

APPLIED CHEMISTRY

By

Diptee Manjari Mallick

Registration No.: 200705100028

Under the supervision of

Dr Atia Arzoo



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UNIVERSITY**

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DEPARTMENT OF CHEMISTRY

SCHOOL OF APPLIED SCIENCES

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA, INDIA

2020-2022



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School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA

I

CERTIFICATE

This is to certify that the dissertation entitled “**Elemental content present in banana wine and its impact on human health**” is a bona fide work done by Diptee Manjari Mallick of M.Sc. (Chemistry) bearing Registration No.200705100028 in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

*Alia Arzoo
05/05/22*

Supervisor

*Alia Arzoo
05/05/22*

HOD

H.O.D

**Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha**

*Yash
5/5/2022*

**Dean
DEAN**

**School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGE
Bhubaneswar, Odisha**

II

DECLARATION

I do hereby declare that the work presented in this project is original and has been done by me under the supervision of Dr Atia Arzoo in the department of chemistry, School of Applied Sciences, Centurion University of Technology, and Management, Odisha, India. I further declare that this work has not been submitted partly / fully elsewhere for the award of any other degree in this university or any other institution.

Date: 5.5.22

Place: CUTM, Odisha

Diptee Manjari Mallick
Diptee Manjari Mallick

Registration No. 200705100028

M.Sc.in Applied Chemistry

Session: 2020-2022

III

ACKNOWLEDGEMENT

With deep regards and profound respect, I take this opportunity to express my deep sense of gratitude and indebtedness to Dr Atia Arzoo, Associate Professor, Centurion University of Technology and Management, Bhubaneswar for introducing the topic and for inspiring guidance, constructive criticism and valuable suggestion throughout this research work. I am very much thankful to our HOD, Dr. Atia Arzoo because it wouldn't have been possible for me to bring out this project report without her help and constant encouragement. I wish she will keep in touch with me in the future and will continue to give her valuable advice.

I would also like to thank all the lab assistants and lab attendants who have helped us to complete this project successfully. Due to their guidance and help, I was able to precede the project towards completion.

It was a nice and memorable experience with all the things in my department. I wish to give them my heartfelt thanks for their constant help and support I would also like to thank my parents for their constant encouragement and support to achieve my goal. Above all, I thank God the Almighty for giving me all these people to help and courage me, and also for providing skills and opportunity to complete this report

Date: 6.5.22

Place: CUTM, Odisha

Diptee Manjari Mallick
Diptee Manjari Mallick

Registration No: 200705100028

M Sc. In Applied Chemistry



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UNIVERSITY
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School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**DESIGN, MANUFACTURING AND PROPERTIES OF FRP FISH BREEDING TANK**” is a bona fide work done by Dipti Mayee Sahoo of M.Sc. (Applied Chemistry) bearing Registration No.200705100038 in partial fulfilment for the award of the degree of Master of Science in Applied Chemistry, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Prajna Paramita Debata.

Supervisor

Dipti Mayee Sahoo.

Name of the student

**BIOFILM PREPARATION FROM CORN STARCH USING BEETROOT
AS COLOURING AGENT**

A Dissertation submitted in partial fulfilment of the requirements

for the degree of

MASTER OF SCIENCE

IN

APPLIED CHEMISTRY

By

Jayanti Rani Gouda

Registration No.: 200705100056

Under the supervision of

Dr Ashish Kumar Sahoo



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UNIVERSITY**
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DEPARTMENT OF CHEMISTRY

SCHOOL OF APPLIED SCIENCES

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA, INDIA

2020-2022




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**School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA**

CERTIFICATE

This is to certify that the dissertation entitled “**BIOFILM PREPARATION FROM CORN STARCH USING BEETROOT AS COLOURING AGENT**” is a bona fide work done by Jayanti Rani Gouda of M.Sc. (Chemistry) bearing Registration No.200705100046 in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.


25/4/2022
Supervisor


30/04/22

**HOD
H.O.D**

**Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha**



Dean

**DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha**

I

DECLARATION

I do hereby declare that the work presented in this project is original and has been done by me under the supervision of Dr Ashish Sahoo in the department of chemistry, School of Applied Sciences, Centurion University of Technology, and Management, Odisha, India. I further declare that this work has not been submitted partly / fully elsewhere for the award of any other degree in this university or any other institution.

Date:

Place: CUTM, Odisha

Jayanti Rani Gouda

Registration No. 200705100056

M.Sc.in Applied Chemistry

Session: 2020-2022

II

ACKNOWLEDGEMENT

With deep regards and profound respect, I take this opportunity to express my deep sense of gratitude and indebtedness to Dr Ashish Kumar Sahoo, Assistant Professor, Centurion University of Technology and Management, Bhubaneswar for introducing the topic and for inspiring guidance, constructive criticism and valuable suggestion throughout this research work. I am very much thankful to our HOD, Dr. Alia Arzoo because it wouldn't have been possible for me to bring out this project report without her help and constant encouragement. I wish she will keep in touch with me in the future and will continue to give her valuable advice.

I would also like to thank all the lab assistants and lab attendants who have helped us to complete this project successfully. Due to their guidance and help, I was able to precede the project towards completion.

It was a nice and memorable experience with all the things in my department. I wish to give them my heartfelt thanks for their constant help and support I would also like to thank my parents for their constant encouragement and support to achieve my goal. Above all, I thank God the Almighty for giving me all these people to help and courage me, and also for providing skills and opportunity to complete this report

Date:

Jayanti Rani Gouda

Place: CUTM, Odisha

Registration No: 200705100056

M Sc. In Applied Chemistry



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School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**Supercritical Fluids As An Alternate Green Media And Their Important Applications**” is a bona fide work done by Kirtida Karana of M.Sc. (Chemistry) bearing Registration No.200705100048 in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

PKC
11.5.22

Signature of supervisor

Dr. Pratap Kumar Chhotray

Atia Arzoo
04/05/22

Signature of HOD

Dr. Atia Arzoo

H.O.D

Department of Chemistry

School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha

Yashaswi
5/5/2022

Signature of Dean

Dr. Yashaswi Nayak

DEAN

School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

*Synthesis of Alumina/Iron Oxide Mixed Nanocomposite using
Combustion method*

A Dissertation

Submitted in partial fulfilment for the degree of

MASTER OF SCIENCE IN CHEMISTRY

Under Academic Autonomy

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA

By

LOPAMUDRA PANDA

Registration No.: 200705100012

Under the supervision of

Dr. Shraban Kumar Sahoo



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DEPARTMENT OF CHEMISTRY

SCHOOL OF APPLIED SCIENCES

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA, INDIA

APRIL-2022



Centurion
UNIVERSITY

GUIDE CERTIFICATE

Dr. Shraban Kumar Sahoo

Assistant Professor of Chemistry Department

Centurion University Of Technology And Management

Bhubaneswar-752050

Odisha

This is to certify that the dissertation entitled "**Synthesis of Alumina/Iron Oxide Mixed Nanocomposite using Combustion method**" by **Lopamudra Panda (Registration No-200705100012)** to the department of chemistry, Centurion University of Technology And Management, Bhubaneswar for the degree of Master of Science in Applied Chemistry is based on the result obtained in the bonafide project work carried out by her under my Guidance and supervision.

I further certify that to the best of my knowledge **Lopamudra Panda** bears a good moral character.

Date

SK Sahoo
09-05-22
Dr. Shraban Kumar Sahoo

C.U.T.M, Bhubaneswar



Centurion
UNIVERSITY

School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,

BHUBANESWAR, ODISHA

I

CERTIFICATE

This is to certify that the dissertation entitled "**Synthesis of Alumina/Iron Oxide Mixed Nanocomposite using Combustion method**" is a Bonafede work done by Lopamudra Panda of M.Sc. (Applied Chemistry) bearing Registration No-200705100012 in partial fulfilment for the award of the degree of Master of Science in Applied Chemistry, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned

S.K. Saha
07-05-22
Supervisor

Alia Arora
07/05/22
HOD
H.O.D.

