UGC CBCS
TDC COURSE CURRICULUM
and
SYLLABI

CHEMISTRY

Submitted by:-

Dr. Pradip C. Paul
Head, Department of Chemistry
Chairman, BUGS-Chemistry
Assam University: Silchar.

Adopted in the meeting of the BUGS-Chemistry dated April 20, 2017.
Modified as per CBCS Syllabus Structure Preparation Committee Meeting, March 28, 2017

CBCS
TDC - SYLLABI

CHEMISTRY
(HONOURS)

Head
Deptt. of Cemistry
HAFLONG GOVT-COLLEGE
HAFLONG

SARBOJIT THAOSEN

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Discipline Specific Elective (DSE) Courses forChemistry Honours

SEMESTER	COURSE No.	*Couse Name*	Credit	Marks
V	CHEMISTRY-DSE-501	*Analytical Methods in Chemistry*	4	70
	CHEMISTRY-DSE-501-LAB	*Practical*	2	30
	CHEMISTRY-DSE-502	*Green Chemistry*	4	70
	CHEMISTRY-DSE-502-LAB	*Practical*	2	30
VI	CHEMISTRY-DSE-601	*Inorganic Materials of Industrial Importance*	4	70
	CHEMISTRY-DSE-601-LAB	*Practical*	2	30
	CHEMISTRY-DSE-602	***Dissertation (Project Work)***	6	100

Skill Enhancement Courses (SEC)
(FOR CHEMISTRY HONOURS)

III	CHEMISTRY-SEC-301	*Analytical Clinical Biochemistry*	4	70
IV	CHEMISTRY –SEC-401	*Fuel Chemistry*	4	70

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CHEMISTRY
(Honours)
(6th Semester)
Course No.:**CHEMISTRY-DSE-602**

Dissertation

(Project Work)

(Credits: 06)

Full Marks: 100 **Pass Marks: 40**

One project work on inorganic / organic / physical / analytical / biochemical / environmental / agricultural chemistry. Submission of the project report in bound form and presentation of the project in front of the external examiner.

Distribution of marks

(a)	**Internal Assessment**	(Regularity, timely completion and submission of project report, maintenance of project Dairy)	30 marks
(b)	**Project Report**	(Proper documentation of literature, data, discussion etc. and logical flow of work undertaken)	30 marks
(c)	**Presentation**		20 marks
(d)	**Viva/Defense**		20 marks
		Total:	**100 marks**

Guidelines to Project Work:

1. Students shall undertake the project work related to chemistry only under the guidance of teacher(s) from the department and strict monitoring by the Department. Project work on inorganic / physical / analytical / biochemical / environmental / agricultural or others related interface areas may be undertaken. Project work can be experimental, theoretical or both. The following activities have been outlined as guidelines (not exhaustive):

   (a) Physiochemical studies (pH, conductivity, turbidity, etc.) of different wetlands (ponds, lakes, river etc.)

   (b) Analysis of iron in pond / tube well / river water.

   (c) Analysis of Ca^{2+} / Mg^{2+} / As^{3+} / As^{5+} in soil / water samples.

(d) Adulteration detection activities.

(e) Extraction and preliminary characterization of useful chemicals (as far as possible) from plants.

(f) Solubility, surface tension, and viscosity measurements of some solution of practical relevance, (cough syrup, soap solution, pesticides, fertilizers,... etc.)

(g) Pollution related activities.

(h) Nutrition related activities, (essential metal detection in food, cereals, pulses, fruits etc.)

(i) Heavy metal uptake / sequestering activities, (from nature and laboratory based experiments.

2. Head of the Department must provide the service of a teacher for supervising the project work of each group. A teacher can guide more than one group, if necessary.

3. No two groups in the same institution are permitted to do project work on the same problem.

4. The UG level project work is a group activity, maximum number of students being limited to three. However, each student shall prepare and submit the project report separately and each student must present the Project Report before the external examiner during project evaluation.

5. The project report must be hard bound, spiral bound or paper back and each student must submit a copy of the Project Report to keep in the department.

6. The project report shall be divided as:

Chapter I: Introduction

Chapter II: Review of literature

Chapter III: Scope of the research problem

Chapter IV: Materials and methods

Chapter V: Results and discussion

Chapter VI: Conclusion and Scope of future studies

Chapter VII: References.

