Department of Bengali:: Haflong Government College
Plan for Curriculum Implementation

ACADEMIC SESSION
2018-2019
To
2022-2023

Prepared by
Curriculum Implementation Committee
Department of Bengali
Haflong Government College

Associate Professor & Head
Department Of Bengali
Haflong Govt. College

Department of Bengali:: Haflong Government College
Plan for Curriculum Implementation

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

The Department of Bengali of Haflong Government College has made the following plan for implementation of the Curriculum designed by the affiliating Assam University for the Session 2018-2019. Assam University has introduced the TDC CBCS programme for BA General as well as B A Honours programme in Bengali from the session 2018-19. The Department of Bengali has planned to implement the BA Honours Programme as well as the B A General Programme in the Choice Based Credit System from the session 2018-19 for students enrolled in TDC 1st Semester. The earlier programmes of TDC Bengali Pass Course of BA Pass Programme designed by Assam University will also continue for TDC 3rd , 4th, 5th and 6th Semesters in the session 2018-19. The following is the outline plan for implementation of the curriculum for the academic session 2018-2019.

ODD SEMESTERS from August 2018 to December 2018

Plan for Implementation of B A (Bengali) Honours and B A (Bengali) General CBCS Programme

BA First SEMESTER Honours Programme

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNG HCC-101 Bangla Sahityer Itihas Prachin o Madhya Yug	Bangla Sahityer Yug Bivajon. Charya Pad. Shrikrishna kirtan, Baisnav padabali sahitya.	Bangla Mangal Kabyer Dhara Samuho. Monosa Mangal, Chandi Mangal, Dharma Mangal, Annada Mangal	Bangla Anubad Sahitya, Ramayan Mahavarat, Shakta Pada Sahitya, Arakan Rajsovar sahitya.
BNG HCC-102 Prachin o Madhyayuger Bangla Sahitya	Charya Pad. Baisnav padabali,	Kabikankan Chandi, Chaitnya Bhagbat	Shakto Podavali

Continuous and Comprehensive Assessment(CCA):As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for implementation of BA (General) Bengali Programme

First Semester: Course Code:BNGDSC101T & BNGAEC101T

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNG DSC-101 Bangla Sahityer Itihas Prachin o Madhya Yug	Bangla Sahityer Yug Bivajon. Charya Pad. Shrikrishna kirtan, Baisnav padabali sahitya.	Bangla Mangal Kabyer Dhara Samuho. Monosa Mangal, Chandi Mangal, Dharma Mangal, Annada Mangal	Bangla Anubad Sahitya, Ramayan Mahavarat, Shakta Pada Sahitya, Arakan Rajsovar sahitya.

Associate Professor & Head
Department Of Bengali
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNG AEC-101 Sanjoger Rup riti o prayog	Sanjoger Nanarup o Paddhati, Moukhik o lekhya rup. Monologue, Dialogue, Group Discussion	Documentation Report Writing, Prayog-II Galpa Guchha (1) Rabindranath Tagore	Prayog 1, Birangana Kabya: Madhusudan Dutta, Prativedan rachana, Grontha Porikarma.

PLAN FOR IMPLEMENTATION OF BENGALI PASS COURSE OF BA (PASS) PROGRAMME FOR ODD SEMESTERS (AUGUST 2018 TO DECEMBER 2018)

The different units and topics thereof of the Bengali Pass Course of BA (Pass, Non CBCS) Programme have been allotted to individual teachers of the department as mentioned in the following tables for the odd semesters from August2018 to December 2018. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations.

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNGP-301 (Madhya Yuger Bangla Kabya)	Baisnab Padavali Kabya	Annada mangal (Debokhanda)	Shakto padavali
BNG LAN-301 Arts, Unish Sataker Bangla Sahitya	Kamalakanter Daptar : Eka, Ekti Geet, Amar Durgotsav.	Sonartori: Porosh Pathor, Somudrer Proti, Boshundhara, Jhulan, Sonar Tori, Dewl.	Kamalakanter Daptar : Boro Bazar, Monushya fal, Basanter Kokil.
BNG LAN-301Com. Bangla Gadya o Byakaran	Banijyik Paribhasha, Banijyik Patra	Bichitra Prabanda: Rabindranath Tagore (Ponero Ana, Bajekatha, Pagal)	Bichitra Prabanda: Rabindranath Tagore (Kekadhwani, Paraninda)
Bangla LAN-301 Sc. Bish Sataker Bangla Sahitya	Paribhasha	Biswa Parichay	Ruphasi Bangla.
BNGP-501 (Adhunik bangla Gadya o Natak)	Cheratar (Natak)	Krisnakumari (Natak)	Bibidho Prabondha (Prose)

Continuous and Comprehensive Assessment(CCA):As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Associate Professor & Head
Department Of Bengali
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

EVEN SEMESTERS from January 2019 to June 2019

Plan for Implementation of B A (Bengali) Honours and B A (Bengali) General CBCS Programme

BA Second SEMESTER Honours Programme

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNG HCC-201 Bangla Sahityer Itihas (Adhunik Yug)	Bangla Gadyer Vikash, Bangla Kobitar Itihas	Bangla Upanyas o Bangla Golper Itiihas	Bangla Natoker Itihas
BNG HCC-202 Unish Sataker Bangla Gadya O Natok	Sitar Bonobas, Bisarjan	Nil Darpan	Bibidho Prabandhan, Ekei Ki Bole Savyata

Continuous and Comprehensive Assessment(CCA):As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for implementation of BA (General) Bengali Programme

Second Semester: Course Code:BNGDSC201T

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNG DSC-201 Bangla Sahityer Itihas (Adhunik Yug)	Bangla Gadyer Vikash, Bangla Kobitar Itihas	Bangla Upanyas o Bangla Golper Itiihas	Bangla Natoker Itihas

PLAN FOR IMPLEMENTATION OF BENGALI PASS COURSE OF BA (PASS) PROGRAMME FOR ODD SEMESTERS (JANUARY 2019 TO JUNE 2019)

The different units and topics thereof of the Bengali Pass Course of BA (Pass, Non CBCS) Programme have been allotted to individual teachers of the department as mentioned in the following tables for the Even semesters from January 2019 to June 2019. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations.

Associate Professor & Head
Department Of Bengali
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Paper	Name of the Faculties & course		
	Shyamananda Chowdhury	Dr. Sudipta Mahanta	Dr. Sakir Hussain Laskar
BNGP-401 Adhunik Kabita	Ishaner Punja Megh	Meghnadbadh Kabya (1st, 4th & 9th Chapter)	Sanchita,
BNGL-401 (Arts) Bangla Kotha Sahitya o Bhasa	Sabda Bhandar, Upabhasa, Bangla Bhasar Riti, Sadhu o Cholito Bhasa	Bangla Bhasar Udbhav o Kromobikash, Prachin Madhya o Adhunik Banglar Lakkhan.	Srikanta (Novel) Part-I
BNGL-401 (Science) Bangla Kotha Sahitya o Rachana	Arogya Niketan (Novel)	Golpoguchcha (Part-II)	Rachana
BNGL-401 (Commerce) Bangla Kotha Sahitya o Rachana	Rachana, Telenapota Abiskar (Story)	Punnam, Shrinkhal, stove, Sudhu Karani (Stories)	Sarangsha Likhan
BNGP-601 Adhunik Bangla Katha Sahitya	Golpahuchha: Postmaster, Ekratri, Chuti	Hansulibaker Upakotha (Novel)	Galpaguccha-Jibito o Mrito, Madhyabartini, Shasti.

Continuous and Comprehensive Assessment(CCA):As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Associate Professor & Head
Department Of Bengali
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

DEPARTMENT OF ENGLISH : HAFLONG GOVERNMENT COLLEGE

PLAN FOR CURRICULUM IMPLEMENTATION

ACADEMIC SESSION 2018-2019

PREPARED BY

CURRICULUM IMPLEMENTATION PLANNING COMMITTEE

DEPARTMENT OF ENGLISH

HAFLONG GOVERNMENT COLLEGE

The Department of English of Haflong Government College has made a plan for implementation of the curriculum designed by the University to which the college is affiliated for the session 2018-2019.The Department of English implements the Three Years Six Semester Degree (CBCS)B.A. Honours Programme and Three Years Six Semester Degree (CBCS)B.A General Programme designed by Assam University. The following g is the outline plan for implementation of the curriculum for the academic session 2018-2019.

Odd Semesters from August 2018– December 2019

Plan for Implementation of Three Years Six Semester Degree (CBCS) B.A. Honours Programme

The different units and topics thereof the courseof Three Years Six Semester Degree(CBCS) B.A.Honours Programme have been allotted to individual teachers as mentioned in the following tables. Details of plan for each unit and topic will be designed by each of the teachers to whom the units of the course/courses are allotted. As per the guidelines of the university , internal assessment will be done by taking unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be reflected in the marksheets of university conducted examinations for each semester.

Associate Professor and Head
Dept of English
Haflong Govt College
Pin.788819

28/2/19
Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE

DEPARTMENT OF ENGLISH

Renu Mahajan Gupta

AUGUST 2018-DECEMBER 2018

CBCS(Choice Based Credit System)

Honours I	Unit 1 : (History) The History of the Elizabethan Theatre Shakespearean Drama Unit 4 : (Drama) William Shakespeare :Macbeth Unit 3 : (Poem) Toru Dutt : Our Casuarina Tree Kamala Das : My Grandmother's House Unit 3 : (Poem) Nissim Ezekiel : The Night of the Scorpion	101 101 102 102
Discipline specific Core 1st Sem	Elizabethan Drama (History) William Shakespeare : The Merchant of Venice (Drama)	101
English as a Language Subject 1st Sem	Short Stories Unit 4 : Guy de Maupassant : The Necklace (Short Story)	101
Ability Enhancement Compulsory Course 1st Sem	Writing Skill Unit 5 : Report Writing , Letter Writing	
Honours III	Owen :Strange Meeting Unit 1: Aristotle : Poetics ,Translated with an introduction by Ingram Bywater ,tragedy, plot, character, Tragic Hero, Catharsis Frost : Mending Wall	301 302 303
Discipline Specific Core 3rd Sem	Unit 3 :W.H.Auden : The Unknown Citizen Philip Larkin : Church Going	
Alternative English 3rd Sem	Unit 2 : Robert Frost : The Road not Taken Robert Frost : Mending Wall	
English as a Language 3rd Sem	Thomas Hardy – The Darkling Thrush Louis Macneice – Prayer Before Birth Nissim Ezekiel – Goodbye Party for Miss Pushpa T.S	
Elective English 5th Sem	E.M. Forster : What I Believe	
Honours V	Toru Dutt : Our Casuarina Tree (Poetry) Wole Soyinka :Kongi's Harvest (Poetry)	501 502

Associate Prof. & Head
Dept of English
Haflong Govt College
Pin.788819

28/2/19

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE

DEBBIE PAKHUONGTE

CBCS (Choice Based Credit System)

Honours I	Unit 1 :(History)Renaissance Poetry Unit 3 : John Donne : The Sunne Rising William Shakespeare : Sonnet 73,133 Indian English Literature in the Post-Independence Phase Unit 5 : Mulk Raj Anand : Two Lady Rams	101 101 101 102
Discipline Specific Core 1st Sem	Unit1 : Elizabethan Sonnet Tradition Unit 2 : William Shakespeare : Sonnet 65,116	
English as a Language Subject 1st Sem	Richard Wright : Twelve Million black Voices	
Ability Enhancement Compulsory Course 1st Sem	Unit1 : Language and Communication Verbal and Non – Verbal(spoken and Written) Personal, Social and Business Unit 3 : Summary Paraphrasing	
Honours III	20th Century Poetry W.H. Auden : Muses Des Beaux Arts Matthew Arnold : The study of Poetry Walt Whitman : When Lilacs Last in the Dooryard Bloom'd Langston Hughes : The Negro Speaks of Rivers	301 302 303
Alternative English 3rd Sem	Unit 2 :W.B.Yeats : The Second Coming T. S. Eliot :Preluder	301
English 3rd Sem	W.B. Yeats : The second Coming T.S.Eliot :Preluder Nissim Ezekiel – Goodbye Party for Miss Pushpa T.S	301
Elective English	Charles Lamb – Londoner G. B. Shaw – Life and Learning	301
Non- CBCS		
Elective English 5th Sem	J.M.Synge : Riders to the Sea (Drama) R. Tagore : Religion of the Forest	
Honours V	NizzimEzekiel : Enterprise (Poem) 501 Kamla Das : An Introduction (Poem) 501 Derek Walcott : Ruins of a Great house (Poem)	501 501 502

Associate Prof & Head
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

DINESH TIWARI

CBCS (Choice Based Credit System)

Honours I	Unit 1 (History) Drama before Shakespeare Unit 4 (Drama) C. Marlowe :Dr. Faustus C2 (History)Short Story in thr Pre – Independence Period Sashi Deshpande : The Intrusion	101 102
Disciplinary Specific Core 1st Sem	Spencer : Amoretti -75 John Donne : Valediction The Metaphysical Tradition	101
English as a language Subject 1st Sem	Tolstoy : God Sees the Truth but Waits	
Ability Enhancement Compulsory Course 1st Sem	Unit 3 : Speaking Skills Dialogue, Group Discussion, Effective Communication, Mis- Communication , Interview, Public Speech	
Honours III	W.B. Yeats : Easter 1916 W.B. Yeats : An Irish Airman Forsees his Dead T.S. Eliot : The Love Song of J. Prufrock Edgar Allan Poe : Anabelle Robinson Crusoe : Richard Cory	301 303
Honours V	A.K. Ramanujan : Another View of Grace F.T.Wood : Change of Meaning F.T.Wood : The Growth of Vocabulary Randolph Quirk : What is Standard English?	501 503
Alternative English 3rd Sem	W.H.Auden : The Unknown Citizen Anton Chekov : A Marriage Proposal	301
3rd Sem Elective English	Francis Bacon : Of Truth	301
5th Sem Elective English	Cardinal Newman: Knowledge its own End Russell : Road to Happiness	501

Associate Prof & Head
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt. College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

LALPARVUL PAKHUONGTE

CBCS (Choice Based Credit system)

Honours I	Unit 1 (History) Renaissance Prose G.Chaucer : Knight and Prioress in Prologue Unit 2 (Poem) Edmund Spencer : Sonnet 67 Unit 1 (History) The Growth of Prose in the late 19th century Unit 2 (Novel) R.K. Narayan : Swami and Friends	101 101 102 102
Disciplinary Specific Core 1st Sem	Unit 1 : (History) Beginnings of English Novel Unit 5: (Novel) Daniel Defoe : Robinson crusoe	
English as a Language Subject 1st Sem	Unit 5 : 1.Job Application 2. Paragraph Writing	101
Ability Enhancement Compulsory Course 1st Sem	Close Reading,Summary,Paraphrasing Unit 5 : Comprehension	
Honours III	Ted Hughes – Hawk Roosting The 20th Century Prose Wordsworth : Preface to lyrical ballads Carl Sandburg : Chicago	301 301 302 302
Elective English 3rd Sem	Virginia Woolf : Shakespeare's sister	
Alternative English 3rd Sem	Unit 4 : O. Henry : After Twenty Years Unit 2 : Sylvia Plath : Lady Lazarus	301 301
Elective English 5th Sem	Bernard Shaw : Arms and The Man (Drama) G. K. Chesterton : Archaeology	501
Honours V	Asif Currimbhoy : The Refugee (Drama)	501

Associate Prof & Head
Dept of English
Haflong Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

LALSANGZUALI TUOLOR

CBCS (Choice Based Credit System)

Honours I	Unit 1(History)Medieval Drama Unit 5 (Drama) John Dryden : Mac Flecknoe Unit3 (History)Growth and Development of Indian English Drama Unit 3 (Drama) : Tara	101 101 102 102
Disciplinary Specific Core 1st Sem	Unit 1 (history) Influence of Puritan Movemnt Upon English Life & Literature Alexander Pope : The Rape of the Lock 18th Century Satire Unit4 (Poem) John Milton : On His Blindness	
English as a Language Subject 1st Sem	English as a Language Subject 1st Sem Unit3 (Essay)Verrier Elwin : A Pilgrimage to Tawang	
Ability Enhancement Compulsory Course 1st Sem	Unit 4 : Writing Skills I Documenting, Making Notes	
Honours III	Rhetoric T.S.Eliot : Tradition and Individual Talent Hemingway : The Oldman and the Sea Toni Morrison : The Bluest Eye	301 302 303
Elective English 5th Sem	Chesterton :Archeology	
Honours v	A. D . Hope: Hay Fever B. The Return of Prsephone C. Margaret Atwood : This is the Photograph of Me	501

Associate Prof.
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE

SHANKALP LANGTHASA

English as a Language	Direct and Indirect Speech Question tags Sentence Structure(Simple,Compound,Complex) Synthesis and splitting up of sentences	101
Honours 3rd sem	T.S.Eliot : Tradition and Individual Talent	
Honours 5th Sem	Randolph Quirk : What is Standard English?	
Ability Enhancement Compulsory Course 1st Sem	Report Writing Letter Writing	
Disciplinary Specific Core 1st Sem	Eighteenth Century Satire	101

Associate Prof & Head
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE ★ HAFLONG ★

NGULMINTHANG KIPGEN

Honours I	The Elizabethan Theatre	101
Honours V	Mahesh Dattani - Tara	501
English as a Language I Sem	Grammar 1 Determiners, Prepositions, Verbs, Tenses, Subject-Verb Agreement(Concord),Voices	
Ability Enhancement Compulsory Course 1st Sem	Documenting Art of Documenting Making notes What Is Note Making? Tips on Note Making.	
Disciplinary Specific Core 1st Sem	History of the Treasure of the period 18th Century Satire	

Associate Prof & Head
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE ★ HAFLONG ★

DEPARTMENT OF ENGLISH

JANUARY 2019-JULY2019

RENU GUPTA

Course/Paper	Course Allotment	
Honours II	Unit2(Poetry) John Milton Paradise Lost Book I(L1 to 125) Unit2(Poem)Robert Frost : The Road Not Taken (Poem) Langston Hughes : The Negro Speaks of Rivers	201 202
English as a Language II Sem	William Wordsworth : The Daffodils William Blake : The chimney Sweeper	
4th Sem Honours	Bernard Shaw : Major Barbara Postcolonial Studies O' Henry : The Last Leaf	401 402 403
4th Sem Elective English	Mark Twain : The Adventures of Huckleberry Finn	401
Alternative English 4th Sem 401	Tolstoy : God Sees the Truth but Waits O' Henry : The Gift of The Magi	
Non-CBCS		
Elective English 6thsem	The Return to Nature	
Honours VI	Unit 1(Fiction)Raja Rao :Kanthapura Unit 1(Fiction)Chinua Achebe : Things Fall Apart	601 602

Associate Prof & Head
Dept of English
Haflong Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

DEBBIE PAKHUONGTE

Course/Paper	Course Allotment
Honours II	Unit 1 (History)Growth of Periodicals Unit5(Poem)Alexander Pope : The Rape of the Lock(canto1) Unit3 (Novel)Arthur Miller : death of a Salesman
English as a Language II	P.B. Shelley: Ode to the Westwind,To Skylark John Keats : To Autumn
Honours IV	D.H. Lawrence : Sons and Lovers Psychoanalytic Criticism
Discipline specific Core 4thsem	Unit3(Short Story) Premchand : The Holy Panchayat
Alternative English 4th Sem	Tagore's The child return J.B.S Haldane : The Scientific Point of View
Elective English 6th Sem	The Interwar Years
Honours VI	Unit 2(Non-Fiction)NiradC.Chaudhuri: Money and the Englishman 501 Unit1(Novel) V.S.Naipaul : Mimic Man

Associate Prof &
Dept of Engl
Haflong, Govt
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

DINESH TIWARI

Course/Paper	Course Allotment	
Honours II	Unit 4 Aphra Behn: The Rover Unit1 Walt Whitman : O Captain,My Captain Passage to India Ann Bradstreet : The Prologue	201
English as a Language subject II Sem	Unit3(Short story) Saki : The Open Window	201
Honours IV	William Golding – Lord of the Flies Marxist Criticism/New Criticism Lorraine Hansberry – A Raisin In the Sun	401 402
Elective English	Two Leaves and a Bud	401
Alternative English	Maupassant : The Necklace E.R. Federov : Climate Change	401
Honours VI	Kwami Anthony Appiah : Is the Post in Postmodernism the Post in Post – Colonial?	602 603
Elective English	The Victorian Age	601

Associate Prof & Hd.
Dept of English
Haflong Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

LALPARVUL PAKHUONGTE

Course/Paper	Course Allotment	
Honours II	Unit 1(history)Jacobean Drama Unit3(drama) John Webster : The duchess of Malfi Unit4 Edgar Allan Poe : The Purloined Letter Willliam Faulkner : Dry September	201 201 202 202
English as a Language II Sem	Unit 3 (Short Story) Ruskin Bond : The eyes are Not Here	
Honours IV Sem	Drama Osborne : Look Back in Anger Feminist Criticism Arthur Miller – All my Sons	
Elective English IV Sem	Script Writing/ Dialogue Writing	
Honours VI Sem	Unit1(Fiction)Bankim C. Chattopadhaya : Raj Mohan's Wife Unit 2 (Non-Fiction) Nehru : What is culture?	601
Elective English	The Birth of Modern Literature	

Associate Prof & Head
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

LALSANGZUALI TUOLOR

Course/Paper	Course Allotment	
Hons II Sem	Unit 1(History)Rise of the Novel Unit5(drama) Toni Morrison : Beloved	201 202
Discipline specific Core II Sem	Victorian Poetry Unit3 (Poem) A.Tennyson :Ulysses Robert Browning : My Last Duchess	201
Honours IVSem	Prosody (Scansion)& Critical Appreciation of a given poem	402 401
Alternative English IV Sem	Tolstoy : God Sees the Truth but Waits O'Henry : The gift of the Magi E.R. Federov : Climate Change	
Honours VI Sem	Unit 2 (Non – Fiction)Tagore : What is Art ? Unit 2 (Drama) Ibsen : A Doll's House	601 603

Associate Prof & Head
Dept of English
Haflong, Govt College
Pin.788819

Principal
Haflong Govt. College
Haflong

HAFLONG GOVT. COLLEGE
HAFLONG

NGULMINTHANG KIPGEN

Course/ Paper	Course Allotment	
Honours II	Metaphysical Poetry	201
Discipline specific Core II Sem	Romantic Fiction and Non Fiction Growth of Periodical Literature	201 201
English as a language II Sem	Marcel Junod : The First Atom Bomb	
Honours IV Sem	Formalism, Structuralism, Poststructuralism Edgar Allan Poe : Murders in the Rue Morgue Booker T. Washington : The Struggle for Education(Up from Slavery)	402 401
Honours VI Sem	Dostoevosky : Crime and Punishment Edward Said : Crisis in Orientalism	601 602

Associate Prof & Head
Dept of Engl...
Haflong Govt ...e
Pin.788819

Principal
Haflong Govt. College
Haflong

HAFLONG GOVT. COLLEGE

SHANKALP LANGTHASA

Course/Paper	Course Allotment	
English as a Language II Sem	George Orwell : Shooting An Elephant	201
Honours IV Sem	Bertrand Russell : Science and War	401
Honours VI Sem	Kalidasa : Abhijnana Shakuntalam	603

Associate Prof & Head
Dept of English
Haflong Govt College

Principal
Haflong Govt. College
Haflong

HAFLONG GOVT. COLLEGE

Department of Economics

Haflong Government College

Plan for Curriculum Implementation

ACADEMIC SESSION:2018-2019

Prepared by

Curriculum Implementation Committee

Department of Economics

Haflong Government College

The Department of Economics, Haflong Govt. College has made certain plans for implementation of the Curriculum designed by affiliating Assam University, Silchar for the session 2018-19. The Department Of Economics has planned to implement the B.A. General Programme in the Choice Based Credit System from the session 2018-19 for the students enrolled in TDC 1st Semester. The earlier programme of TDC Economics Pass Course designed by Assam University will also continue for TDC 3rd, 4th, 5th and 6th semester for the session 2018-19. The following is the outline plan for implementation of the curriculum for the academic session 2018-19.

Teaching Methods of the Department: Lectures, Tutorials and Remedial classes.

ODD SEMESTERS from August 2018 to December 2018

Session-2018-19(General Programme)

Semester -I Choice Based Credit System(CBCS)

Core Economics I: Principles of Microeconomics-I

Paper-ECODSC-101

Faculty	Unit no.	Unit name
Dr. B. Pathari	Unit-I	Introduction
H.R. Laskar	Unit-II	Consumer Theory
Dr. B. Pathari	Unit -III	Theory of Costs.
H.R. Laskar	Unit-IV	Theory of Production.
Dr. B. Pathari	Unit -V	Perfect competition.

Principal
Haflong Govt. College
Haflong

Head
Department of Economics
Haflong Govt. College
Haflong

Semester -III (Non CBCS)

Paper-ECOP 301 Macroeconomics-I

Faculty	Unit no.	Unit name
H.R. Laskar	Unit-I	Concept of Macroeconomics
H.R. Laskar	Unit-II	Theories of Income and Employment
Dr. B. Pathari	Unit -III	Basics of Keynesian Macroeconomics(A)
H.R. Laskar	Unit-IV	Basics of Keynesian Macroeconomics(B)
Dr. B. Pathari	Unit -V	Money and Banking

Semester V(Non CBCS)

Paper: ECOP 501: Development of Indian economy(Since Independence)-I

Faculty	Unit no.	Unit name
H.R. Laskar	Unit-I	Issues in Growth, Development and Sustainability.
Dr. B. Pathari	Unit -II	Factors in Development.
Dr. B. Pathari	Unit -III	Population and Economic Development.
H.R. Laskar	Unit-IV	Employment.
H.R. Laskar	Unit-V	Indian Development Experience.

Principal
Haflong Govt. College
Haflong

Head
Department of Economics
Haflong Govt. College
Haflong

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

Semester-II Choice Based Credit System (CBCS)

Core Economics II: Principles of Microeconomics-II

Faculty	Unit no.	Unit name
Dr. B. Pathari	Unit-I	Theory of Monopoly.
H.R. Laskar	Unit-II	Imperfect Competition.
Dr. B. Pathari	Unit -III	Markets and Market Failure.
H.R. Laskar	Unit-IV	Income Distribution and Factor Pricing.
Dr. B. Pathari	Unit -V	Welfare Economics.

Semester IV(Non CBCS)

Paper-ECOP 401: Macroeconomics-II

Faculty	Unit no.	Unit name
Dr. B. Pathari	Unit-I	Money and Banking(B)
H.R. Laskar	Unit -II	Inflation and Unemployment
Dr. B. Pathari	Unit -III	International Trade and Institutions.
H.R. Laskar	Unit-IV	Balance of Payments .
Dr. B. Pathari	Unit: -V	Taxation and Public Expenditure

Head
Department of Economics
Haflong Govt. College
Haflong

Semester-VI(Non CBCS)

Paper-ECOP 601: Development of Indian economy(Since Independence)-II

Faculty	Unit no.	Unit name
Dr. B. Pathari	Unit -I	Unemployment and Poverty
Dr. B. Pathari	Unit -II	External Sector
H.R. Laskar	Unit-III	Government Budget
H.R. Laskar	Unit-IV	Banking in India(A)
Dr. B. Pathari	Unit -V	Banking in India(B)

Principal
Haflong Govt. College
Haflong

Head
Department of Economics
Haflong Govt. College
Haflong

DEPARTMENT OF HISTORY

HAFLONG GOVERNMENT COLLEGE

PLAN FOR CIRRICULUM IMPLEMENTATION ACADEMIC SESSION 2018-2019

Prepared by

Curriculum Implementation Committee

Department of History

Haflong Government College

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

DEPARTMENT OF HISTORY : HAFLONG GOVERNMENT COLLEGE

PLAN FOR CURRICULUM IMPLEMENTATION

ACADEMIC SESSION 2018-2019

PREPARED BY

CURRICULUM IMPLEMENTATION PLANNING COMMITTEE

DEPARTMENT OF HISTORY

HAFLONG GOVERNMENT COLLEGE

The department of HISTORY of HAFLONG GOVERNMENT COLLEGE has made a plan for Implementation of the curriculum designed by the University to which the college is affiliated for the session 2018- 2019 . The Department of HISTORY implements the Three Years Six Semester Degree (CBCS) B.A Honours Programme and Three Six Semester Degree (CBCS) B.A General Programme designed by Assam University. The following is the outline plan for Implementation of the curriculum for the academic session 2018 – 2019

Odd semester from August 2018 – December 2019

Plan for Implementation of Three Years Six Semester Degree (CBCS) B.A. Honours Programme .

The different units and topics thereof the course Three Years Six Semester Degree(CBCS) B.A. Honours Programme have been allotted to individual teachers as mentioned in the following tables. Details of plan for each unit and topic will be designed by each of the teachers to whom the units of the course/courses are allotted . As per the guidelines of the university , internal assessment will be done by taking unit tests of 20 marks for each course in each Semester. Qualifying the tests is mandatory for appearing in the end Semester examinations though the marks secured in internal Assessment will not be reflected in the marksheets of university conducted examination for each Semester.

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIRST SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-101T
Name of Course: History of India I (up to Vedic Period)

Unit-I	Reconstructing Ancient Indian History: 1.Sources of Ancient Indian History: Literature, Archaeology- Epigraphy, Numismatics; Art & Architecture	Suravi Haflongbar
Unit II	Pre-Historic Hunter- Gatherers 1. Palaeolithic Cultures: Brief overview of Palaeolithic Cultures, prominent Palaeolithic sites in India; Stone Industry & other technological developments. 3.Mesolithic Cultures: A brief overview	Dr. Golap Saikia
Unit III	The Advent of Food Production	Dr.Lina Jyoti Medhi
Unit IV	The Harappan Civilisation 1.Indus Valley Civilisation: Town Planning, Social Life, Economic Life, Religious beliefs & practices; Arts & Crafts; and causes of decline.	Lallomjudi Darnei
Unit V	Vedic Civilisation 1.Early Vedic Age: Polity, Economy, Society and Religion 2. Later Vedic Aryans: Polity, Economy, Society and Religion	Debojit Phonglo

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIRST SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-102T
CC – 2: Social Formations & Cultural Patterns of the Ancient World

Unit-I	Evolution of Humankind: 1.Definitions of Prehistory, Proto history & History 2.Palaeolithic & Mesolithic – A Brief Overview	Valentina Bazeley
Unit II	Food Production: 1.Neolithic culture : A Brief Overview 2.Chalcolithic culture: A Brief Overview 3. Beginning of Agriculture & Animal Husbandry	Valentina Bazeley
Unit III	Bronze Age Civilisations 1.Egypt: a. The Old kingdom- Egyptian writing, building of pyramids b. The Middle Kingdom- Imperial Egypt, Egyptian Art & Architecture. c. The New Kingdom- Emergence and Decline 2.Mesopotamia: a. Early Sumer, b. Sumerian writing c. System of irrigation d. City states of Sumer e. Temples and Religion f. Hammurabi's Code of Laws.	Dr. Golap Saikia & Priyanka Hojai
Unit IV	Nomadic Groups in Asia: 1.Advent of Iron in India and its implications 2. Emergence of Mahajanapadas 3.Rise of Magadha 4. Rise of Orthodox sects	Bharati Thaosen
Unit V	Ancient Greece: 1. Aristotle's Theory ofSlavery 2. City States in Ancient Greece-Athens & Spartian 3. Cultural contribution of Ancient Greece	Bharati Thaosen

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIRST SEMESTER PASS PROGRAMME (CBCS)
COURSE CODE: HISDSC/GEC-101T
Name of Course: History of India from Earliest Times up to 300 CE

Unit-I	1Sources of Ancient Indian History: Literature, Archaeology, Epigraphy and Numismatics 2.Palaeolithic Cultures: Brief Overview 3.Mesolithic Cultures: Brief Overview	Priyanka Hojai
Unit II	1.Neolithic Cultures: Characteristics, Prominent Neolithic sites in India 2.Chalcolithic Cultures: Characteristics, Ahar and Jorwe Culture in India 3. Indus Valley Civilisation: Town Planning, Social life, Economic life, Religious practices and decline	Valentina Bazeley & Lallomjudi Darnei
Unit III	1.Vedic Age: Social, Political, Economic life of Early Vedic Aryans and Later Vedic Aryans 2.Conditions for the emergence of Mahajanapadas: Rise of Magadha 3.Jainism and Buddhism: Life and Teachings of Mahavira and Gautama Buddha	Dr. Golap Saikia & Bharati Thaosen
Unit IV	1.Alexander: Invasion of India and its effects 2.The Mauryas: Conquests and achievements of Chandragupta Maurya, Dharmma of Ashoka, Mauryan administration, causes of decline , Art and Architecture	Debajit Phonglo
Unit V	1.Kushans: Kanishaka's conquests and achievemnts, art and culture during the reign of Kanishka with special reference to Gandhara school of art 2.The Sangam Literature 3.The Satavahanas: Gautamiputra Satakarni, administration.	Dr. Lina Jyoti Medhi & Suravi Haflongbar

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. THIRD SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH301
Name of Course: History of India from 1556 TO 1707

Unit-I	Evolution of Polity under the Mughals: Sher Shah: Administration Evolution of administrative system: Mansab and Jagir The Mughal ruling classes: Nobility and Zamindars State and Religion: Akbar's religious ideas and theory of divine kingship, Sul-h-i-kul, relations with religious elites; Auranazeb's relation with religious groups and institutions	Priyanka Hojai
Unit II	Rural Economy, Society and trends in trade, commerce and urbanisation Agrarian structure: Land ownership and rights, the village community and peasantry Forests and agricultural zones, management of water resources, agricultural technology and crop patterns, growth of rural credit and cash nexus, role of the state	Priyanka Hojai
Unit III	Trade routes and pattern of internal commerce Indian ocean trade network in the seventeenth century, markets and monetary system, administration of cities and towns Urban economy; crafts, industries, imperial Kharkhanas Urban social structure: Merchant communities, Bankers, artisans, craftsmen and labourers	Priyanka Hojai
Unit IV	Cultural and Religious developments Language, literature, art and architecture, religion and culture, Sufi, Vaishnava Bhakti and Sant traditions: teaching and social impact	Valentina Bazely
Unit V	Pattern of Regional Polity and decline of the Mughal empire Rise of the Marathas: Shivaji, the Mughal Maratha conflict, the Peshwas, the Sikhs, The Rajputs and its relations with the Mughals, Nature of the crisis: case studies of Hyderabad, Awadh and Bengal: Jagirdari crisis	Valentina Bazely

Bazely
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. THIRD SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH302
Name of Course: History of India from 1707-1818

Unit-I	Rise of British power: Financial basis of trade with India, conflict between English and French, Carnatic wars. English Conquests of Bengal: Plassey to Buxar, factors behind English success, Diwani	Dr. Golap Saikia
Unit-II	Organisation of British rule and beginning of colonial rule, administrative arrangements, colonial governance (Regulating Act Pitts India Act Dual government Judicial system)	Suravi Haflongbar
Unit-III	Beginning of Colonial economy: land revenue system till permanent settlement, conflict with Mysore: Hyder Ali and Tipu Sultan, conflict with English and consequences	Dr. Golap Saikia
Unit-IV	Marathas: British relation with the Peshwa and Maratha confederacy, Anglo-Marathas war, causes of the failure of the Marathas, Subsidiary alliance	Dr. Lina Jyoti Medhi
Unit-V	Ryotwari settlement, Mahalwari settlement, Deindustrialisation after 1813, the deurbanisation	Dr. Lina Jyoti Medhi

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. THIRD SEMESTER PASS PROGRAMME (NON-CBCS)
COURSE CODE: HISP301
Name of Course: Modern India 1757-1857

Unit-I	Ascendency of British in India: Bengal on the eve of Battle of Plassey, Clive and the Battle of Plassey and Buxar; administrative system introduced in Bengal after the Battle of Buxar	Valentina Bazeley
Unit-II	Administrative structure and economic policy of the British Land revenue system- Permanent settlement, Ryotwari settlement and Mahalwari system	Valentina Bazeley
Unit-III	Resistance movement and the Revolt of 1857 Tribal and Peasant movement- Causes of revolts	Priyanka Hojai
Unit-IV	Revolts of Bengal and Eastern India Nature of the revolts IN South India	Priyanka Hojai
Unit-V	Revolt of 1857- Nature, Character, Causes, spread of the revolt, causes of failure, impact of the revolt	Debajit Phonglo

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIFTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH501
Name of Course- History of Europe 1871-1945

Unit-I	Industrialization in Europe, difference in Industrialization process between England and the continent- French, German and Russian Industrialisation- rise of the working class movement and the sociallist thought European Imperialism: The impetus behind colonial expansion-scramble for colonies in Asia and Africa	Bharti Thaosen
Unit-II	Bismarckian Diplomacy Eastern question in the late nineteenth century and the Balkan nationalism- William II and the new course in the German foreign policy, Anglo- German antagonism-Triple alliance, Triple entente	Lallomjudi Darnei
Unit-III	Origins of the First World War Russian Revolution:origin and impact on European politics	Dr. Lina Jyoti Medhi
Unit-IV	Peace settlement of 1919 and its consequences- the establishment of the Weimar Republic	Suravi Haflongbar
Unit-V	Consolidation and development of Soviet states, fascism In Italy, League of Nations, The economic depression, the collapse of the Weimer state, Rise of Nazi power, outbreak of the second world war	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIFTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH502
Name of Course: Historiography

Unit-I	Meaning, Scope and Sources of History Literature, Archaeology, Epigraphy, Numismatics, foreign accounts, archival sources	Valentina Bazeley
Unit-II	Historical objectivity, concept and debate	Dr. Golap Saikia
Unit-III	Tradition of historical writing, Graeco- Roma traditon	Valentina Bazeley
Unit-IV	Medieval historiography, Theocratic school- St. Augustine and cyclical school of Ibn Khaldun	Valentina Bazeley
Unit-V	Modern Historiography Enlightenment, historiography in Europe, Romanticist school, English histories- Edward Gibbon, Thomas Carlye, Arnold Toynbee	Bharati Thaosen

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIFTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH503
Name of Course- Indian Historiography

Unit-I	Indian Historical Tradition, Historicity of the Puranas, Historical Biographies in ancient India, Ancient Indian historical tradition	Bharati Thaosen
Unit-II	Histories of Sultanate period- Nizami, Amir Khusru, Isami, Zia-ud-din Barni Historical tradtion from the time of Akbar, Nizam-ud-din Ahmed Badauni, Abul Fazl, Abdul Lahori, Bernier. Historical Writing from Jahangir to Aurangazeb Mughal historiography: and assessment	Priyanka Hojai
Unit-III	British historians in India and the rise of Imperialist historiographies of India: James Mill, Macaulay, Elphinstone, Alfred Layll, Vincent Smith and W.H. Moreland Orientalism in India: Calebroke, Max Muller, William Jones, Asiatic Society of Bengal	Dr. Golap Saikia & Bharati Thaosen
Unit-IV	Nationalist historians: R.C.Majumdar, Jadunath Sarkar, S.N.Sen An assessment of nationalist historiography in India	Dr. Lina Jyoti Medhi
Unit-V	Early Marxist Historians:D.D.Kosambhi, R.P.Dutt, and Mohammad Habib An assessment of Marxist Histography of India	Dr. Golap Saikia

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM JULY 2018 TO DECEMBER 2018
B.A. FIFTH SEMESTER PASS PROGRAMME (NON-CBCS)
COURSE CODE: HISP501
Name of Course: History of Modern World 1914-1939

Unit-I	World War I and Peace treaties Causes of the War	Debajit Phonglo
Unit-II	Peace treaties after the war	Debajit Phonglo
Unit-III	Russian Revolution Causes of 1917 Revolution, and results. Soviet Russia under Lenin and Stalin	Lallomjudi Darnei & Suravi Haflongbar
Unit-IV	Rise of Totalitarian dictatorship in Europe, Fascism in Italy, Causes of rise of fascism in Italy and Mussolini Home and Foreign Policy of Mussolini	Bharati Thaosen
Unit-V	Nazism in Germany Causes of rise of Nazism and Adolf Hitler Home and foreign policy of Hitler	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO JUNE 2019
B.A. SECOND SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-201T

Name of Course: History of India II (C.300 BCE to 750 CE)

Unit-I	Economy and Society (circa 300 bCE to circa C.E 300): 1. Urban growth: Craft Production; Trade & Trade Routes. 2. Emergence of Varna & Jati.	Bharati Thaosen
Unit II	Changing political formations(circa 300 BCE to circa C.E 300): 1. The Mauryan Empire – administration. 2. Kautilya Arthasashtra; Megasthenese of Indica. 3. Post Mauryan Politics: a. Kushanas – Kanishka b. Satavahanas – GautamiputraSatakarni.	Valentina Bazeley
Unit III	Towards early Medieval India (circa CE fourth century to CE 750): 1. Agrarian Expansions: Landgrants, Condition of Peasantry. 2. The nature of politics: a. Gupta Empire – administration. b. Harshavardhan – administration.	Lallomjudi Darnei
Unit IV	Religion, philosophy and society(circa 300 BCE to C.E 750): 1. Condolidation of the brahminical tradition: Varnashramdharma, Purusharthas. 2. Theistics cults (from circa second centuryBC): Mahayana; the puranic tradition. 3. The beginning of Tantricism.	Dr.Lina Jyoti Medhi
Unit V	Cultural developments(circa 300 BCE to C.E 750): 1. A brief survey of Sanskrit and Tamil Literature. 2. Mauryan Architecture & Gupta Architecture.	Suravi Haflongbar

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

EVEN SEMESTER FROM JANUARY 2019 TO JUNE 2019
B.A. SECOND SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-202T

Name of Course: Social Formations and Cultural Patterns of the Medieval World

Unit-I	Roman Republics, Participate and Empire & slave society in ancient Rome: Agrarian economy, urbanization, trade.	Dr. Golap Saikia
Unit II	1. Religion and culture in ancient Rome. 2. Crises of the Roman Empire.	Dr. Golap Saikia
Unit III	1. Economic developments in Europe from the 7th to the 14th centuries: Organizations of production, towns and trade, technological developments, crises of feudalism.	Bharati Thaosen
Unit IV	1. Religion and Culture in medieval Europe	DebajitPhonglo
Unit V	Societies in Centra Islamic Lands: a. The tribal background, ummah, Caliphate state; rise of Sultanates. b. Religious developments: the origins of Shariah, Mihna, Sufism. c. Urbanization and trade.	Priyanka Hojai

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO JUNE 2019
B.A. SECOND SEMESTER PASS PROGRAMME (CBCS)
Course Code: HISDSC/GEC-201T
Name of Course: History of India from C.300 to 1206

Unit-I	1.The Guptas: a. Military conquests under Samudragupta & Chandragupta II b. Gupta Administration. c. Causes of decline of the Guptas. 2.Harshavardhana: a. Conquests and achievements b. Administrative system of Harsha	Valentina Bazeley Suravi Haflongbar DebajitPhonglo
Unit II	1.South India: a. Contribution of the Cholas &Pallavas to Indian Culture. b. Administrative system of the Cholas &Pallavas. 2. Towards the Early Medieval. a. Cultural contributions of the Chalukyas.	Dr. Lina Jyoti Medhi Lallomjudi Darnei
Unit III	1.Evolution of Political Structures: a. Political achievements of Devapala & Dharmapala. b. Pratiharas- their administration. c. Rashtrakutas- development of art & architecture.	Priyanka Hojai
Unit IV	1.Emergence of Rajput states in Northern India a. Salient features of the Rajput period b. Emergence of Mewar c. Gurjara-PratiharasMihirbhoja d. Social Condition of the Rajput States	Bharati Thaosen Dr. Golap Saikia
Unit V	1.Arabs conquests of Sindh. 2.Indian invasion of Sultan Mahmud of Ghazni (996-1030 A.D) 3.Advent of Muhammad Ghuri(1173-1205 A.D) and Battles of Tarain.	Bharati Thaosen Dr. Golap Saikia

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. FORTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE-HISH-401
Name of Course : Indian Nationalism upto 1948

Unit-I	Factors behind the rise of Indian nationalism, 'Economic nationalism', early phase of national movement to 1905, the moderates and extremist.	Dr. Golap Saikia
Unit II	Indian national movement 1905-1918, Partition of Bengal, 1905-1907, Muslim League Act of 19096, The 1911 Concession, World War-I, Gadar Party, Home Rule league, Congress-League pact 1916, Act of 1919	Valentina Bazeley
Unit III	Gandhi, his career and major elements of his though, Khilafat and non co-operation movement, Civil Disobedience movement 1930-34 The emergence of left in the congress. Rise of Communal Politics, Act of 1935; The Congress ministries World War II and Quit Indian Movement, Indian National Army, Royal Indian Navy Mutiny.	Dr. Lina Jyoti Medhi & Priyanka Hojai
Unit IV	Constitutional negotiations; Cabinet Mission, Mountbatten plan.	Suravi Haflongbar
Unit V	Partition and independence, integration of states, Gandhi's assassination.	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. FORTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE-HISH-402
Name of Course : India 1948-1964

Unit-I	Main principles of the Constitution of 1950, Chief features and significance.	Dr. Golap Saikia
Unit II	Re-organization of States, Multi-lingual and linguistic states.	Dr. Golap Saikia
Unit III	Five year planning and main thrust of planning.	Valentina Bazeley
Unit IV	India's foreign policy, non-allign movement, panchsheel.	Suravi Haflongbar
Unit V	Sino Indian War and Indo-Pak Wars and the implications.	Priyanka Hojai

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. FORTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE-HISH-403
Name of Course : History of Europe from 1780-1871 AD

Unit-I	The idea of Europe; the 18th Centure background-Society, Economy, politics and Enlightenment. Industrial Revolution and its impact on society, economy and state.	Dr. Lina Jyoti Medhi
Unit II	Trends in the French Revolution; Aristocratic revolt-bourgeois, popular and peasant-The Constituent Assembly and its achievements – Girondins and Jacobins – The Thermidorian reaction and the directory interpreting the French revolution – creation of a new political culture.	Priyanka Hojai & Valentina Bazeley
Unit III	Nepoleon Bonaparte; the revolution legacy- the reorganization of France and the new elite – Napoleonic Empire and Europe – Fall of Bonaparte – confliting estimate of Napoleon's character and achievements.	Dr. Golap Saikia
Unit IV	The Vienna congress, Metternich and the conservative order in Europe – liberalism – nationalism and the revolutionary challenge to the conservative order-an overview. The revolution of 1848- pattern of insurrections of France and other Central Europetur countries – collapse of the revolution.	Lallomjudi Darnei
Unit V	The emergence of national states in Central Europe – unification of Italy, unification of Germany and Bismarck's diplomacy, Russian modernization Emancipation of the serf and liberal reforms in Russia, France under the second emperor.	Bharati Thaosen

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. FORTH SEMESTER PASS PROGRAMME (NON-CBCS)
COURSE CODE-HISP-401
Name of Course : Modern India (1858-1947)

Unit-I	Efforts of Regeneration of Indian Society Reform movements- Nature of the movements; Raja Ram Mohan Roy and Brahmo Samaj, Ishwarchandra Bidyasagar, Derozio and Young Bengla movement, Arya Samaj, Prathana Samaj, Theosophical society, Ramakrishna Misison, Aligarh Movement and Sayyad Ahmed Khan.	Suravi Haflongbar
Unit II	Indian National Movement Indian National Movement 1st phase till 1919- Predecessors of Indian National Congress, Foundation of Indian National Congress, activities of the congress.	Valentina Bazeley
Unit III	Partition of Bengal and Swadeshi Movement; growth for revolutionary ideas & practices.	Valentina Bazeley
Unit IV	Indian National Movement – Second Phase 1919-47, Emergence of M.K. Gandhi his ideas, Khilafat and non-co-operation movement, Civil disobedience movement; Quit India movement, role of INA and Naval revolt partition and freedom.	Priyanka Hojai
Unit V	Impact of Freedom struggle in North East India 1857-1947, Revolt of 1857, Peasant Movements, Swadeshi & Boycott, Non-Co-operation, Civil disobedience and Quit India Movement.	Dr. Lina Jyoti Medhi

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. SIXTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE-HISH-601
Name of Course : History of Northeast India with special reference to Assam 1228-1826

Unit-I	Land and the people ofNorth East India and influence of Geography on history ofthe North East India. Political scenario of 13th century North East India-effect of disintergration of ancient kamrupa kamataKingdom, invasions of Turko Afghan rles and its impact	Bharati Thaosen
Unit-II	Emergence of independent kingdoms-The kingdom of Koch,Heramba(Cachar),Jaintia and Tripura-internal Political development and cultural activities.	Dr.GolapSaikia
Unit-III	Foundation and expansion of Ahom Kingdom in Upper Brahmaputra Valley from 1616-1669-origin of the Ahoms,foundation of the Ahom Kingdom,expansion of territories till 1639	Dr.Linajy oti Medhi
Unit-IV	Ahom's struggle with the Mughals -1616 – 1639,Ahom relations with Cacharis,Jaintias,Manipur,Tr ipura	Bharati Thaosen
Unit-V	Burmese invasion of Assam-Internal political condition of NorthEast India:Burmeseinvasion, Anglo- Burmesewar, Treaty of Yandaboo 1826	Bharati Thaosen

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. SIXTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE-HISH-602
Name of Course : History of North East India, 1824-1947

Unit-I	Establishment of British rule in Assam.	Dr. Golap Saikia
Unit II	Frontier policy of the British and British relation with the hill tribes of North East India. British Paramountsy in Naga Hills, Khasi Hills, Jaitia Hills, Garo Hills, and British risings in these Hills.	Dr. Golap Saikia
Unit III	Relations with Tripura and Manipur Nature of colonial intervention pattern of British Administration in the Hills.	Dr. Golap Saikia
Unit IV	Organized nationalist Movement in Assam, Resistance Movements in the Hills.	Bharati Thaosen
Unit V	Muslim League and its activities in the Northeast India, Independence partition and its impact on Northeast India.	Priyanka Hojai

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. SIXTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE-HISH-603
Name of Course : Gender History of India

Unit-I	Introduction to Gender History,Gender as a Social construct, what are women studies, What is feminism, shift from Women's studies to Gender Studies	ValentinaBazeley
Unit- II	State of Women in Pre ColonialIndian Society :	ValentinaBazeley
Unit- III	Gender Relations in colonial India:Debate around Sati, Age ofConsent Bill, Issue of Widow Remarriage,Child marriage	ValentinaBazeley
Unit -IV	Social Reform Movements andits impacts ,Issues of women education	Dr.LinajyotiMedhi
Unit- V	Women in Nationalist Movement : Participation in Congress, in Gandhian mass movements, peasant and tribalstruggles ,Partition and its aftermath	PriyankaHojai

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

EVEN SEMESTER FROM JANUARY 2019 TO DECEMBER 2019
B.A. SIXTH SEMESTER PASS PROGRAMME (NON-CBCS)
COURSE CODE-HISP-601
Name of Course : History of Modern World 1939-1945

Unit-I	Formation of two block after the second world war The Cold War Origin of the cold war Progress of cold war between two blocks – Soviet Union and the West end of Cold War.	Bharati Thaosen & Lallomjudi Darnei
Unit II	Non-Aligned Movement Non-Aligned Movement and the Cold War.	Bharati Thaosen & Lallomjudi Darnei
Unit III	Awakening in Africa Freedom Movements.	Bharati Thaosen & Lallomjudi Darnei
Unit IV	International Organization for maintaining world peace since 1919 League of Nations and UNO Aims, objective and organization of League of Nations.	Debajit Phonglo
Unit V	UNO Aims, objective and organs of UNO, Activities of UNO, achievements of UNO Political humanitarian.	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIRST SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-101T

Name of Course: History of India I (upto Vedic Period)

Unit-I	Reconstructing Ancient Indian History: 1.Sources of Ancient Indian History: Literature, Archaeology- Epigraphy, Numismatics; Art & Architecture	Suravi Haflongbar
Unit II	Pre Historic Hunter- Gatherers 1. Palaeolithic Cultures:Brief overview of Palaeolithic Cultures,prominent Palaeolithic sites in India; Stone Industry & other technological developments. 3.Mesolithic Cultures: A brief overview	Dr. Golap Saikia
Unit III	The Advent of Food Production	Dr.Lina Jyoti Medhi
Unit IV	The Harappan Civilisation 1.Indus Valley Civilisation:Town Planning, Social Life,Economic Life, Religious beliefs & practices ; Arts & Crafts; and causes of decline.	Lallomjudi Darnei
Unit V	Vedic Civilisation 1.Early Vedic Age: Polity,Economy, Society and Religion 2. Later Vedic Aryans: Polity,Economy, Society and Religion	Debojit Phonglo

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIRST SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-102T

CC – 2: Social Formations & Cultural Patterns of the Ancient World

Unit-I	Evolution of Humankind: 1.Definitions of Prehistory, Proto history & History 2.Palaeolithic & Mesolithic – A Brief Overview	Valentina Bazeley
Unit II	Food Production: 1.Neolithic culture : A Brief Overview 2.Chalcolithic culture: A Brief Overview 3. Beginning of Agriculture & Animal Husbandry	Valentina Bazeley
Unit III	Bronze Age Civilisations 1.Egypt: a. The Old kingdom- Egyptian writing, building of pyramids b. The Middle Kingdom- Imperial Egypt, Egyptian Art & Architecture. c. The New Kingdom- Emergence and Decline 2.Mesopotamia: a. Early Sumer, b. Sumerian writing c. System of irrigation d. City states of Sumer e. Temples and Religion f. Hammurabi's Code of Laws.	Dr. Golap Saikia Priyanka Hojai
Unit IV	Nomadic Groups in Asia: 1.Advent of Iron in India and its implications 2. Emergence of Mahajanapadas 3.Rise of Magadha 4. Rise of Orthodox sects	Bharati Thaosen
Unit V	Ancient Greece: 1.Aristotle's Theory ofSlavery 2City States in Ancient Greece-Athens & Sparta 3.Cultural contribution of Ancient Greece	Bharati Thaosen

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIRST SEMESTER PASS PROGRAMME (CBCS)
COURSE CODE: HISDSC/GEC-101T

Name of Course: History of India from Earliest Times upto 300 CE

Unit-I	1Sources of Ancient Indian History: Literature, Archaeology, Epigraphy and Numismatics 2.Palaeolithic Cultures: Brief Overview 3.Mesolithic Cultures: Brief Overview	Priyanka Hojai
Unit II	1.Neolithic Cultures: Characteristics, Prominent Neolithic sites in India 2.Chalcolithic Cultures: Characteristics, Ahar and Jorwe Culture in India 3. Indus Valley Civilisation: Town Planning, Social life, Economic life, Religious practices and decline	Valentina Bazeley & Lallomjudi Darnei
Unit III	1.Vedic Age: Social, Political, Economic life of Early Vedic Aryans and Later Vedic Aryans 2.Conditions for the emergence of Mahajanapadas: Rise of Magadha 3.Jainism and Buddhism: Life and Teachings of Mahavira and Gautama Buddha	Dr. Golap Saikia & Bharati Thaosen
Unit IV	1.Alexander: Invasion of India and its effects 2.The Mauryas: Conquests and achievements of Chandragupta Maurya, Dharmma of Ashoka, Mauryan administration, causes of decline , Art and Architecture	Dr. Golap Saikia
Unit V	1.Kushans: Kanishaka's conquests and achievemnts, art and culture during the reign of Kanishka with special reference to Gandhara school of art 2.The Sangam Literature 3.The Satavahanas: GautamiputraSatakarni, administration.	Dr. Lina Jyoti Medhi & Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. THIRD SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC- 301T

Name of Course: History of India III (c.750 to 1206)

Unit-I	Studying Early Medieval India 1. Sources for the Study of Early Medieval history. 2. Rise of Rajputs-Salient features of Rajput states; Emergence of Mewar. .	Suravi Haflongbar
Unit II	Political structures: 1.Cholas: Administration 2. Palas: Devapala & Dharmapala. 3.Arabs Conquest of Sind: a. Indian invasion of Sultan Mahmud of Ghazni (996-1030 AD) b. Advent of Muhammad Ghuri(1173-1205 A.D) and the Battle of Tarain.	Dr. Lina Jyoti Medhi
Unit III	Agrarian Structure and Social change: 1.Agricultural expansion;crops 2. Landlords and peasants 3.Proliferation of castes;status of untouchables 4.Tribes as peasants and their place in the Varna order.	Dr. Lina Jyoti Medhi
Unit IV	Trade and Commerce: 1.Inter- regional trade 2. Maritime trade 3. Process of Urbanisation 4. Merchants guilds of South India	Dr. Golap Saikia
Unit V	Religious and Cultural Developments: 1.Bhakti, Buddhism & Jainism 2. Islamic intellectual traditions: Al- Biruni 3. Art and Architecture:Cholas and Pallavas.	DebajitPhonglo

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. THIRD SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-302T

Name of Course: Rise of Modern West--I

Unit-I	Transition fro Feudalism to capitalism: problems and theories.	Valentina Bazeley
Unit II	Early Colonial expansion: motives, voyages and explorations: the conquests of the Americas:beginning of the era of colonization; mining and plantation;the African slaves.	Valentina Bazeley
Unit III	Rennaissance: Its Social roots, city-states of Italy; spread of humanism in Europe;Art.	Dr. Golap Saikia
Unit IV	Economic developments of the sixteenth century: shift of economic balance from the Mediterranean to the Atlantic; Commercial Revolution; Influx of America Silver and the Price Revolution	Bharati Thaosen
Unit V	Emergence of European State system: Spain; France; England; Russia	Bharati Thaosen

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. THIRD SEMESTER HONOURS PROGRAMME (CBCS)
COURSE CODE: HISHCC-303T

Name of Course: History of India IV (c.1206-1550)

Unit-I	Interpreting the Delhi Sultanate: Survey of sources: Persian tarikh tradition; vernacular histories; epigraphy	Priyanka Hojai
Unit II	Sultanate Political Structures-I: a.Foundation ,expansion and consolidationof the Sultanate of Delhi; The Khaljis and the Tughluqs; Mongol threats and Timur's invasion; The Lodis: Conquest of Bahlul and Sikandar; Ibrahim Lodi and the battle of Panipat.	Priyanka Hojai
Unit III	Sultanate Political Structures—II: a.Emergence of provincial dynasties: Bahamanis, Vijayanagar, Gujarat, Malwa, Jaunpur and Bengal. b. Consolidation of regional identities; regional art,architecture and literature.	Lallomjudi Darnei
Unit IV	Society and Economy: a.Iqta and the revenue-free grants b.Agriculturalproduction;technology c.Changes in rural society; revenue system d. Monetization; market regulations;growth of urban centres; trade and commerce; Indian Ocean trade.	Lallomjudi Darnei
Unit V	Religion,Society and Culture: a.Sufisilsilas: Chishtis and Suhrawardis; doctrines and practices;social roles b. Bhakti movements and monotheistic traditions in south and North India; Women Bhaktas; Nathpanthis;Kabir,Nanak and the Sant tradition. c. sufi literature: malfuzat; premakhayans	Suravi Haflongbar

Bazley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. THIRD SEMESTER PASS PROGRAMME (CBCS)
COURSE CODE: HISDSC/GEC-301T
Name of Course: History of India from C.1206 to 1707

Unit-I	1.Sources of Medieval Indian History: Literary & Archaeological Sources. 2. Foundation, Expansion & Consolidation of the Delhi Sultanate: a. Qutubuddin Aibak- Conquest and achievements. b. Iltutmish- Consolidation of sultanate. c. Ghiyasuddin Balban- His theory of kingship.	Dr. Lina Jyoti Medhi
Unit II	1.Allauddin Khalji- Economic Policy. 2. Muhammad-bin-Tughluq- The various schemes of Muhammad-bin-Tughluq. 3. Causes of downfall of Delhi sultanate.	Lallomjudi Darnei
Unit III	1.The Bhakti Movement- Kabir,Nanak, Chaitanya. 2.Sufism and its impacton Indian culture. Provincial Kingdoms: a. Vijayanagara: Deva Raya II, Krishna Deva Raya III.	Valentina Bazeley
Unit IV	1.Emergence and consolidation of Mughal State, C.16th century to mid 17th century: a. Foundation of Mughal Empire by Babur. b. Akbar- Religious policy with special reference to Din-i-Ilahi. c. Shah Jahan: Development o art and architecture. d. Aurangzeb:His Religious Policy.	Priyanka Hojai
Unit V	1.Administration of Sher Shah. 2. Mughal Administration. 3.Causes of downfall of the Mughals. 4. Marathas: Shivaji.	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. THIRD SEMESTER PASS PROGRAMME (CBCS)
COURSE CODE: HISSEC- 301T

Name of Course: Archaeology & Museology

Unit-I	1.Definition of Archaeology, Aims and Scope; relationship of Archaeology with History;brief overview of different types of archaeology	Valentina Bazeley
Unit II	1.Archaeology in India: Establishment of the Asiatic Society; Alexander Cunningham and the establishment of the Archaeological Survey . 2.Contributions of John Marshall and Mortimer Wheeler in Indian Archaeology.	Dr. Golap Saikia
Unit III	1.Contributions of R.D.Banerjee and Dayaram Sahani in the field of archaeology.	Dr.Lina Jyoti medhi
Unit IV	1.A study of the archaeological sites-Madan Kamdev & Surya Pahar.	Bharati Thaosen
Unit V	1.Definition of Museology, Scope of Museology;History of Museum in India; 2.Types of Museum-Specialised Museum & General Museum 3. A.study of Indian Museum, Kolkata; National Museum,New Delhi & State Museum,Guwahati.	Dr. Lina Jyoti Medhi

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIFTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH501
Name of Course- History of Europe 1871-1945

Unit-I	Industrialization in Europe, difference in Industrialization process between England and the continent- French, German and Russian Industrialisation- rise of the working class movement and the sociallist thought European Imperialism: The impetus behind colonial expansion-scramble for colonies in Asia and Africa	Bharti Thaosen
Unit-II	Bismarckian Diplomacy Eastern question in the late nineteenth century and the Balkan nationalism- William II and the new course in the German foreign policy, Anglo- German antagonism-Triple alliance, Triple entente	Lallomjudi Darnei
Unit-III	Origins of the First World War Russian Revolution:origin and impact on European politics	Dr. Lina Jyoti Medhi
Unit-IV	Peace settlement of 1919 and its consequences- the establishment of the Weimar Republic	Suravi Haflongbar
Unit-V	Consolidation and development of Soviet states, fascism In Italy, League of Nations, The economic depression, the collapse of the Weimer state, Rise of Nazi power, outbreak of the second world war	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIFTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH502
Name of Course: Historiography

Unit-I	Meaning, Scope and Sources of History Literature, Archaeology, Epigraphy, Numismatics, foreign accounts, archival sources	Valentina Bazeley
Unit-II	Historical objectivity, concept and debate	Dr. Golap Saikia
Unit-III	Tradition of historical writing, Graeco-Roma traditon	Valentina Bazeley
Unit-IV	Medieval historiography, Theocratic school-St. Augustine and cyclical school of Ibn Khaldun	Valentina Bazeley
Unit-V	Modern Historiography Enlightenment, historiography in Europe, Romanticist school, English histories-Edward Gibbon, Thomas Carlye, Arnold Toynbee	Bharati Thaosen

Bazeley
Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIFTH SEMESTER HONOURS PROGRAMME (NON-CBCS)
COURSE CODE: HISH503
Name of Course- Indian Historiography

Unit-I	Indian Historical Tradition, Historicity of the Puranas, Historical Biographies in ancient India, Ancient Indian historical tradition	Bharati Thaosen
Unit-II	Histories of Sultanate period- Nizami, Amir Khusru, Isami, Zia-ud-din Barni Historical tradtion from the time of Akbar, Nizam-ud-din Ahmed Badauni, Abul Fazl, Abdul Lahori, Bernier. Historical Writing from Jahangir to Aurangazeb Mughal historiography: and assessment	Priyanka Hojai
Unit-III	British historians in India and the rise of Imperialist historiographies of India: James Mill, Macaulay, Elphinstone, Alfred Layll, Vincent Smith and W.H. Moreland Orientalism in India: Calebroke, Max Muller, William Jones, Asiatic Society of Bengal	Dr. Golap Saikia & Bharati Thaosen
Unit-IV	Nationalist historians: R.C.Majumdar, Jadunath Sarkar, S.N.Sen An assessment of nationalist historiography in India	Dr. Lina Jyoti Medhi
Unit-V	Early Marxist Historians:D.D.Kosambhi, R.P.Dutt, and Mohammad Habib An assessment of Marxist Histography of India	Dr. Golap Saikia

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

ODD SEMESTER FROM AUGUST 2019 TO DECEMBER 2019
B.A. FIFTH SEMESTER PASS PROGRAMME (NON-CBCS)
COURSE CODE: HISP501
Name of Course: History of Modern World 1914-1939

Unit-I	World War I and Peace treaties Causes of the War	DebajitPhonglo
Unit-II	Peace treaties after the war	DebajitPhonglo
Unit-III	Russian Revolution Causes of 1917 Revolution, and results. Soviet Russia under Lenin and Stalin	Lallomjudi Darnei & Suravi Haflongbar
Unit-IV	Rise of Totalitarian dictatorship in Europe, Fascism in Italy, Causes of rise of fascism in Italy and Mussolini Home and Foreign Policy of Mussolini	Bharati Thaosen
Unit-V	Nazism in Germany Causes of rise of Nazism and Adolf Hitler Home and foreign policy of Hitler	Suravi Haflongbar

Bazeley

Associate Professor & Head
Department of History
Haflong Govt. College

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

The Department of Philosophy of Haflong Government College has made the following plan for implementation of the Curriculum designed by the affiliating Assam University for the Session 2018-2019. Assam University has introduced the TDC CBCS programme for BA General as well as B A Honours programme in Philosophy from the session 2018-19. The Department of Philosophy has planned to implement the BA Honours Programme as well as the B A General Programme in the Choice Based Credit System from the session 2018-19 for students enrolled TDC 1st Semester. The earlier programmes of TDC Philosophy Honours and Philosophy Pass Course of BA Pass Programme designed by Assam University will also continue for TDC 3rd , 4th, 5th and 6th Semesters in the session 2018-19. The following is the outline plan for implementation of the curriculum for the academic session 2018-2019.

ODD SEMESTERS from July 2018 to December 2018
Plan for Implementation of B A (Philosophy) Honours and B A (Philosophy) General CBCS Programme

BA First SEMESTER Honours Programme
Course Code:PHPHCC101T, Credits-06, Full Marks-100, Pass Marks-40
Name of Course::Epistemology and Metaphysics (Indian)

Unit	Topic	Teacher to whom allotted
I	General Ideas about the Schools of Indian Philosophy. Concept of Ṛta, Law of Karma, Upaniṣadic Concept of (Self) Ātman	Rajnandini Das
II	Cārvāka-epistemology, Metaphysics Jainism Syādvāda, Anekāntāvada	Punyamoni Baruah
III	Buddhism: Pratityasamutpāda, Nairātmavāda, Kṣaṇikatvavāda, Four Noble Truths	Punyamoni Baruah
IV	Nyāya : Pramā & Pramāṇa, Pratyakṣa, Anumāna and its Kinds,	Amitra Langthasa
	Vaiśeṣika Atomism, Padārtha, Sāmānaya, Viśeṣa, Samavāya, Abhāva,	Rajnandini Das
V	Sānkhya: Prakṛti, Puruṣa, Evolution	Paran Bothakur
	Viśiṣṭadvaita: Rāmānuja's Criticism of Śankara's Māyā, Brahman	Amitra Langthasa

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester

examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code:PHPHCC102T, Credits-06, Full Marks-100, Pass Marks-40
Name of Course::Logic-1

Unit	Topic	Teacher to whom allotted
I	Nature of Logic, Truth and Validity, Argument and Argument Form	Rajnandini Das
II	Kinds of Proposition::Traditional and Modern	Amitra Langthasa
	Square of Opposition::Traditional, Aristotelian, Boolean	Punyamoni Baruah
III	Immediate Inference: Conversion, Obversion, Contraposition, Mediate Inference: Categorical syllogism, Copi's Six Rules	Paran Bothakur
	Figure and Mood, Venn Diagram, Technique for Testing Syllogism	Punyamoni Baruah
IV	Symbolization, Testing Validity by Truth-table Method, Shorter Truth-table Method for Proving Invalidity.	Amitra Langthasa
V	Formal Proof of Validity (Nine Rules of Inference)	Paran Bothakur

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for implementation of BA (General) Philosophy Programme
First Semester: Course Code:PHPDSC101T, Credits-06, Full Marks-100, Pass Marks-40
Name of Course::Logic-1

Unit	Topic	Teachers to whom allotted
I	Nature of Logic, Truth and Validity, Argument and Argument Form	Rajnandini Das
II	Kinds of Proposition::Traditional and Modern	Amitra Langthasa
	Square of Opposition::Traditional, Aristotelian, Boolean	Punyamoni Baruah

III	Immediate Inference: Conversion, Obversion, Contraposition, Mediate Inference: Categorical syllogism, Copi's Six Rules	Paran Bothakur
	Figure and Mood, Venn Diagram, Technique for Testing Syllogism	Punyamoni Baruah
IV	Symbolization, Testing Validity by Truth-table Method, Shorter Truth-table Method for Proving Invalidity.	Amitra Langthasa
V	Formal Proof of Validity (Nine Rules of Inference)	Paran Bothakur

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for implementation of BA First Semester Generic Elective Course for learners of honours programmes of other than philosophy departments:

First Semester:Course Code:PHPGEC101T, Credits-06, Full Marks-100(Internal assessment 30 and End Semester External Evaluation 70), Pass Marks-40

Name of Course:: Logic-1

Unit	Topic	Teachers to whom allotted
I	Nature of Logic, Truth and Validity, Argument and Argument Form	Rajnandini Das
II	Kinds of Proposition::Traditional and Modern	Amitra Langthasa
	Square of Opposition::Traditional, Aristotelian, Boolean	Punyamoni Baruah
III	Immediate Inference: Conversion, Obversion, Contraposition, Mediate Inference: Categorical syllogism, Copi's Six Rules	Paran Bothakur
	Figure and Mood, Venn Diagram, Technique for Testing Syllogism	Punyamoni Baruah
IV	Symbolization, Testing Validity by Truth-table Method, Shorter Truth-table Method for Proving Invalidity.	Amitra Langthasa

V	Formal Proof of Validity (Nine Rules of Inference)	Paran Bothakur

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for TDC Honours Programme for 3rd and 5thSemester from July 2018 to December 2018

The different units and topics thereof of the Courses of BA (Philosophy Honours) Programme have been allotted to individual teachers as mentioned in the following tables. Details of plan for each unit and topic will be designed by each of the teachers to whom the units of the course/ courses are allotted. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be reflected in the university conducted end semester examinations for each semester.

THIRD SEMESTER::COURSE PHIH 301 ETHICS-I

Unit No.	Unit & Topics	Teacher to whom allotted
I	Nature of Ethics, Meta Ethics and Normative Ethics, Judgement, Facts and Value	Punyamoni Baruah
II	Concept of Good, Right and Duty, Virtue Ethics :Aristotle	Amitra Langthasa
III	Teleological Ethics: Hedonism, Utilitarianism (Bentham, Mill) Sarvodaya (M. K. Gandhi)	Rajnandini Das
IV	Deontological Ethics: Kant, Intuitionism: G E Moore	Paran Borthakur
V	Emotivism: A.J Ayer, C L Stevension, Prescriptivism: R M Hare	Paran Borthakur

THIRD SEMESTER::COURSE PHIH 302 LOGIC-I

Unit No.	Unit & Topics	Teacher to whom allotted
I	Nature of Logic, Truth and Validity, Laws of Thought, Traditional and Modern Classification of Propositions and Existential import	Amitra Langthasa
II	Immediate Inference: Conversion, Obversion & Contraposition	Paran Borthakur
III	Square of Opposition: Traditional, Aristotelian, Boolean,	Punyamoni Baruah
IV	Venn Diagram Technique for testing categorical syllogisms, Copi's Six rules for testing Categorical syllogism	Punyamoni Baruah

V	Preliminary Set Theory	Paran Borthakur

THIRD SEMESTER::COURSE PHIH 303 SOCIAL AND POLITICAL PHILOSOPHY

Unit No.	Unit & Topics	Teacher to whom allotted
I	Social and Political Philosophy: Scope and Concerns, Its relation to Sociology and Ethics	Amitra Langthasa
II	Concepts of family, Society, Nation, State and Ethnicity	Punyamoni Baruah
III	The Concepts of Social Contact, Reform and Revolution	Paran Borthakur
IV	Relation between Individuals and Society, Individualism, Collectivism	Rajnandini Das
V	Socialism and Capitalism	Paran Borthakur

FIFTH SEMESTER:: COURSE PHIH 501::CONTEMPORARY INDIAN PHILOSOPHY

Unit No.	Unit & Topics	Teacher to whom allotted
I	Swami Vivekānanda: The Real Nature of Man, Universal Religion	Paran Borthakur
II	Sri Aurobindo: Evolution of Consciousness	Punyamoni Baruah
III	M K Gandhi: Concepts of Swarāj and Ahiṁsā	Amitra Langthasa
IV	Rabindranath Tagore: Surplus in Man, Problem of Evil	Amitra Langthasa
V	S Radhakrishnan: Intellect and Intuition	Punyamoni Baruah
	K C Bhattacharya: Concept of Philosophy	Paran Borthakur

FIFTH SEMESTER:: COURSE PHIH 502:: PHILOSOPHY OF RELIGION

Unit No.	Unit &Topics	Teacher to whom allotted
I	Philosophy of Religion: Nature and Concerns	Rajnandini Das
II	Theories of Origin of Religion: Anthropological, Psychological	Rajnandini Das
III	Proof for the Existence of God: Ontological Argument, Cosmological Argument	Rajnandini Das
IV	Proof for the Existence of God: Teleological Argument, Moral Argument	Rajnandini Das
V	Problem of Evil, Faith, Reason and Revelation	Rajnandini Das

FIFTH SEMESTER:: COURSE PHIH 503:: GENERAL PSYCHOLOGY

Unit No.	Unit & Topics	Teacher to whom allotted
I	Definition, Scope and Methods of Psychology-Introspection, Extrospection, Experimental Methods	Punyamoni Baruah
II	Physiological Basis of Mental Life: Nervous System, Localisation of Brain Functions, Endocrine Glands	Punyamoni Baruah
III	Sensations-Weber Fechner Law, Structure and Functions of Eyes and Ears	Paran Borthakur
IV	Perceptions, Factors of Perceptions, Gestalt theory of Perception, Nature, Condition and Span of Attention	Paran Borthakur
V	Memory and Imagination, Marks of Good Memory, Laws of Association,	Paran Borthakur
	Levels of Consciousness-Unconscious, Freud's Theory of Dream, Emotion-various theories. Instinct-McDougall's Theory	Punyamoni Baruah

PLAN FOR IMPLEMENTATION OF HILOSOPHY PASS COURSE OF BA (PASS) PROGRAMME FOR ODD SEMESTERS (JULY 2018 TO DECEMBER 2018)

The different units and topics thereof of the Philosophy Pass Course of BA (Pass) Programme have been allotted to individual teachers of the department as mentioned in the following tables for the odd semesters from July 2018 to December 2018. Details of plan for each unit and topics will be designed by each of the teachers to whom the units and topics are allotted. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be counted in the university conducted examinations for each semester.

THIRD SEMESTER: PHIP 301::ETHICS - I

Unit No.	Unit & Topics	Teacher to whom allotted
I	Nature of Ethics: Its Concerns, Normative Ethics and Meta-ethics	Punyamoni Baruah
II	Fundamental Concepts: Right and Duties, Good and Virtue, Object of Moral Judgement	Amitra Langthasa
III	Teleological Ethics: Hedonism, Utilitarianism (Bentham, Mill), Sarvodaya (M K Gandhi)	Rajnandini Das
IV	Deontological Ethics: Kant – Good Will, Categorical Imperative	Paran Borthakur
V	Virtue Ethics: Aristotle – Nature and Kinds of Virtues	Paran Borthakur

FIFTH SEMESTER: PHIP 501::LOGIC - I

Unit No.	Unit & Topics	Teacher to whom allotted
I	Sentence and Proposition – Argument, Truth and Validity	Rajnandini Das
II	Four Basic Types of Propositions – AEIO, modern Classification of Propositions, and Existential Import	Amitra Langthasa
III	Immediate Inference: Conversion, Obversion, Contraposition	Paran Borthakur
IV	Categorical Syllogism: Figure, Mood, Rules of Validity, Fallacies	Paran Borthakur
V	Square of Opposition: Traditional, Aristotelian and Boolean Venn Diagram: Technique of Testing Syllogisms	Punyamoni Baruah

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

EVEN SEMESTERS from January 19 to June 2019

Plan for Implementation of B A (Philosophy) Honours and B A (Philosophy) General CBCS Programme

BA Second SEMESTER Honours Programme

Course Code:PHPHCC201T, Credits-06, Full Marks-100, Pass Marks-40

Name of Course:: Epistemology and Metaphysics (Western)

Unit	Topic	Teachers to whom allotted
I	Meaning and Scope of Philosophy, Metaphysics, Epistemology, Axiology, Concept of Applied Philosophy	Rajnandini Das
II	Plato: Theory of knowledge and Ideas. Aristotle: Form and Matter, Causation.	Amitra Langthasa
III	Theories of Knowledge: Empiricism, Rationalism, Kant's Critical Theory, Intuitionism.	Rajnandini Das
IV	Realism: Naive Realism, Representationalism, Neo- Critical Realism. Idealism: Subjective Idealism of Berkeley, Objective Idealism of Hegel	Punyamoni Baruah
V	Substance, Space, Time, Causality (Hume)	Paran Borthakur

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code:PHPHCC202T, Credits-06, Full Marks-100, Pass Marks-40
Name of Course:: ETHICS- I

Unit	Topic	Teachers to whom allotted
I	Nature of Ethics: Its concerns, Normative Ethics and Meta-ethics.	Punyamoni Baruah
	Fundamental Concepts: Concepts of Rights and Duties, Good and Virtue, Object of Moral Judgment.	Amitra Langthasa
II	Teleological Ethics: Hedonism, Utilitarianism, (Bentham and Mill), Sarvodaya. (Gandhi)	Rajnandini Das
	Virtue Ethics: Aristotle – Nature and Kinds of Virtues.	Paran Borthakur
III	Deontological Ethics: Kant – Good Will, Categorical Imperative.	Paran Borthakur
	Ethics of Gīta: Swadharma, Niskāma Karma.	Punyamoni Baruah
IV	Hindu Ethics: Puruṣārtha: The notion of Dharma.	Punyamoni Baruah
	Jaina Ethics: Ahimsā Buddhist Ethics: Theory of Action	Rajnandini Das
V	Definition and Scope of Applied Ethics. Environmental Ethics: Anthropocentrism and Eco-centrism.	Paran Borthakur
	Theories of Punishment: Retributive, Deterrent and Reformative.	Amitra Langthasa

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for implementation of BA (General) Philosophy Programme
Second Semester: Course Code:PHPDSC201T, Credits-06, Full Marks-100, Pass Marks-40
Name of Course:: ETHICS-I

Unit	Topic	Teacher to whom allotted
I	Nature of Ethics: Its concerns, Normative Ethics and Meta-ethics.	Punyamoni Baruah
	Fundamental Concepts: Concepts of Rights and Duties, Good and Virtue, Object of Moral Judgment.	Amitra Langthasa
II	Teleological Ethics: Hedonism, Utilitarianism, (Bentham and Mill),Sarvodaya. (Gandhi)	Rajnandini Das
	Virtue Ethics: Aristotle – Nature and Kinds of Virtues.	Paran Borthakur
III	Deontological Ethics: Kant – Good Will, Categorical Imperative.	Paran Borthakur
	Ethics of Gīta: Swadharma, Niskāma Karma.	Punyamoni Baruah
IV	Hindu Ethics: Puruṣārtha: The notion of Dharma.	Punyamoni Baruah
	Jaina Ethics: Ahimsā Buddhist Ethics: Theory of Action	Rajnandini Das
V	Definition and Scope of Applied Ethics. Environmental Ethics: Anthropocentrism and Eco-centrism.	Paran Borthakur
	Theories of Punishment: Retributive, Deterrent and Reformative.	Amitra Langthasa

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Plan for implementation of BA First Semester Generic Elective Course for learners of honours programmes of other departments:

First Semester:Course Code:PHPGEC201T, Credits-06, Full Marks-100(Internal assessment 30 and End Semester External Evaluation 70), Pass Marks-40
Name of Course:: ETHICS

Unit	Topic	Teachers to whom allotted
I	Nature of Ethics: Its concerns, Normative Ethics and Meta-ethics.	Punyamoni Baruah
	Fundamental Concepts: Concepts of Rights and Duties, Good and Virtue, Object of Moral Judgment.	Amitra Langthasa
II	Teleological Ethics: Hedonism, Utilitarianism, (Bentham and Mill), Sarvodaya. (Gandhi)	Rajnandini Das
	Virtue Ethics: Aristotle – Nature and Kinds of Virtues.	Paran Borthakur
III	Deontological Ethics: Kant – Good Will, Categorical Imperative.	Paran Borthakur
	Ethics of Gīta: Swadharma, Niskāma Karma.	Punyamoni Baruah
IV	Hindu Ethics: Puruṣārtha: The notion of Dharma.	Punyamoni Baruah
	Jaina Ethics: Ahimsā Buddhist Ethics: Theory of Action	Rajnandini Das
V	Definition and Scope of Applied Ethics. Environmental Ethics: Anthropocentrism and Eco-centrism.	Paran Borthakur
	Theories of Punishment: Retributive, Deterrent and Reformative.	Amitra Langthasa

Continuous and Comprehensive Assessment(CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

PLAN FOR IMPLEMENTATION OF BA HONOURS PROGRAMME 4th and 6th SEMESTER

From January 2019 to June 2019

The different units and topics thereof of the Courses of BA (Philosophy Honours) Programme have been allotted to individual teachers to be implemented in the even semesters from January 2019 to June 2019 as mentioned in the following table. Details of plan for each unit and topic will be designed by each of the teachers to whom the units of the course/ courses are allotted. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester.

Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be counted in the university conducted examinations for each semester.

FOURTH SEMESTER ::PHIH 401 :: ETHICS - II

Unit No.	Unit & Topics	Teacher to whom allotted
I	Hindu Ethics: Purusarthas and their inter-relation, varnāśrama Dharma, Ethics of Gītā: Svadharma and Niṣkāma karma	Punyamoni Baruah
II	Buddhist Ethics:Four Noble Truths, Eightfold Path Ethics of Jaina: Anubrata and Mahavratas	Rajnandini Das
III	Existentialist Ethics:	Punyamoni Baruah
IV	Contemporary Ethical Problems: Euthanasia, Amniocentesis	Punyamoni Baruah
V	Contemporary Ethical Problems: Animal Rights; Environmental Ethics: Anthropocentrism, Ecocentrism	Paran Borthakur

FOURT SEMESTER ::PHIH 402 :: LOGIC - II

Unit No.	Unit & Topics	Teacher to whom allotted
I	Values of Special Symbols, symbolization, Decision Procedure, Testing of Validity by Truth Table Method	Punyamoni Baruah
II	Proving Invalidity, Shorter Truth Table Technique, Indirect Method (Propositional Logic)	Punyamoni Baruah
III	Quantification, Symbolization, Rules, Formal Proof	Paran Borthakur
IV	J. S. Mill's Methods of Experimental Enquiry	Amitra Langthasa
V	Science and Hypothesis, Probability, (Theories of Addition and Multiplication and their joint application)	Amitra Langthasa

FOURTH SEMESTER ::PHIH 403 :: SOCIAL AND POLITICAL PHILOSOPHY - II

Unit No.	Unit & Topics	Teacher to whom allotted
I	Democracy, Fascism, Liberalism and Marxism, Secularism	Rajnandini Das
II	Feminism: Social construction of gender, Sex-gender relationship	Punyamoni Baruah
III	Social ideals: Liberty, Equality,	Amitra Langthasa
IV	Social Ideals: Justice, Human Rights	Amitra Langthasa
V	Insurgency, Terrorism, National Integration	Paran Borthakur

SIXTH SEMESTER ::PHIH 601 :: CONTEMPORARY PHILOSOPHY:WESTERN - II

Unit No.	Unit & Topics	Teacher to whom allotted

I	Bertrand Russell: Logic as the Essence of Philosophy	Paran Borthakur
II	Logical Positivism: Elimination of Metaphysics, Principle of Verification	Amitra Langthasa
III	Ludwig Wittgenstein: Picture Theory of Meaning, Language Game	Amitra Langthasa
IV	Husserl: Phenomenological Standpoint, Intentionality of Consciousness	Punyamoni Baruah
V	Salient Features of Existentialism: Theistic, Atheistic; Jean Paul Sartre: Existentialism and Humanism	Punyamoni Baruah

SIXTH SEMESTER ::PHIH 602 :: PHILOSOPHY OF RELIGION - II

Unit No.	Unit & Topics	Teacher to whom allotted
I	Religious Language: Cognitivist and Non-cognitivist Debate	Rajnandini Das
II	Fundamental Tenets of Living Religions, Religious Tolerance	Rajnandini Das
III	Conflicts of Religions and the possibility of Comparative Religions	Rajnandini Das
IV	Possibility of Interreligious Understanding, Religious Understanding, religious Pluralism	Rajnandini Das
V	Religion and Morality, Science and Religion	Rajnandini Das

SIXTH SEMESTER ::PHIH 603 :: GENERAL PSYCHOLOGY - II

Unit No.	Unit & Topics	Teacher
I	Theories of Learning: Trial and Error, Insight Theory	Punyamoni Baruah
II	Personality – factors of personality – Heredity and Environment; Intelligence – Measurement of Intelligence	Punyamoni Baruah
III	Contemporary Schools of Psychology; Branches of Psychology, Child Psychology, Experimental Psychology, Physiological Psychology, Abnormal Psychology, Industrial Psychology and Social Psychology	Punyamoni Baruah
IV	Psychological Concepts: Motivation, Stress, Conflict, Anxiety, Attitude, Aggression, Prejudice, Depression	Paran Borthakur
V	Aspects of Developmental Psychology: Sensory, Emotional, cognitive, Social and Cognitive.	Paran Borthakur

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

PLAN FOR IMPLEMENTATION OF PASS COURSE FOR EVEN SEMESTERS (January 2019 to June 2019)

The different units and topics thereof of the Philosophy Pass course of BA programme have been allotted to individual teachers as mentioned in the tables below for the even semesters from January 2019 to June 2019. Details of implementation plan for each unit and topics will be designed by each of the teachers to whom units or topics are allotted. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be counted in the university conducted examinations for each semester.

FOURTH SEMESTER ::PHIP 401 - ETHICS - II

Unit No.	Unit & Topics	Teacher to whom allotted
I	Hindu Ethics: Puruṣārtha, the Notion of Dharma	Punyamoni Baruah
II	Ethics of Gita: Swadharma and Niṣkāma Karma	Punyamoni Baruah
III	Jaina and Buddhist Ethics: Four Noble Truths, Eightfold Paths,Anuvrata and Mahāvrata	Rajnandini Das
IV	Theories of Punishment: Retributive, Deterrent, Reformative	Amitra Langthasa
V	Applied Ethics: Environmental Ethics: Anthropocentrism and Ecocentrism Animal Ethics: Animal Rights	Paran Borthakur

SIXTH SEMESTER ::PHIP 601 - LOGIC - II

Unit No.	Unit & Topics	Teacher to whom allotted
I	Use of Symbols, Truth Functions, Negation, Conjunction, Disjunction, Implication, Equivalence	Rajnandini Das
II	Decision Procedure and Testing Validity of Arguments by Truth Table Method	Punyamoni Baruah
III	Formal Proof of Validity	Paran Borthakur
IV	Mill's Method of Experimental Inquiry	Amitra Langthasa
V	Hypothesis and Scientific Inquiry	Amitra Langthasa

ATTESTED

Paran Borthakur
02/07/2019 Associate Professor & Head
(Dr Paran Borthakur) Department of Philosophy
Head i/c Haflong Government College
Department of Philosophy, Haflong Government College

Principal
Haflong, Govt. College
Haflong

Haflong Government College

Department of Political Science

Plan for Curriculum Implementation (CBCS)

Academic Session 2018-2019

ODD SEMESTER from July 2018to December 2018
EVEN SEMESTER from January 2019 to June 2019

The Department of Political science of Haflong Government College has made the following plan for implementation of the Curriculum of TDC Honors and Pass Course (CBCS) for the year 2018-19. The Curriculum is design by Assam University.

Plan for Implementation of TDC Honours Course:

The different units and topics thereof of the TDC honours course has been allotted to individual teachers as mentioned in the following table. Details of plan for each unit and topic will be designed by each of the teachers (the books here are referred by university and availability at local place)*

Haflong Government College
Plan for Curriculum Implementation Department of Political Science
ODD SEMESTER from July 2018to December 2018
EVEN SEMESTER from January 2019 to June 2019

The Department of Political science of Haflong Government College has made the following plan for implementation of the Curriculum of TDC Honours and Pass Course for the Session 2018-19. The Curriculum is design by Assam University.

Plan for Implementation of TDC Honours Course:

The different units and topics thereof of the TDC honours course has been allotted to individual teachers as mentioned in the following table. Details of plan for each unit and topic will be designed by each of the teachers(the books here are referred by university and availability at local place)* :

FIRST SEMESTER::COURSE PLSH 101 **Introduction to the political theory**

Unit No.	Unit & Topics	Texts	Further Readings*	Mode of Teachings	Teacher
I	Political Theory- Definition, Nature and Functions	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory),O.P. Gauba (AnIntroduction to Political Theory)	Lecture Tutorial Seminar Assignment	Mrs. Bhaswati Khersa
II	State- nature, origin of the state- theory of Social Contract, Evolutionary Theory and Marxian Theory	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory),O.P. Gauba (AnIntroduction to Political Theory)	Lecture Tutorial Assignment Seminar	Dr. Rakhi Moni Gogoi
III	Sovereignty – Meaning and Characteristics Theories of Sovereignty- Monistic and Pluralistic Theories	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory),O.P. Gauba (AnIntroduction to Political Theory)	Lecture Tutorial Seminar Assignment	Mrs. Roslyn L. Changsan
IV	Power, Authority and Legitimacy – meaning and their relationship	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory),O.P. Gauba (An Introduction to Political Theory)	Lecture Tutorial Seminar Assignment	Dr. Shilo L. Parate
V	Theories and Dimensions of Power	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Political Theory),O.P. Gauba (An Introduction to Political Theory)	Lecture Seminar Tutorial	Dr. L. Nampui

*Teacher can use other books also for reference purpose

FIRST SEMESTER::COURSE PLSH 102 Theories of International relations

Unit No.	Unit & Topics	Texts	Further Readings*	Mode of Teachings	Teacher
I	Nature and Scope of international Politics, Development of the study of international Politics , Emergence of Non	V.K.Malhotra (International Relations), J.C. Johari (International Relations and Politics : Theoretical Perspective in the	Prakash Chander (International relation), Mahendra Kumar (Theoritical aspects of International	Lecture Assignment Tutorial	Dr. L. Nampui

	State Actors	post cold war era)	Politics)	Seminar	
II	Theories of international politics: idealist theory, realist theory and systems theory	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chander (International relation) Mahendra Kumar (Theoritical aspects of International Politics)	Lecture Assignment Tutorial Seminar	Dr. Rakhi Moni Gogoi
III	National capability- Its components and limitations	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chander (International relation) Mahendra Kumar (Theoritical aspects of International Politics)	Lecture Assignment Tutorial	Mrs. Roslyn L. Changsan
IV	Control of interstate relations – balance of power and collective security	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chander (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lecture Seminar Assignment	Dr. Shilo L. Parate
V	Foreign policy and its determinants	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chander (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lecture Assignment Seminar	Mrs. Bhaswati Khersa

*Teacher can use other books also for reference purpose

FIRST SEMESTER::COURSE PLSH 103Greek Political Thinkers

Unit No.	Unit & Topics	Texts	Further Readings*	Mode of Teachings	Teacher
I	Greek Political Traditions: Sophists and Socrates	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought), R.C. Gupta (Great Political Thinkers: East and West)	Lecture Tutorial Seminar	Dr. Rakhi Moni Gogoi
II	Plato's the Republic- Justice, Education, Communism and Ideal State	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought),R.C. Gupta (Great Political Thinkers: East and West)	Lecture Tutorial Seminar	Mrs. Bhaswati Khersa
III	Plato's the Statesman and the Laws	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought),R.C. Gupta (Great Political Thinkers: East and West)	Lecture Tutorial Seminar	Dr. Shilo L.Parate
IV	Aristotle's Idea on Nature and End of State, Classification of the Constitution and Democracy	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought), R.C. Gupta (Great Political Thinkers: East and West)	Lecture Tutorial Seminar	Dr. L. LimiNampui
V	Aristotle's Idea on Slavery, Citizenship and Revolution	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought) R.C. Gupta (Great Political	Lecture Tutorial Seminar	Mrs. Roslyn L. Changsan

			Thinkers: East and West)		

*Teacher can use other books also for reference purpose

THIRD SEMESTER::COURSE PLSH 301 (COMPARATIVE GOVERNMENT AND POLITICS- 1)

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Comparative Politics: Meaning and Its Evolution, Nature and Scope	J.C. Johari (Comparative Politics)	S.N. Ray (Modern Comparative Politics : Approaches, Methods & Issues)	Lectures Tutorial Assignment	Dr. Rakhi Moni Gogoi
II	Approaches to Comparative Politics- Traditional and Modern	J.C. Johari (Comparative Politics) V. Bhagwan &V.Bhushan (World Constitution : a Comparative study)	S.N. Ray (Modern Comparative Politics : Approaches)	Lectures Tutorial Assignment	Dr. Shilo L.Parate
III	Classification of Political Systems- Democratic And Authoritarian, Unitary- Federal, Parliamentary- Presidential	J.C. Johari (Comparative Politics) V. Bhagwan &V.Bhushan (World Constitution : a Comparative study)	S.N. Ray (Modern Comparative Politics : Approaches)	Lectures Tutorial Assignment	Mrs. BhsawatiKhersa
IV	Political tradition and legacies of UK and USA, Characteristics of the Constitution	Hans Raj (Comparative Politics), V. Bhagwan &V.Bhushan (World Constitution)	S.N. Ray (Modern Comparative Politics : Approaches), A.C. Kapoor (World Constitution	Lectures Tutorial Assignment	Dr. Limi l. Nampui
V	Political tradition and legacies of Switzerland and China, Characteristics of the Constitution	Hans Raj (Comparative Politics), V. Bhagwan &V.Bhushan (World Constitution)	S.N. Ray (Modern Comparative Politics : Approaches), A.C. Kapoor (World Constitution	Lectures Tutorial Assignment	Mrs. Roslyn Changsan

THIRD SEMESTER:: COURSE PLSH 302 POLITICAL SOCIOLOGY

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Political Sociology- Definition and its scope, Critical assessment of political sociology as a formal subject	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment	Mrs. Bhaswati Khersa
II	Social stratification – Caste and Class	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S (Political sociology), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment	Mrs. Roslyn L. Changsan
III	Influence and Power- Meaning, Types & Relations	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment	Mrs. Roslyn L. Changsan
IV	Legitimacy and Authority: Meaning, types and Relations	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment	Mrs. Bhaswati Khersa
V	Distribution of Power- Marxist theory and Elite theories- Pareto And Mosca,	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah	Chakravarty, S. (Political sociology), Baruah M, Borah Pankaj	Lectures Tutorial	Dr. Rakhi Moni Gogoi

	Michaels and C.W. Mills	Pankaj (Political Sociology)	(Political Sociology)	Assignment	

THIRD SEMESTER::COURSE PLSH 303 PUBLIC ADMINISTRATION: THEORIES AND CONCEPTS

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Meaning, nature and scope of public administration, Evolution of Public administration as a discipline, public administration& private administration	Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration),	Lectures Assignment & Seminar	Dr. Liminampui
II	Theories of Organisation- a. Classical Theory; b. Scientific Management Theory; c. Bureaucratic Theory	Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration),	Lectures, Assignment & Seminar	Dr. Shilo Parate
III	Theories Of Organisation-Behavioural-: A. Human Relations Theory, B. Decision Making Theory, C. Systems Approach	Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration),	Lectures,Assignment & Seminar	Mrs. Roslyn Changsan
IV	Principles of organisation: Hierarchy, Span of Control, Unity of Control, Unity of Command	Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration),	Lectures,Assignment & Seminar	Dr. Rakhi Moni Gogoi
V	Structure of Organisation: Chief Executive – Line and Staff	Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration),)	Lectures Tutorial Assignment	Mrs. Bhaswati Khersa

Fifth Semester:: Course 501 Government and Politics in India-1

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Historical development of Indian Constitution- Features and Philosophy	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	D.D. Basu (Indian Constitution), Rajni Kothari (Politics In India)	Lectures Tutorial Assignment	Mrs. BhsawatiKhersa
II	Fundamental rights, fundamental duties, directive principles of state policy	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Zoya Hasan (Politics and State in India),) D.D. Basu (Indian Constitution)	Lectures Tutorial Assignment	Mrs. Roslyn Changsan
III	Structure of Government- President, Prime minister council of ministers (SH),	B.L. Fadia (Government and Politics in India),	Atul Kohli (Success of Indian Democracy), Prakash Chandra (	Lectures Tutorials	LimiNampui

	Parliament: structure, functions and role	S.L. Sikri (Indian Government and Politics)	Government and Politics in India), Rajni Kothari (Politics in India)	Assignments	
IV	Structure of Government: Governor, Chief Minister, Council of Ministers, State Legislature	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Prakash Chandra (Government and Politics in India), Rajni Kothari (Politics in India)	Lectures Tutorials Assignments	Dr. Shilo parate
V	Judicial System- Supreme Court- High Court- Judicial Review, Judicial Activism	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Bipan Chandra and M. Mukherjee (India Since Independence), Rajni Kothari (Politics in India)	Lectures Tutorials Assignments Seminar	Dr. Rakhi Moni Gogoi

Fifth Semester:: Course PLSH 502 Socialist thinkers1

Unit No.	Unit &Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Early socialists- St. Simon, Charles Fourier, Robert Owen	P.G. Das (History of Political Thought), S. Mukherjee(A History of Political Thought : From Plato to Marx)	Gupta, R.C (Great Political Thinkers (East and West), P.G. Das (History of Political Thought),	Lectures, Tutorial Assignment, Seminar	Bhaswati Khersa
II	Precursors of Marx- Hegel and Feuerbach	J.C. Johari (socialist Thinkers), Mukherjee and Ramaswamy (World's Greatest Socialist Thinkers)	Nelson (Western Political thought: from Socrates to the age of ideology)	Lectures, Tutorial Assignment, Seminar	Dr. Rakhi Moni Gogoi
III	Marx- Dialectical Materialism, Historical Materialism, Theory of Surplus Value, Class Struggle	P.G. Das (History of Political Thought), S. Mukherjee(A History of Political Thought : From Plato to Marx) ,	Mukherjee and Ramaswamy (World's Greatest thinkers) , J.C. Johari (Socialist Thinkers),	Lectures, Tutorial Assignment, Seminar	Dr. Roslyn Changsan
IV	Marx- Alienation, State, Dictatorship of the Proletariat	P.G. Das (History of Political Thought), S. Mukherjee(A History of Political Thought : From Plato to Marx) ,	Nelson (Western Political thought: from Socrates to the age of ideology), Mukherjee and Ramaswamy (World's Greatest thinkers) , J.C. Johari (Socialist Thinkers),	Lectures, Tutorials Assignments, Seminar	Dr. Shilo Parate
V	Lenin- Imperialism, State and Revolution, Party, Dictatorship of the proletariat	P.G. Das (History of Political Thought), S. Mukherjee(A History of	Nelson (Western Political thought: from Socrates to the age of ideology), Mukherjee and	Lectures, Tutorials, Assignments, Seminar	Dr. LimiNampui

		Political Thought : From Plato to Marx) ,	Ramaswamy (World's Greatest thinkers) , J.C. Johari (Socialist Thinkers),		

Fifth Semester:: Course 503 Freedom Movement and Politics in North East India-1

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Geo- political and Historical profile of North East in the 19th century- British Annexation and the Amalgamation of Sylhet and Cachar to Assam and its consequence	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures, Tutorials, Assignments, Seminar	Dr. Rakhi Moni Gogoi
II	Nature and Growth of freedom struggle in different parts of the north east in the 19th century- revolt of 1857 and the North East – Rebellion by the Nobles- Popular uprisings	Edward Gait(History of Assam), Priyam Goswami (The history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam) , Pathak & Pathak (History of Assam)	Lectures Tutorial Assignment Seminar	Dr. Rakhi Moni Gogoi
III	Formation of the Indian National Congress- the Moderate and militant phase and their impact on the north east	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorials Assignments	Dr. LimiNampui
IV	Gandhian era- non co operation movement and the north East	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorials Assignments Seminar	Dr. Shilo Parate
V	Civil disobedience movement, Quit India Movement and the North East	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorials Assignments	Mrs. Bhaswati Khersa

		Yandabo to partition), P.N. Datta (History of Assam)		Seminar	

PLAN FOR IMPLEMENTATION OF PASS COURSE FOR ODD SEMESTERS (JULY 2018 TO DECEMBER 2018)

FIRST SEMESTER: PLSP 101 Introduction to Political Theory

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Nature And Scope Of Political Science, Growth Of Political Science As A Discipline, Relation With Social Sciences – Economics, History, Sociology, Ethics And Geography	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Mrs. Bhaswati Khersa
II	Nature Of The State- The Juridical Theory, The Organismic Theory, The Idealistic Theory, Marxian Theory	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Dr. Shilo Parate
III	The Concept Of Sovereignty: Monism And Pluralism	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Mrs. Roslyn Changsan
IV	The Concept Of Power , Legitimacy And Authority	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Dr. L.Nampui
V	The Concept Of Democracy, Critiques On Democracy- Stalinism And Fascism	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Dr. Rakhi Moni Gogoi

THIRD SEMESTER: PLSP 301Comparative Government and Politics

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Comparative Politics : Meaning , Evolution, Nature And Scope	N.C.Mazumdar(Comparative Government and Politics), J.C. Johari (Comparative Politics),	Hans Raj (Comparative Politics), Kesselman, Krieger and Joseph(Introduction to Comparative Politics)	Lectures Tutorial Assignment	Rakhi Moni Gogoi
II	UK : Sources And Characteristics Of The Constitution, Rule Of Law, Conventions	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	A.C. Kapoor (Select Constitution), Almond,Bingham,Dalton and Strom(Comparative Politics Today : a world	Lectures Tutorial Assignment	Dr. L.Nampui

			view)		
III	UK : Parliamentary Government, Monarchy, Cabinet Parliament(Role And Functions), Political Parties And Interest Groups	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	A.C. Kapoor (Select Constitution), Almond,Bingham,Dalton and Strom(Comparative Politics Today : a world view)	Lectures Tutorial Assignment	Mrs. Roslyn Changsan
IV	US : Characteristics Of The Us Constitution, Federal System, The Amendment Process Of The Constitution	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	A.C. Kapoor (Select Constitution), Almond,Bingham,Dalton and Strom(Comparative Politics Today : a world view)	Lectures Tutorial Assignment	Mrs. Bhaswati
V	National Government, The President, The Congress And The Supreme Court (Role And Functions) (SH) Political Parties And Interest Groups (RC)	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	A.C. Kapoor (Select Constitution), Almond,Bingham,Dalton and Strom(Comparative Politics Today : a world view)	Lectures Tutorial Assignment	Dr. Shilo Parate & Mrs. Roslyn Changsan

FIFTH SEMESTER: PLSP 501 GOVERNMENT AND POLITICS IN INDIA

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Historical Background And The Making Of The Constitution	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Government and Politics)	Prakash Chandra (Indian Government and Politics)	Lectures Tutorial Assignment	Mrs. Bhaswati Khersa
II	Important Features And Philosophy Of The Constitution	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Government and Politics)	Prakash Chandra (Indian Government and Politics)	Lectures Tutorial Assignment	Dr. LimiNampui
III	Fundamental Features , Directive Principles Of The State Policy	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Government and Politics)	Prakash Chandra (Indian Government and Politics)	Lectures Tutorial Assignment	Mrs. Roslyn Changsan
IV	Federal System: Nature, Union State Relation : Emerging Trend	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Government and Politics)	Prakash Chandra (Indian Government and Politics)	Lectures Tutorial Assignment	Dr. Shilo Parate
V	Amendment Procedures, Important Amendments- 24^{th}, 25^{th} ,42^{nd} ,44^{th}	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Government and Politics)	Prakash Chandra (Indian Government and Politics)	Lectures Tutorial Assignment	Dr. Rakhi Moni Gogoi

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

PLAN FOR IMPLEMENTATION OF HONOURS COURSE

SECOND SEMESTER **PLSH 201**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Liberty and equality- Meaning and attributes, mutual relationship	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory), O.P. Gauba (An Introduction to Political Theory)	Lectures Tutorial Assignment	Rakhi monigogoi
II	Theories of property- Liberal, Anarchist and Marxist	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory), O.P. Gauba (An Introduction to Political Theory)	Lectures Tutorial Assignment	Mrs Roslyn Changsan
III	Theories of democracy- Classical and Modern, Liberal and Marxist, Critiques on Democracy	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory), O.P. Gauba (An Introduction to Political Theory)	Lectures Tutorial Assignment	Miss Shilo Parate
IV	Spheres and Limits of State activities- Liberal, Fascist, Marxian and Gandhian Interpretations	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory), O.P. Gauba (An Introduction to Political Theory)	Lectures Tutorial Assignment	Mrs. Bhaswati Khersa
V	Emerging trends in political theory- Human Rights and Feminism	V.D. Mahajan (Political theory) N.D. Arora & S.S. Avasthy (Political Theory)	J.C. Johari (Contemporary Political Theory), O.P. Gauba (An Introduction to Political Theory)	Lectures Tutorial Assignment	Ms. LimiNampui

SECOND SEMESTER: PLSH 202 **Problems of International Politics**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Cold war- origins and Development	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chandra (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lectures, Tutorial, Assignment, Seminar	Roslyn Changsan
II	Multi Polar World and Detente	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chandra (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lectures Tutorial, Assignment, Seminar	Rakhi monigogoi

III	Disarmament and its Linkage to Development	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chandra (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lectures Tutorial, Assignment, Seminar	Rakhi monigogoi
IV	Globalisation, IMF, World Bank and WTO	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chandra (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lectures Tutorial, Assignment, Seminar	Shilo parate
V	Problem of Terrorism	V.K.Malhotra (International Relations) J.C. Johari (International Relations and Politics : Theoretical Perspective in the post cold war era)	Prakash Chandra (International relation) Mahendra Kumar (Theoretical aspects of International Politics)	Lectures Tutorial, Assignment, Seminar	Liminampui

SECOND SEMESTER **::PLSH 203 MODERN POLITICAL THINKERS**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Machiavelli: Science of Statecraft, Separation of Ethics from Politics	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought) R.C. Gupta (Great Political Thinkers: East and West)	Lectures Tutorial Assignment	Rakhi monigogoi
II	Hobbes: State of nature, Social Contract, Sovereignty, Political Obligation	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought) R.C. Gupta (Great Political Thinkers: East and West)	Lectures Tutorial Assignment	Shilo parate
III	Locke: State of Nature, Social Contract, Political Obligation, Rights of Citizen	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought) R.C. Gupta (Great Political Thinkers: East and West)	Lectures Tutorial Assignment	Liminampui
IV	Rousseau: State of Nature, Social Contract, General Will and Political Obligation	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought) R.C. Gupta (Great Political Thinkers: East and West)	Lectures Tutorial Assignment	Roslyn Changsan
V	J S Mill : Liberty and Representatives government	V.V.Rao (Ancient Political Thought) P.G. Das (History of Political thought)	S. Mukherjee & S. Ramaswamy (A History of political Thought) R.C. Gupta (Great Political Thinkers: East and West)	Lectures Tutorial Assignment	Bhaswati Khersa

FOURTH SEMESTER **:: PLSH 401 COMPARATIVE GOVERNMENT AND POLITICS**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Political system of U.K—power, position and role of the crown—the cabinet-the Prime minister-the parliament –composition and functions of the House of commons – the speaker- the house of lords – relation between the two houses	N.C.Mazumdar(Comparative Government and Politics), J.C. Johari (Comparative Politics),	Hans Raj (Comparative Politics), A.C. Kapoor (Comparative Politics)	Lectures Tutorial Assignment	LimiNampui
II	Political system of U.S.A ---nature of federation—amendment procedure- the Congress:- Composition, Powers and Role- The President, Powers and Functions, the Supreme Court and the Judicial Review	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	Hans Raj (Comparative Politics), A.C. Kapoor (Comparative Politics)	Lectures Tutorial Assignment	Shilo Parate
III	Political System of Switzerland: Federal System – Amendment Procedure- Direct Democracy, The National Government- The Judicial System	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	Hans Raj (Comparative Politics), A.C. Kapoor (Comparative Politics)	Lectures Tutorial Assignment	Roslyn Changsan
IV	Political System of Peoples Republic of China- State Structure- Power and Role of Communist Party Of China- Party- State Relations- Judicial Review	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	Hans Raj (Comparative Politics), A.C. Kapoor (Comparative Politics)	Lectures Tutorial Assignment	Rakhi Moni Gogoi
V	Comparison Between the Political System Of UK.USA, Switzerland and China	N.C.Mazumdar(Comparative Government and Politics), Vidya Bhushan &Vishnoobhagwan (world Constitution)	Hans Raj (Comparative Politics), A.C. Kapoor (Comparative Politics)	Lectures Tutorial Assignment	Bhaswati Khersa

FOURTH SEMESTER **::**PLSH 402 :: **POLITICAL SOCIOLOGY**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Political Culture and Political Socialisation- Types and relations, Agents of Political Socialisation	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment Seminar	Bhaswati Khersa
II	Political Participation- Mode and Determinants, Political apathy	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S (Political sociology), Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment Seminar	LimiNampui

III	Political Parties – Importance , Types, Role & Function	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment Seminar	Shilo Parate
IV	Pressure Groups- Types & Role	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment Seminar	Roslyn Changsan
V	Political Development – Attributes and theories of Political Development Lucian Pye and Huntington	Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Chakravarty, S. (Political sociology), Ashraf A, Sharma LN (A New Grammar of politics), Baruah M, Borah Pankaj (Political Sociology)	Lectures Tutorial Assignment Seminar	Rakhi Moni Gogoi

FOURTH SEMESTER **:: PLSH 403 Public administration in India**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Evolution of Modern Administration in India	Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration),	M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration)	Lectures Tutorial Assignment Seminar	Rakhi monigogoi
II	Personal Administration in India- Recruitment- Training, Promotion, Motivation, Morale	Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration),	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration)	Lectures Tutorial Assignment Seminar	Shilo Parate
III	UPSC: Composition, Functions and Role, Relation between Ministers and Civil Servants	Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration),	M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration),	Lectures Tutorial Assignment Seminar	Roslyn Changsan
IV	Financial Administration – Budgetary Processes in India, Parliamentary Control over Finance in India, Comptroller and Auditor General of India	Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration)	Lectures Tutorial Assignment Seminar	Rakhi moni Gogoi
V	Citizen and Administration – Institution of Ombudsman in India, Lokpal &Lokayukta, Right to Information **(LN)**	Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration), G. Das (Fundamental of Public Administration)	Maheswari,S.R. (Public Administration), M.P. Sharma & B.L. Sadana (Public Administration), Avasthi and Maheshwari (Public Administration), Sachdeva & Gupta (A simple study of Public Administration)	Lectures Tutorial Assignment Seminar	Limi Nampui

SIXTH SEMESTER **::** **PLSH 601 Government & Politics in India**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Party system- origin, development and changing nature	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	D.D. Basu (Indian Constitution), Rajni Kothari (Politics In India)	Lectures Tutorial Assignment	Roslyn Changsan
II	Structure, Ideology, and social base of national and regional parties	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Zoya Hasan (Politics and State in India),) D.D. Basu (Indian Constitution)	Lectures Tutorial Assignment	Limi nampui
III	Political Dynamics- Secularism, Regionalism, National Integration- Role of Religion , Caste and Language	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Atul Kohli (Success of Indian Democracy), Prakash Chander (Government and Politics in India), Rajni Kothari (Politics in India)	Lectures Tutorial Assignment	Bhaswati Khersa
IV	Electoral politics in India- patterns and trends	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Prakash Chandra (Government and Politics in India), Rajni Kothari (Politics in India)	Lectures Tutorial Assignment	Rakhi Moni Gogoi
V	Federalism and democratic decentralization- recent trends	B.L. Fadia (Government and Politics in India), S.L. Sikri (Indian Government and Politics)	Bipan Chandra and M. Mukherjee (India Since Independence), Rajni Kothari (Politics in India)	Lectures Tutorial Assignment	Shilo Parate

SIXTH SEMESTER ::PLSH 602 SOCIALIST THINKERS

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Stalin: Nationality Question And Socialism In One Country **(LN)**	P.G. Das (History of Political Thought), S. Mukherjee(A History of Political Thought : From Plato to Marx) ,	Nelson (Western Political thought: from Socrates to the age of ideology), Mukherjee and Ramaswamy (World's Greatest thinkers)	Lectures Tutorial Assignment Seminar	LimiNampui

II	Mao : On Practice, On Contradiction	Mukherjee and Ramaswamy (World's Greatest Socialist Thinkers) , Gupta, R.C (Great Political Thinkers (East and West),	Nelson (Western Political thought: from Socrates to the age of ideology), P.G. Das (History of Political Thought), Mukherjee and Ramaswamy (World's Greatest thinkers)	Lectures Tutorial Assignment Seminar	Shilo Parate
III	Mao: New Democracy, Cultural Revolution, On War	P.G. Das (History of Political Thought), S. Mukherjee(A History of Political Thought : From Plato to Marx) ,	Mukherjee and Ramaswamy (World's Greatest thinkers) , J.C. Johari (Socialist Thinkers),	Lectures Tutorial Assignment Seminar	Roslyn Changsan
IV	Euro Communism	P.G. Das (History of Political Thought), S. Mukherjee(A History of Political Thought : From Plato to Marx) , J.C. Johari (socialist Thinkers),	Gupta, R.C (Great Political Thinkers (East and West), P.G. Das (History of Political Thought),	Lectures Tutorial Assignment Seminar	Bhaswati Khersa
V	New Left: Che Guevara, Herbert Marcuse	J.C. Johari (socialist Thinkers), Mukherjee and Ramaswamy (World's Greatest Socialist Thinkers) ,	Nelson (Western Political thought: from Socrates to the age of ideology)	Lectures Tutorial Assignment Seminar	Rakhi Moni Gogoi

SIXTH SEMESTER **::**PLSH 603 **FREEDOM MOVEMENT & NORTH EAST INDIA**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	North East in the twilight of independence – Cabinet Mission, Grouping Plan and Partition	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorial Assignment Seminar	Rakhi Moni Gogoi
II	Congress and Muslim League Politics in the North East- Question of Sylhet's Reunion with Bengal- Referendum and the transfer of Sylhet to Pakistan and its Consequences	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorial Assignment Seminar	Rakhi Moni Gogoi
III	Politics of immigration before and after independence	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorial Assignment Seminar	LimiNampui

IV	Language politics and reorganisation of Assam, Anti foreigners agitation in Assam and its consequence on the North East	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorial Assignment Seminar	Shilo parate
V	Autonomy /statehood movements, insurgency and its impact	Edward Gait(History of Assam), Priyam Goswami (the history of Assam : From Yandabo to partition), P.N. Datta (History of Assam)	H.K. Borpujari (Political History of Assam), Pathak & Pathak (History of Assam)	Lectures Tutorial Assignment Seminar	Bhaswati khersa

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

PLAN FOR IMPLEMENTATION OF TDC PASS COURSE

SECOND SEMESTER **::**PLSP 201

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Nationalism- meaning, origin, value and limitations, growth of nation state	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Shilo Parate
II	Spheres of state activity: Liberalism, Marxism and Gandhism	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Rakhi monigogoi
III	Plato- Justice, Education, Communism , Ideal State	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Bhaswati khersa
IV	Aristotle- State, Slavery, Democracy	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Liminampui
V	Aristotle- Citizenship, Classification of constitution, Theory of Revolution	V.D. Mahajan (Political Theory), N.C. Majumdar (Political theory)	O.P. Gauba (Introduction to Political Theory)	Lectures Tutorial Assignment	Roslyn Changsan

FOURTH SEMESTER **::**PLSP **401 COMPARARTIVE GOVERNMENT AND POLITICS**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Switzerland- Characteristics of the Swiss Constitution, Federal System, the amendment procedure of the constitution	N.C.Mazumdar(Comparative Government and Politics), A.C. Kapoor (Comparative Politics)	Vidya Bhushan and Vishnoo Bhagwan (World Constitution : A comparative study)	Lectures Tutorial Assignment	Bhaswati khersa
II	Switzerland - National Government- the Federal Council, the Federal Legislature	N.C.Mazumdar(Comparative Government and Politics), A.C. Kapoor (Comparative Politics)	Vidya Bhushan and Vishnoo Bhagwan (World Constitution : A comparative	Lectures Tutorial Assignment	Shilo parate

			study)		
III	Switzerland - The judicial system	N.C.Mazumdar(Comparative Government and Politics), A.C. Kapoor (Comparative Politics)	Vidya Bhushan and Vishnoo Bhagwan (World Constitution : A comparative study)	Lectures Tutorial Assignment	Roslyn changsan
IV	Characteristics of the Chinese Constitution, Fundamental Rights and Duties of the Citizens	N.C.Mazumdar(Comparative Government and Politics), A.C. Kapoor (Comparative Politics)	Vidya Bhushan and Vishnoo Bhagwan (World Constitution : A comparative study)	Lectures Tutorial Assignment	Limi Nampui
V	The Chinese Revolutionary legacy, Structure and functions of the government , National People's Congress, Standing Committee, State Council, Judicial System (Role and Functions)	N.C.Mazumdar(Comparative Government and Politics), A.C. Kapoor (Comparative Politics)	Vidya Bhushan and Vishnoo Bhagwan (World Constitution : A comparative study)	Lectures Tutorial Assignment	Rakhi moni gogoi

SIXTH SEMESTER ::PLSP 601 **GOVERNMENT AND POLITICS IN INDIA**

Unit No.	Unit & Topics	Texts	Further Readings	Mode of Teachings	Teacher
I	Government Structure: Union, President, Prime Minister, Cabinet and Parliament	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Governmnet and Politics)	Prakash Chander (Indian Government and Politics)	Lectures Tutorial Assignment	Bhaswati Khersa
II	Govt. Structure: State- Governor, Chief Minister, Council of Minister and State Legislature	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Governmnet and Politics)	Prakash Chander (Indian Government and Politics)	Lectures Tutorial Assignment	Roslyn Changsan
III	Judicial System- Supreme Court and High Court, Judicial Review	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Governmnet and Politics)	Prakash Chander (Indian Government and Politics)	Lectures Tutorial Assignment	Shilo Parate
IV	Political Parties and the Party System- National (CONG., BJP. And Communist Parties) and Regional Parties(AGP, Akali Dal and TDP)- Structure and Ideology, Coalition Politics	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Governmnet and Politics)	Prakash Chander (Indian Government and Politics)	Lectures Tutorial Assignment	Rakhi Moni Gogoi
V	Political Institutions at the Local Level – Panchayat System in Assam, administration in the hill district of Assam	N.C.Mazumdar (Indian Government and politics), BL Fadia (Indian Governmnet and Politics)	Prakash Chander (Indian Government and Politics)	Lectures Tutorial Assignment	LimiNampui

1. **DR. RAKHI MONI GOGOI**
2. **MRS. BHASWATI KHERSA**
3. **MRS. ROSLYN LAMTINTHEM CHANGSAN**
4. **DR. LOILUNGTHIANGLIMI NAMPUI**
5. **SHILO PARATE**

Rakhi M. Gogoi 23/7/2018
HOD
Political Science, HGC

Principal
Haflong Govt. College
Haflong Govt. College
Haflong

DEPARTMENT OF BOTANY
HAFLONG GOVT. COLLEGE. HAFLONG.

Plan for implementation of TDC and CBCS, Pass & Honours Course.
Session- 2018-2019.

ODD SEMESTER FROM JULY2018

UNIT	PAPER HONOURS	MARKS	COURSE CONTENTS OF PAPER/TOPICS	UNIT WISE TAUGHT BY FACULTY
IV&V	BOTHCC101T	30	Algae-general characteristic, division of algae	Kalpana Kumari Hazarika
V	BOTHCC102T	20	Cell division	
	BOTHCC103L	50	Qualitative tests, cell structure, etc.	
I	BOTHHCC104L	50	Plant water relation	
I	BOTH301	7	Nitrogen metabolism	
II	BOTH302	7	Secondary body of plant	
III	BOTH303	7	Botanical nomenclature	
III&V	BOTH501	7	Conservation Biology, Role of national and International organism	
	BOTH502	14		
IV	BOTHCC101T	20	Algae-Significant contribution of important Phycologists	Dr. Jamshed Ali
	BOTHCC102T	50	Biomolecules	
I	BOTHCC103L	10	Phycology	
IV	BOTH301	7	Transport of organic substance	
II	BOTH302	14	Growth and development	
I&II	BOTH303		Meristems and development/secondary body of the plant	
IV	BOTH501	7	Phylogeny of angiosperms	
IV	BOTH502	7	Diversity of ecosystems	
V	BOTH503	7	Alternations in genetic make up	
II	BOTHCC101T	20	Viruses	Dr. Monohar Deka
IV	BOTHCC102T	20	Cell organelles	
	BOTHCC104L	50	Biomolecules and cell biology	
III	BOTH301	7	Photosynthesis, Carbohydrate and Lipid metabolism	
V	BOTH302	7	Plant fibres, timber and firewood, rubber	
V	BOTH303	7+7	Introduction, systematic practice	
I, II	BOTH501	7	Impact of human activities	
IV	BOTH502			
III	BOTHCC101T	20	Bacteria	Ron Kemprai
III	BOTHCC102T	20	Cell structures	
	BOTHCC104L	50	Biomolecules and cell biology	
II	BOTH301	7	Mineral Nutrition	
IV	BOTH302	7	Protein metabolism/Carbohydrates	
III	BOTH303	7	Domestication of plant	
II, III & IV	BOTH503	21	Maternal influence on inheritance, Multiple alleles, Linkage	
I	BOTHCC101T	20	Introdution to microbial world	Dr. R. K. Upadhyay
II	BOTHCC102T	20	Bioenergetics enzymes	
	BOTHCC104L	50	Biomolecules and cell biology	
V	BOTH301	7	Respiration	
III	BOTH302	7	Energy of flow and enzymology	
IV	BOTH303	7	Cereals and carbohydrates	
V	BOTH501	7	Modern taxonomy	
I	BOTH502	7	The environment	
I	BOTH503	7	Genetics, Mendels experiments	

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

HoD. Botany
Haflong Govt. College
Haflong

UNIT	PAPER PASS	MARK	COURSE CONTENTS OF PAPER / TOPICS	UNIT WISE TAUGHT BY FACULTY
I IV IV	BOTDSC101T BOTDSC102L BOTP301 BOTP501	20 50 7 7	Microbes Biodiversity (Microbes, Algae, Fungi and Archegoniate Classification of Angiosperms, enzymology	Kalpana Kumari Hazarika
II V V	BOTDSC101T BOTDSC102L BOTP301 BOTP501	20 50 7 7	Algae and fungi Biodiversity(Microbes,Algae,Fungi and Archegoniate Diversity of flowering plants Growth and development	Dr. Jamshed Ali
V II II&III	BOTDSC101T BOTDSC102L BOTP301 BOTP501	20 50 7 14	Gymnosperm Biodiversity(Microbes,Algae,Fungi and Archegoniate Gymnosperm classification Photosynthesis, Respiration	Dr.ManoharDeka
III I I	BOTDSC101T BOTDSC102L BOTP301 BOTP501	20 50 7 7	Bryophytes Biodiversity (Microbes, Algae, Fungi and Archegoniate Characteristics of seed plant Plant water relation	Mr. RonKemprai
IV III IV	BOTDSC101T BOTDSC102L BOTP301 BOTP501	20 50 7 7	Pteridophytes Biodiversity (Microbes, Algae, Fungi and Archegoniate Angiosperm taxonomy Mineral Nutrition, N_2 Metabolism	Dr. R. K. Upadhyay

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

HoD. Bota
Haflong Govt. College
Haflong

EVEN SEMESTER

UNIT	PAPER HONOURS	MARKS	COURSE CONTENTS OF PAPER/TOPICS	UNIT WISE TAUGHT BY FACULTY
II	HCC201T	7	Division of Fungi	KalpanaKumariHazarika
I	HCC202T	7	Unifying characters of Archegoniate	
-	HCC203L	50	Mycology and phytopathology	
-	HCC204L	50	Plant ecology and taxonomy	
III	BOTH401	7	Palynology	
IV	BOTH402	7	Bryophytes	
I	BOTH403	7	The seed bearing plants	
II(A)	BOTH404	15	Technique, grafting, fossil, etc.	
I	BOTH601	7	Plant breeding	
IV	BOTH602	7	Bacteriology	
IV	BOTH603	7	Major disease f plant and their control	
I(B)	BOTH604	10	Field study and reporting	
I	HCC201T	7	Introduction to true fungi	Dr.Jamshed Ali
III	HCC202T	7	Type studies- Bryophytes	
-	HCC203L	50	Mycology and phytopathology	
-	HCC204L	50	Plant ecology and taxonomy	
I	BOTH401	7	Ethnobotany	
III	BOTH402	7	Fungi	
IV	BOTH403	7	Flowerq	
IA	BOTH404P	15	Morphology and anatomy	
II	BOTH601	7	Gene structure	
V	BOTH602	7	Industrial microbiology	
V	BOTH603	7	Major disease of plant and control	
IIIA	BOTH604	7	Plant pathology	
V	HCC201T	7	Phytogeography	Dr.MahoharDeka
V	HCC202T	7	Gymnosperm	
-	HCC203L	50	Mycology and Phytopathology	
-	HCC204L	50	Plant Ecology and taxonomy	
V	BOTH401	7	Geological time scale	
II	BOTH402	7	Algae	
II	BOTH403	7	Gymnosperm	
II(B)	BOTH404P	15	Seminar/Demonstration	
V	BOTH601	7	Agrobacterium	
III	BOTH602	7	Virology	
I	BOTH603	7	General concept of plant pathology	
III(B)	BOTH604	25	Determination of chromosome/RNA/DNA	
IV	HCC201T	7	Applied Mycology	Ron Kemprai
II	HCC202T	7	Bryophytes	
IV	HCC203L	50	Mycology and Phytopathology	
I	HCC204L	50	Plant Ecology and taxonomy	
III	BOTH401	7	Palaeobotany	
III(A)	BOTH402	7	Algae	
III	BOTH403	7	Angiosperm - organography	
I	BOTH404	15	Field report and herbarium etc	
III	BOTH601	7	Recombinant DNA technology	
A(I&II)	BOTH 602	7	Systemic position of microrganism	
	BOTH603	7	Genetic resistance and susceptibility	

Principal
HAFLONG GOVT. COL...
HAFLONG

HoD, Botany
Haflong Govt. C...
Haflong

	BOTH604	32	Project work;Microbiology	
III	HCC201T	7	Symbiotic association	
IV	HCC202T	7	Pteridophytes	
-	HCC203L	50	Mycology and Plant Pathology	
-	HCC204L	50	Ecology and Taxonomy	
II	BOTH401	7	Horticulture	
V	BOTH402	7	Pteridophytes	
V	BOTH403	7	Mechanism and agencies of pollination	Dr. R. K. Upadhyay
I(B)	BOTH404	30	Physiological practical	
V	BOTH601	7	Plant biochemistry	
I&II	BOTH602	7	Systematic methods in microbiology	
II	BOTH603	7	Plant disease/management	
II(B)	BOTH604	10	Physiological practical	

UNIT	PAPER PASS	MARK	COURSE CONTENTS OF PAPER/TOPICS	UNIT WISE TAUGHT BY FACULTY
V	BOTDSC/GE 201T	7 50	Classification of Angiosperm Archegoniate	
II	BOTDSC/GL 202L	7 5		KalpanaKumariHazarika
I	BOTP401	7	The Shoot system	
IV	BOTP402(P)	10	Practical-Cycas,Pinus,Gnetumetc	
I	BOTP601		Vegatation types of India	
	BOTP602(P)		Study of permeability,plasma membrane etc	
III	BOTDSC/GE 201T	7 50	Introduction to plant taxonomy Archegoniate	
	BOTDSC/GL 202L	7 5		Dr.Jamshed Ali
I	BOTP401	7	Diversity of plant form	
I	BOTP402(P)	10	Angiosperm families	
II	BOTP601		Plant and environment/Viva Voce	
III	BOTP602(P)		Practical record/Viva Voce	
II	BOTDSC/GE 201T	7 50	Ecosystem and Phytogeography Archegonate	
	BOTDSC/ 202L		Root system, Leaf	Dr.ManoharDeka
III	BOTP401	7	Primary and secondary growth, anther, pollen	
II	BOTP402(P)	5	grain	
III	BOTP601	7	Population ecology	
I	BOTP602(P)	10	Practical- Respiration,Transpiration,Chromatographyetc	
IV	BOTDSC/GE 201T	7 50	Taxonomy hierarchy Archegonate	
IV	BOTDSC/GL 202L			Mr.RonKemprai
	BOTP401	7	Flower	
II	BOTP402(P)	5	Study of dicot plant, ovule, embryo	
III	BOTP601	7	Utilization of Plant	
II	BOTP602(P)	10	Determination of biomass in grassland, etc	
I	BOTDSC/GE 201T	7 50	Ecological factor Archegoniate	
	BOTDSC/GL 202L		Significance of seed, vegetative reproduction	
V	BOTP401	7	Herbarium, field study	Dr. R. K. Upadhyay
I&II	BOTP402(P)	10	Genetic Engineering, Biotechnology	
I	BOTP601	7	Practical on determination of moisture	
II	BOTP602	10	content	

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

HoD, Botany
Haflong Govt. College
Haflong

Department of Chemistry ::: Haflong Govt. College
Plan for Curriculum Implementation

Academic Session 2018-2019

Prepared by
Curriculum Implementation Committee
Department of Chemistry
Haflong Government College

Department of Chemistry :: Haflong Government College

Plan for Curriculum Implementation

The Department of Chemistry of Haflong Government College has made the following plan for implementation of the Curriculum of Three-year Degree Course under Choice Based Credit System (CBCS). The programme implemented as TDC (CBCS) Honours and TDC (CBCS) General for the Session 2018-19. The Curriculum is designed by Assam University.

The different units and topics of the TDC Honours and General Programme has been allotted to individual faculty as mentioned in the following table. Details of plan for each unit and topic will be designed by each of the faculty (the books here are referred by the University and availability at local place

Odd Semester from July 2018 to December 2018

Plan for Implementation of B. Sc (Chemistry) Honours and B. Sc (Chemistry) General CBCS Programme

ATTESTED
Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
Head Dept. of Chemistry
Haflong Govt. College
Haflong

B. Sc First Semester Honours Programme as per CBCS syllabus

Course No. CHM-HCC-101T, Course Name: **Inorganic Chemistry-1** (Atomic Structure and Chemical Bonding)

Contact Hours: 60, **Credit:** 04, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	Atomic Structure	J. D. Lee, Concise Inorganic Chemistry. B. E. Douglas, and D. H. Mc Daniel, Concepts & Models of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
2	Periodicity of Elements	-do-	-do-	-do-
3	Chemical Bonding-I	-do-	-do-	Sankar Neogi
4	Chemical Bonding-II	-do-	-do-	-do-
5	Oxidation-Reduction	-do-	-do-	Dewali Chakraborty

Continuous and Comprehensive Assessment (CCA): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 14 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Course No. CHM-HCC-102T, **Course Name:** Physical Chemistry-I (States of Matter & Ionic Equilibrium)

Contact Hours: 60, **Credit:** 04, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	Gaseous State I	P. W. Atkins, & J. de Paula, Atkin's Physical Chemistry. D. W. Ball, Physical Chemistry. Castellan, G. W. Physical Chemistry.	Lecture, Tutorial Seminar & Assignment	Kazi Kawsar Ahmed
2	Gaseous State II	-do-	-do-	-do-
3	Liquid State	-do-	-do-	Uttam Kumar Paul
4	Solid State	-do-	-do-	-do-
5	Ionic Equilibria	-do-	-do-	Dewali Chakraborty

Continuous and Comprehensive Assessment (CCA): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 14 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Course No. CHM-HCC-103L, **Course Name:** Inorganic Chemistry – I (Practical)

Contact Hours: 60, **Credit:** 02, **Full Marks** = 30, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1.	**Part I: Titrimetric Analysis:** (i). Calibration and use of apparatus. (ii). Preparation of solution of different Molarity/Normality of titrants.	A. I. Vogel, A Textbook of Quantitative Inorganic Analysis. A. K. Nad, B. Mahapatra, A. Ghoshal, An Advanced Course in Practical Chemistry.	Laboratory work & Assignment	Uttam Kumar Paul
2	**Part II: Oxidation-Reduction Titrimetry** (i). Estimation of Fe (II) and Oxalic acid using standardized $KMnO_4$. (ii). Estimation of Fe (II) with $K_2Cr_2O_7$.	-do-	-do-	-do-

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Course No. CHM-HCC-104L, **Course Name:** Physical **Chemistry – I** (Practical)

Contact Hours: 60, **Credit:** 02, **Full Marks** = 30, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1. Part I	(a). Determination of transition temperature of the given substance by thermometric method (e.g., $MgSO_4/MnCl_2/Na_2SO_4.10H_2O$). (b). To determine the surface tension of glycerol/acetic acid/aniline solutions at different Concentrations and construction of graph.	B. D. Khosla, V. C. Garg, & A. Gulati, Senior Practical Physical Chemistry.	Laboratory work & Assignment	Kazi Kawsar Ahmed
2. Part II	(a). Preparation of Sodium acetate-acetic acid buffer solutions of different pH. (b). Preparation of Ammonium chloride-ammonium hydroxide buffer solutions of different pH. (c). pH metric titration of strong acid/strong base. (d). pH metric titration of weak acid/strong base.	A. K. Nad, B. Mahapatra and A. Ghoshal, An Advanced Course in Practical Chemistry.	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

B. Sc First Semester (General) Programme as per CBCS syllabus

Course No. CHM-DSC/GE-101T, **Course Name:** Atomic Structure, Bonding, General Organic Chemistry and Aliphatic Hydrocarbons

Contact Hours: 60, **Credit**: 04, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	**Section A: Inorganic Chemistry** Atomic Structure	J. D. Lee: A new Concise Inorganic Chemistry. F. A. Cotton & G. Wilkinson: Basic Inorganic Chemistry:	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
2	Chemical Bonding and Molecular Structure	-do-	-do-	-do-
3	**Section B: Organic Chemistry** Fundamentals of Organic Chemistry	Peter Sykes: A Guide book to Mechanism in Organic Chemistry.	-do-	-do-
4	Aliphatic Hydrocarbons	R. T. Morrison & R. N. Boyd: Organic Chemistry.	-do-	-do-
5	Aromatic Hydrocarbons	-do-	-do-	-do-

Continuous and Comprehensive Assessment (CCA): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 14 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

ATTESTED
Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Course No. CHM-DSC/GE-102L, **Course Name:** Practical

Contact Hours: 60, **Credit:** 02, **Full Marks** = 30, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	**Section A: Inorganic** (i). Estimation of Fe (II) ions by titrating it with $K_2Cr_2O_7$ using internal indicator. (ii). Estimation of Oxalic acid by titrating it with $KMnO_4$. (iii). Estimation of water of Crystallization in Mohr's salt by titrating with $KMnO_4$. (iv). Estimation of Cu (II) ions odometrically using $Na_2S_2O_3$.	A. I. Vogel, Vogel's Qualitative Inorganic Analysis. A. I. Vogel, Vogel's Quantitative Chemical Analysis.	Laboratory work & Assignment	Dilip Chorei
2	**Section B: Organic** (i). Detection of characterized element (N, S, Cl, Br, I) in the given organic compound. (ii). Separation of mixtures by Chromatography: Measure the R_f value in each case (Combination of two compounds to be given) (a). Identify and separate the components of a given mixture of 2-amino acids (glycine, aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography. (b). Identify and separate the sugars present in the given mixture by paper chromatography.	A. I. Vogel's, Textbook of Practical Organic Chemistry	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Plan for Curriculum (Non CBCS) Implementation in the Department of Chemistry

ODD SEMESTER from July 2018 to December 2018

EVEN SEMESTER from January 2019 to June 2019

The Department of Chemistry of Haflong Government College has made the following plan for implementation of the Curriculum (Non CBCS) of TDC Honours and Pass Course Structure for the Session 2018-19. The Curriculum is designed by Assam University. Details of plan for each unit and topic will be designed by each of the faculty (the books here are referred by the University and availability at local place):

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

Head Dept. of Chemistry
Haflong Govt. College
Haflong

THIRD SEMESTER (**HONOURS for Non CBCS**) :: COURSE NO :: **CHMH-301** :: PAPER NAME :: **INORGANIC CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
I	Study of Complexes I	J. D. Lee, Concise Inorganic Chemistry. G. D. Tuli, S. K. Basu & R. D. Madan, Advanced Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
II	General study of the properties of d-block and f-block elements	-do-	-do-	Sankar Neogi
III	Theories of Chemical Bonding & VSEPR theory	-do-	-do-	-do-
IV	Metallic Bonding & Peroxides	-do-	-do-	-do-
V	Study of Complexes II	-do-	-do-	Dilip Chorei

ATTESTED
Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

THIRD SEMESTER (HONOURS) :: COURSE NO :: **CHMH-302** :: PAPER NAME :: **ORGANIC CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Organic Compound containing nitrogen	T. W. Graham Solomons & Craig B. Fryhle, Organic Chemistry. Paula Yurkanis Bruice, Organic Chemistry. R. T. Morrison and R. N. Boyd & S. K. Bhattacharjee, Organic Chemistry. M. K. Jain & S. C. Sharma, Modern Organic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dewali Chakraborty
II	Carbohydrates, Di and Polysaccharides	-do-		-do-
III	Terpenoids & Alkaloids	-do-		-do-
IV	Types of polymers and polymerization process, Aliphatic and Aromatic carboxylic acids	-do-		Dilip Chorei
V	Detail study of the mechanism of some reactions with their scope & Use of reagents in organic synthesis	-do-		Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

THIRD SEMESTER (HONOURS) :: COURSE NO :: **CHMH-303** :: PAPER NAME :: **PHYSICAL CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Thermodynamics II	Puri, Sharma & Pathania, Principles of Physical Chemistry. Gordon M Barrow, Physical Chemistry. Dr. S. Pahari, Physical Chemistry (Volume I & II). N. C. Dey, Thermodynamics Principles and Applications.	Lecture, Tutorial Seminar & Assignment	Uttam Kumar Paul
II	Chemical equilibrium	-do-	-do-	-do-
III	Solutions and colligative properties	-do-	-do-	Kazi Kawsar Ahmed
IV	Electrochemistry	-do-	-do-	-do-
V	Macromolecules	-do-	-do-	Uttam Kumar Paul

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head of Chemistry
Haflong Govt. College
Haflong

THIRD SEMESTER (GENERAL for Non CBCS) :: COURSE NO :: **CHMP-301** :: PAPER NAME :: **CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Group	Unit No.	Topics	Text Books	Mode of Teaching	Teacher
A (INORGANIC)	I	Coordination Compounds	R. D. Madan, Modern Inorganic Chemistry. W. U. Malik, G. D. Tuli & R. D. Madan, Selected Topics in Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
	II	Nuclear Chemistry	Arun Bahl & B. S. Bahl, A Textbook of Organic Chemistry. Arun Bahl & B. S. Bahl, Advanced Organic Chemistry. P. S. Kalsi, Stereochemistry Conformation and Mechanism. R. Balaji Rao, Advanced Organic Chemistry.	-do-	Sankar Neogi
	III	Bioinorganic Chemistry	-do-	-do-	-do-
	IV	Industrial Chemistry	-do-	-do-	Dilip Chorei
B (ORGANIC)	I	Carboxylic acid and their derivatives	-do-	-do-	Dewali Chakraborty
	II	Amino acids & Biopolymers	-do-	-do-	-do-
	III	Organic Compound containing nitrogen	-do-	-do-	Kazi Kawsar Ahmed

ATTESTED
Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
Head Dept. of Chemistry
Haflong Govt. College
Haflong

	IV	Carbohydrates	-do-	-do-	-do-
C (PHYSICAL)	I	Thermodynamics II (A)	Puri, Sharma & Pathania, Principles of Physical Chemistry.	-do-	Uttam Kumar Paul
	II	Thermodynamics II (B)	-do-	-do-	-do-
	III	Thermochemistry	-do-	-do-	-do-
	IV	Physical properties and molecular structure	-do-	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FIFTH SEMESTER **(HONOURS for Non CBCS) :: COURSE NO ::** CHMH-501 **:: PAPER NAME ::** INORGANIC CHEMISTRY

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
I	Crystal structure & Structure of Ionic Solids	B. K. Sharma, Analytical Chemistry. G. D. Tuli, S. K. Basu & R. D. Madan, Advanced Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry. U. N. Dash, Analytical Chemistry Theory and Practice.	Lecture, Tutorial Seminar & Assignment	Sankar Neogi
II	Methods of analysis	-do-	-do-	Dilip Chorei
III	Statistical analysis of experimental data	-do-	-do-	-do-
IV	Instrumental methods of analysis	-do-	-do-	Sankar Neogi
V	Reaction Mechanism	-do-	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FIFTH SEMESTER **(HONOURS) :: COURSE NO ::** CHMH-502 **:: PAPER NAME ::** ORGANIC CHEMISTRY

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Introduction to organic synthesis	S. N. Sanyal, Reactions, Rearrangements and Reagents. V. P. Sharma & R. Kumar, Pericyclic Reactions and Organic Photochemistry. S. M. Mukherji & S. P. Singh, Reaction Mechanism in Organic Chemistry. K. S. Mukherjee, B. Mukhopadhyay, Organic Spectroscopy through solved problems.	Lecture, Tutorial Seminar & Assignment	Dewali Chakraborty
II	Heterocyclic compounds	-do-	-do-	-do-
III	Ultra violet and visible spectroscopy, Infrared Spectroscopy & Mass Spectroscopy	-do-	-do-	-do-
IV	Organic photochemistry	-do-	-do-	Dilip Chorei
V	Topics in Biological Chemistry, Purines, pyrimidines and nucleic acids, Steroids and hormones	-do-	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FIFTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-503** :: PAPER NAME :: **PHYSICAL CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Third law of thermodynamics	P. W. Atkins & J. Paula, de Atkin's Physical Chemistry. Puri, Sharma & Pathania Principles of Physical Chemistry. Gordon M Barrow, Physical Chemistry. Pahari & Pahari, Problems on Physical Chemistry.	Lecture, Tutorial Seminar & Assignment	Uttam Kumar Paul
II	Photochemistry	-do-	-do-	-do-
III	Spectroscopy	-do-	-do-	-do-
IV	Molecular spectroscopy	-do-	-do-	Kazi Kawsar Ahmed
V	Advanced Materials, Conducting Polymer & Micelles.	-do-	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FIFTH SEMESTER (GENERAL): COURSE NO :: **CHMP-501** :: PAPER NAME :: **CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Group	Unit No.	Topics	Text Books	Mode of Teaching	Teacher
A (INORGANIC)	I	Theories of chemical bonding & Ionic bond	R. D. Madan, Modern Inorganic Chemistry. W. U. Malik, G. D. Tuli & R. D. Madan, Selected Topics in Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
	IV	Quantitative inorganic analysis	-do-	-do-	
	II	Molecular orbital theory	-do-	-do-	Sankar Neogi
	III	Weak Interactions & Crystal structure	-do-	-do-	
B (ORGANIC)	I	Introduction to organic synthesis	Arun Bahl & B. S. Bahl, A Textbook of Organic Chemistry. Arun Bahl & B. S. Bahl, Advanced Organic Chemistry. P. S. Kalsi, Stereochemistry Conformation and Mechanism.	-do-	Dewali Chakraborty
	II	Heterocyclic compounds	-do-	-do-	
	III	Six-membered and condensed five-and six-membered heterocycles	-do-	-do-	

ATTESTED
Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
Head Dept. of Chemistry
Haflong Govt. College
Haflong

	IV	Basic concepts and applications of spectroscopy to organic chemistry	-do-	-do-	Kazi Kawsar Ahmed
C (PHYSICAL)	I	Electrochemistry I	Puri,, Sharma & Pathania, Principles of Physical Chemistry.	-do-	-do-
	II	Electrochemistry II	-do-	-do-	Uttam Kumar Paul
	III	Photochemistry I	-do-	-do-	-do-
	IV	Physisorption and Chemisorption & Colloidal State	-do-	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Even Semester from January 2019 to June 2019

Plan for Implementation of B. Sc (Chemistry) Honours and B. Sc (Chemistry) General as per CBCS Course programme

B. Sc Second Semester Honours Programme as per CBCS Syllabus

Course No. CHM-HCC-201T, **Course Name:** Organic Chemistry-1 (Hydrocarbons and Stereochemistry)

Contact Hours: 60, **Credit:** 04, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	Basics of Organic Chemistry	R. N. Morrison & R. N. Boyd, Organic Chemistry.	Lecture, Tutorial Seminar & Assignment	Sankar Neogi
2	Chemistry of Aliphatic Hydrocarbons	-do-	-do-	Dewali Chakraborty
3	Aromatic and Polynuclear Hydrocarbons	-do-	-do-	-do-
4	Stereochemistry	E. L. Eliel & S. H. Wilen, Stereochemistry of Organic Compounds.	-do-	-do-
5	Cycloalkanes and Conformational Analysis	P. S. Kalsi, Stereochemistry Conformation and Mechanism.	-do-	-do-

Continuous and Comprehensive Assessment (CCA): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 14 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Course No. CHM-HCC-202T, **Course Name:** Physical Chemistry-1 (Chemical Thermodynamics and its Applications)

Contact Hours: 60, **Credit:** 04, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	Chemical Thermodynamics I	P. Atkins. & J. de. Paula, Physical Chemistry. G. W. Castellan, Physical Chemistry.	Lecture, Tutorial Seminar & Assignment	Kazi Kawsar Ahmed
2	Chemical Thermodynamics II	-do-	-do-	-do-
3	Systems of Variable Composition	-do-	-do-	Uttam Kumar Paul
4	Chemical Equilibrium	-do-	-do-	-do-
5	Solutions and Colligative Properties	-do-	-do-	Sankar Neogi

Continuous and Comprehensive Assessment (CCA): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 14 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Course No. CHM-HCC-203L, Course Name: Organic Chemistry-1 (Practical)

Contact Hours: 60, **Credit:** 02, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1. Part I	(a). Phthalic acid/Benzoic acid from hot water (using fluted filter paper and stemless funnel) (b). Acetanilide from boiling water. (c). Naphthalene/m-Dinitrobenzene from ethanol. (d). Naphthalene/camphor/phthalic acid (by sublimation)	A. I. Vogel, A Textbook of Qualitative Organic Analysis.	Laboratory work & Assignment	Dewali Chakraborty
2. Part II	**Chromatographic separation:** (a). 2, 4-Dinitrophenyl hydrazones of any two carbonyl compounds (e.g., benzophenone and benzyl; p-nitro benzaldehyde and benzaldehyde) from their mixture and determination of R_f values (By Thin layer chromatography) (b). Paper chromatographic separation and determination of R_f values of mixture of any three amino acids from their mixture (alanine, glycine and leucine or any other set). Spray reagent: Ninhydrin.	F. G. Mann & B. C. Saunders, Practical Organic Chemistry.	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Course No. CHM-HCC-204L, **Course Name:** Physical Chemistry – II (Practical)

Contact Hours: 60, **Credit:** 02, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	**Physical Experiments:** (i). To determine the viscosity of glycerol/acetic acid solutions at different concentrations and construction of the graph. (ii). To determine the solubility of benzoic acid at different temperatures and to determine pH of the dissolution process. (iii). To determine the refractive index of a given liquid by Abbe refractometer and to find the specific and molar refraction. (iv). To determine the molecular mass by transition point method (Solvent: Naphthalene/m-dinitrobenzene and Solute: Glucose/Urea).	B. D. Khosla, V. C. Garg & A. Gulati, Senior Practical Physical Chemistry.	Laboratory work & Assignment	Uttam Kumar Paul

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

B. Sc Second Semester General Programme as per CBCS Syllabus

Course No. CHM-DSC/GEC-201T, **Course Name**: Chemical Energetics, Equilibria and Functional Organic Chemistry, **Contact Hours**: 60, **Credit:** 04, **Full Marks** = 70, **Pass Marks** = 28

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	**Section A: Physical Chemistry** Chemical Energetics	G. W. Castellan, Physical Chemistry.	Lecture, Tutorial Seminar & Assignment	Uttam Kumar Paul
2	Equilibria	D. W. Ball, Physical Chemistry.	-do-	Kazi Kawsar Ahmed
3	**Section B: Organic Chemistry** Alkyl and Aryl Halides	R. T. Morrison & R. N. Boyd: Organic Chemistry.	-do-	Sankar Neogi
4	Alcohols, Phenols and Ethers: (Up to 5 Carbons)	Arun Bahl and B. S. Bahl: Advanced Organic Chemistry.	-do-	Dewali Chakraborty
5	Stereochemistry & Carbohydrates	-do-	-do-	Dilip Chorei

Continuous and Comprehensive Assessment (CCA): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 14 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

Course No. CHM-DSC/GEC-202L, Course Name: Practical

Contact Hours: 60, **Credit:** 02, **Full Marks** = 30, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
1	**Section A: Physical Chemistry:** (I). **Thermochemistry** (i). Determination of heat capacity of a calorimeter. **(ii).** Determination of enthalpy of neutralization of hydrochloric acid with sodium hydroxide. (iii). Determination of enthalpy of ionization of acetic acid. (iv). Determination of integral enthalpy of solution of salts (KNO_3, NH_4Cl). (v). Determination of enthalpy of hydration of copper sulphate. (vi). Study of the solubility of benzoic acid in water and determination of ΔH. (II). **Ionic equilibria.** (i). Measurement of pH of different solutions like aerated drinks, fruit juices, shampoos and soaps (use dilute solutions of soaps and shampoos to prevent damage to the glass electrode) using pH-meter (at least three different materials to be given to per student per experiment) and preparation of a comparative document. (ii). Preparation of Sodium acetate-acetic acid buffer solutions of different pH (the observed data to be compared with theoretical values).	B. D. Khosla, Senior Practical Physical Chemistry. A. I. Vogel: Textbook of Practical Organic Chemistry. F. G. Mann & B. C. Saunders, Practical Organic Chemistry.	Laboratory work & Assignment	Uttam Kumar Paul

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

Head Dept. of Chemistry
Haflong Govt. College
Haflong

	(iii). Preparation of Ammonium chloride-ammonium hydroxide buffer solutions of different pH (the observed data to be compared with theoretical values)			
2	**Section B: Organic Chemistry** (i). Purification of organic compounds by crystallization (from water and alcohol) and distillation. (ii). Criteria of Purity: Determination of melting and boiling points. (iii). Organic Preparations: (a). Bromination of Phenol/Aniline. (b). Benzoylation of amines/phenols. (c). Oxime and 2, 4-dinitrophenylhydrazone of aldehyde/ketone	-do-		Dewali Chakraborty

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FOURTH SEMESTER (HONOURS for **Non CBCS course**) :: COURSE NO :: **CHMH-401** :: PAPER NAME :: **INORGANIC CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
I	Application of coordination compound	J. D. Lee, Concise Inorganic Chemistry. Satya Prakash, G. D. Tuli, S. K. Basu & R. D. Madan, Advanced Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
II	Lanthanides and actinides	-do-	-do-	Sankar Neogi
III	Molecular orbital theory	-do-	-do-	-do-
IV	Hydrates, Clathrates, structure of water and ice	-do-	-do-	-do-
V	Magneto Chemistry	-do-	-do-	Dilip Chorei

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FOURTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-402** :: PAPER NAME :: **ORGANIC CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Polynuclear Hydrocarbon	T. W. Graham Solomons & Craig B. Fryhle, Organic Chemistry. R. T. Morrison, R. N. Boyd & S. K. Bhattacharjee, Organic Chemistry. M. K. Jain & S. C. Sharma, Modern Organic Chemistry.	Lecture, Tutorial Seminar & Assignment	Kazi Kawsar Ahmed
II	Amino acids, Peptides and polypeptids	-do-	-do-	Dewali Chakraborty
III	Vitamins & Chemistry of Important Food Additives	-do-	-do-	-do-
IV	Coal, petroleum and petrochemicals & Dyes	-do-	-do-	-do-
V	Green Chemistry & Asymmetric Synthesis	V. Kumar, An Introduction to Green Chemistry.	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FOURTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-403** :: PAPER NAME :: **PHYSICAL CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Second law of thermodynamics	P. W. Atkins & J. de Paula, Atkin's Physical Chemistry. Puri, Sharma & Pathania, Principles of Physical Chemistry. Gordon M Barrow, Physical Chemistry. Dr. S. Pahari, Physical Chemistry (Volume I & II).	Lecture, Tutorial Seminar & Assignment	Uttam Kumar Paul
II	Chemical Kinetics & Catalysis	-do-	-do-	Kazi Kawsar Ahmed
III	Colloidal state	-do-	-do-	-do-
IV	Electrochemistry	-do-	-do-	Uttam Kumar Paul
V	Diffusion	-do-	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FOURTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-404P** :: COURSE NAME :: **PRACTICAL**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Quantitative Inorganic analysis	Sudarsan Barua, A Text Book of Practical Chemistry. P. C. Kamboj, Systematic Practical Chemistry. Bidhan Chandra Ray & Satyanarayan Das, A Textbook on Chemistry Practical. Arthur I. Vogel, Elementary Practical Organic Chemistry.	Practical & Assignment	Dilip Chorei
II	Qualitative Organic analysis	-do-	-do-	-do-
III	Physical experiments	-do-	-do-	Uttam Kumar Paul

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FOURTH SEMESTER (GENERAL) :: COURSE NO :: **CHMP-401** :: PAPER NAME :: **CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Group	Unit No.	Topics	Text Books	Mode of Teaching	Teacher
A (INORGANIC)	I	Theories of bonding in complexes	R. D. Madan, Satya Prakash's Modern Inorganic Chemistry. W. U. Malik, G. D. Tuli & R. D. Madan Selected Topics in Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Sankar Neogi
	III	Methods of analysis	-do-	-do-	
	II	Environmental Chemistry	-do-	-do-	
	IV	Pulp and paper & Portland cement	-do-	-do-	Dilip Chorei
B (ORGANIC)	I	Amines (Aliphatic and aromatic)	Arun Bahl & B. S. Bahl, A Textbook of Organic Chemistry. Arun Bahl & B. S. Bahl, Advanced Organic Chemistry. R. Balaji Rao, Advanced Organic Chemistry.	-do-	Kazi Kawsar Ahmed
	II	Peptide and Protein	-do-	-do-	Dewali Chakraborty

ATTESTED
Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18
Head Dept. of Chemistry
Haflong Govt. College
Haflong

	III	Urea	-do-	-do-	-do-
	IV	Chromatography	-do-	-do-	-do-
C (PHYSICAL)	I	Chemical Equilibrium-I	Puri, Sharma & Pathania, Principles of Physical Chemistry.	-do-	-do-
	II	Chemical Equilibrium-II	-do-	-do-	Uttam Kumar Paul
	III	Chemical Kinetics I	-do-	-do-	-do-
	IV	Chemical Kinetics II	-do-	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

FOURTH SEMESTER (GENERAL) :: COURSE NO :: **CHMP-402** :: COURSE NAME :: **PRACTICAL**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Volumetric estimation	Sudarsan Barua, A Text Book of Practical Chemistry. P. C. Kamboj, Systematic Practical Chemistry.	Practical & Assignment	Dilip Chorei
II	Qualitative organic analysis	-do-	-do-	

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

SIXTH SEMESTER (HONOURS for Non CBCS) :: COURSE NO :: **CHMH-601** :: PAPER NAME :: **INORGANIC CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Faculty
I	Alloys and intermetallic compounds	Puri, Sharma and Kalia, Principles of Inorganic Chemistry. B. K. Sharma, Environmental Chemistry. M. S. Gopinathan & V. Ramakrishnan, Group Theory in Chemistry. James E. Huheey, Ellen A. Keiter, Richard L. Keiter and Okhil K. Medhi, Inorganic Chemistry, Principles of Structure and Reactivity.	Lecture, Tutorial Seminar & Assignment	Sankar Neogi
IV	Atomic absorption spectroscopy	-do-	-do-	
II	Environmental Chemistry	-do-	-do-	Dilip Chorei
III	Molecular symmetry	-do-	-do-	
V	Bioinorganic Chemistry	-do-	-do-	

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

SIXTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-602** :: PAPER NAME :: **ORGANIC CHEMISTRY**
Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Molecular rearrangement	S. N. Sanyal, Reactions, Rearrangements and Reagents. V. P. Sharma & R. Kumar, Pericyclic Reactions and Organic Photochemistry. S. M. Mukherji & S. P. Singh, Reaction Mechanism in Organic Chemistry. S. C. Sharma & Raj Kumar. Pharmaceutical Organic Chemistry.	Lecture, Tutorial Seminar & Assignment	Sankar Neogi
II	Organometallic compounds	-do-	-do-	-do-
III	Nuclear magnetic resonance spectroscopy	-do-	-do-	Dewali Chakraborty
IV	Pericyclic reactions, Electrocyclic reactions & Cyclo addition reaction	-do-	-do-	-do-
V	Pharmaceutical compounds	-do-	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

SIXTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-603** :: PAPER NAME :: **PHYSICAL CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Chemical bonding	P. W. Atkins & J. Paula, de Atkin's Physical Chemistry. Ira N. Levine, Quantum Chemistry. R. K. Prasad, Quantum Chemistry. Donald A McQuarrie, Quantum Chemistry.	Lecture, Tutorial Seminar & Assignment	Uttam Kumar Paul
II	Elementary quantum mechanics-I	-do-	-do-	-do-
III	Elementary quantum mechanics-II	-do-	-do-	-do-
IV	Hybridisation and shapes of molecule	-do-	-do-	Kazi Kawsar Ahmed
V	Statistical thermodynamics	-do-	-do-	-do-

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

Head Dept. of Chemistry
Haflong Govt. College
Haflong

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

SIXTH SEMESTER (HONOURS) :: COURSE NO :: **CHMH-604** :: COURSE NAME :: **PRACTICAL**

Contact Hours: 60, **Full Marks** = 90, **Pass Marks** = 30

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Organic Synthesis	Sudarsan Barua, A Text Book of Practical Chemistry. P. C. Kamboj, Systematic Practical Chemistry. Bidhan Chandra Ray & Satyanarayan Das, A Textbook on Chemistry Practical. Arthur I Vogel, Elementary Practical Organic Chemistry.	Practical & Assignment	Dilip Chorei
II	Organic quantitative analysis	-do-	-do-	-do-
III	Physical experiments	-do-	-do-	Uttam Kumar Paul
IV	Project work		Guidance	Sankar Neogi Dilip Chorei Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

SIXTH SEMESTER (GENERAL for non CBCS) :: COURSE NO :: **CHMP-601** :: PAPER NAME :: **CHEMISTRY**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Group	Unit No.	Topics	Text Books	Mode of Teaching	Teacher
A (INORGANIC)	I	Electronegativity & Dipole moment	R. D. Madan, Satya Prakash's Modern Inorganic Chemistry. W. U. Malik, G. D. Tuli & R. D. Madan, Selected Topics in Inorganic Chemistry. Puri, Sharma and Kalia, Principles of Inorganic Chemistry.	Lecture, Tutorial Seminar & Assignment	Dilip Chorei
	IV	Extraction of metal	-do-	-do-	-do-
	II	VSEPR Theory	-do-	-do-	-do-
	III	Lattice energy	-do-	-do-	Sankar Neogi
B (ORGANIC)	I	Dyes	Arun Bahl & B. S. Bahl, A Textbook of Organic Chemistry. P. S. Kalsi, Stereochemistry Conformation and Mechanism. R. Balaji Rao, Advanced Organic Chemistry.	-do-	Dewali Chakraborty
	II	Molecular rearrangements	-do-	-do-	-do-
	III	Organometallic compounds & Active methylene compounds	-do-	-do-	-do-

ATTESTED

01/08/18

Head Dept. of Chemistry
Haflong Govt. College
Haflong

	IV	NMR spectroscopy	-do-	-do-	Kazi Kawsar Ahmed
C (PHYSICAL)	I	Elementary quantum mechanics I	R. K. Prasad, Quantum Chemistry.	-do-	-do-
	II	Elementary quantum mechanics II	-do-	-do-	-do-
	III	Spectroscopy	S. D. Bhattamisra & P. Gouda, Basic Principles of Spectroscopy, Vishal Publishing Co.	-do-	-do-
	IV	Vibrational spectra	1. Spectroscopy (Atomic and Molecular), Gurdeep R. Chatwal & Sham K. Anand	-do-	Kazi Kawsar Ahmed

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

SIXTH SEMESTER (GENERAL) :: COURSE NO :: **CHMP-602** :: COURSE NAME :: **PRACTICAL**

Contact Hours: 60, **Full Marks** = 35, **Pass Marks** = 12

Unit No.	Topics	Text Books	Mode of Teaching	Teacher
I	Physical experiment	Sudarsan Barua, A Text Book of Practical Chemistry. P. C. Kamboj, Systematic Practical Chemistry.	Practical & Assignment	Sankar Neogi

ATTESTED

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

01/08/18

(Dr. S. Neogi)
Head
Department of Chemistry
Haflong Govt. College

Head Dept. of Chemistry
Haflong Govt. College
Haflong

CURRICULUM PLANS

OF THE

DEPARTMENT OF MATHEMATICS

HAFLONG GOVERNMENT COLLEGE
HAFLONG-788819

DIMA HASAO: ASSAM

Declaration by the Head of the Department

I certify that the informative data included in this **Curriculum Plans of the Department of Mathematics** (**CPDM**) are true to the best of my knowledge. This **CPDM** is prepared by me after internal discussion along with other two colleagues, **Dr Md Helal Ahmed and Mrs. Marilyn Durpui** and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this **CPDM** during the peer team visit.

12.04.2024

Dr. G. Bodosa
HoD
Mathematics

Place: Haflong
Date: 12-04-2024

CURRICULUM PLANS OF THE DEPARTMENT OF MATHEMATICS

1. **Name of the Department and its year of establishment:** Mathematics started in the Academic year 1969 and taught general and additional Mathematics

2. **Name of the Course:** B. Sc. (General)

3. **Semester based credit system:** General Course started in the Academic year 2010

4. **Semester choice based credit system:** General Programme started in the Academic year 2018

5. **FYUG Semester system:** FYUG Programme started in the Academic year 2023

6. Faculty members:

Sl. No.	Name	Designation	Qualification	Specializations	Joining Date
01	Dr. Gwjwn Bodosa	Associate Professor	M. Sc., Ph. D.	NSDE, Topology & Fluid Mechanics	23rd March, 2004
02	Dr Md Helal Ahmed	Assistant professor	M. Sc., Ph. D.	Number Theory	14th August 2023
03	Mrs. Marilyn Durpui	Tutor Assistant professor	M. Sc.	Applied Mathematics	23rd February 2021

7. **Courses offered:** i) HS Course

ii) Three years (six semesters) degree (CBCS/NON-CBCS) B. A. General Programme

iii) Three years (six semesters) degree (CBCS/NON-CBCS) B. Sc. General Programme

IV) Four years (eight semesters) under Graduate Programme.

8. **Students-Teacher ratio:** i) **07:3 (Session: 2023-2024)** **ii) 09:2 (Session: 2022-2023)**

iii) 13:1 (Session: 2021-2022) **iv) 12:1 (Session: 2020-2021)**

v) 19:1 (Session: 2019-2020) **vi) 22:1 (Session: 2018-2019)**

9. Curriculum Plan for the session 2016-17, TDC UG Mathematics (General)

SL NO.	MATHEMATICS -MTMP-101 TOPICS: CLASSICAL ALGEBRA & TRIGONOMETRY	TAUGHT BY
UNIT-I	Adjoint of a square matrix, Jacobi's Theorem; Inverse of a square matrix, Elementary transformation on matrices, Rank of a matrix, Solution of a system of linear equations by matrix inverse and by Gaussian elimination method.	Dr G Bodosa
UNIT-II	Relation between the roots and coefficients of a polynomial equation of nth degree with special reference to cubic equations, Symmetric functions of roots; Transformation of equations; Cardan's Method of solution of cubic equation of the form $ax^3 + bx + c = 0\ (a \neq 0)$; Inequalities involving Arithmetic and geometric means.	
UNIT-III	Sequences and their convergence and divergence, Monotonic and bounded sequence and, the theorems involving them, Infinite series of constant term, Convergence and divergence of the series of positive terms; Tests of convergence- Comparison test, D-Alembert's ratio test; Raabe's test, Cauchy's root test (without proof).	
UNIT-IV	De' Moivre's theorem (for rational indices), Expansions of $\sin n\theta$ and $\cos n\theta$, Expansions of $\sin\theta$ and $\cos\theta$ in ascending powers of θ, Functions of complex arguments.	
UNIT-V	Gregory's series; Summation of trigonometric series; Hyperbolic functions.	

10. Curriculum Plan for the session 2016-17, TDC UG Mathematics (General)

SL NO.	MATHEMATICS -MTMP-201 TOPICS: MODERN ALGEBRA & GEOMERTY (2-D)	TAUGHT BY
UNIT-I	Group, Permutation group, Cyclic group, Subgroup, Cosets and their properties, Lagrange's theorem for order of a subgroup, Normal subgroup, Quotient group.	Dr G Bodosa
UNIT-II	Definitions, examples and simple properties of Rings, Integral domains, Skew fields, fields.	
UNIT-III	Vector spaces, subspace, linear independence, Basis and dimension.	
UNIT-IV	Changes of axes, pair of straight lines, general equation of second degree, reduction to standard forms.	
UNIT-V	Properties of a parabola, an ellipse, a hyperbola, equations of chord, tangent & normal, polar equation of a conic.	

11. Curriculum Plan for the session 2017-18, TDC UG Mathematics (General)

SL NO.	MATHEMATICS -MTMP-301 TOPICS: DIFFERENTIAL CALCULUS & INTEGRAL CALCULUS	TAUGHT BY
UNIT-I	Limit, Cauchy's criterion for existence of limit (without proof), Continuity, Problems on continuity, Bounded functions-l.u.b., g.l.b., Properties of continuous and bounded functions, differentiability, Relation between continuity and differentiability, Successive differentiation- Standard cases, Leibnitz's theorem and its application in simple cases.	Dr G Bodosa
UNIT-II	Indeterminate forms- $0.\infty, \infty.\infty, 0^0, 1^\infty, \infty^0, \frac{\infty}{\infty}, \frac{0}{0}$ Application of L Hospital's Theorem, Rolle's Theorems, Lagrange and Cauchy forms of Mean value Theorems, Taylor's and Maclaurin's Series, Expansion of functions $e^{ax}, \sin x, \cos x, \tan x, \sinh x, \cosh x$ (Assuming $R_n \to 0$ as $n \to \infty$). Maxima and Minima for functions of one variable.	
UNIT-III	Function of two or more variables- partial derivatives, Euler's Theorem (proof for two variables only and problems for two and three variables, Tangents, Normals- Equations and Properties of Tangents and normals, Subtangents and Subnormals of Cartesian and Polar curves.	
UNIT-IV	Definition and properties of definite integrals, Fundamental theorem, Reduction formulae.	
UNIT-V	Rectification of plane curves- Cartesian and polar curves, Area bounded by plane curves- Cartesian and polar curves, volumes and surface areas of solids of Revolution about axes	

12. Curriculum Plan for the session 2017-18, TDC UG Mathematics (General)

SL NO.	MATHEMATICS -MTMP-401 TOPICS: DIFFERENTIAL EQUATIONS & VECTORS	TAUGHT BY
UNIT-I	Solution of first order and first degree differential equations- variable separable method, Homogeneous equations, Exact equations.	Dr G Bodosa
UNIT-II	Linear equations (including Bernoulli's equation, and other simple cases reducible to linear equations), Orthogonal Trajectories.	
UNIT-III	Higher order differential equations with constant coefficients, Homogeneous linear differential equations,	
UNIT-IV	Vector equations – Vector equations of lines, planes and spheres Vector functions- Differentiation of vector point functions.	
UNIT-V	Operation with del operator- Gradient, divergence and curl, their identities and applications in simple problems.	

13. Curriculum Plan for the session 2018-19, TDC UG Mathematics (General)

SL NO.	MATHEMATICS -MTMP-501 TOPICS: DYNAMICS & STATICS	TAUGHT BY (SESSION: 2018-19)
UNIT-I	Motion in a line with variable acceleration (under some law of velocity, inverse square law), Simple harmonic motion, Tangential and Normal components of velocity and acceleration in a plane.	Dr G Bodosa
UNIT-II	Motion in a plane- Projectile (excluding range on an inclined plane), motion inside and outside a smooth vertical circle.	
UNIT-III	Impulse, Work, Energy- Impulse of a force, work, power, energy, principle of energy, conservation of linear momentum and energy. Impact- Direct impact of two elastic bodies, Direct impact of an elastic body on a smooth fixed plane.	
UNIT-IV	Coplanar forces- Condition of equilibrium on smooth planes, frictions- Laws of friction, equilibrium on rough planes.	
UNIT-V	Centre of gravity- C. G. Of a triangle formed by three rods, C. G. of an arc and a sector of a circle, of a quadrant of an ellipse, of a cardioide, of an asteroid, and of a lamina bounded by a parabola and a line.	

14. Curriculum Plan for the session 2018-19, TDC UG Mathematics (General)

SL NO.	MATHEMATICS -MTMP-601 TOPICS: LINEAR PROGRAMMING & SOLID GEOMETRY (3-D)	TAUGHT BY (SESSION: 2018-19)
UNIT-I	Introduction, brief idea about O. R. And its applications, convex sets and their properties, hyper plane, formation of an L.P.P., Different models, solution by graphical method.	Dr G Bodosa
UNIT-II	Standard form of an L.P.P., feasible, basic, optimal, unbounded solution, solution of the standard L.P.P. by Simplex method, Big-M method.	
UNIT-III	Concept of duality, formation of dual problems, standard results on duality, advantages of duality, Transportation problems.	
UNIT-IV	Equation of straight lines, Shortest distance between lines, Equation of the line of shortest distance.	
UNIT-V	Sphere, cone; Tangent lines and planes.	

15. Curriculum Plan for the session 2018-23, TDC UG Mathematics (General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS -DSC-101 TOPICS: Differential Calculus	TAUGHT BY (SESSION: w. e. f. 2018-19 to 2022-23)
UNIT-I	Limit of a function, algebra of limits, related results and problems	Dr G Bodosa
UNIT-II	Continuity (ε and δ definition), related theorems and problems, types of discontinuities, differentiability of functions	
UNIT-III	Successive differentiation, Leibnitz's theorem, Partial differentiation, Euler's theorem on homogeneous functions	
UNIT-IV	Tangents and normals, curvature, asymptotes, singular points, tracing of curves, parametric representation of curves and tracing of parametric curves	Dr G Bodosa (taught for 2018-19 to 2021-22) Mrs M Durpui (taught for 2022-23)
UNIT-V	Rolle's theorem, Mean Value theorems, Taylor's theorem with Lagrange's and Cauchy's forms of remainder, Taylor's series, Maclaurin's series of sin x, cos x, ex, log(l+x), (l+x)m, Maxima and Minima Indeterminate forms	Dr G Bodosa

16. Curriculum Plan for the session 2018-23, TDC UG Mathematics (General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS -DSC-201 TOPICS: Differential Equations	TAUGHT BY (SESSION: w. e. f. 2018-19 to 2022-23)
UNIT-I	First order exact differential equations, integrating factors, rules to find an integrating factor. First order higher degree equations solvable for x, y, p	Dr G Bodosa
UNIT-II	Methods for solving higher-order differential equations, basic theory of linear differential equations	
UNIT-III	Solving a differential equation by reducing its order linear homogenous equations with constant coefficients, linear non-homogenous equations, the method of variation of parameters	
UNIT-IV	The Cauchy-Euler equation, simultaneous differential equations, total differential equations	
UNIT-V	Order and degree of partial differential equations, concept of linear and non-linear partial differential equations, formation of first order partial differential equations,	Dr G Bodosa (taught for 2018-19 to 2021-22) Mrs M Durpui (taught for 2022-23)

17. Curriculum Plan for the session 2018-23, TDC UG Mathematics (General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS -DSC-301 TOPICS: Real Analysis	TAUGHT BY (SESSION: w. e. f. 2018-19 to 2022-23)
UNIT-I	Finite and infinite sets, examples of countable and uncountable sets, real line, bounded sets, suprema and infima.	Dr G Bodosa
UNIT-II	Intervals, open and closed subsets of R, their properties, nested interval theorem, concept of cluster points and Bolzano-Weierstras theorem	
UNIT-III	Real Sequence, bounded sequence, Cauchy convergence criterion for sequences. Cauchy's theorem on limits, order preservation and squeeze theorem, monotone sequences and their convergence	
UNIT-IV	Infinite series. Cauchy convergence criterion for series, geometric series, comparison test, convergence of p-series, root test, ratio test, alternating series, Leibnitz's test definition and examples of absolute and conditional convergence.	
UNIT-V	Sequential criterion of limit and continuity and the equivalence of sequential criterion with epsilon-delta definition, properties of continuous functions	Dr G Bodosa (taught for 2018-19 to 2021-22) Mrs M Durpui (taught for 2022-23)

18. Curriculum Plan for the session 2018-23, TDC UG Mathematics (General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS -DSC-401 TOPICS: Abstract Algebra	TAUGHT BY (SESSION: w. e. f. 2018-19 to 2022-23)
UNIT-I	Definition and examples of groups, examples of abelian and non-abelian groups, the group Zn of integers under addition modulo n and the group U(n) of units under multiplication modulo n, Cyclic groups from number systems, complex roots of unity, circle group, the general linear group GL(n,R)	Dr G Bodosa
UNIT-II	Subgroups, cyclic subgroups, the concept of a subgroup generated by a subset and the commutator subgroup of group, examples of subgroups including the center of a group, cosets,	
UNIT-III	Normal subgroups: their definition examples, and characterizations, Quotient groups, group homomorphism: definition, example and related problems	Dr G Bodosa (taught for 2019-20 to 2021-22) Mrs M Durpui (taught for 2022-23)
UNIT-IV	Definition and examples of rings, examples of commutative and non-commutative rings: rings from number systems, polynomial rings, and rings of continuous functions.	Dr G Bodosa
UNIT-V	Integral domains, division ring, and fields, examples of fields: Zp, Q, R, and C, Subrings and ideals, prime, principal and maximal ideal	

19. Curriculum Plan for the session 2019-23, TDC UG Mathematics (General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS -DSE-501 TOPICS: Abstract Algebra	TAUGHT BY (SESSION: w. e. f. 2019-20 to 2022-23)
UNIT-I	Vector spaces, subspaces, algebra of subspaces, quotient spaces, linear combination of vectors, linear span, linear independence, basis and dimension, dimension of subspaces	Dr G Bodosa
UNIT-II	Linear transformations, null space, range, rank and nullity of a linear transformation, matrix representation of a linear transformation,	
UNIT-III	Algebra of linear transformations, invertibility and isomorphisms, change of coordinate matrix	
UNIT-IV	Eigen space of a linear operator, diagonalisability, invariant subspaces and Cayley-Hamilton theorem, the minimal polynomial for a linear operator	
UNIT-V	Inner product spaces and norms, Gram Schimdt orthogonalisation process, orthogonal complements, Bessel's inequality, the adjoint of a linear operator, least square approximation	

20. Curriculum Plan for the session 2019-23, TDC UG Mathematics (General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS -DSC-601 TOPICS: Complex Analysis	TAUGHT BY (SESSION: w. e. f. 2019-20 to 2022-23)
UNIT-I	Limits, limits involving the point at infinity, continuity, properties of complex numbers, regions in the complex plane, functions of complex variable, mappings	Dr G Bodosa
UNIT-II	Derivatives, differentiation formulas, Cauchy-Riemann equations, sufficient conditions for differentiability. Analytic functions, examples of analytic functions, exponential function, Logarithmic function, trigonometric function	
UNIT-III	Definite integrals of functions, Contours,Contour integrals and its examples, upper bounds for moduli of contour integrals. Cauchy Goursat theorem, Cauchy integral formula	
UNIT-IV	Liouville's theorem and the fundamental theorem of algebra, convergence of sequences and series, Taylor series and its examples	
UNIT-V	Laurent series and its examples, absolute and uniform convergence of power series	

21. Curriculum report for the Pandemic Session 2019-20, TDC UG Mathematics (General)

Sl. No.	Subject	Classes (Semester- wise) UG	Mode of Teaching for online classes	No. of Students Covered
1	TDC 2nd Sem (CBCS), Pass Course	Differential Equations as per syllabus	WhatsApp, Video	03
2	TDC 4th Sem (CBCS), Pass Course	Abstract Algebra as per syllabus	do	06
3	TDC 6th Sem (Non-CBCS), Pass Course	Linear programming problem and Solid Geometry as per syllabus	do	04

Sl. No.	Semester	% of course covered		Offline/online
		Before 16th March 2020	After 16th March 2020	
01	Second	35%	35%	70%
02	Fourth	35%	40%	75%
03	Sixth	40%	45%	85%

22. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSC101 TOPICS: Higher Algebra and Trigonometry	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Polar representation of complex numbers. De Moivre's theorem for rational indices and related problems. Expansions of $\sin n\theta$, $\cos n\theta$, $\sin\theta$, $\cos\theta$. Expansions for $\sin n\theta$, $\cos n\theta$ for even and odd n.	Dr M Helal Ahmed
UNIT-II	Exponential and logarithmic functions of complex arguments, Gregory's series, hyperbolic functions, summation of trigonometric series.	
UNIT-III	Relations: Reflexive, symmetric, transitive, and equivalence. Equivalence classes and partitions. Introduction to Logic: propositions, truth table, negation, conjunction and disjunction. Implications, biconditional propositions. Converse, contra positive and inverse propositions and precedence of logical operators. Quantifiers: Universal and Existential quantifiers.	Dr G Bodosa
UNIT-IV	Relation between roots and coefficients of a polynomial equations of nth degree, symmetric functions of roots. Transformation of equations, reciprocal and binomial equations. Cardan's method of solution of cubic equations. Descartes' rule of signs. Inequalities involving arithmetic and geometric means, Cauchy Schwarz's inequality, Minkowski inequality.	
UNIT-V	Elementary transformation of matrices, echelon and canonical forms, rank of a matrix, linear dependence and independence of n-tuples; Inverse of a matrix by elementary operations. Systems of linear equations and their solutions by Gaussian elimination method.	Mrs M Durpui

23. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSC102 TOPICS: Differential Calculus	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Limit of a function, Fundamental theorems on limits, Some important limits, Cauchy's criterion, Problems on limits. Continuity of a function, Different classes of discontinuity, Properties of continuous functions, related problems. Differentiability of a function, Fundamental theorems on differentiation, problems involving derivatives of a function of a function, inverse circular functions, hyperbolic functions, logarithmic differentiation, implicit functions and parametric equations.	Dr M Helal Ahmed
UNIT-II	Significance of derivative and its sign, geometrical interpretation, derivative as a rate measurer and related problems. Successive Differentiation, nth derivatives of some special functions, nth derivatives of rational algebraic functions, related problems. Leibnitz's theorem and related problems. Indeterminate forms, L'Hospital's theorem, and related problems.	
UNIT-III	Rolle's theorem, Lagrange's Mean Value Theorem, Geometrical interpretation and related problems. Generalized mean value theorem (Taylor's series in finite form), Lagrange's form of remainder, Cauchy's form of remainder, Expansion of functions in infinite power series - Taylor's series and Maclaurin's series. Increasing and decreasing functions, Maxima and minima for functions of single variable and related problems.	Dr G Bodosa
UNIT-IV	Tangents and normals - equation of tangent, tangent at the origin, equation of normal, angle of intersection of curves, related problems. Cartesian subtangent and subnormal, derivative of arc-length (cartesian form), angle between radius vector and tangent, derivative of arc-length (polar form), polar subtangent and subnormal. Radius of curvature of cartesian and polar curves.	
UNIT-V	Partial derivatives, related problems, homogeneous functions, Euler's theorem on homogeneous functions. Asymptotes, Concavity, Points of inflection, Tracing graphs of polynomial and rational functions	Mrs M Durpui

24. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSM101 TOPICS: Calculus	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Limit (ε - δ definition), Cauchy's criterion for existence of limit (without proof), problems on limits. Continuity (ε - δ definition), related theorems and problems, types of discontinuities. Differentiability of a function, problems on differentiability, relation between continuity and differentiability. Successive differentiation, Leibnitz's theorem and its application.	Dr M Helal Ahmed
UNIT-II	Rolle's theorems, Lagrange's mean value theorem, Cauchy's mean value theorem. Statement and applications of Taylor's and Maclaurin's theorems, Taylor's and Maclaurin's series, expansions of functions sin x, cos x, , $(1 + x)$ (assuming$Rn \to 0$ as $n \to \infty$). Maxima and minima for functions of one variable, necessary and sufficient condition for maxima and minima. Indeterminate forms: 0 0 , ∞ ∞ , 0 × ∞, ∞ − ∞, 0 0 , 1 ∞, ∞0 .	
UNIT-III	Partial differentiation. Euler's theorem on homogeneous functions (two variable). Tangents, normals: Equations and properties of tangents and normals, subtangents and subnormals of cartesian and polar curves.	Mrs M Durpui
UNIT-IV	Definition and properties of definite integrals, Fundamental theorem (without proof), Reduction formulae of the type $\int sinn\ xdx$, $\int cosn\ xdx$, $\int tann\ xdx$, $\int secn\ xdx$, $\int (logx)\ n\ dx$, $\int sinm\ xcosnxdx$, $\int sinm\ xcosnxdx$.	Dr G Bodosa
UNIT-V	Area bounded by plane curves (cartesian and polar), rectification of plane curves (cartesian and polar), volumes and surface of solid of revolution about axes: Cartesian curves.	

25. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSEC101 TOPICS: : Mathematical Skill Development with Software (Theory with Practical)	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Introduction to problem solving with computer programming. Introduction to algorithms, flowcharts, symbols used in flowcharts. Algorithms and flowcharts for decision making - use of if-then, if-then-else, nested if-then-else. Algorithms and flowcharts for problems involving iterations and looping - use of repeat while. Algorithms and flowcharts involving arrays. Common exercises involving each of the above from the textbook.	Dr G Bodosa
UNIT-II	Relations, functions, types of functions: exponential, logarithm, trigonometric, polynomial, periodic, greatest integer, injective, surjective, bijective, even and odd. Operation of functions: addition, subtraction, multiplication, division and composition.	
UNIT-III	Well-ordering property of positive integers, Division algorithm, Divisibility of integers, Euclidean algorithm, Greatest Common Divisor (GCD), Prime number, Fundamental Theorem of Arithmetic, Congruence relation between integers, properties of congruences.	Dr M Helal Ahmed
UNIT-IV	Idempotent, nilpotent, involutory matrices, transpose of a matrix, conjugate of a matrix, symmetric, skew symmetric, Hermitian, skew Hermitian, orthogonal, unitary matrices, adjoint of a square matrix, Jacobi's theorem, inverse of a square matrix.	
UNIT-V	Introduction of differential equation, basic concepts, general and particular solutions of a differential equation, formation of a differential equation whose general solutions are given. Methods of solving differential equations: variable separable, homogeneous differential equation, linear differential equation.	Mrs M Durpui

26. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATIDC101 TOPICS: Foundation Course in Mathematics	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Place value, face value of digits in decimal number system. Natural numbers, integers, rational numbers. Divisibility of integers. Problems on LCM, GCD, fractions, ratio & proportion, percentage, profit and loss, simple and compound interest.	Dr G Bodosa
UNIT-II	Unitary method, problems on time and work, speed and distance. Surds, Laws of exponents. Elementary set theory, union, intersection, difference, cartesian product of sets, subsets, number of elements of sets.	
UNIT-III	Simultaneous Linear equations in two variables and related problems. Quadratic equations and related problems. Arithmetic Progression, Geometric Progression.	Dr M Helal Ahmed
UNIT-IV	Permutation and Combination, Binomial Theorem for positive integer indices. Introduction to Probability, simple problems.	
UNIT-V	Matrices: order, transpose, sum, difference, scalar multiple, product, inverse. Symmetric and skewsymmetric matrices. Determinant of a square matrix, problems on evaluating determinants. Elementary row and column operations on matrices. Use of matrices and determinants to solve system of linear equations.	Mrs M Durpui

27. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSC151 TOPICS: Analytical Geometry	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Change of origin, invariants in orthogonal transformation, pair of straight lines, bisector of angles between pair of straight lines.	Dr G Bodosa
UNIT-II	Orthogonal circles, radial axis, radical centre of three circles, circles through intersection of two circles, condition of tangency of a straight line to a circle, parabola, ellipse and hyperbola.	
UNIT-III	Definition, equation of polar of a point with respect to a circle, parabola, ellipse and hyperbola, polar equation of a conic in the form $1\ r = 1 + e \cos\theta$, equation of chord and tangent, related problems.	
UNIT-IV	Shortest distance and equation of shortest distance line, section of a sphere by a plane, great circle, sphere through a given circle, the curve of intersection of two spheres, tangent plane to a sphere at a given point on it, condition of tangency of a given plane to be a tangent plane to a sphere.	Mrs M Durpui
UNIT-V	Cone with vertex at a given point and a given curve as base, equation of a right circular cone with vertex is at a point other than origin, cylinder, equation of a cylinder, equation of a right circular cylinder, related examples.	Dr M Helal Ahmed

28. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSC152 TOPICS: Integral Calculus and Vectors	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Integration of rational functions, definite integral as the limit of a sum. Definite integrals and their properties.	Dr G Bodosa
UNIT-II	Reduction formulae, derivations and illustrations of reduction formulae of the type$\int \sin n\ x\ dx, \int \cos n\ x\ dx, \int \tan n\ x\ dx, \int \sec n\ x\ dx, \int (\log x)\ n\ dx, \int \sin m\ x \cos n\ x\ dx, \int \sin m\ x \cos nx\ dx.$	
UNIT-III	Cartesian and parametric equations of plane curves, rectification of plane curves, areas of surfaces of revolution and volumes of solids of revolution.	
UNIT-IV	Scalar and vector triple products, related problems. Vector equations of lines, planes and spheres.	
UNIT-V	Vector functions, limit, continuity and differentiation of vector functions, and related problems, gradient, divergence and curl, their identities and related problems.	Mrs M Durpui

29. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - MATDSM151 TOPICS: Calculus	TAUGHT BY (SESSION: 2023-24)
UNIT-I	Limit (ε - δ definition), Cauchy's criterion for existence of limit (without proof), problems on limits. Continuity (ε - δ definition), related theorems and problems, types of discontinuities. Differentiability of a function, problems on differentiability, relation between continuity and differentiability. Successive differentiation, Leibnitz's theorem and its application.	Dr M Helal Ahmed
UNIT-II	Rolle's theorems, Lagrange's mean value theorem, Cauchy's mean value theorem. Statement and applications of Taylor's and Maclaurin's theorems, Taylor's and Maclaurin's series, expansions of functions sin x, cos x, , $(1 + x)$ (assuming$Rn \to 0$ as $n \to \infty$). Maxima and minima for functions of one variable, necessary and sufficient condition for maxima and minima. Indeterminate forms: $0\,0$, $\infty\,\infty$, $0 \times \infty$, $\infty - \infty$, $0\,0$, $1\,\infty$, $\infty 0$.	
UNIT-III	Partial differentiation. Euler's theorem on homogeneous functions (two variable). Tangents, normals: Equations and properties of tangents and normals, subtangents and subnormals of cartesian and polar curves.	Mrs M Durpui
UNIT-IV	Definition and properties of definite integrals, Fundamental theorem (without proof), Reduction formulae of the type $\int sinn\ xdx$, $\int cosn\ xdx$, $\int tann\ xdx$, $\int secn\ xdx$, $\int (logx)\ n\ dx$, $\int sinm\ xcosnxdx$, $\int sinm\ xcosnxdx$.	Dr G Bodosa
UNIT-V	Area bounded by plane curves (cartesian and polar), rectification of plane curves (cartesian and polar), volumes and surface of solid of revolution about axes: Cartesian curves.	

30. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	DISCIPLINE SPECIFIC CORE COURSES MATHEMATICS - **MATDSEC151** **TOPICS: Mathematical Programming in C (Theory with Practical)**	**TAUGHT BY (SESSION: 2023-24)**
UNIT-I	Introduction to C language, C characters, constants and variables. Arithmetic expression and statement. Input-output statements, assignment statement, printf and scanf statements, declaration statement.	**Dr M Helal Ahmed**
UNIT-II	Simple computer programs. Logical expression and statements, logical and relational operators.	
UNIT-III	Decision control structures and loops: if statement, if-else statement, for loop, while loop, do-while loop, switch statement, break statement, continue statement, go to statement.	
UNIT-IV	Functions: Defining a function, function prototypes, passing arguments to a function.	
UNIT-V	Return statement, arrays, defining one and multi-dimensional arrays.	

31. Curriculum Plan for the session 2023-24, FYUG Mathematics (Honours/General)

SL NO.	**DISCIPLINE SPECIFIC CORE COURSES** **MATHEMATICS - MATIDC151** **TOPICS: Geometry**	**TAUGHT BY (SESSION: 2023-24)**
UNIT-I	Coordinates, distance between two points, section formula, area of a triangle and quadrilateral with given coordinates of vertices, polar coordinates, change of Cartesian to polar coordinates.	**Dr G Bodosa**
UNIT-II	Straight lines, various forms of equation of a straight line, angles between two straight lines, conditions for parallel and perpendicular lines, lengths of perpendiculars, intersection of two straight lines.	
UNIT-III	Pair of straight lines, conditions parallel and perpendicular lines, bisector of angles between pair of straight lines, general equation of 2nd degree. Homogeneous equation of 2nd degree.	**Dr M Helal Ahmed**
UNIT-IV	Circles, various forms of equation of a circle, condition that the general equation of 2nd degree may represent a circle, tangent and normal to a circle.	
UNIT-V	Conic sections, parabola, hyperbola, ellipse, their equations in various forms.	**Mrs M Durpui**

32. Programme Outcomes: The outcome of the mathematics degree programs is to equip students with analytic and problem solving skills for careers and graduate work. Classes develop student abilities and aptitudes to apply mathematical methods and ideas not only to problems in mathematics and related fields such as the sciences, computer science, actuarial science, or statistics. Students are encouraged to develop intellectually and to become involved with professional organizations.

1. This program fosters critical thinking and scientific temper among the students.

2. It enables the students to appreciate mathematical logic and ideas and to write mathematical statements correctly with quantifiers.

3. This program provides a curriculum that trains the students to ask more questions.

4. It enriches the knowledge base and provides a strong foundation for higher studies.

5. It makes the students employable in academia and industry sectors.

6. It motivates the students towards research.

7. This program helps the students to model the real-life problems and to go for solving them with the help of various mathematical tools.

8. To introduce the concept of limits, continuity, differentiability of functions and their various applications.

9. To learn the techniques of L'Hospital rule for evaluation of limit.

10. To explain the concept of definite integral and various types of reduction formula for integration of trigonometric function.

11. To explain the applications in finding the area and rectification of plane curves; the volume and surface area of revolution of curve.

33. Course Outcome: Students will interpret average rate of change over an interval and instantaneous rate of change for a function at a point. Also, able to utilize appropriate theory and solution techniques for the problems of Taylor series with its interval of convergence for use in a variety of applications such as approximating values of a function and studying the behaviour of a function.

After completion of the course, learners will be able to

1. Demonstrate understanding of complex numbers in polar form and apply De Moivre's theorem effectively.

2. Analyse and solve problems involving exponential and logarithmic functions with complex arguments and series expansions.

3. Apply formal logic principles to construct logical statements and understand the relationship between roots and coefficients of polynomial equations.

4. Solve polynomial equations and inequalities involving means using appropriate techniques.

5. Solve systems of linear equations using Gaussian elimination and understand concepts related to matrices, rank, and linear dependence/independence.

6. After completion of this course, the learners should be able to understand limits, continuity and differentiability and apply these to solve real life problems. The learners should also be able to grasp the concepts of tangents, normals, subtangents, subnormals and solve related problems. This course will also provide an overview of partial derivatives which will be helpful in further courses of study.

7. After completion of this course, the learners will be able to solve the problems of limits, continuity, derivative and integration, apply Calculus in real life problems.

34. Evaluation Methods in the Department of Mathematics (Pedagogy of Mathematics)

The main objective of the evaluation in Mathematics is to achieve the desired goals in the teaching-learning methods for the students. Therefore, some methods of evaluation have been embraced by me. These methods are divided into two sections viz., Testing techniques and Non-testing techniques.

34.1 Testing techniques: ***Test**: The most customary method of evaluation of Mathematics is Test.

i) It helps to discover the capacities of students to solve mathematical problems.

ii) It helps to assess the knowledge already acquired by the student about a new topic. This type of assessment is called Inventories.

iii) A Test is conducted at the end of a new chapter to assess if the students have properly understood the lesson taught.

iv) Certain tests are conducted to find out learning difficulties of students.

The arranged tests are based on the latest curriculum and easily accessible, and it is an achievement test. Unit tests are categorised under achievement tests.

Unit tests are arranged to assess the students' knowledge level under that particular unit. These tests are useful for giving suggestions and advice to the students regarding their performance. This kind of test is a class test and an hour is allotted for this. Question is prepared as sample answers for the test questions.

34.2 Non-testing techniques:

i) **Rating scales**: The rating scale is a system through which a teacher decides if the student is expressing interest in Mathematics or not. Therefore, it is a set of behavioural feature that has to be evaluated.

ii) **Checklist**: The checklist is another method of evaluation in Mathematics through observation. It is basically a method through which the existence of certain characteristics is measured. Through this process, the abilities and disabilities of the students are found. With the help of this process, we can easily find out the difficulties faced by the students.

iii) **Observational method**: Evaluation can not only be completed with tests alone but also with observations. There are so many factors which cannot be evaluated with the help of test. Therefore, observation is another suitable method of evaluation. The behaviour of the students is observed ion the classroom while teaching them Mathematics. He/She can write them down and later analyse it.

But the most regular practices in Mathematics are **homework and assignment** for the problems of the courses taught in the classes. Homework makes students more responsible and helps them to learn develop time management and study skills. **Students can engage with their studies:** Even with the whole day spent at the College, allocated class time is not always sufficient when it comes to engaging students with their College work. Setting homework allows students to revise content learnt during the day with a fresh set of eyes and a clear head, away from their friends and other College yard distractions. This also provides parents with an opportunity to get involved in their child's College work, providing assistance and additional insight when needed.

35. CONCLUSION

Evaluation is a very important method to teach mathematics appropriately and this method is helpful for both the teacher and the students. Teachers learn about their students and students learn about their capacities and weaknesses.

12.04.2024

Dr. G. Bodosa
Associate Professor
Department of Mathematics

Principal (i/c)
Haflong Govt. College
Dima Hasao: Assam

CURRICULUM IMPLEMENTATION for PHYSICS DEPARTMENT, 2018-2019

A single teacher (called course coordinator) is assigned the responsibility of teaching the contents of the whole course. The entire syllabus is evenly distributed among the teachers of the Department. Personal preference and teaching experience are the factors that were taken into consideration while distributing the syllabus among the teachers. The number of classes per week is equal to the credits assigned to the course. The course coordinator also took the responsibility of conducting the internal assesement exams of their respective courses. The internal assesement marks and student's attendance were then forwarded and finally uploaded in the University website.

The TDC (CBCS) Physics syllabus can be viewed and downloaded from the link given below.

http://www.aus.ac.in/physics-department/syllabus/

The syllabus distribution for TDC (CBCS) Honours is given below.

SEMESTER	COURSE NO.	COURSE NAME	TEACHER	CREDITS
I	PHSHCC101T	Mathematical Physics-I	Chinmoy Phookan	4
	PHSHCC101P	Mathematical Physics-I Lab	Anjana Devi	2
	PHSHCC102T	Mechanics	Basanta Pathak	4
	PHSHCC102P	Mechanics Lab	Basanta Pathak	2
II	PHSHCC201T	Electricity and Magnetism	Anjana Devi	4
	PHSHCC201P	Electricity and Magnetism Lab	Anjana Devi	2
	PHSHCC202T	Waves and Optics	David Pegu	4
	PHSHCC202P	Waves and Optics Lab	David Pegu	2
III	PHSHCC301T	Mathematical Physics-II	CP / AD	4
	PHSHCC301P	Mathematical Physics-II Lab	Chinmoy Phookan	2
	PHSHCC302T	Thermal Physics	Basanta Pathak	4
	PHSHCC302P	Thermal Physics Lab	David Pegu	2
	PHSHCC303T	Digital Systems and Applications	Anjana Devi	4
	PHSHCC303P	Digital Systems & Applications Lab	Chinmoy Phookan	2
	PHSSEC301T	Workshop skill	Basanta Pathak	4
IV	PHSHCC401T	Mathematical Physics III	Chinmoy Phookan	4
	PHSHCC401P	Mathematical Physics-III Lab	Chinmoy Phookan	2
	PHSHCC402T	Elements of Modern Physics	David Pegu	4
	PHSHCC402P	Elements of Modern Physics Lab	Basanta Pathak	2
	PHSHCC403T	Analog Systems and Applications	BP / DP	4
	PHSHCC403P	Analog Systems & Applications Lab	Anjana Devi	2
	PHSSEC401T	Electrical Circuit and Network	Anjana Devi	4
V	PHSHCC501T	Quantum Mechanics & Applications	Anjana Devi	4
	PHSHCC501P	Quantum Mechanics Lab	Anjana Devi	2
	PHSHCC502T	Solid State Physics	David Pegu	4
	PHSHCC502P	Solid State Physics Lab	Chinmoy Phookan	2
	PHSDSE501T	A. Classical Dynamics B. Biological Physics	Basanta Pathak	6
	PHSDSE502	A. Nuclear and Particle Physics	Chinmoy Phookan	

CURRICULUM IMPLEMENTATION for PHYSICS DEPARTMENT, 2018-2019

		B. Advanced Mathematical Physics		6
VI	PHSHCC601T	Electro-magnetic Theory	Anjana Devi	4
	PHSHCC601P	Electro-magnetic Theory Lab	Chinmoy Phookan	2
	PHSHCC602T	Statistical Mechanics	Basanta Pathak	4
	PHSHCC602P	Statistical Mechanics Lab	Chinmoy Phookan	2
	PHSDSE601T	A. Astronomy and Astrophysics B. Nano-materials and applications	David Pegu	6
	PHSDSE602T	A. Dissertation B. Physics of Devices and Communication	Chinmoy Phookan	6

The syllabus distribution for TDC (CBCS) Pass is given below.

SEMESTER	COURSE NO.	COURSE NAME	TEACHER	CREDITS
I	PHSDSC101T	Mechanics	Chinmoy Phookan	4
	PHSDSC101P	Mechanics Lab	Basanta Pathak	2
II	PHSDSC201T	Electricity, Magnetism and EMT	Basanta Pathak	4
	PHSDSC201P	Electricity, Magnetism and EMT Lab	Basanta Pathak	2
III	PHSDSC301T	Thermal Physics and Statistical Mechanics	Anjana Devi	4
	PHSDSC301P	Thermal Physics and Statistical Mechanics Lab	David Pegu	2
	PHSSEC301T	Physics workshop skill	Basanta Pathak	4
IV	PHSDSC401T	Waves and Optics	David Pegu	4
	PHSDSC401P	Waves and Optics Lab	David Pegu	2
	PHSSEC401T	Electrical Circuits and Network Skills	Anjana Devi	4
V	PHSSEC501T	Basic Instrumentation Skills	David Pegu	4
	PHSDSE501T	A. Classical Dynamics B. Biological Physics	Basanta Pathak	6
VI	PHSSEC601T	Renewable Energy and Energy Harvesting	Chinmoy Phookan	4
	PHSDSE601T	A. Astronomy and Astrophysics B. Nano-materials and Applications	David Pegu	6

ATTESTED

Principal
Haflong, Govt. College
Haflong

22/8/18

{Dr. Chinmoy Kr. Phookan
Head, Dept. of Physics}

Department of Zoology :: Haflong Government College
Plan for Curriculum Implementation

ACADEMIC SESSION 2018-2019

Prepared by
Curriculum Implementation Committee
Department of Zoology
Haflong Government College

Department of Zoology:: Haflong Government College
Plan for Curriculum Implementation

The Department of Zoology of Haflong Government College has made the following plan for implementation of the Curriculum designed by the affiliating Assam University for the Session 2018-2019. Assam University has introduced the TDC CBCS programme for B.Sc. General as well as B.Sc. Honours programme in Zoology from the session 2018-19. The Department of Zoology has planned to implements the B.Sc. Honours Programme as well as the B.Sc. General Programme in the Choice Based Credit System from the session 2018-19 for students enrolled TDC 1st Semester. The earlier programmes of TDC Zoology Honours and Zoology Pass Course of B.Sc. Pass Programme designed by Assam University will also continue for TDC 3rd, 4th, 5th and 6th Semesters in the session 2018-19. The following is the outline plan for implementation of the curriculum for the academic session 2018-2019.

ODD SEMESTERS from August 2018 to December 2018

Plan for Implementation of B.Sc. (Zoology) Honours and B.Sc. (Zoology) General CBCS Programme

B.Sc. First SEMESTER Honours Programme
DISCIPLINE SPECIFIC CORE COURSES

Course Code: ZOOHCC-101 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Non-chordates I: Protozoa and Metazoa (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Protozoa and Metazoa:** 1. General characteristics and Classification up to classes 2. Study of *Euglena*, *Amoeba* and *Paramecium* (structure and nutrition) *3.* Life cycle and pathogenicity of *Plasmodium vivax* and *Entamoeba histolytica* 4. Locomotion and Reproduction in Protozoa 5. Body symmetry and segmentation of Metazoa	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
II	**Porifera:** 1. General characteristics and Classification up to classes 2. Histology of *Sycon*, Life history of *Sycon* 3. Canal system and spicules in sponges	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

III	**Cnidaria and Ctenophora:** 1. General characteristics and Classification of Cnidaria up to classes 2. Life cycle of *Obelia* 3. Polymorphism in *Siphonophora* 4. Corals and coral reefs formation 5. General characteristics and affinities of Ctenophora	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
IV	**Platyhelminthes:** 1. General characteristics and classification up to classes 2. Life cycle and pathogenicity of *Fasciola hepatica* and *Taenia solium* 3. Parasitic adaptations in Platyhelminthes	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Nemathelminthes (Pseudocoelomates):** 1. General characteristics and Classification of Nemathelminthes up to classes 2. Life cycle, and pathogenicity of *Ascaris lumbricoides* and *Wuchereria bancrofti* 3. General characteristics and significance of rotifers	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-103 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Non-chordates I: Protozoa and Metazoa (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of whole mount of *Euglena, Amoeba* and *Paramecium,* Binary fission and Conjugationin *Paramecium*	Mr. Bubul Das	Lecture, Practical Total Hours: 5
2	Examination of pond water collected from different places for diversity in Protista	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
3	Study of Sycon (L.S.), *Hyalonema, Euplectella, Spongilla*	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
4	Museum specimen for identification – *Obelia, Physalia, Millepora, Aurelia, Tubipora, Corallium, Alcyonium, Gorgonia, Metridium, Pennatula, Fungia, Meandrina, Madrepora,Fasciola hepatica, Taenia solium*	Mrs. Anima Das	Lecture, Practical Total Teaching Hours: 5

5	One specimen/slide of any ctenophore	Mrs. Anima Das	Lecture, Practical Total Hours: 5
6	Study of adult *Ascaris lumbricoides* and its life stages (Slides/micro-photographs)	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
7	To submit a Project Report on any related topic on life cycles	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5

Identification= 10 marks; Project report= 8 marks; Regularity= 5 marks; Viva voce= 2 marks; Laboratory notebook= 5 marks

Course Code: ZOOHCC-102 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Principles of Ecology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teaching
I	**Introduction to Ecology** 1. Definition of ecology, Autecology and synecology 2. Levels of organization, Laws of limiting factors 3. Biotic and abiotic factors	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
II	**Population** 1. Unique and group attributes of population: Density, natality, mortality, life tables, fecunditytables, survivorship curves 2. Exponential and logistic growth 3. Population regulation - density-dependent and independent factors 4. Population interactions – negative and positive interactions	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
III	**Community** 1. Community characteristics: species richness, dominance, diversity, abundance, verticalstratification 2. Ecotone and edge effect; Ecological succession with example 3. Theories pertaining to climax community	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
IV	**Ecosystem** 1. Types of ecosystems with example 2. Food chain: Detritus and grazing food chains, Food web, Energy flow through the ecosystem 3. Ecological pyramids 4. Biogeochemical cycle, Nitrogen cycle, Carbon Cycle	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12

V	**Applied Ecology** 1. Concept of sanctuary, national park, biosphere reserve, 2. Ecology in Wildlife Conservation and Management 3. Causes of depletion of wildlife 4. Project Tiger, Project Rhino 5. Application of GIS and remote sensing in wildlife biology	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-104 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Non-chordates I: Principles of Ecology (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of life tables and plotting of survivorship curves of different types from the hypothetical/real data provided	Mr. Bubul Das	Lecture, Practical Total Hours: 5
2	Determination of population density in a natural/hypothetical community by quadrate method andcalculation of Shannon-Weiner diversity index for the same community	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
3	Study of an aquatic ecosystem: Phytoplankton and zooplankton, Measurement of area, temperature, turbidity/penetration of light, determination of pH, and Dissolved Oxygen content (Winkler's method)	Dr. Sarbojit Thaosen	Lecture, Practical Field Visit Total Hours: 5
4	Biological Oxygen Demand (BOD)	Mrs. