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FIRST CYCLE NAAC ACCREDITATION 2024

CRITERION-I
(CURRICULAR ASPECTS)

Key Indicator - 1.3

Curriculum Enrichment

Submitted to



THE NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

Bangalore, Karnataka, India

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Department of Botany: Student List	

		GAUHATI UNIVERSITY, ASSAM ATTENDANCE SHEET Practical Exam	
PAPER CO	F EXAMINATION : 18 DE AND NAME : B	9.Sc (Hons) CBCS, 6Sem - PRACTICAL EXAMINATION, 83- PDVAIM , Argings OT-HE-6036 Dissertation/Project work 22(ダインジ	
S.NO.	ROLL NO.	STUDENT NAME	SIGNATURE
1	US-191-183-0071	UPASHA KAIBARTA	Upasha Kaibanda
2	US-201-183-0012	DILTU R MARAK	Welter K. Marsale
3	US-201-183-0022	JUMUI DAIMARY	Jumus Daim way
4	US-201-183-0025	KAJAL RUDRA	kajar Radera
5	US-201-183-0027	KAUSHIK RAY	Koushik Ray
6	US-201-183-0028	KAUSHIK ROUTH	Kaushik Routh
7	US-201-183-0030	MANALISHA BODOSA	Manalisha Badasa
8	US-201-183-0032	MANSUR ALAM	Mansux Alam
9	US-201-183-0039	PUJA PATGIRI	Puja Patgiπi,
10	US-201-183-0042	RIYA MAHANTA	Riya Mahanta
11	US-201-183-0046	SHARMISTHA I SANGMA	Tharmistha I. Langua
12	US-201-183-0050	SWAGATA NATH	Swagar walls.

Signature Of External Examiner	Dann
Name of External Examiner	Dr. Dharmeswar Barman
Signature Of Internal Examiner	Dw 22/5/23 & Norm 22/5/23
Name of Internal Examiner	Debajit Robbe & Sabmoore Yeasnein Tyoli

Coordinator Arrivage
ICAC POUNTA 7 93124



Metric No	Heading
1.3.2.1	Percentage of students undertaking project work/ field work/ internship
Department of Chemistry: Student List	

		GAUHATI UNIVERSITY, ASSAM ATTENDANCE SHEET Practical Exam	
PAPER CO	DE AND NAME	B.Sc (Hons) CBCS, 6Sem - PRACTICAL EXAMINATION 183- PDU Am Amjorga CHE-HE-6056 Dissertation 25/05/2023	N, 2023
S.NO.	ROLL NO.	STUDENT NAME	SIGNATURE
1	US-191-183-0063	RUPJYOTI NATH	Rupgyoti Nath
2	US-201-183-0001	ABDUL KALAM	Abdul Kalarr
3	US-201-183-0002	ANKUR BARMAN	Ankeur Borma
4	US-201-183-0004	BABITA RABHA	Babita Rabha
5	US-201-183-0005	BHAWANA DAS	Bhawana Das
6	US-201-183-0023	JYOTI PRASAD DAS	Typti Pragada
7	US-201-183-0026	KAPIL BAYAN	Kapil Bayen
8	US-201-183-0029	MADHUMITA HAZARIKA	Madhumita Hagarii
9	US-201-183-0045	SANU SARKAR	Samuel Conta

Signature Of External Examiner	Dr.
Name of External Examiner	Dr Manash Locker Din.
Signature Of Internal Examiner	A M
Name of Internal Examiner	Dr. Prasmon Sosvi, Dr. Upama Baenah.





Metric No	Heading	
1.3.2.1	Percentage of students undertaking project work/ field work/ internship	
Department of Computer Science: Student List		

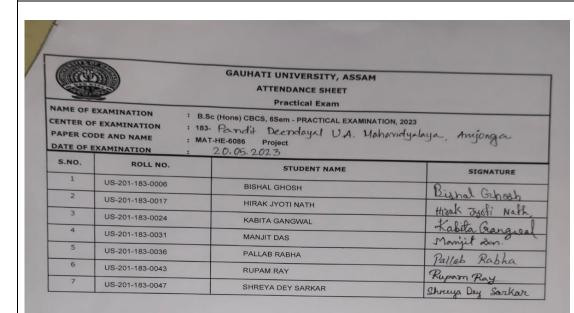
			GAUHATI UNIVERSITY, ASSAM ATTENDANCE SHEET Practical Exam	
NAME OF EXAMINATION CENTER OF EXAMINATION PAPER CODE AND NAME DATE OF EXAMINATION		: 183- : CSC-	e (Hons) CBCS, 5Sem - PRACTICAL EXAMINATION, 2023 PDUAM Anjonga - HE-5036 Project work/Dissertation - 01 - 2023.	
S.NO.	ROLL NO.		STUDENT NAME	SIGNATURE
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7	US-201-183-0041		RAMI KASHYAP BASUMATARY	Papan 40Swam

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Name of External Examiner	Dr. Rubul Kumar Bania
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Name of Internal Examiner	DR. KSHIROD SARMAH,



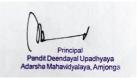


Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/
	internship
	Department of Mathematics: Student List



Signature Of External Examiner	Moidul Dutte
Name of External Examiner	Dr. Mridul Dutte
Signature Of Internal Examiner	300
Name of Internal Examiner	Dr. Pranal Tyoti Dewaii





Metric No	Heading	
1.3.2	Percentage of students undertaking project work/ field work/ internship	
Department of Zoology: Student List		

		GAUHATI UNIVERSITY, ASSAM ATTENDANCE SHEET Practical Exam	
NAME OF EXAMINATION : B.Sc (Hons) CBCS, 6Sem - PRACTICAL EXAMINATION, 2023 CENTER OF EXAMINATION : 183- PAPER CODE AND NAME : ZOO-HE-6056 Dissertation DATE OF EXAMINATION : CXCNATURE			
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6	US-201-183-0033	MONISA BASUMATARY	Monisa Basumalany
7	US-201-183-0034	NIKITA MEDHI	Nikita Medhi
8	US-201-183-0038	PRAGYAN RABHA	Braggen Rabha
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	Of External Examiner kternal Examiner	Dr. Tapan Chandra Kalit	- Ca
Name of E		Dr tapan Chandra Kalit Beka Dr Chandralekha Deka.	





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

ASSESSMENT OF ECOSYSTEM SERVICES OF URPAD BEEL AND ITS IMPACT ON PEOPLE'S DEPENDENCY

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

UPASHA KAIBARTA

Registration No: 19067746 Roll No: US-191-183-0071 Paper code: BOT-HE-6026 Session: 2022-2023



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Submitted by Upasha Kaibartya





Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
Certificate	



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Certificate

This is to certify that the dissertation entitled, "Assessment Of Ecosystem Services Of Urpad Beel And Its Impact On Peoples Dependency", submitted to the Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Upasha Kaibarta under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

(Mr. Debajit Rabha) HoD,

(Dr.Insan Ara Rahman)

Dept. of Botany PDUAM, Amjonga

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Date: 22/05/2023

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Submitted by Upasha Kaibartya

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

ASSESSMENT OF BIOMASS AND CARBON STOCK OF THE ROADSIDE TREES FROM DUDHNOI TO DARANGGIRI IN GOALPARA DISTRICT OF ASSAM

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Diltu Marak

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
Certificate	



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This is to certify that the dissertation entitled, "Assessment Of Biomass And Carbon Stock Of The Roadside Trees From Dudhnoi To Daranggiri In Goalpara District Of Assam", submitted to the Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by DILTU R MARAK under my supervision and guidance.

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

ASSESSMENT OF NON-TIMBER FOREST PRODUCTS IN GOALPARA DISTRICT OF ASSAM: A CASE STUDY

A dissertation submitted in partial fulfillment of the requirements for the degree of Bachelor of Science

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Registration No: 20037420 Roll No: US-201-183-0022 Paper code: BOT-HE-6036 Session: 2022-2023



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Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
	Certificate



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CERTIFICATE

This is to certify that the dissertation entitled, "Assessment of Non-timber Forest Products In Goalpara District Of Assam: A Case Study", submitted to the department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Jumui Daimary under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

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Metric No	Heading	
1.3.2	Percentage of students undertaking project work/ field work/ internship	
	Title Page of Project	

ASSESSMENT OF NON-TIMBER FOREST PRODUCTS IN GOALPARA DISTRICT OF ASSAM: A CASE STUDY

A dissertation submitted in partial fulfillment of the requirements for the degree of Bachelor of Science

Kajal Rudra

Registration No: 20037423 Roll No: US-201-183-0025 Paper code: BOT-HE-6036 Session: 2022-2023



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Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
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All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

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215/13 (Dr. D. Mamman)

Submitted by Kajal Rudra





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

ASSESSMENT OF ECOSYSTEM SERVICES OF URPAD BEEL AND ITS IMPACT ON PEOPLE'S DEPENDENCY

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

KAUSHIK RAY

Registration No: 20037425 Roll No: US-201-183-0027 Paper code: BOT-HE-6036 Session: 2022-2023



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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



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Certificate

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All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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Date: 22/05/2023

Place: Amjonga

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Submitted by Kaushik Ray

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

ASSESSMENT OF BIOMASS AND CARBON STOCK OF THE ROADSIDE TREES FROM DUDHNOI TODARANGGIRI IN GOALPARA DISTRICT OF ASSAM

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Kaushik Routh

Registration No: 20037426] Roll No: US-201-183-0028 Paper code: BOT-HE-6026

Session: 2022-2023



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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



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Certificate

This is to certify that the dissertation entitled, "Assessment Of Biomass And Carbon Stock Of The Roadside Trees From Dudhnoi ToDaranggiri In Goalpara District Of Assam", submitted to the Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Kaushik Routh under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

(Mr. Debojit Rabha)

HoD, Dept. of Botany PDUAM, Amjonga

Dept. of Botany PDUAM, Amjonga (Dr. Sangeeta Deka)

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Date: 22/05/2023

Place: Amjonga

Submitted by Kaushik Routh





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Morphometric, Physiological and Qualitative Phytochemical screening of some Citrus species of Dudhnoi, Goalpara

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Manalisha Bodosa

Registration No.: 20037428
Roll No.: US-201-183-0030
Paper Code: BOT-HE-6036
Session – 2022-23



Name of the Supervisors: Ms. Sabnoor Yeasrin Jyoti Dr. Insan Ara Rahman

Submitted to

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Amjonga-783124, Goalpara, Assam

Submitted by Manalisha Bodosa





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



Certificate

This is to certify that the dissertation entitled, "Morphometric, Physiological and Qualitative Phytochemical screening of some Citrus species of Dudhnoi, Goalpara" submitted to the Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Manalisha Bodosa under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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Submitted by Manalisha Bodosa

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

ASSESSMENT OF ECOSYSTEM SERVICES OF URPAD BEEL AND ITS IMPACT ON PEOPLE'S DEPENDENCY

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

MANSUR ALOM

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
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Certificate

This is to certify that the dissertation entitled, "Assessment Of Ecosystem Services Of Urpad Beel And Its Impact On Peoples Dependency", submitted to the Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Mansur Alam under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

ASSESSMENT OF BIOMASS AND CARBON STOCK OF THE ROADSIDE TREES FROM DUDHNOI TO DARANGGIRI IN GOALPARA DISTRICT OF ASSAM

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

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Metric No	Heading
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DEPARTMENT OF BOTANY পণ্ডিত দীনদয়াল উপাধ্যায় আদর্শ মহাবিদ্যালয়, আমজোঙ্গা PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124 Phone: +9170020323 Email:dept.botany.pduam@gmail.com

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(Mr. Debojit Rabha) Supervisor Dept. of Botany

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Date: 22/05/2023

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

ASSESSMENT OF NON-TIMBER FOREST PRODUCTS IN GOALPARA DISTRICT OF ASSAM: A CASE STUDY

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

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Registration No: 20037441 Roll No: US-201-183-0042 Paper code: BOT-HE-6036 Session: 2022-2023



Supervisors Mr. Debajit Rabha Ms. Sabnoor Yeasrin Jyoti

Department of Botany Pandit Deendayal Upadhayaya Adarsha Mahavidyalaya Amjonga-783124, Goalpara, Assam

Submitted by Riya Mahanta





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

DEPARTMENT OF BOTANY

পণ্ডিত দীনদয়াল উপাধ্যায় আদর্শ মহাবিদ্যালয়, আদজোঙ্গা

PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124

Phone: +917002073239 Email: dept.botany.pduam@gmail

CERTIFICATE

This is to certify that the dissertation entitled, "Assessment of Non-timber Forest Products In Goalpara District Of Assam: A Case Study", submitted to the department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Riya Mahanta under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Mr Debajit Rabha HoD & Supervisor Dept. of Botany

PDUAM, Amjonga

Sygn 22/05/2023 Ms. Sabnoor Yeasrin Jyoti

Supervisor

Dept. of Botany

PDUAM, Amjonga

Submitted by Riya Mahanta

Jums (22/5/23 (DI D Barman)



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

Morphometric, Physiological and Qualitative Phytochemical screening of some Citrus species of Dudhnoi, Goalpara

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Sharmistha I. Sangma

Registration No.: 20037445 Roll No.: US-183-0046 Paper Code: BOT-HE-6036 Session -2022-23



Name of the Supervisors: Ms. Sabnoor Yeasrin Jyoti Dr. Insan Ara Rahman

Submitted to

Department of Botany
PanditDeendayalUpadhyayaAdarshaMahavidyalaya,
Amjonga-783124, Goalpara, Assam

Submitted by Sharmistha I Sangma





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124 Phone: +9170020323 Email:dept.botany.pduam@g

Certificate

This is to certify that the dissertation entitled, "Morphometric, Physiological and Qualitative Phytochemical screening of some Citrus species of Dudhnoi, Goalpara", to the Department of PanditDeendayalUpadhyayaAdarshaMahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Sharmistha I. Sangmaunder my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

(Mr. DebajitRabha) HoD, Dept. of Botany PDUAM, Amjonga

Supervisor Dept. of Botany PDUAM, Amjonga

(SabnoorYeasrinJyoti) (Dr. Insan Ara Rehman)

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Date: 22/05/2023

Place: Amjonga

Jum 221 9/23

Submitted by Sharmistha Sangma





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

Morphometric, Physiological and Qualitative Phytochemical screening of some Citrus species of Dudhnoi, Goalpara

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Swagata Nath

Registration No.: 20037449
Roll No.: US-201-183-0050
Paper Code: BOT-HE-6036
Session – 2022-23



Name of the Supervisors: Ms. Sabnoor Yeasrin Jyoti Dr. Insan Ara Rahman

Submitted to

Department of Botany

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

Submitted by Swagata Nath





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



DEPARTMENT OF BOTANY পণ্ডিত দীনদয়াল উপাধ্যায় আদর্শ মহাবিদ্যালয়, আমজ্যেঙ্গা PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124

Phone: +9170020323

Email dept botany pduam@gmail.com

Certificate

This is to certify that the dissertation entitled, "Morphometric, Physiological and Qualitative Phytochemical screening of some Citrus species of Dudhnoi, Goalpara", submitted to the Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Botany is a genuine record of original research investigations carried out by Swagata Nath under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

(Mr. Debajit Rabha)

HoD, Dept. of Botany PDUAM, Amjonga

(Sabnoor Yeasrin Jyoti)

Supervisor

Dept. of Botany

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(Dr. Insan Ara Rehman)

Supervisor

Dept. of Botany

PDUAM, Amjonga

Date: 22/05/2023

Place: Amjonga

Submitted by Swagata Nath





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

COMPARATIVE STUDY ON SOME FRUITS AND DETECTION OF SOME MINERALS ON THEM

A dissertation submitted in partial fulfillment of the requirements for Degree of Bachelor of Science

Rupjyoti Nath

Registration No.: 19067738

Roll No.: US-191-183-0063

Paper Code: CHE-HE-6056

Session: 2022-2023



Name of the Supervisor: Dr. Prasant Gogoi

Department of Chemistry

Pandit Deendayal Upadhaya Adarsha mahavidyalaya

Amjonga, 783124, Goalpara (Assam)

Submitted by Rupjyoti Nath





Metric No	Heading
1.3.2.1	Percentage of students undertaking project work/ field work/ internship
	Certificate

Certificate

This is to certify that the dissertation entitled "COMPARATIVE STUDY ON SOME FRUITS AND DETECTION OFSOME MINERALS ON THEM" submitted to the department of chemistry PANDIT DEENDAYAL UPADHYAYA ADHARSA MAHABIDYALAYA AMJONGA in partial fulfillment of the requirements for of Bachelor of Science (B.Sc) in Chemistry is subject is a genuine record original research. Investigations carried out by Rupjyoti Nath under m supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree diploma, or recognition.

Dr. PRASANT GOGOL

HoD. Dept. of Chemister

PDUAM, Amjonga

Dr. PRASANT GOGOI

Dept. of Chemistry

PDUAM, Amjonga

Date : 25/05/2023 Place : Amjonga

Submitted by Rupjyoti Nath





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

Qalitative Analysis of Functional Groups in Betel Nut Extracts

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Abdul Kalam

Registration No:20037399
Roll No:US-201-181-0001
Paper Code: CHE-HE-6056
Session – 2022-23



Name of the Supervisor: Dr.Prasanta Gogoi

Department of Chemistry

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

Submitted by Abdul Kalam





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

Departmental Letter Head

Certificate

This is to certify that the dissertation entitled, "Qualitative Analysis of Functional Groups in Betel Nut Extracts", submitted to the department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Dissertation is a genuine record of original research investigations carried out by Abdul Kalam under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr.Prasarta Gogoi

HoD, Dept. Of Chemistry

PDUAM, Amjonga

Dr.Prasanta Gogoi

Dept. Of Chemistry

PDUAM, Amjonga

Date:25-05-23

Place:PDUAM, Amjonga

Submitted by Abdul Kalam





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

ADSORPTION STUDY OF ACETIC ACID ON ACTIVATED CARBON FROM NATURALLY AVAILABLE ECO-FRIENDLY LOW COST ADSORBENT

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

ANKUR BARMAN

Registration No: 20037400

Roll No: US-201-183-0002

Paper code: CHE-HE-6056

Session: 2022-2023



Name of the supervisor: Dr. Chandrama Sarkar

Department of Chemistry

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya Amjonga- 783124,

Goalpara,

Submitted by Ankur Barman





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Certificate	



OFFICE OF THE HEAD DEPARTMENT OF CHEMISTRY PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA: 783124; GOALPARA; ASSAM; INDIA

CERTIFICATE

This is to certify that the dissertation entitled, "Adsorption study of acetic acid on activated carbon from naturally available eco-friendly low cost adsorbent", submitted to the department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) Chemistry is a genuine record of original research investigations carried out by Ankur Barman under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr. Prasanta Gogoi HoD, Dept. of Chemistry

PDUAM, Amjonga

Date: 25/05/2023

lace: Amjonga

Dr. Chandrama Sarkar Dept of Chemistry

PDUAM, Amjonga

Submitted by Ankur Barman

Coordinator Amprosa

Principal
Pandit Deendayal Upadhyaya
Adarsha Mahavidyalaya, Amjonga

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

A COMPARATIVE STUDY OF RATE OF FERMENTATION OF DIFFERENT FRESH AND PACKAGED FRUIT JUICES

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Babita Rabha

Registration No: 20037402 Roll no.: US-201-183-0004 Paper code: CHE-HE-6056 Session: 2020-2023



Name of the Supervisor: Dr. Upama Baruah

Department of Chemistry
Pandit Deendayal Upadhaya Adarsha Mahavidyalaya (PDUAM)
Amjonga, Amjonga-783124,
Goalpara, Assam

Submitted by Babita Rabha





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



OFFICE OF THE HEAD DEPARMENT OF CHEMISTRY

PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA: 783124; GOALPARA;ASSAM;INDIA

Certificate

This is to certify that the dissertation entitled, "Comparative Study of Rate of Fermentation of Different Fresh and Packaged Fruit Juices", submitted to the Department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfillment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in Chemistry is a genuine record of original research investigations carried out by Babita Rabha under my supervision and guidance.

All the co-operation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Prasania Gogora

Date 25/05/27

Place: PDUAM Amjonga

Upama Baruah Dr. Upama Baruah Dept. of Chemistry PDUAM, Amjonga

Submitted by Babita Rabha





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

PROJECT REPORT ON

ACID AND CAFFEINE IN DIFFERENT SAMPLES OF TEA LEAVES

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science.

Submitted by -

BHAWANA DAS

Registration No: 20037403 Roll No: US-201-183-0005 Paper Code: CHE-HE-6056

Session: 2022-23



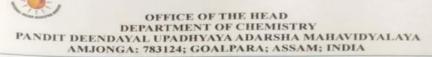
Name of the Supervisor: Dr. Prasanta Gogoi
Department of *Chemistry*Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,
Amjonga-783124, Goalpara, Assam

Submitted by Bhawana Das





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



Certificate

This is to certify that the dissertation entitled, "Comparative study of amount of polyphenol, tannic acid and caffeine in different samples of tea leaves" Department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfillment of the requirements for the award of degree of Bachelor of Science (BSc) in Chemistry is a genuine record of original research investigations carried out by Bhawana Das under my supervision and guidance.

All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged..

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

HoD, Dept. of Chemistry

PDUAM, Amjonga

Date: 25/05/23

Dr. Prasenta Good Dept. of Chemistry PDUAM, Amjonga

Submitted by Bhawana Das

Coordinator Test 724



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

"Adsorption Study of Oxalic Acid on Activated Charcoal Obtained From Naturally Available Activated Carbon Sources"

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Submitted by-

JYOTI PRASAD DAS

Registration No: 20037421

Roll No: US-201-183-0023

Paper Code: CHE-HE-6056

Session 2022-2023



Name of the Supervisor: Dr. Chandrama Sarkar

Department of CHEMISTRY

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam, India

Submitted by Jyotiprashad Das





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



OFFICE OF THE HEAD DEPARTMENT OF CHEMISTRY PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA: 783124; GOALPARA; ASSAM; INDIA

Certificate

This is to certify that the dissertation entitled, "Adsorption Study of Oxalic Acid on Activated Charcoal Obtained From Solanum tuberosum(Potato peel), Cocos nucifera(Coconut hulk), Musa paradisiaca(Banana peel), Mangifera indica(Mango peel), Citrullus lanatus(Watermelon)" submitted to the department of CHEMISTY, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in name of subject is a genuine record of original research investigations carried out by JYOTI PRASAD DAS under my supervision and guidance.

All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Prasanta Gogoi Name of the HoD, HoD, Dept. of CHEMISTRY

PDUAM, Amjonga

Date: 25/5/2023

Place: AMJONGA

Dr Chandrama Sarkar Name of Supervisor Dept. of CHEMISTRY PDUAM, Amjonga

Submitted by Jyotipeashad Das





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Studies on synthesis of Schiff base ligand with O, N donor atoms and their complexes

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Ву

Kapil Bayan

Registration No.: 20037424 Roll No.: US-201-183-0026 Paper Code: CHE-HE-6056 Session - 2022-23



Name of the Supervisor: Dr. Mukul Kalita

Department of Chemistry

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga-783124

Goalpara, Assam

Submitted by Kapil Bayan





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



OFFICE OF THE HEAD DEPARTMENT OF CHEMISTRY

PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA

AMJONGA:783124; GOALPARA; ASSAM;INDIA

CERTIFICATE

This is to certify that the dissertation entitled, "Studies on synthesis of Schiff base ligand with O, N donor atoms and their complexes" submitted to the Department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Chemistry is a genuine record of original research investigation carried out by KAPIL BAYAN under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr.Prasantal Cosor,
Asstt. Professor & difference of Cheffistry
PDUAM, Amjonga

Amjonga

Date: 25/05/2023

Dr. Mukul Kalita
Asstt.Professor,
Dept.Chemistry
PDUAM

Submitted by Kapil Bayan





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Title Page of Project	

A COMPARATIVE PRELIMINARY INVESTIGATION OF GROUND WATER QUALITY FROM DIFFERENT SOURCES IN A PART OF EAST DUDHNOI, GOALPARA, ASSAM

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Madhumita Hazarika

Registration No: 20037427 Roll no.: US-201-183-0029 Paper code: CHE-HE-6056 Session: 2020-2023



Name of the Supervisor: Dr. Upama Baruah

Department of Chemistry
Pandit Deendayal Upadhaya Adarsha Mahavidyalaya (PDUAM)
Amjonga, Amjonga-783124,
Goalpara, Assam

Submitted by Madhumita Hazarika





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



OFFICE OF THE HEAD DEPARTMENT OF CHEMISTRY PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA:783124, GOALPARA ,ASSAM,INDIA

CERTIFICATE

This is to certify that the dissertation entitled, "A Comparative Preliminary Investigation of Ground Water Quality From Different Sources in A Part of East Dudhnoi, Goalpara, Assam", submitted to the Department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfillment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in Chemistry is a genuine record of original research investigations carried out by Madhumita Hazarikaunder my supervision and guidance.

All the co-operation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Prasanta Goodings Construction HoD, Dept. of Chamistry

Date 25/05/22

Place:

Upama Baruah. Dr. Upama Baruah

Dept. of Chemistry PDUAM, Amjonga

Submitted by Madhumita Hazarika





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Studies on synthesis of O, N donor hydrazone Schiff base ligands and their complexes

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Submitted by Sanu Sarkar

Registration No:20037444 Roll No:US-201-183-0045 Paper Code: CHE-HE-6056 Session – 2022-23



Name of the Supervisor: Dr. Mukul Kalita

Department of chemistry

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

Submitted by Sanu Sarkar





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



OFFICE OF THE HEAD DEPARTMENT OF CHEMISTRY

PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA: 783124; GOALPARA; ASSAM; INDIA

Certificate

This is to certify that the dissertation entitled, "Studies on synthesis of O, N doner hydrazone Schiff base ligands and their complexes", submitted to the department of chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) chemistry is a genuine record of original research investigations carried out by Sanu Sarkar under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Prasanta Gogo

PDUAM, Amjongerica

Date: 25/5/2023

Until tality 125/2023

Assst, Professor,

Dept. of chemistry

PDUAM, Amjonga

Submitted by Sanu Sarkar





Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
	Title Page of Project

HOSPITAL MANAGEMENT SYSTEM

PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

ANUPAM KUMAR NATH US-201-183-0003

UNDER THE GUIDANCE OF

SISIR KUMAR RAJBONGSHI



DEPARTMENT OF COMPUTER SCIENCE PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA - 783124, ASSAM JANUARY, 2023

Submitted by Anupam Kumar Nath





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



PANDIT DEENDAYAL UPADIIYAYA ADARSHA MAHAVIDYALAYA, AMJONGA DEPARTMENT OF COMPUTER SCIENCE

Forwarding Certificate

This is to certify that ANUPAM KUMAR NATH .

has carried out the project work HOSPITAL MANAGEMENT SYSTEM under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate/(s) did this project full time during the whole semester under my supervision, and the analysis, results, claims, etc. are all related to his/her/their studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

External Examiner Affiliation:

DR. SISIR KUMAR RAJBONGSHI

Department of Computer Science, PDUAM, Amjonga, Goalpara - 783123, Assam

Submitted by Anupam Kumar nath

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project



ONLINE VOTING SYSTEM PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

NAME OF STUDENT:BITTU PATGIRI ROLL NO:US-201 183 0007

UNDER THE GUIDANCE
OF
SISIR KUMAR RAJBONGSHI
ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE

AMJONGA, GOALPARA - 783124, ASSAM JANUARY, 2023

Submitted by Bittu Patgiri





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



DEPARTMENT OF COMPUTER SCIENCE
PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA
AMJONGA, GOALPARA - 783124, ASSAM
JANUARY, 2023

Forwarding Certificate

This is to certify that

Bittu Patgiri has carried out the project work "ONLINE VOTING SYSTEM" under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate/(s) did this project full time during the whole semester under my supervision, and the analysis, results, claims, etc. are all related to his/her/their studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

External Examiner

Dr. Rubul Kumar Bania Assistant Professor Department of Computer Application School of Technology NEHU, Tura Campus NAME OF THE PROJECT - ONLINE VOTING SYSTEM GUIDE SISIR KUMAR RAJBONGSHI

Department of Computer Science,

PDUAM, Amjonga,

Goalpara-783123,Assam

Submitted by Bittu Patgiri





Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
	Title Page of Project

HOSPITAL MANAGEMENT SYSTEM

PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

DENISH SARMA US-201-183-0010

UNDER THE GUIDANCE OF

SISIR KUMAR RAJBONGSHI



DEPARTMENT OF COMPUTER SCIENCE
PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA
AMJONGA, GOALPARA - 783124, ASSAM
JANUARY, 2023

Submitted by Denish Sarma





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



PANDIT DEENDAYAL UPADIIYAYA ADARSHA MAHAVIDYALAYA, AMJONGA DEPARTMENT OF COMPUTER SCIENCE

Forwarding Certificate

This is to certify that DENISH SARMA has carried out the project work HOSPITAL MANAGEMENT SYSTEM under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate/(s) did this project full time duting the whole semester under my supervision, and the analysis, results, claims, etc. are all telated to his/her/their studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

External Examiner
Affiliation:

DR. SISIR KUMAR RAJBONGSHI

Department of Computer Science, PDUAM, Amjonga, Goalpara - 783123, Assam

Submitted by Denish Sarma





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

HOSPITAL MANAGEMENT SYSTEM

PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

JULFIKAR JITU RAHMAN US-201-183-0021

UNDER THE GUIDANCE OF

SISIR KUMAR RAJBONGSHI



DEPARTMENT OF COMPUTER SCIENCE
PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA
AMJONGA, GOALPARA - 783124, ASSAM
JANUARY, 2023

Submitted by Julfikar Jitu Rahman





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



PANDIT DEENDAYAL UPADIIYAYA ADARSHA MAHAVIDYALAYA, AMJONGA DEPARTMENT OF COMPUTER SCIENCE

Forwarding Certificate

This is to certify that

JULFIKAR JITU RAHMAN

has carried out the project work HOSPITAL MANAGEMENT SYSTEM under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate/(s) did this project full time during the whole semester under my supervision, and the analysis, results, claims, etc. are all related to his/her/their studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

External Examiner Affiliation:

DR. SISIR KUMAR RAJBONGSHI

Department of Computer Science, PDUAM, Amjonga, Goalpara - 783123, Assam

Submitted by Julfikar Jitu Rahman

Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
	Title Page of Project



ONLINE VOTING SYSTEM PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

NAME OF STUDENT: NOBODOL M SANGMA

UNDER THE GUIDANCE
OF
SISIR KUMAR RAJBONGSHI
ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE

AMJONGA, GOALPARA - 783124, ASSAM JANUARY, 2023

Submitted by Nobodol M Sangma





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



DEPARTMENT OF COMPUTER SCIENCE PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA - 783124, ASSAM JANUARY, 2023

Forwarding Certificate

This is to certify that Nobodol M Sangma

has carried out the project work "ONLINE VOTING SYSTEM" under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate/(s) did this project full time during the whole semester under my supervision, and the analysis, results, claims, etc. are all related to his/her/their studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

External Examiner

Dr. Rubul Kumar Bania Assistant Professor Department of Computer Application School of Technology NAME OF THE PROJECT -

NAME OF THE PROJECT - O NLINE NOTING SYSTEM GUIDE SISIR KUMAR RAJBONGSHI

Department of Computer Science,

PDUAM, Amjonga,

Goalpara-783123,Assam

Submitted by Nobodol M Sangma





Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
	Title Page of Project



ONLINE VOTING SYSTEM PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

NAME OF STUDENT:PLABAN GOSWAMI ROLL NO:US-201 183 0037

UNDER THE GUIDANCE
OF
SISIR KUMAR RAJBONGSHI
ASSISTANT PROFESSOR
DEPARTMENT OF COMPUTER SCIENCE

AMJONGA, GOALPARA - 783124, ASSAM JANUARY, 2023

Submitted by Plaban Goswami





Metric No	Heading
1.3.2	Percentage of students undertaking project work/
	field work/ internship
Certificate	



DEPARTMENT OF COMPUTER SCIENCE PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA - 783124, ASSAM JANUARY, 2023

Forwarding Certificate

This is to certify that Plaban Goswami has carried out the project work "ONLINE VOTING SYSTEM" under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate/(s) did this project full time during the whole semester under my supervision, and the analysis, results, claims, etc. are all related to his/her/their studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

NAME OF THE PROJECT - ONLINE VOTING SYSTEM GUIDE SISIR KUMAR RAJBONGSHI

Department of Computer Science,

PDUAM, Amjonga,

Goalpara-783123,Assam

Submitted by Plaban Goswami





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project



LOPHAL SHANSHALL E-WEBSITE

PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

BY

Rami Kashyap Basumatary US-201-183-0041

UNDER THE GUIDANCE OF

Dharmeswar Tarang

Dr. Rubul Kumar Bania
Assistant Professor
Department of Computer Application
School of Technology

Submitted by Rami Kashyap Basumatary

Coordinator Coordi



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA, AMJONGA DEPARTMENT OF COMPUTER SCIENCE

Forwarding Certificate

This is to certify that Ramil Kashyap Basumatary has carried out the project work "E-Clothing Website" under the supervision and has compiled this thesis reflecting the candidates work in the semester long project. The candidate did this project full time during the whole semester under my supervision, and the analysis, results, claims, etc. are all related to his studies and works during the semester.

I recommend submission of this project report as a part for partial fulfilment of the requirements for the degree of Bachelor of Science in Computer Science.

External Examiner 2001107

Dr. Rubul Kumar Bania Assistant Professor Separtment of Computer Application School of Technology Mornemen (ever)

Rami kashyap Basumatary Dharmeswar Tarang Department of Computer Science, PDUAM, Amjonga, Goalpara - 783124, Assam

Submitted by Rami Kashyap Basumatary

Coordinator Pari 24

Principal
Pandit Deendayal Upadhyaya
Adarsha Mahavidyalaya, Amjonga

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Project Report On Fibonacci Sequence

A Project submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Name of the student: Bishal Ghosh

Registration No: 20037404 Roll No: US-201-183-0006 Session – 2022-23



Serified by
20.05.2023

Name of the Supervisor: Mr. Rajesh Kumar Das

umar Das

Dutte

Department of Mathematics

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

2005.23 20,05.23

Submitted by Bishal Ghosh





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

Department of Mathematics

Certificate

This is to certify that the dissertation entitled, "Fibonacci Sequence", submitted to the department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Mathematics is a genuine record of original survey carried out by Bishal Ghosh under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this Project Report has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Shahidul Islam Khan

HoD, Dept. of Mathematics

PDUAM, Amjonga

Diesh (20.05.2023)
Mr. Rajesh Kumar Das

Dept. of Mathematics

PDUAM, Amjonga

Date: 20105123

Place: Amjonga

Submitted by Bishal Ghosh

Coordinator Coordinator IDAC COMPARIA 7 831 24



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Project Report

on

Mathematics Behind Stock Market

A project report submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Name of the student: Hirak Jyoti Nath

Registration No:20037415
Roll No: US-201-183-0017
Paper Code: MAT-HE-6086
Session – 2022-23

Veirfied by

Veirfied by

20.05-2023



Name of the Supervisor: Dr . Pranab Jyoti Dowari

Department of Mathematics

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

300.05.23

Dejish 20.05.23

Submitted by Hirakjyoti Nath

Coordinator Amiorosa



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga
Departmental of Mathematics

Certificate

This is to certify that the project report entitled, "Mathematics Behind Stock Market", submitted to the department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in Mathematics is a record of survey work carried out by Hirak Jyoti Nath under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this project report has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr . Shahidul Islam Khan

HoD, Dept. of Mathematics

PDUAM, Amjonga

Dr . Pranab Jyoti Dowari

Dept. of Mathematics

PDUAM, Amjonga

Submitted by Hirak Jyoti Nath

Coordinator Coordinator IOAC COMPARIZ 231 24 Principal
Pandit Deendayal Upadhyaya
Adarsha Mahavidyalaya, Amjonga

Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Diagonalization of Matrices

A project report is submitted in partial fulfillment of the requirements for the degree of Bachelor of Science

Name of the student: Kabita Gangwal

Registration no.: 20037422 Roll no.: US-201-183-0024

Session: 2022 - 23



Destred 23

Name of the Supervisor :Dr. Md Shahidul Islam Khan

Department of Mathematics

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya ,

Amjonga-783124, Goalpara, Assam

Submitted by Kabita Gangwal





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

Certificate

This is to certify that the project report entitled, "Diagonalization of Matrices", submitted to the department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfillment of the requirements for the award of degree of Bachelor of Science (BSc) in Mathematics is a record of survey carried out by Kabita Gangwal under my supervision and guidance.

All the cooperations and help received by her throughout this academic jouney from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this project report has been submitted elsewhere for the award of any other degree, diploma or recognition.

Dr. Md Shahidul Islam Khan

HoD, Dept. of Mathematics

PDUAM, AmjongaPDUAM, Amjonga

Dr. Md Shahidul Islam Khan

Dept. of Mathematics

Submitted by Kabita Gangwal





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Project Report

on

A Study on Quadratic Residues

A project report is submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Name of the student: Manjit Das

Registration No:20037429 Roll No:US-201-183-0031 Session – 2022-23



Name of the Supervisor: Dr. Shahidul Islam Khan

Department of Mathematics

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

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2005-23

Submitted by Manjit Das





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Certificate	



Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga

Department of Mathematics

Certificate

This is to certify that the project report entitled, "A Study on Quadratic Residues", submitted to the Department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in mathematics is a genuine record of survey work carried out by Manjit Das under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this project report has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Shahidul Islam Khan,

HoD, Dept. of Mathematics

PDUAM, Amjonga

Dr. Shahidul Islam Khan

Dept. of Mathematics

PDUAM, Amjonga

Submitted by Manjit Das





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Project Report

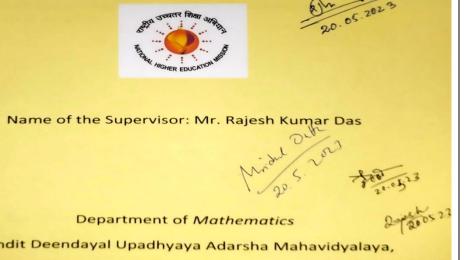
on

A Study on Fermat's Theorem

A project report submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Name of the student: Pallab Rabha

Registration No:20037433 Roll No:US-201-183-0036 Session - 2022-23



Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

Submitted by Pallab Rabha





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Certificate	



Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga

Department of Mathematics

Certificate

This is to certify that the project report entitled, "A Study on Fermat's Theorem", submitted to the Department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Mathematics is a genuine record of original survey carried out by Pallab Rabha under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this project work has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Shahidul Islam Khan

HoD, Dept. of Mathematics

PDUAM, Amjonga

Dejesh Numar Das

Dept. of Mathematics

PDUAM, Amjonga

Submitted by Pallab Rabha





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Project Report

on

A Study on Different Types of Sequence Spaces

A project report is submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Name of the student: Rupam Ray

Registration No:20037442 Roll No:US-201-183-0043 Session - 2022-23



Verified by

Name of the Supervisor: Dr. Pranab Jyoti Dowari

Department of Mathematics

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

Submitted by Rupam Ray





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga



Department of Mathematics

Certificate

This is to certify that the project report entitled, "A Study on Different Types of Sequence Spaces", submitted to the Department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in Mathematics is a genuine record of survey work carried out by Rupam Ray under my supervision and guidance.

All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this project report has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Shahidul Islam Khan,

HoD, Dept. of Mathematics

PDUAM, Amjonga

Dr. Pranab Jyoti Dowari

Dept. of Mathematics

PDUAM, Amjonga

Submitted by Rupam Ray





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Project Report

A Study on Operators

A project submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

> Shreya Dey Sarkar Registration No: 20037446 Roll No: US-201-183-0047 Paper Code: MAT-HE-6086

> > Session - 2022-23

Verified by

20.05.2023



Name of the Supervisor: Dr. Pranab Jyoti Dowari

ri Dowari

Department of Mathematics Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga-783124, Goalpara, Assam

Submitted by Shreya Dey Sarkar





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga

Department of Mathematics

Certificate

This is to certify that the project entitled, "A study on operators", submitted to the department of Mathematics, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) in mathematics is a genuine record of original compilation and investigations carried out by Shreya Dey Sarkar under my supervision and guidance.

All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Shahidul Islam Khan

HoD, Dept. of Mathematics

PDUAM, Amjonga

Dr. Pranab Jyoti Dowari

Dept. of Mathematics

PDUAM, Amjonga

Date:

Place:

Submitted by Shreya Dey Sarkar





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

A STUDY ON DIVERSITY OF FISH IN GAURIPUR FISH MARKET,GAURIPUR,DHUBRI

A dissertation submitted in partial fulfillment of the requirements for the degree of Bachelor of Science

Submitted by-

Dipangkar Roy

Registration No: 19067694

Roll No: US-191-183-0019

Paper Code: ZOO-HE-6056

Session: 2022-2023

Examines 2015/27



Name of the Supervisor: Dr. Mitali Chetia

Department of Zoology Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga-783124, Goalpara, Assam

Submitted by Dipangkar Ray





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate



DEPARTMENT OF ZOOLOGY পণ্ডিত দীৰদ্মাল উপাধ্যাম আদর্শ মহাবিদ্যাল্ম, আমজোঙ্গা PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124

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Certificate

This is to certify that the dissertation entitled,"Study on different varieties of dry fish sold in Dudhnoi daily Market, Dudhnoi, Goalpara", submitted to department of Zoology, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfillment of the requirements for the award of degree of Bachelor of Science (BSc) in Zoology is a genuine record of original research investigations carried out by Rajbaba Ahmed under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr. Chandralekha Deka

HoD , Dept.of Zoology

PDUAM.Amjonga Head Department of Zoology Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, Goalpara, Assam

Date:22/05/2023

Place : Amjonga , Goalpara

Bhabajyoti Das Dept.of Zoology PDUAM, Amjonga

Submitted by Dipangkar Ray





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

A STUDY OF INSECT DIVERSITY IN PRITHUPARA, DARRANGGIRI, GOALPARA

A dissertation submitted in partial fulfilment of the requirement for the degree of Bachelor of Science

Name: Diman Kalita

Registration No: 20037411

Roll No: US-201-183-0013

Paper Code: ZOO-HE-6056

Session: 2022-23



Name of the Supervisior: Dr. Mitali Chetia

Department of Zoology

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,
Amjonga-783124, Goalpara, Assam

Submitted by Diman Kalita





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	neid work/ internsinp
	Certificate



DEPARTMENT OF ZOOLOGY শতিত पीनप्यान উनाधाय आपर्न मशक्तिपालय, आमरजात्रा PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124

Phone: +919435849434

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Certificate

This is to certify that the dissertation entitled, "A Study Of Insect Diversity in Prithupara, Darranggiri, Goalpara submitted to the Department of Zoology, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in Zoology is a genuine record of original research investigations carried out by Diman Kalita under my supervision and guidance.

All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr. Chandralekha Deka

Head, Dept. of Zoology

PDUAM, Amjonga

Head Department of Zoology Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, Goalpara, Assam

Date: 22nd May, 2023

Place: PDUAM, Amjonga

Ortholic Chetia

Dept. of Zoology

PDUAM, Amjonga

Submitted by Diman Kalita

Coordinator Control of Coordinator Coordin



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

Study on dry fish in Krishnai, Goalpara, Assam.

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Emzamul Hussain

Registration No: 20037413 Roll No: US-201-183-0015 Paper Code: : ZOO—HE-6056

Session - 2022-23

EMONAL HIGHER EDUCATION HIST

Name of the Supervisor: Sir. Bhabajyoti Das

Department of Zoology

Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya,

Amjonga-783124, Goalpara, Assam

Submitted by Emzamul Hussain



Faminged (



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

DEPARTMENT OF ZOOLOGY

পণ্ডিত দীনদয়াল উপাধ্যায় আদর্শ মহাবিদ্যালয়, আমজোঙ্গা

PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA, GOALPARA, PIN-783124

Phone: +919435849434

email:

zoologypduamamjonga agmail.com

Certificate

This is to certify that the dissertation entitled, "Study on dry fish in Krishnai, Goalpara, Assam", submitted to the Department of Zoology, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in zoology is a genuine record of original research investigations carried out by Emzamul Hussain under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr. Chandralekha Deka

Head, Dept. of Zoology

PDUAM, Amjonga

Head Department of Zoology
Pandlt Deendayal Upadhyaya Adarsha
Mahavidyalaya, Amjonga, Goalpara, Assam
Date: 22/05/2023

Place: PDUAM, Amjonga

Sir. Bhabajyoti Das

Dept. of Zoology

PDUAM, Amjonga

Submitted by Emzamul Hussain

Coordinator 793 74



Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

STUDY OF INSECT DIVERSITY IN KHARA PART 2, DUDHNOI

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

Hiranjana Basumatary

Registration No. : 20037416 Roll No : US-201-183-0018 Paper code : ZOO-HE-6056 Session : 2022-23

Son's



Name of the Supervisor : Dr. Chandralekha Deka

Department of Zoology Pandit Deendayal Upadyaya Adarsha Mahavidyalaya, Amjonga-783124, Goalpara,Assam

Submitted by Hiranjana Basumatary





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Certificate

Certificate

This is to Certify that the dissertation entitled, "Study of Insect Diversity in Khara Pt 2 Dudhnoi" submitted to the department of Zoology Pandit Deendayal Upadyaya Adarsha Mahavidyalaya, Amjonga, in fulfilment of the requirement for the award of degree of Bachelor of Science (BSc) in Zoology is a genuine under my supervision and guidance.

All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the content compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition

Dr. Chandralekha Deka Head, Dept. of Zoology PDUAM, Amjonga

> Head Department of Zoology Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, Goalpara, Assam

Date: 22-05-2023

Place: PDUAM, Amjonga

Dr. Chandralekha Deka Dept. of Zoology PDUAM, Amjonga

Submitted by Hiranjana Basumatary





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Title Page of Project

A STUDY ON DIVERSITY OF BIRDS OF KHARA CHAKAL PARA VILLAGE OF DUDHNOI, GOALPARA, ASSAM

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

Janmoni Khakhalary

Registration No: 20037418 Roll No: US-201-183-0020 Paper Code: ZOO-HE-6056 Session – 2022-23





Name of the Supervisor: Bhabajyoti Das

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All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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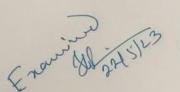
A STUDY ON DIVERSITY OF MAMMALIAN SPECIES IN DUDHNAI, GOALPARA, ASSAM

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

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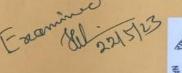
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Submitted by-

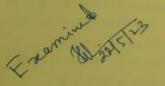
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All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

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All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

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All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

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ASSESSMENT OF ECOSYSTEM SERVICES OF URPAD BEEL AND ITS IMPACT ON PEOPLE'S DEPENDENCY

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

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All the cooperation and help received by him/her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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Kaushik Ray

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DECLARATION

I, Kaushik Ray, hereby declare that the dissertation entitled, "ASSESSMENT OF ECOSYSTEM SERVICES OF URPAD BEEL AND IT'S IMPACT ON PEOPLE'S DEPENDENCY", submitted to Department of Botany, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (BSc) is a genuine record of original research investigations by me during my course period. Any part of texts, figures and results by other researchers in any form, which are properly used in dignified way herein, are suitably cited in order to give credit to the originators.

I also hereby declare that the works compiling the dissertation have not been submitted anywhere in part, or in full, for the award of any other degree, diploma, or recognition.

Date: 22/05/2022 Place: Amjonga Kaushik Ray Kaushik Ray

Department of Botany PDUAM, Amjonga

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Abstract

This study investigates the ecosystem services provided by Urpad Beel, a wetland of significant ecological importance. The study aims to identify, assess, and analyze the diverse ecosystem services offered by Urpad Beel, as well as their contributions to the well-being and livelihoods of local communities. Through a comprehensive literature review, field surveys, and stakeholder consultations, this research examines the ecological, economic, and sociocultural dimensions of the wetland's ecosystem services.

The research employs a multi-disciplinary approach, integrating ecological assessments, economic valuation techniques, and qualitative analyses to understand the significance and benefits derived from Urpad Beel. The ecosystem services are classified, quantified, and ranked based on their perceived importance and utilization by local communities. Additionally, the study investigates the temporal dynamics of the wetland's ecosystem services, exploring how they have changed over time and the factors contributing to these changes.

Furthermore, this study explores the implications of ecosystem service degradation or loss on the well-being of local communities and highlights the interdependencies between natural and human factors in shaping the wetland ecosystem. The findings of this research will provide valuable insights for policymakers, conservationists, and stakeholders involved in the sustainable management and conservation of Urpad Beel.

Overall, this thesis contributes to the understanding of the ecosystem services provided by Urpad Beel and emphasizes their critical role in supporting the socio-economic well-being and cultural heritage of the local communities. The results will guide the formulation of effective policies and management strategies aimed at the conservation and sustainable use of Urpad Beel's ecosystem services for the benefit of both present and future generations.





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CHAPTER-1: INTRODUCTION

Wetlands are some of the most biologically diverse and productive ecosystems on the planet, and they play a crucial role in the health of our environment and the well-being of our society. According to the Ramsar Convention, wetlands are areas where water is the primary factor controlling the environment and the associated plant and animal life. This definition highlights the unique characteristics of wetlands, where the land is saturated with water, either permanently or seasonally, creating a variety of habitats for a wide range of species. The United States Environmental Protection Agency emphasized the importance of wetlands, as they protect and improve water quality, provide habitats for fish and wildlife, store floodwaters, and maintain surface water flow during dry periods. The International Union for Conservation of Nature adds that wetlands can be natural or artificial, permanent or temporary, and can include marine areas. Meanwhile, the Australian Government Department of Agriculture, Water and the Environment notes that water is present at or near the surface of the ground in wetlands for all or part of the year. Wetlands are some of the most biologically diverse and productive ecosystems on the planet, covering approximately 6% of the world's surface area (Davidson, 2014).

In India, wetlands cover an estimated 4.6% of the country's total land area, with a wide range of types and characteristics (Bhattacharjee et al., 2020). Wetlands play a critical role in the livelihoods and culture of local communities, as well as in the conservation of endangered species such as the one-horned rhinoceros in Assam a north-eastern state of India (Assam State Wetland Authority, 2019). According to a report by the Assam State Wetland Authority, there are 708 wetlands in the state, covering an area of 3,585 square kilometres (Assam State Wetland Authority, 2019). Wetlands are vital ecosystems that provide a wide range of ecosystem services, including water purification, flood control, carbon sequestration, and habitat provision for biodiversity. These services not only support the functioning of natural systems but also underpin the livelihoods and well-being of millions of people worldwide. Wetlands provide a variety of ecosystem services that are essential for human well-being and the functioning of natural systems. These services can be broadly categorized into four types: provisioning, regulating, supporting, and cultural services. Provisioning services refer to the goods that wetlands provide, such as food, water, and other resources. Wetlands are important sources of fish, shellfish, and other aquatic organisms, and they also provide timber, fuel wood, and medicinal plants. In addition, wetlands play a critical role in water supply, storing and releasing water during times of drought or flooding. Regulating

1



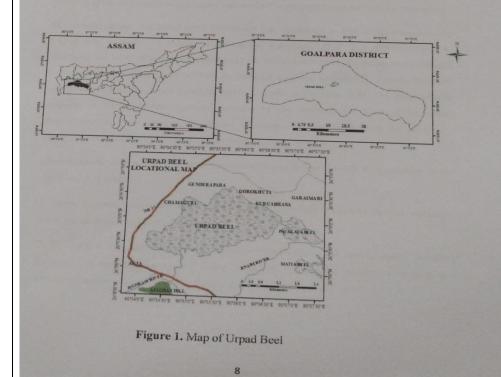


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CHAPTER-3: MATERIALS AND METHOD

STUDY SITE

The study site for this research is Urpad Beel, a wetland located in the Goalpara district of Assam, India. Urpad Beel is situated at approximately 26.1750° N latitude and 90.5708° E longitude, with a total area of approximately 649.38 ha. It is about 12 km from Goalpara town, the district headquarters and is approximately 150kmfrom the state capital i.e. Guwahati. It has been found that Free floating hydrophytes i.e. Eichhornia crassipes was the most dominant species whereas Swampy and Marshy hydrophytes i.e. Cyperus brevifolius showed the lowest value among all the life forms of aquatic macrophytes of the wetland. Urpad beel is connected by Jhinjiram and Jinari. The river Jhinjiram originates from the Urpad beel at its south and flows westwards towards the Brahmaputra. The Jinari is originates from the Garo hills of Meghalaya in the southern side, passes by the side of the wetland to the north and north-east direction.







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CHAPTER-3: MATERIALS AND METHOD

METHODOLOGY

We adopted a case study approach, and data were collected using both qualitative and quantitative methods. The data for this research was collected using a combination of field surveys, household survey, and literature review. We adopted similar strategies to Sandhu and Sandhu (2015) to identify how people's livelihoods were dependent on ecosystem services.

Literature review: A review of literature was conducted to understand the existing knowledge on wetlands and the ecosystem services provided by them. The review included published research articles, government reports, and policy documents related to wetland conservation and management.

Field surveys: Field surveys were conducted to collect primary data on the physical and biological characteristics of Urpad Beel. The survey included mapping the wetland, identifying the different wetland zones, and wetland vegetation based on peoples' perception.

Household survey: An initial rapid assessment was conducted in five villages surrounding Urpad Beel, namely Chamaguri, Genderapara, Paharkata, TNT, and Sutradharpara, to determine the level of household dependency on wetland resources. To gather more detailed information on the impact of wetland degradation on these households, a semi-structured questionnaire was developed based on previous works in the same field. The questionnaire focused on the ecosystem services provided by the wetland, the level of household dependency on these services, the drivers of change, and the impacts on the ecosystem services. The questionnaire is provided as Supplementary materials.

Questionnaire design: The structured questionnaire was designed to elicit information on the following key areas:

- 1. Socio-economic characteristics of the household, including household income, education level, occupation, and household size.
- 2. Perceptions and attitudes towards wetland conservation and management, including awareness of wetland conservation issues, knowledge of wetland ecosystem services, and attitudes towards wetland conservation and management practices.

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CHAPTER-4: RESULTS

SOCIO-ECONOMIC ASSESSMENT

Based on the comprehensive personal interviews conducted in five distinct regions of the study site, a meticulously designed questionnaire was employed to assess the socio-economic characteristics of the area under investigation (refer to Figure 2). The respondents exhibited a predominance of males, accounting for 52.5% of the sample. Among the participants, three distinct age groups were identified, namely 25–45 (40%), 46–65 (32.5%), and 66–85 (27.5%). In terms of marital status, the majority of respondents, namely 67.5%, were married, while the remaining portion was unmarried.

An examination of educational attainment among the villagers revealed a noticeable dearth of individuals with higher education credentials. Only a meagre proportion, approximately 5% each, identified as graduates or post-graduates. The literacy rate within the community can be characterized as low, as the majority of respondents, totalling 55%, had not progressed beyond the matriculate level. Among the various educational levels, the highest percentage, amounting to 17.5%, represented individuals who had completed their higher secondary education.

The primary occupation of the local populace was primarily cantered around agriculture, with 52.5% of respondents identifying themselves as farmers or fishermen. Government employees constituted a mere 7.5% of the sample, while students comprised an equivalent proportion. Wage earners accounted for 12.5% of respondents, and businessmen constituted 20% of the study population.

These findings underscore the socio-economic profile of the study site, highlighting the gender disparity, age distribution, marital status, educational background, and predominant occupations within the community. The overrepresentation of males in the sample indicates the need for targeted strategies to ensure the inclusion and participation of women in future research and development initiatives.

Moreover, the limited presence of individuals with higher education underscores the importance of promoting educational opportunities and increasing literacy rates in the study area. Efforts to diversify occupational opportunities beyond agriculture may be warranted to address potential vulnerabilities associated with the dependence on a single sector.

Submitted by Kaushik Ray Department of Botany





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Sample Project

CHAPTER-4: RESULTS

Table 4. Drivers of change of ecosystem services

Drivers of change	No. Of reports	Percentage
Burning of forest ground	3	30
Chemical poisoning	4	40
Climate change	7	70
Deforestation	8	80
Erosion and landslide	6	60
Flood	5	50
Imbalance in water regulation	4	40
Invasive and alien species	9	90
Over exploitation	9	90
River cutting	4	40
Sewage and other pollution	5	50
iltation	9	
se of advanced fishing equipment		90
se of chemical fertilizers	6	60
ncroachment	6	60
ncroachment	4	40

Submitted by Kaushik Ray Department of Botany





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Sample Project	

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Sample Project

ADSORPTION STUDY OF ACETIC ACID ON ACTIVATED CARBON FROM NATURALLY AVAILABLE ECO-FRIENDLY LOW COST ADSORBENT

A dissertation submitted in partial fulfilment of the requirements for the degree of Bachelor of Science

ANKUR BARMAN

Registration No: 20037400

Roll No: US-201-183-0002

Paper code: CHE-HE-6056

Session: 2022-2023



Name of the supervisor: Dr. Chandrama Sarkar

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Sample Project

OFFICE OF THE HEAD DEPARTMENT OF CHEMISTRY PANDIT DEENDAYAL UPADHYAYA ADARSHA MAHAVIDYALAYA AMJONGA: 783124; GOALPARA; ASSAM; INDIA

CERTIFICATE

This is to certify that the dissertation entitled, "Adsorption study of acetic acid on activated carbon from naturally available eco-friendly low cost adsorbent", submitted to the department of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) Chemistry is a genuine record of original research investigations carried out by Ankur Barman under my supervision and guidance.

All the cooperation and help received by him throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

Dr. Prasanta rugoi HoD, Dept. of Chemin Portant Argania (1984)

Date: 25/05/2023 Place: Amjonga Dr. Chandrama Sarkar Dept of Chemistry PDUAM, Amjonga

Submitted by Ankur Barman, Department of Chemistry

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
Sample Project	

DECLARATION BY THE CANDIDATE

I, Ankur Barman, hereby declare that the dissertation entitled, "Adsorption study of acetic acid on activated carbon from naturally available eco-friendly low cost adsorbent", submitted to Dept of Chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) is a genuine record of original research investigations by me during my course period. Any part of texts, figures and results by other researches in any form, which are properly used in dignified way herein, are suitable cited in order to give credit to the originators.

I also hereby declare that the works compiling the dissertation have not been submitted anywhere in part, or in full, for the award of any other degree, diploma, or recognition.

Date: 25/05/2023 Ankur Barman

Place: Amjonga

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ACKNOWLEDGEMENT

I express my profound gratitude and deep regards to my guide **Dr. Chandrama**Sarkar, Department of chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, for her exemplary guidance, monitoring and constant encouragement throughout the entire period of the work without which I could not have completed my work.

I also take this opportunity to express a deep sense of gratitude to **Dr. Prasanta Gogoi**, Head, Department of chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, for giving me permission to carry out the work and providing all the necessary facilities.

I also express my respect and humble gratitude to sir **Dr. Mukul Kalita** and ma'am **Dr.Upama Baruah**, Department of chemistry, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, whose teaching of chemistry has built the foundation of my knowledge and whose encouragement inspired me to take up the project work.

This project would not have been possible without the valuable encouragement and support from Mrs. Hasina Begom. I am also grateful Abdul kalam, Modhumita Hazarika, Babita Rabha, Bhawana Das, Kapil Bayon, Sanu Sarkar, Jyoti Prasad Das for their help.

Finally, I am forever indebted to my family and my friends for their understanding, endless patience and encouragement when it was most required. In this context, I wish to specially thank my friend Bishal Sharma for being my support during those stressful days of project work.

Date: 25/05/2023

Place: Amjonga

Ankut Barman

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ABSTRACT

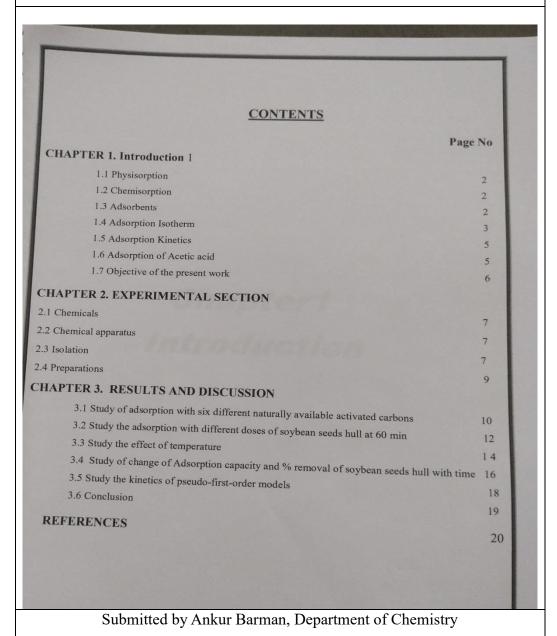
Concern about environmental protection has increased over the years from a global viewpoint. Adsorption is considered to be one of the most effective technologies widely used in global environmental protection areas due to their low initial cost, environmentally benign, ease to operation, insensitivity to toxic substances and complete removal of pollutants even from dilute solutions.

The present work deals with the results of studies involving isolation and purification of naturally available activated carbon sources. Six raw materials were used as activated carbon such as Cocos ncifera (Coconut shell), Glycine max (Soybean seeds hull), Mangifera indica (Ripe mango peel), Punica granatum (Pomegranate peel), Chinese okra (Ridge gourd peel), Shorea robusta (Sal timber powder) and their application for the adsorption of acetic acid. The adsorption capacity and % Removal is studied for each of the activated carbon. Out of these the Glycine max (Soybean seeds hull) shows maximum adsorption capacity. The adsorbent experiment for Glycine max (Soybean seeds hull) were also studied for different doses, different time and different temperature. Removal of %efficiency and adsorption capacity (qe) were experimentally determined. The adsorption follows pseudo-first-order kinetics and the value of rata constant (k1) is 1.679 and the R2 is 0.90691





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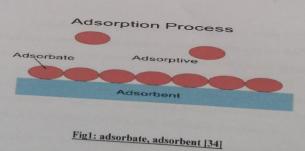
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LINTRODUCTION

Concern about environmental protection has increased over the years from a global viewpoint. To date the prevalence of adsorption separation environmental chemistry remains an aesthetic attention and consideration abroad the nations. Over the past several decades, the exponential population and social civilization expansion, change affluent lifestyles and resources use, and continuing progress of the industrial and technologies has been accompanied by a sharp modernization and metropolitan growth [1]. With the rising awareness of the occurrence of industrial activities which has intensified numerous deteriorations on several ecosystems and specially threatens the human health and environment, the enforcement of straight rules and regulations concerning the emission of contaminants from industrial waste stream by various regulatory agencies has been promulgated [2].

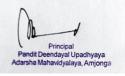
Simultaneously, a developing research by the invention of a wide range of treatment technologies such as preparation, coagulation-sedimentation, floatation, filtration, membrane processes, electrochemical techniques, biological process, chemical reactions, adsorption and ion exchange with a varying levels of successes has accelerated a dramatic progress in the scientific community [3-13].

Among them, adsorption is recognized as the most efficient, promising and widely used fundamental approach in wastewater treatment processes [14], mainly because of its simplicity, economically viable, technically feasible and environmentally benign [15]. It is a surface phenomenon by which a multicomponent fluid (gas or liquid) mixture is attracted to the surface of a solid adsorbent and forms attachments via physical or chemical bonds. The substance which is adsorbed on the surface is called **adsorbate** and the substance on which adsorption takes place is called **adsorbent**. Adsorption are two types physical adsorption or van der Waal's adsorption and chemical adsorption or chemisorption.

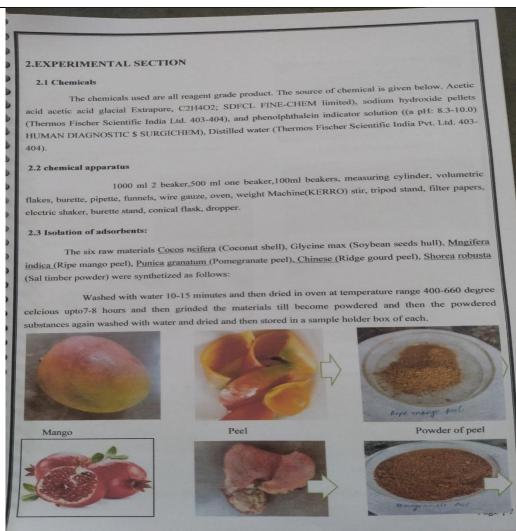


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.4. Preparation

4.1 Preparation of acetic acid

By using normality formula $N_1V_1 = N_2V_2$ Where the concentration of acetic acid (N1) is .4N, Concentration we need (N2) is 0.5N and V2 is 1000 ml and by substituting the value in above uation

i.e. $V_1 = 0.5*1000/17.4$ then we get 28.7ml.

So to prepare 0.5N added 28.7 ml of acetic acid in 1000 distilled water, and by distilled the solution e other normality of solutions was prepared and labelled ml.



Fig7: Acetic acid solution

4.2 Preparation of 0.1N NaOH solution

To prepare 0.1N of NaOH solution dissolved 4g of sodium hydroxide pellets in 1000 ml distilled ater in 1000ml volumetric flask after that mixed the solution and labelled.



Fig8: 0.1N NaOH solution

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3. Results and discussion

The adsorption capacity (qe, mg/g) of the hybrid and the percentage removal of acetic acid concentration by the adsorbent can be calculated as follows

Adsorption capacity (qe) = (Co - Ce) *V/m

% removal = 100 *(Co - Ce)/Co

Where, Co is the initial concentration and Ce is the equilibrium concentration of acid (mg/L), V is the volume of the solution (L), and m is the mass of the adsorbent

3.1 Study of adsorption with six different naturally available activated carbons:

The synthetized six naturally available activated carbons were taken (1g) and then added 20 ml of acetic acid in 100 ml beaker and placed onto shaker for 1 hour and filtrated the extract and then 5ml of filtrate solution was taken in a in a 100ml conical flask and added 2-3 drops of phenolphthalein indicator and titrate against burette solution of NaOH and the obtained data given in Table 1



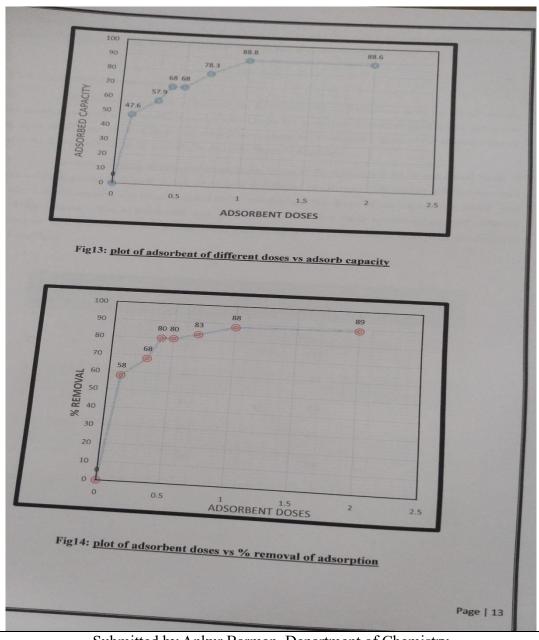
Fig9: Filtration process of the adsorbent

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The equation (1)

 $\log (qe - q_1) = \log qe - k_1 t / 2.303$

y = c + mx

i.e. the slop of the equation is calculated from the graph and its value is 0.0014 and the value of intercept is 0.7505. From the above equation the value of rate contestant of the pseudo-first-order reaction is determined i.e. k_1 is 1.679m and the R^2 is 0.9069. Therefore, the adsorption followed pseudo-first-order kinetics.

3.5 CONCLUSION

In this present work we have successfully isolated and purified six naturally available activated carbon sources namely Cocos neifera (Coconut shell), Glycine max (Soybean seeds hull), Mangifera (Ripe mango peel), Punica granatum (Pomegranate peel), Chinese okra (Ridge gourd peel), Shorea robusta (Sal timber powder) and studied their application for the adsorption of acetic acid. The adsorption capacity and % removal is also studied for each of the activated carbon. Out of these the Glycine max (Soybean seeds hull) showed and maximum adsorption capacity and maximum % removal. The adsorbent experiment for Glycine max (Soybean seeds hull) were also studied for different doses, different time and different temperature. We have also studied the adsorption kinetics and the process follows pseudo-first-order kinetics.

The adsorbent can be used as an alternative eco-friendly activated carbon source in future.

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A STUDY OF INSECT DIVERSITY IN PRITHUPARA, DARRANGGIRI, GOALPARA

A dissertation submitted in partial fulfilment of the requirement for the degree of Bachelor of Science

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Certificate

This is to certify that the dissertation entitled, "A Study Of Insect Diversity in Prithupara, Darranggiri, Goalpara submitted to the Department of Zoology, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (B.Sc.) in Zoology is a genuine record of original research investigations carried out by Diman Kalita under my supervision and guidance.

All the cooperation and help received by her throughout this academic journey from various sources have been thankfully acknowledged.

It is further stated that no part of the contents compiled in this dissertation has been submitted elsewhere for the award of any other degree, diploma, or recognition.

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Date: 22nd May, 2023

Place: PDUAM, Amjonga

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Dept. of Zoology

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Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
	Sample Project

DECLARATION

I, Diman Kalita, hereby declare that the dissertation entitled, "A Study Of Insect Diversity in Prithupara, Darranggiri, Goalpara", submitted to the Department of Zoology, Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, Amjonga, in partial fulfilment of the requirements for the award of degree of Bachelor of Science (Bsc) in Zoology is a genuine record of original research investigations by me during my course period. Any part of texts, figures and results by other researchers in any form, which are properly used in dignified way herein, are suitably cited in order to give credit to the originators.

I also hereby declare that the works compiling the dissertation have not been submitted anywhere in part, or in full, for the award of any other degree, diploma, or recognition.

Date: 22nd May, 2023

Place: PDUAM, Amjonga

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ACKNOWLEDGEMENT

On the very outset of this project, I would like to extend my sincere and heartfelt obligation towards all the personages who have helped me in this endeavour. Without their active guidance, help and encouragement, I would not have made headway in the project.

I acknowledge my depth to my mentor, Dr. Mitali Chetia, Professor of Zoology Department, for her valuable guidance, constant supervision and unceasing encouragement all throughout the course of this project.

My gratitude to Dr. Navajyoti Sarmah, Principal of Pandit Deendayal Upadhyaya Adarsha Mahavidyalaya, for offering a helping hand whenever required. I am also grateful to the HOD of the Zoology department Dr. Chandralekha Deka and Mr. Bhabajyoti Das and all the faculties of the department for sharing expertise and their cooperation during the project.

I am highly indebted to the Department of Zoology for providing me all the necessary facilities for this project.

I thank the almighty, my parents and also my friends who supported me throughout this venture.

Lastly, I would like to express my deep sense of gratitude to one and all, who directly or indirectly, have lent their hand in this project.

Date: 22nd May, 2023

Diman Kalita
Diman Kalita





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CONTENTS

- 1. INTRODUCTION
- 2. OBJECTIVE
- 3. METHODOLOGY
- 4. RESULTS AND DISCUSSION
- 5. CONCLUSION
- 6. REFERENCE



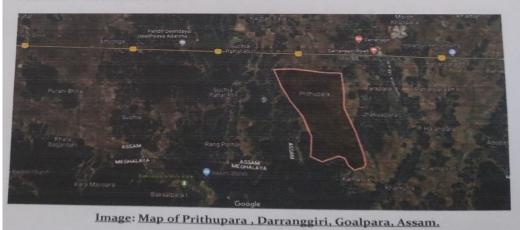


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METHODOLOGY

Study Area

Prithupara is a small village located on the South of Darranggiri in the Goalpara district on state of Assam. The village is 97 km away from Guwahati city and 42 km away from the town of Goalpara. The area is on the latitude 25.95 N and longitude 90.89 E. The climate is warm and subtropical and the temperature ranges from 9°C to 38°C in winter and summer respectively. The average rainfall is 178 to 450 cm and average humidity is 83.0%. The village has an ample population of insects along with other wild varieties of flora and fauna. The village contains varied natural habitats ranging from grasslands, forests, wetlands and many small and medium size ponds. The survey of insects are carried out in three different study sites- Open area, Wetlands and Human habitats area.







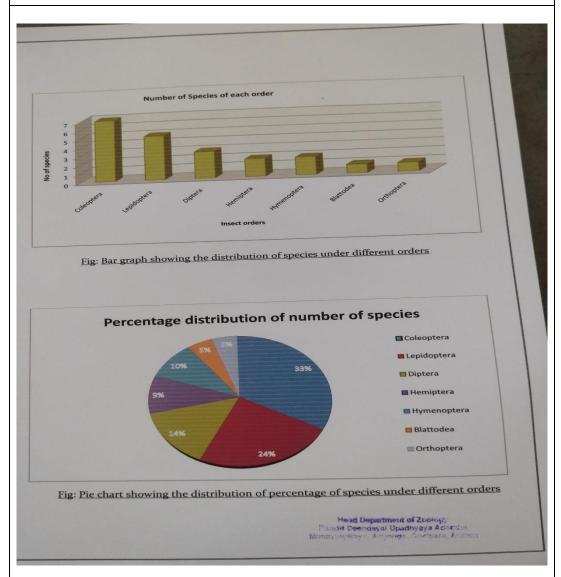
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From the survey, 21 species of insects belonging to 7 orders and 17 families were found and displayed in the following table:								
SI.	Scientific Name	Phylum	Class	Order	Family	Genus	Species	
1	Monolepta signata	Arthropoda	Insecta	Coleoptera	Chrysomelidae	Monolepta	M. signa ta	
2	Ophionea nigrofasciata	Arthropoda	Insecta	Coleoptera	Carabidae	Ophionea	O. nigrofa sciata	
3	Cycloneda sanguinea	Arthropoda	Insecta	Coleoptera	Coccinellidae	Cycloneda	C. sangu inea	
4	Altica oleracea	Arthropoda	Insecta	Coleoptera	Chrysomelidae	Altica	A. olera cea	
5	Cantharis pellucida	Arthropoda	Insecta	Coleoptera	Cantharidae	Cantharis	C. pelluci da	
5	Paropsis intermedia	Arthropoda	Insecta	Coleoptera	Chrysomelida	e Paropsis	P. internedia	





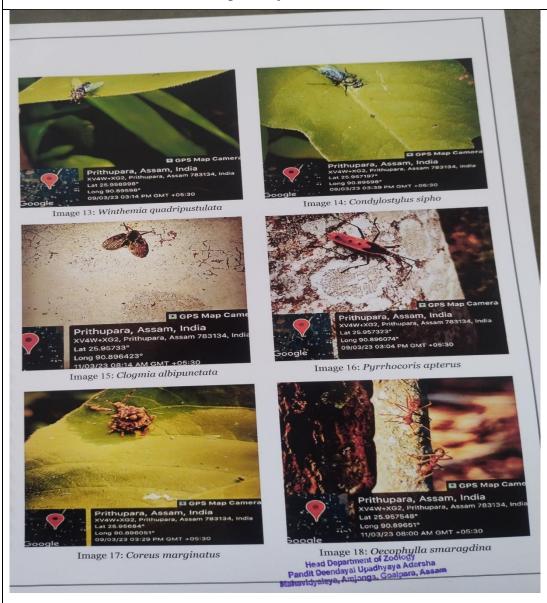
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CONCLUSION

Insects are most diverse, successful and dominant taxon of the animal kingdom. They are found in almost every habitat across the globe. It is due to their diverse body size, habit, fecundity, different modes of respiration, food diversity, etc, because of these diverse characteristics, they became an important component of our ecosystem (*Prakhar Prerana et al, 2021*).

The study centred on the forecasting of diversity of insects found in Prithupara, Darranggiri, results in 21 different species of insects. All total 21 species were documented from different areas during the month of March, 2023. The insects were identified using keys available in Richard and Davies (1997), Borror and de Long (1992) and standard manuals. The methodology included active searching from ground level to tree canopy level which is easily accessible for hand collection and visual surveys. The 21 different species of insects belonging to 7 different orders were observed. The diversity study revealed that Coleoptera (7 species) were most dominant followed by Lepidoptera (5 species), Diptera (3 species), Hemiptera (2 species), Hymenoptera (2 species), Blattodea (1 species) and Orthoptera (1 species).

The knowledge gathered here will provide useful information for future studies aiming to understand more deeply the process of speciation and faunal diversity of insects in Prithupara, Darranggiri, Goalpara. There is an ample quantity





Metric No	Heading
1.3.2	Percentage of students undertaking project work/ field work/ internship
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