Reference Books:

- M. A. Malati, An Investigative, Integrated Approach to Practical Project Work; Mid-Kent College of Higher/Further Education, UK (October 1999); Imprint: Woodhead Publishing; ISBN: 978-1-898563-47-1.
- Geoffrey, P. Haydn, S., Practical Inorganic Chemistry: Preparations, reactions and instrumental methods; Science Paperbacks; (1974); ISBN: 978-0-412-16150-6 (Print) 978-94-017-2744-0 (Online).

- Dean, J. R., Jones, A. M., Holmes, D., Reed, R., Weyers, J. & Jones, A. (2011) Practical skills in chemistry. 2nd Ed., Prentice-Hall, Harlow.
- Hibbert, D. B. & Gooding, J. J. (2006) Data analysis for chemistry. Oxford University Press.
- Topping, J. (1984) Errors of Observation and their Treatment. 4th Ed., Chapman Hall, London.
- Harris, D. C. Quantitative Chemical Analysis. 6th Ed., Freeman (2007) Chapters 3-5.
- Levie, R. de, How to use Excel in analytical chemistry and in general scientific data analysis. Cambridge Univ. Press (2001) 487 pages.
- Chemical Safety Matters – IUPAC – IPCS, Cambridge University Press, 1992.

A project report On

Analysis and Estimation of iron in pond water of
Different areas of Haflong town

Submitted in partial fulfilment for the three years degree course.

In

Science

By

Thirbuljem hrangkhol

Registration No. 20200005189 of 2020-2021

To, department of chemistry

Haflong govt. college

Haflong, Dima Hasao

Year-2023

A Project Work on

"SOLUBILITY, SURFACE TENSION AND VISCOSITY MEASUREMENT OF COUGH SYRUP, FERTILIZER AND PESTICIDE SOLUTIONS"

A Dissertation submitted in Partial Fulfilment of the Requirements for the Degree of

Bachelor of Science
in
Chemistry
Session: 2022-23

By
Mairingdi Hojai
B.Sc. 6th Semester
Roll: 062320 No: 200500179
Reg no: 20200005175 of 2020- 21
Course No: CHM DSE – 603D

Under the Supervision of
Mr. Kazi Kawsar Ahmed
Assistant Professor
Department of Chemistry
Haflong Government College
Haflong, Dima Hasao, 788819

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HAFLONG GOVERNMENT COLLEGE

A PROJECT REPORT

On

Analysis and Estimation of Iron in River water of Different areas of Haflong Town

Submitted in Partial Fulfillment for the Three Years Degree Course In Science

By

L. Rakhi Singha

Class: B.Sc 6th Semester Honours

Roll: 062320 No: 200500149

Registration No. : 20200005137 of 2020-2021

Paper Code: CHMDSE- 603D

To

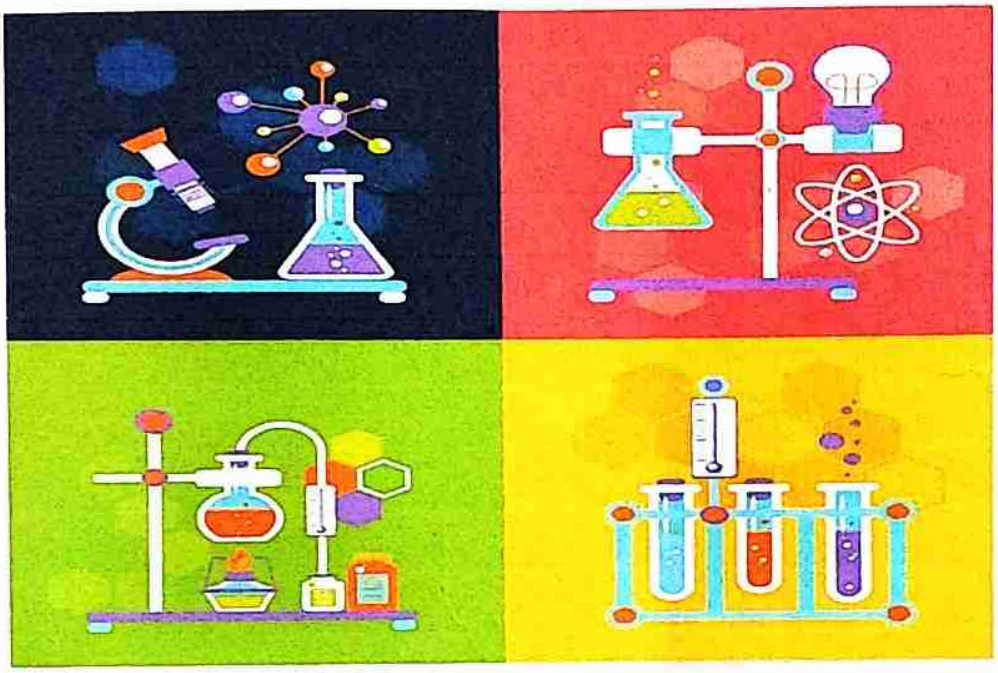
Department Of Chemistry

Haflong Government College

Haflong, Dima Hasao

Year: 2023

Physiochemical Studies of Different Wetlands



A project work submitted by:-

Esther Lamvangchoi Singson

Class: B.Sc 6th Semester

Roll : 062320 No: 200600200

Regn No: 20200005219 of 2020 - 2021

Course:B.Sc (Honours) with Chemistry

Course No: CHMDSE 603D

A Dissertation submitted in Partial Fulfillment of

Requirements for the Degree of –

BACHELOR OF SCIENCE

IN

CHEMISTRY

Session: 2022-2023

By-

Ebenezer Nampui

B.Sc. 6th Semester

Roll 052320 No.200500201

Registration No. -20200005220 OF 2020-21.

Under the supervision of-

MR. DILIP CHOREI

Assistant Professor

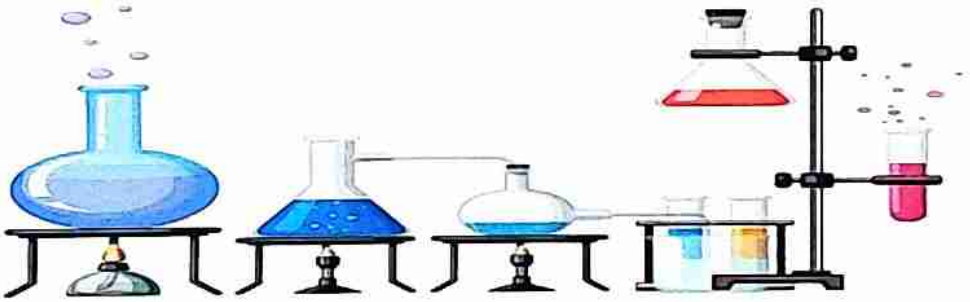
Department of Chemistry

Haflong Govt. College

HAFLONG GOVT. COLLEGE

Examined
Department of Chemistry
Haflong Govt College

PHYSIOCHEMICAL STUDIES OF DIFFERENT WETLANDS



The Project Work Submitted by

TANVI HOJAI

Class:- BSc 6th Semester (Chemistry)

Roll : 062320 No. : 200500198

Registration No: 20200005215 of 2020-2021

Course:- BSc (Honours) with Chemistry

Course No. CHMDSE-603D

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Date: 2024.06.13 15:27:06 +05'30'

A Dissertation submitted in partial fulfillment of the Requirement for the Degree of-

Bachelor of Science

in

Chemistry

Session : *2022-2023*

By

Hamsodao Johori

B.Sc. *6th semester*

Roll :- *062320* **No**:-*200500191*

Regn No:- *2020005197*

Under the supervision of-

Mr. Dilip Chorei.

A project work on

"SOLUBILITY, SURFACE TENSION AND VISCOSITY MEASUREMENT OF COUGH SYRUP, FERTILIZER AND PESTICIDE SOLUTIONS"

A Dissertation submitted in Partial Fulfilment of the Requirements for the Degree of

Bachelor of Science

in

Chemistry

Session: 2022-23

Examined
Department of Chemisty
Haflong Govt College

By

Archona Langthasa

B.Sc. 6th Semester

Roll: 062320 No: 200500142

Regn no: 20200005130 of 2020- 21

Course No: CHM DSE - 603 D

Under the Supervision of

Mr. Kazi Kawsar Ahmed

Assistant Professor

Department of Chemistry

Haflong Government College.

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