T. J. J.
7/5/22
Dean/Coordinator
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha

II

DECLARATION

I LopamudraPanda hereby declare that this project report entitled "Synthesis of Alumina/Iron Oxide Mixed Nanocomposite using Combustion method" is the original work carried out by us under supervision of Dr. Shraban Kumar Sahoo, Department of chemistry, Centurion University Of Technology And Management (CUTM), Odisha and the present work or any other part thereof has not been presented to any other University or Institution for the award of any other degree regarding to our belief.

Date:

Place: CUTM, Odisha

Lopamudra Panda

Lopamudra Panda

Registration No-200705100012

M.Sc.in Applied Chemistry

Session: 2020-22

III

ACKNOWLEDGEMENT

The respect and gratitude for my guide **Dr. Shraban Kumar Sahoo**, Assistant Professor, Department of Chemistry, Centurion University Of Technology And Management Bhubaneswar, cannot be expressed in words. I am grateful to him for devoting time for thought provoking and stimulating discussions in spite of his busy schedule.

I thank him for his patience, guidance and regular monitoring of the work and inputs without which this work could have never come to fruition. Indeed, the experience of working under him is one of that I will cherish forever.

I am grateful to Assistant Prof. Aatia Arzoo Head of the Department, Centurion University of Technology And Management, Bhubaneswar for providing me the opportunity and laboratory facilities for the completion of my work.

I would like to thank Mama Madhusmita Mahakul, Swapnamayee Muduli and all my friends. They were with me in my difficulty that I faced, and their constant efforts and encouragement was a tremendous source of inspiration. Their inputs to this work have been crucial.

Lopamudra Panda

Lopamudra Panda

Registration No.: 200705100012

M.Sc. in Chemistry

Session: 2020-2022



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School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**DESIGN, MANUFACTURING AND PROPERTIES OF FRP FISH BREEDING TANK**” is a bona fide work done by Mukesh Moharana of M.Sc. (Chemistry) bearing Registration No.200705100060 in partial fulfilment for the award of the degree of **Master of Science in Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Supervisor

Name of the student

Milk adulteration and detection

A Dissertation submitted in partial fulfilment of the requirement for
the degree of

**MASTER OF SCIENCE
IN**

**APPLIED CHEMISTRY
By**

NIKITA MOHANTY

Registration NO: 200705100023

Under the supervision of

Dr. ATIA ARZOO



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**DEPARTMENT OF CHEMISTRY
SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA-752050 2020-22**

DECLARATION

I hereby declare that the work presented in this project is original and has been done by me under the supervision of Dr. Atia Arzoo in the Department of Chemistry, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India. I further declare that this work has not been submitted elsewhere for the award of any other degree in this university or any other institution.

Date: 05.05.22

Place: CUTM, Odisha

Nikita Mohanty
NIKITA MOHANTY

Registration No:200705100023
M.Sc. In Applied Chemistry
Session: 2020-2022



Centurion
UNIVERSITY

CERTIFICATE

This is to certify that the dissertation entitled “Milk adulteration and detection” being submitted by Ms. Nikita Mohanty of M.Sc. chemistry, bearing Registration No.200705100023 for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Alia Arora
05/05/22
Supervisor

HOD

H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Alia Arora
05/05/22
Dean

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

ACKNOWLEDGEMENT

With deep regards and profound respect, I take this opportunity to express my deep sense of gratitude and indebtedness to Dr Atia Arzoo, HOD of chemistry department, School of Applied Sciences, Centurion University of Technology and Management, Bhubaneswar for introducing the topic and for inspiring guidance, constructive criticism and valuable suggestion throughout this research work. I am very much thankful to our HOD, Dr Atia Arzoo because it wouldn't have been possible for me to bring out this project report without her help and constant encouragement. I wish she will keep in touch with me in future and will continue to give her valuable advice.

I would also like to thank all the lab assistants and lab attendants who have helped us to complete this project successfully. Due to their guidance and help I was able to proceed the project towards completion.

It was a nice and memorable experience with all the things of my department. I wish to give them my heartfelt thanks for their constant help and support I would also like to thank my parents for constantly encouraging and supporting me to give my 100% and work hard till I achieve my goal above all, I thank God, the Almighty for giving me all these people to help and courage me, and also for providing skills and opportunity to complete this report.

Date: 05.05.20

Place: CUTM, Odisha

Nikita Mohanty
NIKITA MOHANTY

Registration No: 200705100023
M.Sc. Applied Chemistry



School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA
CERTIFICATE

This is to certify that the dissertation entitled “*Design and Fabrication of Products from Glass Fiber/SiC Reinforced Polymer Composite*” is a bonafide work done by **Prakash Chandra Panda** of M.Sc. (Chemistry) bearing **Registration No. 200705100051** in partial fulfillment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Dejalisa Sahu

Supervisor

Solvothermal synthesis of MgO-Fe₂O₃ nanocomposite for the removal of Congo red dye from water

A Dissertation

Submitted in partial fulfilment for the degree of

MASTER OF SCIENCE IN CHEMISTRY

Under Academic Autonomy

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA

By

PRIYANKA PATEL

Registration No.: 200705100049

Under the supervision of

Dr. Shraban Kumar Sahoo



Centurion
UNIVERSITY

DEPARTMENT OF CHEMISTRY

SCHOOL OF APPLIED SCIENCES

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA, INDIA

APRIL-2022



Centurion
UNIVERSITY

GUIDE CERTIFICATE

Dr. Shraban Kumar Sahoo

Assistant Professor of Chemistry Department

Centurion University Of Technology And Management

Bhubaneswar-752050

Odisha

This is to certify that the dissertation entitled "**Solvothermal synthesis of MgO-Fe₂O₃ nanocomposite for the removal of Congo red dye from water**" by **Priyanka Patel (Registration No-200705100049)** to the department of chemistry, Centurion University of Technology And Management, Bhubaneswar for the degree of Master of Science in Applied Chemistry is based on the result obtained in the bonafide project work carried out by her under my Guidance and supervision. I further certify that to the best of my knowledge **Priyanka Patel** bears a good moral character.

SV Sahoo
27-05-22

Dr. Shraban Kumar Sahoo

C.U.T.M, Bhubaneswar

Date:



**Centurion
UNIVERSITY**

School of Applied Sciences

**CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
BHUBANESWAR, ODISHA**

I

CERTIFICATE

This is to certify that the dissertation entitled "**Solvothermal synthesis of MgO-Fe₂O₃ nanocomposite for the removal of Congo red dye from water**" is a Bonafede work done by Priyanka Patel of M.Sc. (Applied Chemistry) bearing Registration No-200705100049 in partial fulfilment for the award of the degree of Master of Science in Applied Chemistry, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned

Sivadas
09-05-22
Supervisor

Alia *Ar200*
09/05/22
HOD

[Signature]
09/05/22
Dean/Coordinator

H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

II

DECLARATION

I **Priyanka Patel** hereby declare that this project report entitled “**Solvothermal synthesis of MgO-Fe₂O₃ nanocomposite for the removal of Congo red dye from water**” is the original work carried out by us under supervision of Dr. Shraban Kumar Sahoo, Department of chemistry, Centurion University Of Technology And Management (CUTM), Odisha and the present work or any other part thereof has not been presented to any other University or Institution for the award of any other degree regarding to our belief.

Date:

Place: CUTM, Odisha

Priyanka Patel
Priyanka Patel

Registration No-200705100049

M.Sc.in Applied Chemistry

Session: 2020-22

III

ACKNOWLEDGEMENT

The respect and gratitude for my guide **Dr. Shraban Kumar Sahoo**, Assistant Professor, Department of Chemistry, Centurion University Of Technology And Management Bhubaneswar, cannot be expressed in words. I am grateful to him for devoting time for thought provoking and stimulating discussions in spite of his busy schedule.

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I would like to thank Laxmipriya Mohapatra, Swapnamayee Muduli and all my friends. They were with me in my difficulty that I faced, and their constant efforts and encouragement was a tremendous source of inspiration. Their inputs to this work have been crucial.

Priyanka Patel
Priyanka Patel

Registration No.: 200705100049

M.Sc.in Chemistry

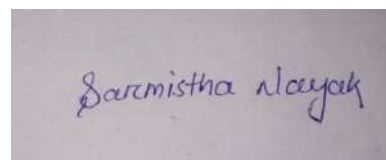
Session: 2020-2022

CERTIFICATE

This is to certify that the dissertation entitled “**Design and Fabrication of Composite** ” being submitted by Sarmistha Nayak M.Sc.(Chemistry) bearing Registration No.200705100054 for the award of the degree of Master of Science in Chemistry is carried out under my supervision. The results presented in this thesis have not been submitted partly / fully elsewhere for the award of any other degree in this university or any other institutions to the best of my knowledge. In my opinion, this work is fulfilling the requirements for the award of the degree mentioned in this certificate.

A rectangular box containing a handwritten signature in blue ink that reads "Dejalisa Sahu".

Supervisor

A rectangular box containing a handwritten signature in blue ink that reads "Sarmistha Nayak".

Name of the student

Synthesis of Iron Oxide Mixed Nanocomposite using Combustion method

A Dissertation submitted in partial fulfilment of the requirement for
the degree of

MASTER OF SCIENCE IN

APPLIED CHEMISTRY

By

SASWAT DASH

Registration NO: 200705100053

Under the supervision of

Dr. ATIA ARZOO



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SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA-
752050, 2020-22

DECLARATION

I hereby declare that the work presented in this project is original and has been done by me under the supervision of Dr. Atia Arzoo in the Department of Chemistry, School of Applied Sciences, Centurion University of Technology and Management, Odisha, India. I further declare that this work has not been submitted elsewhere for the award of any other degree in this university or any other institution.

Date: 05/05/2022

Place: CUTM, Odisha

Saswat Dash
SASWAT DASH

Registration No:200705100053

M.Sc. In Applied Chemistry

Session: 2020-2022



Centurion
UNIVERSITY

CERTIFICATE

This is to certify that the dissertation entitled "Synthesis of Iron Oxide Mixed Nanocomposite using Combustion method" being submitted by Mr. Saswat Dash of M.Sc. chemistry, bearing Registration No.200705100053 for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

Alia Arora
05/05/22

Supervisor

HOD

H.O.D

Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Alia Arora
05/05/22

Dean

Yishuf
6/5/22

DEAN

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

ACKNOWLEDGEMENT

With deep regards and profound respect, I take this opportunity to express my deep sense of gratitude and indebtedness to Dr Atia Arzoo, HOD of chemistry department, School of Applied Sciences, Centurion University of Technology and Management, Bhubaneswar for introducing the topic and for inspiring guidance, constructive criticism and valuable suggestion throughout this research work. I am very much thankful to our HOD, Dr Atia Arzoo because it wouldn't have been possible for me to bring out this project report without her help and constant encouragement. I wish she will keep in touch with me in future and will continue to give her valuable advice.

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Date: 05/05/2022

Place: CUTM, Odisha

Sarwat Dash
SASWAT DASH

Registration No: 200705100053

M.Sc. Applied Chemistry



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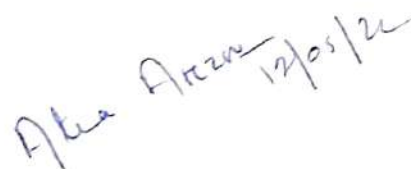
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

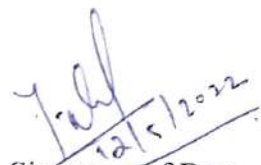
This is to certify that the dissertation entitled “**Effective nutritional value of edible biofilm than synthetic food wrapper**” is a bona fide work done by Saswati Nayak of M.Sc. (Chemistry) bearing Registration No.200705100058 in partial fulfilment for the award of the degree of **Master of Science in Applied Chemistry**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.


Signature of supervisor

Dr. Ashish Kumar Sahoo


Signature of HOD

Dr. Atia Arzoo


Signature of Dean

Dr. Yashaswi Nayak

H.O.D
Department of Chemistry
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
Bhubaneswar, Odisha

Design and Development of Low-Cost Solar Powered Mobile charging Station

**A Dissertation submitted in partial fulfillment of the requirements
For the degree of**

**BACHELOR OF SCIENCE
IN
APPLIED PHYSICS**

By

**ROHAN KUMAR SAHU (190604120006)
ASHA RANI PADHEE (190604120010)
BRUNDABATI MEHER (190604120007)
RAMESHWARI BEHERA (190604120016)
PADMALOCHAN SAHU (190604120011)
AISHWARYA PANI (190604120002)**

Under the supervision of

Prof Smruti Ranjan Nayak



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**DEPARTMENT OF PHYSICS
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA, INDIA
BALANGIR**

DECLARATION

We do hereby declare that the work presented in this project is a work which is original and has been done by Rohan Kumar Sahu (19060412000), Brundabati Meher (190604120007), Asha Rani Padhee (190604120010), Rameswari Behera (190604120016), Padmalochan Sahu (190604120011), Aishwarya Pani (190604120002) under the supervision of Prof. Smruti Ranjan Nayak and Mrs. Meena Kumari Sahu Centre for Renewable Energy and Environment, Centurion University of Technology and Management, Odisha.

ROHAN KUMAR SAHU (190604120006)
ASHA RANI PADHEE (190604120010)
BRUNDABATI MEHER (190604120007)
RAMESHWARI BEHERA (190604120016)
PADMALOCHAN SAHU (190604120011)
AISHWARYA PANI (190604120002)

Date: 24 March, 2022

Place: CUTM, Balangir, Odisha

B.sc in Applied Physics

Session: 2019-2021

Rohan Kumar Sahu
Asha Rani Padhee
Brundabati Meher
Rameswari Behera
Padmalochan Sahu
Aishwarya Pani.

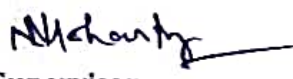


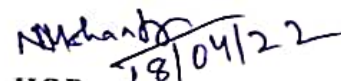
Centurion
UNIVERSITY
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Empowering Communities...*

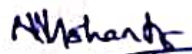
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

I hereby certify that the dissertation entitled "A Low-Cost Solar Powered Mobile charging Station" is a bonafide work done by Rohan Kumar Sahu (19060412000), Brundabati Meher (190604120007), Asha Rani Padhee (190604120010), Rameswari Behera (190604120016), Padmalochan Sahu (190604120011), Aiswarya Pani (190604120002) of BSc. (Applied Physics) in partial fulfillment for the award of the degree of Bachelor of Science in Applied Physics, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

For 
Supervisor
Prof. S. R. Nayak


HOD 18/04/22


Dean
for 18/04/22

DESIGN AND IMPLEMENTATION OF SOLAR-POWERED STREET LIGHT

**A Dissertation submitted in partial fulfillment of the requirements
For the degree of**

**BACHELOR OF SCIENCE
IN
APPLIED PHYSICS**

By

*Rameswari Satpathy(190604120008)
Kasturee Dash (190604120015)
Saraswati Pradhan(190604120005)
Sambit Kumar Mishra(190604120013)
Balkrushna Behera(190604120003)
Kanha Charan Kalsai(190604120004)*

Under the supervision of

SMRUTI RANJAN NAYAK

MEENA KUMARI SAHU



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UNIVERSITY**

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**DEPARTMENT OF PHYSICS
SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA, INDIA
BALANGIR**

DECLARATION

We do hereby declare that the work presented in this project is a work which is original and has been done by Rameswari Satpathy (190604120008), Kasturee Dash (190604120015), Saraswati Pradhan (190604120005), Sambit kumar Mishra (190604120013), Balkrushna Behera (190604120003), Kanha charan Kalsai (190604120004) under the supervision of Prof. Smruti Ranjan Nayak and Asst. Prof. Meena kumari Sahu Centre for Renewable Energy and Environment, Centurion University of Technology and Management, Odisha.

Date: 24 March, 2022

Place: CUTM, Odisha

Rameswari Satpathy (190604120008)
Kasturee Dash (190604120015)
Saraswati Pradhan (190604120005)
Sambit kumar Mishra (190604120013)
Balkrushna Behera (190604120003)
Kanha charan Kalsai (190604120004)
B.sc in Applied Physics
Session: 2019-2022

Rameswari Satpathy
Kasturee Dash
Saraswati Pradhan
Sambit Kumar Mishra
Balkrushna Behera
Kanha charan Kalsai



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Empowering Communities...*

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “Design and Implementation of solar-powered street light” is a bonafide work done by Rameswari Satpathy (190604120008), Kasturee Dash (190604120015), Saraswati Pradhan (190604120005), Sambit kumar Mishra (190604120013), Balkrushna Behera (190604120003), Kanha charan Kalsai (190604120004) of BSc. (Applied Physics) in partial fulfillment for the award of the degree of Bachelor of Science in Applied Physics, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

N.Mohanty
For Supervisor *18/04/22*
Prof. S.R. Nayak

N.Mohanty
HOD *18/04/22*
Dr. N.K. Mohanty

N.Mohanty
Dean For *18/04/22*

Design and Development of Low-Cost Solar Powered Mobile charging Station

**A Dissertation submitted in partial fulfillment of the requirements
For the degree of**

**BACHELOR OF SCIENCE
IN
APPLIED PHYSICS**

By

**ROHAN KUMAR SAHU (190604120006)
ASHA RANI PADHEE (190604120010)
BRUNDABATI MEHER (190604120007)
RAMESHWARI BEHERA (190604120016)
PADMALOCHAN SAHU (190604120011)
AISHWARYA PANI (190604120002)**

Under the supervision of

Prof Smruti Ranjan Nayak



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*

**DEPARTMENT OF PHYSICS
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA, INDIA
BALANGIR**

DECLARATION

We do hereby declare that the work presented in this project is a work which is original and has been done by Rohan Kumar Sahu (19060412000), Brundabati Meher (190604120007), Asha Rani Padhee (190604120010), Rameswari Behera (190604120016), Padmalochan Sahu (190604120011), Aishwarya Pani (190604120002) under the supervision of Prof. Smruti Ranjan Nayak and Mrs. Meena Kumari Sahu Centre for Renewable Energy and Environment, Centurion University of Technology and Management, Odisha.

ROHAN KUMAR SAHU (190604120006)
ASHA RANI PADHEE (190604120010)
BRUNDABATI MEHER (190604120007)
RAMESHWARI BEHERA (190604120016)
PADMALOCHAN SAHU (190604120011)
AISHWARYA PANI (190604120002)

Date: 24 March, 2022

Place: CUTM, Balangir, Odisha

B.sc in Applied Physics
Session: 2019-2021

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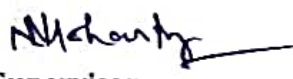


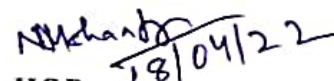
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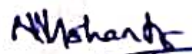
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For 
Supervisor
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HOD 18/04/22


Dean
for 18/04/22

Design and Development of Low-Cost Solar Powered Mobile charging Station

**A Dissertation submitted in partial fulfillment of the requirements
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By

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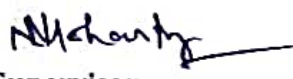


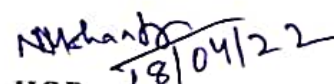
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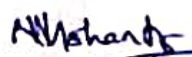
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DESIGN AND IMPLEMENTATION OF SOLAR-POWERED STREET LIGHT

**A Dissertation submitted in partial fulfillment of the requirements
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**BACHELOR OF SCIENCE
IN
APPLIED PHYSICS**

By

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Saraswati Pradhan(190604120005)
Sambit Kumar Mishra(190604120013)
Balkrushna Behera(190604120003)
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Design and Development of Low-Cost Solar Powered Mobile charging Station

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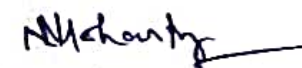


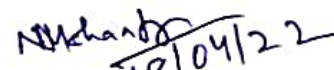
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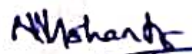
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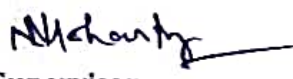


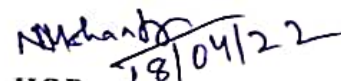
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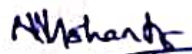
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Padmalochan Sahu
Aishwarya Pani.

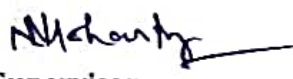


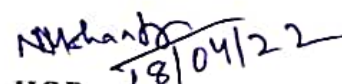
Centurion
UNIVERSITY
*Shaping Lives...
Empowering Communities...*

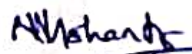
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

I hereby certify that the dissertation entitled "A Low-Cost Solar Powered Mobile charging Station" is a bonafide work done by Rohan Kumar Sahu (19060412000), Brundabati Meher (190604120007), Asha Rani Padhee (190604120010), Rameswari Behera (190604120016), Padmalochan Sahu (190604120011), Aiswarya Pani (190604120002) of BSc. (Applied Physics) in partial fulfillment for the award of the degree of Bachelor of Science in Applied Physics, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

For 
Supervisor
Prof. S. R. Nayak


HOD 18/04/22


Dean
for 18/04/22

DESIGN AND IMPLEMENTATION OF SOLAR-POWERED STREET LIGHT

**A Dissertation submitted in partial fulfillment of the requirements
For the degree of**

**BACHELOR OF SCIENCE
IN
APPLIED PHYSICS**

By

*Rameswari Satpathy(190604120008)
Kasturee Dash (190604120015)
Saraswati Pradhan(190604120005)
Sambit Kumar Mishra(190604120013)
Balkrushna Behera(190604120003)
Kanha Charan Kalsai(190604120004)*

Under the supervision of

SMRUTI RANJAN NAYAK

MEENA KUMARI SAHU



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*

**DEPARTMENT OF PHYSICS
SCHOOL OF APPLIED SCIENCES
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA, INDIA
BALANGIR**

DECLARATION

We do hereby declare that the work presented in this project is a work which is original and has been done by Rameswari Satpathy (190604120008), Kasturee Dash (190604120015), Saraswati Pradhan (190604120005), Sambit kumar Mishra (190604120013), Balkrushna Behera (190604120003), Kanha charan Kalsai (190604120004) under the supervision of Prof. Smruti Ranjan Nayak and Asst. Prof. Meena kumari Sahu Centre for Renewable Energy and Environment, Centurion University of Technology and Management, Odisha.

Date: 24 March, 2022

Place: CUTM, Odisha

Rameswari Satpathy (190604120008)
Kasturee Dash (190604120015)
Saraswati Pradhan (190604120005)
Sambit kumar Mishra (190604120013)
Balkrushna Behera (190604120003)
Kanha charan Kalsai (190604120004)
B.sc in Applied Physics
Session: 2019-2022

Rameswari Satpathy
Kasturee Dash
Saraswati Pradhan
Sambit Kumar Mishra
Balkrushna Behera
Kanha charan Kalsai



Centurion
UNIVERSITY
*Shaping Lives,
Empowering Communities...*

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “Design and Implementation of solar-powered street light” is a bonafide work done by Rameswari Satpathy (190604120008), Kasturee Dash (190604120015), Saraswati Pradhan (190604120005), Sambit kumar Mishra (190604120013), Balkrushna Behera (190604120003), Kanha charan Kalsai (190604120004) of BSc. (Applied Physics) in partial fulfillment for the award of the degree of Bachelor of Science in Applied Physics, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work done and the report satisfy the requirements for the award of the degree mentioned.

N.Mohanty
For Supervisor *18/04/22*
Prof. S.R. Nayak

N.Mohanty
HOD *18/04/22*
Dr. N.K. Mohanty

N.Mohanty
Dean For *18/04/22*

**INDIGENOUS TECHNICAL KNOWLEDGE ON FRUITS AND VEGETABLE
CROPS PROCESSING AND PRESERVATION IN INDIA**

A dissertation submitted in fulfillment of the requirement for the degree

MASTER OF SCIENCE

IN

ZOOLOGY

By

Akankshya Mishra

Registration no 200705180115



**Centurion
UNIVERSITY**


DEPARTMENT OF ZOOLOGY

SCHOOL OF APPLIED SCIENCES

**CENTURION UNIVERSITY OF TECHNOLOGY AND
MANAGEMENT**

CERTIFICATE


This is to certify that the dissertation entitled "INDIGENOUS TECHNICAL KNOWLEDGE ON FRUITS AND VEGETABLE CROPS PROCESSING AND PRESERVATION IN INDIA" is a bonafide work done by Akankshya Mishra bearing university registration number 200705180115 Of MSc (zoology) in partial fulfillment for the award of the degree of Master of Science in Zoology, School of Applied Sciences of Centurion University of Technology Management, Odisha. The project work is done and the report satisfies the requirements for the award of the degree mentioned.



18-05-2022

HOD
H.O.D

Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha



18-05-2022

DEAN
DEAN

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

ANALYSIS OF MOLECULES OF GINGER IN COLON CANCER

A Thesis

Submitted to

Centurion University of Technology and Management

In partial fulfilment of the requirement for the award of the degree of

MASTER OF SCIENCE (ZOOLOGY)

IN

APPLIED ZOOLOGY

By

ABHISHEK NAYAK

(Registration No. 200705180003)

Under the supervision of

DR. PREETHA BHADRA



Centurion
UNIVERSITY

Department of Zoology

School of Applied Science

Centurion University of Technology and Management, Bhubaneswar

Dist: Khurda – 751009 Odisha, India

www.cutm.ac.in

May, 2022

DECLARATION

I, declare that the thesis entitled “Analysis of molecules of Ginger in colon cancer” in Khurda district of Odisha is my own work conducted under the supervision of Dr. Preetha Bhadra, Asst, Professor, Department of Biotechnology, Centurion University of Technology and Management, Bhubaneswar, Odisha and approved by Research Advisory Committee.

I, further declare that this thesis does not contain any work which has been submitted for the award of any degree either in the University or in any other University without proper citation.

Place: Bhubaneswar

Date: 13.06.2022

Abhishek Nayak
Signature of the candidate

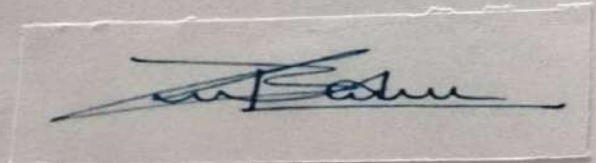
(Abhishek Nayak)

CERTIFICATE – I

This is to certify that the thesis entitled “Analysis of molecules of Ginger in colon cancer” in Khurda district of Odisha submitted to School of applied science research work done by Abhishek Nayak with Registration No. 200705180003 under my guidance and supervision for the partial fulfilment of the degree of Master of Science in Zoology.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the Master of Science (Zoology) in Post Graduate degree of the University.



Place: Bhubaneswar

Date: _____ May 2022

Associate Professor
Department of Biotechnolgy
School of Applied Science
Centurion University of Technology and Management

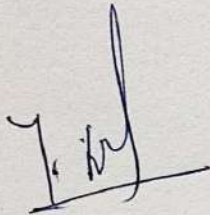
CERTIFICATE- II

This is to certify that the thesis entitled "Analysis of molecules of Ginger in colon cancer" in Khurda district of Odisha" has been prepared and submitted by Abhishek Nayak with Registration No.200705180003 in partial fulfilment of the requirements for the award of degree Master of Science in Zoology has been examined and approved by the Evaluation Committee after viva-voice.

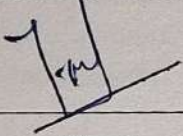
Research Advisory Committee:

Member Dr. Preetha Bhadra
~~Associate~~ Professor
Department of Biotechnology
School of applied science
Centurion University of Technology
and Management, Paralakhemundi

Member Dr. Yashaswi Nayak
Associate Professor & HOD
Department of Zoology
School Of Applied Science
Centurion University of Technology
And Management, Bhubaneswar



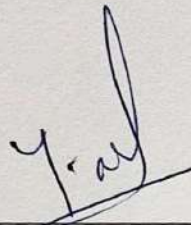
Date of final viva-voce: _____



Head

Department of Zoology,
School of Applied Science,
Centurion University of Technology
and Management, Bhubaneswar

H O D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha



Dean

School of Applied Science
Centurion University of Technology and
Management, Bhubaneswar

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Comparative Study on Effect of Sex on Haematobiochemical Profiles of Goat (*Capra hircus*)

**A Thesis Submitted to Centurion University of
Technology and Management**

In partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By ANUPAMA PATEL

(Registration No. 200705180005)

Under the guidance of

DR. SITARAM SWAIN



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*

Department of Zoology School of Applied Sciences

**Centurion University of Technology and Management,
Bhubaneswar Dist-Khorda, Pin-752050, Odisha, India**

www.cutm.ac.in

DECLARATION

I declare that the thesis entitled "**COMPARATIVE STUDY ON EFFECT OF SEX ON HAEMATOBIOCHEMICAL PROFILES OF GOAT (*Capra hircus*)**" is my own work, which I completed under the supervision of DR. SITARAM SWAIN, Assistant Professor, Department of Zoology and DR. RUKMINI MISHRA, Asst. Professor, Department of Botany, School of Applied Sciences, Centurion University of Technology and Management, Bhubaneswar, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: Bhubaneswar

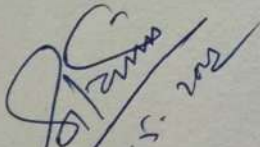
Date: 30.05.22 .

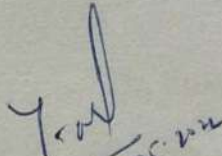
Anupama Patel

Signature of the Candidate

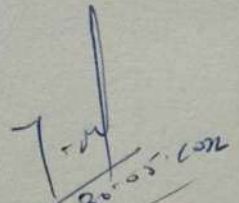
CERTIFICATE:

This is to certify that the dissertation entitled **COMPARATIVE STUDY ON EFFECT OF SEX ON HAEMATO-BIOCHEMICAL PROFILES OF GOAT (*Capra hircus*)** is a bonafide work done by **ANUPAMA PATEL** of M.Sc. (Zoology) bearing Registration No. 200705180003 in partial fulfillment for the award of the degree of Master of Science in Zoology, School of Applied Science of Centurion University of Technology and Management, Odisha. The project work done and report satisfy the requirements for the award of the degree mentioned.


30.05.2022
Supervisor


30-05-2022
HOD

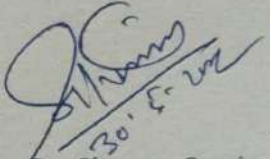
H.O.D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha


30-05-2022
Dean

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

CERTIFICATE

This is to certify that the dissertation entitled **COMPARATIVE STUDY ON EFFECT OF SEX ON HAEMATO-BIOCHEMICAL PROFILES OF GOAT (*Capra hircus*)** being submitted by **ANUPAMA PATEL** of M.Sc. (Zoology) bearing Registration No. 200705180003 for the award of the degree of Master of Science in Zoology is carried out under my supervision. The results presented in this thesis have not been submitted partly/fully elsewhere for the award of any other degree in this university or any other institutions to the best of my knowledge. In my opinion, this work is fulfilling the requirements for the award of the degree mentioned in this certificate.



Dr. Sitaram Swain

Assistant Professor

Department of Zoology

School of Applied Sciences

CUTM, Odisha

HACCP PLAN FOR POST HARVEST BAKERY PRODUCTS

**A report submitting in a partial fulfillment of the
requirement of degree**

**MASTER OF SCIENCE
IN
ZOOLOGY**

By

SUSHREE LABANYABATI PARIDA

Registration No:-200705180013

DOMAIN COURSE-FOOD PROCESSING

PROJECT NAME- HACCP Plan for veggie burger



**Centurion
UNIVERSITY**

**DEPARTMENT OF ZOOLOGY
SCHOOL OF APPLIED SCIENCES**

**CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA, INDIA**

MAY, 2022



Centurion
UNIVERSITY

School of Applied Sciences

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA


CERTIFICATE

This is to certify that the dissertation entitled “**HACCP plan for veggie burger**” is a bona fide work done by **Sushree Labanyabati Parida** of M.Sc (zoology) bearing Registration No. 200705180013 in partial fulfillment for the award of the degree of **Master of Science in Zoology**, School of Applied Sciences of Centurion University of Technology Management, Odisha. The project work is done and the report satisfy the requirements for the award of the degree mentioned.


20/05/2022
HOD

H.O.D

Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha


20/05/2022

Dean

DEAN

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

INTERACTIVE DYNAMICS OF EPIGENOMIC MODULATORS WITH TUMOROGENIC PROTEINS

*A Thesis Submitted to Centurion University of Technology and Management In
Partial fulfillment of the requirements for the award of the degree of*

**MASTER OF SCIENCE
IN
ZOOLOGY**

Submitted By

**ANKITA PRIYADARSHANI
200705180021**

Under the guidance of
DR. GAGAN KUMAR PANIGRAHI



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*

Department of Zoology

School of Applied Sciences

Centurion University of Technology and Management,

Bhubaneswar

Khordha – 752050, Odisha, India

www.cutm.ac.in

May 2022

DECLARATION

I, declare that the thesis entitled "*Interactive Dynamics of Epigenomic Modulators with Tumorigenic proteins*" is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions. The work was done under the guidance of **DR. GAGAN KUMAR PANIGRAHI**, Assistant Professor, Department of Zoology, Centurion University of Technology and Management, Bhubaneswar.

Furthermore, I declare that this thesis does not contain any part of any work submitted for the award of any degree either in this University or in any other University without proper citation.

Place: Bhubaneswar
Date: 16 -05-2022

Ankita Priyadarshani
ANKITA PRIYADARSHANI
200705180021



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*



CERTIFICATE

This is to certify that the thesis entitled **“INTERACTIVE DYNAMICS OF EPIGENOMIC MODULATORS WITH TUMOROGENIC PROTEINS”** has been prepared and submitted by **ANKITA PRIYADARSHANI** bearing Registration No. **200705180021** in partial fulfillment of the requirements for the award the of the degree of **Master of Science in Zoology** has been examined and approved by the Evaluation Committee.

Dr. Gagan Kumar Panigrahi

Supervisor

Assistant Professor
Department of Zoology

CUTM, BBSR
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

Dr. Rukmini Mishra

Domain Coordinator

H.O.D.
Associate Professor & Head
Department of Botany
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

CUTM, BBSR

Dr. Yashaswi Nayak

Dean & Head of the Department

DEAN
Associate Professor
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

CUTM, BBSR

HACCP Plan for Post-harvest Fruit/vegetable Product

A report submitted in a partial fulfillment of requirements for degree of
MASTER OF SCIENCE IN ZOOLOGY



Centurion
UNIVERSITY

DOMAIN COURSE- FOOD PROCESSING
PROJECT- HACCP PLAN FOR VEGGIE BURGER

By

Shaswati Jena (200705180027)

School of Applied Sciences (SoAS),
Centurion University of Technology and Management, Bhubaneswar
ODISHA,INDIA



Centurion
UNIVERSITY

School of Applied Sciences

**CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
BHUBANESWAR
ODISHA**

CERTIFICATE

This is to certify that the dissertation entitled “**HACCP PLAN FOR POST-HARVEST FRUIT/VEGETABLE PRODUCT**” bonafide work done by Shaswati Jena of M.Sc (Zoology) bearing Registration No. 200705180027 in partial fulfilment for the award of the degree of **Master of Science in Zoology**, School of Applied Sciences of Centurion University of Technology and Management, Odisha. The project work has done and the report satisfies the requirement for the award of the degree mentioned.


17-05-2022
HOD

H O D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha


17-5-2022
DEAN

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

Gastro protective effects of “Amla”Emblica officinalis

A Thesis
Submitted to
Centurion University of Technology and Management

In partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE IN ZOOLOGY

By
SHIV SANKAR DWIVEDI
(Registration Number: 200705180028)



Centurion
UNIVERSITY

Department of Zoology
School of Applied Science

Centurion University of Technology and Management, Bhubaneswar

Dist.: Khordha - 752050, Odisha, India

www.cutm.ac.in

May, 2022

DECLARATION

I declare that the thesis titled "Gastroprotective effects of (Amla) Emblica officinalis" is my own work, which I completed under the supervision of Mrs. Preetha Bhadra, Associate Professor, Department of Biotechnology, Centurion University of Technology and Management, Paralakhemundi, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: Bhubaneswar
Date: 27.05.22

Shiv Sankar Dwivedi
Signature of the Candidate

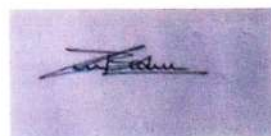
CERTIFICATE - I

This is to certify that the thesis entitled “**Gastroprotective effects of (Amla) Emblica officinalis**” submitted to **School of Applied Science** is a piece of research work done by **SHIV SANKAR DWIVEDI** with **Registration No. 200705180028** under my guidance and supervision for the partial fulfilment of the degree of Master of Science in Zoology. To the best of my knowledge and belief the thesis.

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfil the requirement of the ordinance relating to the M.Sc. Zoology in Postgraduate degree of the University.

Place: Bhubaneswar

Date: 27 / 05 / 2022



Mrs. Preetha Bhadra

Associate Professor

Department of Biotechnology

School of Applied Science

Centurion University of

Technology & Management

CERTIFICATE - II

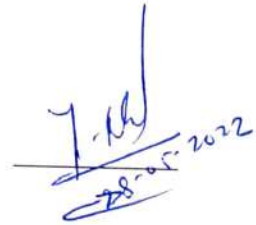
This is to certify that the thesis entitled "**Gastroprotective effects of (Amla) Emblica officinalis**" has been prepared and submitted by **ShivSankar Dwivedi** with **Registration No. 200705180028** in partial fulfilment of the requirements for the award of degree of Master of Science in zoology has been examined and approved by the Evaluation Committee after viva-voice.

Research Advisory Committee:

Member Mrs. Preetha Bhadra
Associate Professor
Department of Biotechnology
School of Applied Science
Centurion University of Technology and Management
Paralakhemundi



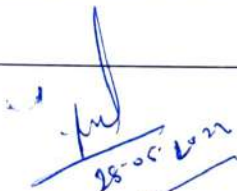
Member Dr. Yashaswi Nayak
Associate Professor & HOD
Department of Zoology
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar



Member Dr. Yashaswi Nayak
Dean of School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Date of final viva voice _____

07.05.22



Head of the Department of zoology
Centurion University of Technology
and Management, Bhubaneswar

Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

Dean
School of Applied Science
Centurion University of Technology
and Management, Bhubaneswar



DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

**COMPARATIVE ANALYSIS OF PHYSICOCHEMICAL PARAMETERS
OF GELATIN EXTRACTED FROM SCALES of *Labeo rohita* (ROHU),
Mugil curema (WHITE MULLET) and *Lates calcarifer* (SEA BASS)**

A Dissertation submitted in the partial fulfillment of the requirements
For the master degree of

**MASTER OF SCIENCE
IN
ZOOLOGY**
By

SIKHA RANI SAHU

Registration No.-200705180029

Under the guidance of

Dr. YASHASWI NAYAK



**Centurion
UNIVERSITY**

DEPARTMENT OF ZOOLOGY

(SCHOOL OF APPLIED SCIENCES)

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT ,

BBSR, ODISHA, INDIA

MAY , 2022



Centurion
UNIVERSITY

SCHOOL OF APPLIED SCIENCES


CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**Comparative analysis of physiochemical parameters of gelatin extracted from scales of *Labeo rohita* (Rohu), *Mugil curema* (White Mullet) and *Lates calcarifer* (Barramundi or sea bass)**” is a bonafide work done by **Sikha Rani Sahu** of M. Sc. ZOOLOGY bearing Registration No. **200705180029** in partial fulfillment for the award of the **Degree of Master of Science in Zoology**, School of Applied Science of Centurion University of Technology and Management, Bhubaneswar, Odisha. This project work done and all the report satisfy the requirements for the award of degree mentioned.


30.05.2022
Supervisor


30.05.2022
HOD
H.O.D.
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha


30.05.2022
Dean
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

DECLARATION

I do hereby declare that the work presented in this is original and has been done by me under the supervision of Dr. Yashaswi Nayak , Associate professor, Department of Zoology, School of Applied Science, Centurion University of Technology and Management, Odisha India. I further declare that this work has not been submitted partly or fully elsewhere for the award of any other degree in this University or any other Institutions.

Date: 30/05/2022

Place: CUTM, Bhubaneswar

Sikha Rani Sahu


Sikha Rani Sahu

Registration No. -: 200705180029
M. Sc. in Zoology

Session-: 2020-2022

CERTIFICATE

This is to certify that the dissertation entitled "Comparative analysis of physiochemical parameters of gelatin extracted from scales of *Labeo rohita* (Rohu), *Mugil curema* (White Mullet) and *Lates calcarifer* (Barramundi or sea bass)" being submitted by **Sikha Rani Sahu** of **M. Sc. Zoology** bearing Registration No. **200705180029** for the award of the degree of **Master of Science in Zoology** is carried under my supervision. The result presented in this thesis have not been submitted partly/ fully elsewhere for the award of the any other degree in this University or any other Institutions to the best of my knowledge. In my opinion, this work is fulfilling the requirements for the award of the degree mentioned in this certificate.



30.05.2022

Dr. Yashaswi Nayak

Associate Professor

Department of Zoology

School of Applied Sciences

CUTM, ODISHA

HACCP PLAN FOR VEGGIE BURGERS

**A Report submitted for the fulfilment of the requirement
for the masters' degree**

**MASTER OF SCIENCE
IN
ZOOLOGY**

By

Sankalpa Sahoo

Registration Number- 200705180030



DEPARTMENT OF ZOOLOGY

**CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT,
BHUBANESWAR, ODISHA, INDIA.**

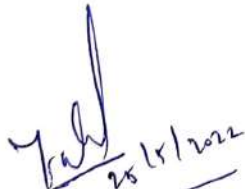
MAY 2022



School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled "HACCP Plan for Veggie Burgers" is a bona-fide work done by Sankalpa Sahoo bearing university registration number 200705180030 of MSc (zoology) in partial fulfilment for the awarding of the degree of Master of Science in Zoology, School of Applied Sciences of Centurion University of Technology & Management, Odisha. The project work is done and the report satisfies the requirements for the award of the degree mentioned.


25/5/2022
HOD

Department of Zoology
H.O.D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha


25-5-2022
DEAN

School of Applied Sciences
DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

FINDING SMALL MOLECULES TO TARGET DENGUE VIRUS NS1

A Thesis
Submitted to
Centurion University of Technology and Management

In partial fulfillment of the requirements for the award of the degree of

**MASTER OF SCIENCE
IN
ZOOLOGY**

By
PURBASHA PRIYADARSHINI
(Registration No.200705180031)



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*

Department of Zoology
School of Applied Sciences
Centurion University of Technology and Management,
Bhubaneswar
Dist- Khordha, Jatani, Pin-752050, Odisha, India

DECLARATION

I declare that the thesis entitled “**Finding small molecules to target dengue virus NS1**” is my own work, which I completed under the supervision of Mrs. Preetha Bhadra, Assistant Professor, Department of Biotechnology, and Dr. Bibhudutta Mishra, Asst. Professor, Department of Zoology, School of Applied Science, Centurion University of Technology and Management, Bhubaneswar, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: Bhubaneswar

Date : (12.5.2022)

Rurbasha Prayadarshini
Signature of the Candidate

CERTIFICATE - I

This is to certify that the thesis entitled “**Finding small molecules to target dengue virus NS1**” submitted to School of Applied Science is a piece of research work done by **PURBASHA PRIYADARSHINI** with **Registration No. 200705180031** under my guidance and supervision for the partial fulfillment of the degree of Master of Science in Zoology.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the Msc Zoology in Post Graduate degree of the University.



Place: Bhubaneswar
Date: 12.05 May 2022

Dr. Preetha Bhadra
Assistant Professor
Department of Biotechnology
M.S. Swaminathan School of Agriculture
Centurion University of Technology & Management

CERTIFICATE – II

This is to certify that the thesis entitled “**Finding small molecules to target dengue virus NS1**” has been prepared and submitted by **PURBASHA PRIYADARSHINI** with **Registration No. 200705180031** in partial fulfillment of the requirements for the award of degree of Master of Science in Zoology has been examined and approved by the Evaluation Committee after viva-voce.

Research Advisory Committee:

Member Mrs. Preetha Bhadra
Assistant Professor
Department of Biotechnology
M.S. Swaminathan School of Agriculture
Centurion University of Technology and Management
Paralakhemundi

Member Dr. Bibhudutta Mishra
Assistant Professor
Department of Zoology
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Member Dr. Yashaswi Nayak
Assistant Professor & HOD
Department of Zoology
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Date of final viva voice _____


12-05-2022


12-05-2022

Head
Department of Zoology
Centurion University of Technology
And Management, Bhubaneswar

H O D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

Dean
School of Applied Science
Centurion University of Technology
and Management, Bhubaneswar

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

MICROBIAL PARAMETERS OF SOIL

A Thesis

Submitted to

Centurion University of Technology and Management

In partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

IN

ZOOLOGY

BY

GANNAWARAPU RUKMINI ACHARY

(Registration No.200705180032)



**CENTURION
UNIVERSITY**

*Shaping Lives...
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Department of Zoology

School of Applied Sciences

**Centurion University of technology and management,
Ramachandrapur, Jatni-752050, Odisha, India**

www.cutm.ac.in

May, 2022

DECLARATION

I declare that the thesis entitled "**Microbial Parameters of Soil** " is my own work, which I completed under the supervision of Dr.Saurav Barman, Associate professor, Department of Soil Science, Mr. Lalichetti Sagar, Assistant professor, Department of Agronomy and Dr. B. Praveen, Associate professor and Head, Department of Plant pathology, M.S. Swaminathan School of Agriculture, Centurion University of Technology and Management, Paralakhemundi, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: Bhubaneswar

Date: 21.05.2022

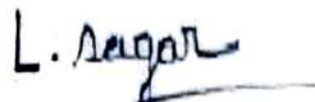
G. Rekmini Achary
Signature of the Candidate

CERTIFICATE - I

This is to certify that the thesis entitled "**Microbial Parameters of Soli**" submitted to School of Applied Science is a piece of research work done by **Gannawarapu Rukmini Achary** with Registration No. **200705180032** under my guidance and supervision for the partial fulfillment of the degree of Master of Science in Zoology.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfils the requirement of the ordinance relating to the Msc Zoology in Post Graduate degree of the University.



MR. LALICHETTI SAGAR

Assistant Professor
Department of Agronomy
M.S. Swaminathan School of Agriculture
Centurion University of Technology &
Management

Place: Bhubaneswar

Date: 21 May 2022

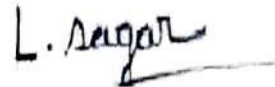
CERTIFICATE - II

This is to certify that the thesis entitled "**Microbial Parameters of Soil**" has been prepared and submitted by **Gannawarapu Rukmini Achary** with Registration No. **200705180032** in partial fulfillment of the requirements for the award of degree of Master of Science in Zoology has been examined and approved by the Evaluation Committee after viva-voce.

Research Advisory Committee:

Guided by

Mr. Lalichetti Sagar
Asst. Prof
Department of Agronomy
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and
Management
Paralakhemundi

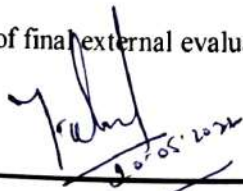


Domain Co-ordinator

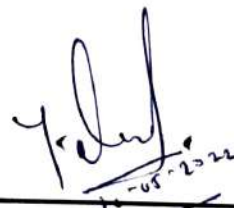
Dr. Saurav Barman
Associate Professor
Department of Soil Science
M.S. Swaminathan School of
Agriculture
Centurion University of
Technology and
Management
Paralakhemundi



Date of final external evaluation _____



Head



Dean

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

H.O.D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

School of Applied Science
Centurion University of
Technology and Management,
Bhubaneswar

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

POST COVID STRESS MANAGEMENT

A Dissertation is submitted in partial fulfilment of the requirements

For the degree of

MASTER OF SCIENCE

IN

ZOOLOGY

BY

SUSANTA KUMAR BARIK

Registration No:- 200705180034

Under the Supervision of

Dr. SOUMYA JAL

HOD of School of Paramedics & Allied Health Sciences



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DEPARTMENT OF ZOOLOGY

SCHOOL OF APPLIED SCIENCES

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA, INDIA

APRIL 2022

DECLARATION

I do hereby declare that the work presented in this project is original and has been done by me under the supervision **Dr. Soumya Jal , HOD of School of Paramedics and Allied Health Sciences , Centurion University of Technology And Management , Odisha , India** . I further declare that this work has not been submitted partly / fully elsewhere for award of any other degree in this university or any other institution.

Date:- 03.08.2022

Place:- CUTM , ODISHA

Susanta Kumar Barik

Susanta kumar Barik


Registration No :- 200705180034

M.SC in ZOOLOGY

Session:- 2020 - 2022

CERTIFICATE

This is to certify that the dissertation entitled " post covid stress management " being submitted by **Susanta kumar Barik of M.sc Zoology** bearing **Registration No. 200705180034** for the award of the degree of **Master of Science in Zoology** is carried out under my supervision . The results presented in this thesis have not been submitted partly / fully elsewhere for the award of any other degree in this university or any other institutions to the best of my knowledge. In my opinion, this work is fulfilling the requirements for the award of the degree mentioned in this certificate.


3/8/22

Dr. Soumya Jal

Head of the department of

School of Paramedics and Allied Health Sciences

CUTM, ODISHA

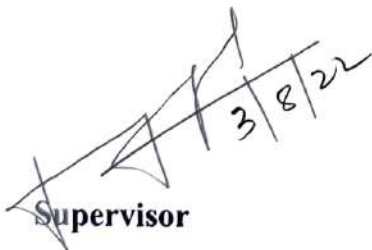


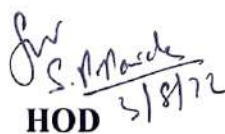
**CENTURION
UNIVERSITY**
*Shaping Lives
Empowering Communities*

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT
ODISHA

CERTIFICATE

This is to certify that the dissertation entitled “**post covid stress management**” is a bonafide work done by **Susanta kumar Barik** of **M.SC Zoology** bearing **Registration No – 200705180034** in partial fulfilment for the award of the degree of **Master of Science In Zoology** , School of Applied Sciences Of Centurion University of Technology And Management , Odisha . The project work has been done and the report satisfies the requirements for the award of the degree mentioned.


Supervisor


HOD

H.O.D
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha


Dean

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

FINDING SMALL MOLECULES TO TARGET DENGUE VIRUS NS1

A Thesis
Submitted to
Centurion University of Technology and Management

In partial fulfilment of the requirements for the award of the degree of

**MASTER OF SCIENCE
IN
ZOOLOGY**

**By
MOUSUMI MISHRA
(Registration No.200705180035**



**Centurion
UNIVERSITY**

*Shaping Lives...
Empowering Communities...*

Department of Zoology

School of Applied Sciences

**Centurion University of Technology and Management, Bhubaneswar
Dist- Khorda Pin-752050, Odisha, India**

DECLARATION

I declare that the thesis entitled "**Finding Small Molecules to Target Dengue Virus NSI**" is my own work, which I completed under the supervision of Dr. Preetha Bhadra, Assistant Professor, Department of Biotechnology, and Dr. Bibhudutta Mishra, Asst. Professor, Department of Zoology, School of Applied Science, Centurion University of Technology and Management, Bhubaneswar, Odisha.

I furthermore declare that this thesis does not contain any part of any work that has been submitted for the granting of any degree at the University or elsewhere without proper citation.

Place: Bhubaneswar

Mousumi Mishra
Signature of the Candidate

Date : (12/5/22)

CERTIFICATE - I

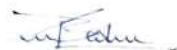
This is to certify that the thesis entitled "**Finding Small Molecules to Target Dengue Virus NS1**" submitted to School of Applied Science is a piece of research work done by **MOUSUMI MISHRA** with **Registration No. 200705180035** under my guidance and supervision for the partial fulfillment of the degree of Master of Science in Zoology.

To the best of my knowledge and belief the thesis

1. Embodies the work of candidate himself.
2. Has duly been completed.
3. Fulfill the requirement of the ordinance relating to the MSc Zoology in Post Graduate degree of the University.

Place: Bhubaneswar

Date: 12/5/22



Dr. Preetha Bhadra
Assistant Professor

Department of Biotechnology
M.S. Swaminathan School of Agriculture
Centurion University of Technology & Management

CERTIFICATE - II

This is to certify that the thesis entitled “**Finding Small Molecules to Target Dengue Virus NS1**” has been prepared and submitted by **MOUSUMI MISHRA** with **Registration No. 200705180035** in partial fulfillment of the requirements for the award of degree of Master of Science in Zoology has been examined and approved by the Evaluation Committee after viva-voce.


Research Advisory Committee:

Member Dr. Preetha Bhadra
Assistant Professor
Department of Biotechnology
M.S. Swaminathan School of Agriculture
Centurion University of Technology and Management
Paralakhemundi

Member Dr. Bibhudutta Mishra
Assistant Professor
Department of Zoology
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Member Dr. Yashaswi Nayak
Assistant Professor & HOD
Department of Zoology
School of Applied Science
Centurion University of Technology and Management
Bhubaneswar

Date of final viva voice _____


12.05.2022
Head

Department of Zoology
Centurion University of Technology and
Management, Bhubaneswar

HOD
Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha


12.05.2022
Dean

School of Applied Sciences
Centurion University of Technology
and Management, Bhubaneswar

DEAN
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha

HACCP PLAN FOR BAKED PRODUCTS

A Report submitted in fulfillment of the requirement for the degree

MASTER OF SCIENCE

IN

ZOOLOGY

By

Punyatoya Mishra

Registration No:200705180036



Centurion
UNIVERSITY

DEPARTMENT OF ZOOLOGY

SCHOOL OF APPLIED SCIENCE

CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT

ODISHA, INDIA

MAY 2022



Centurion
UNIVERSITY

School of Applied Sciences

**CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT,
ODISHA**

CERTIFICATE

This is to certify that the dissertation entitled “**HACCP Plan for Baked Product**” is a bonafide work done by **Punyatoya Mishra** bearing university registration number 200705180036 of MSc (zoology) in partial fulfilment for the award of the degree of **Master of Science in Zoology**, School of Applied Sciences of Centurion University of Technology Management, Odisha. The project work is done and the report satisfies the requirements for the award of the degree mentioned.

HOD
H.O.D

Department of Zoology
School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar Odisha

Dean
DEAN

School of Applied Sciences
CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT
Bhubaneswar, Odisha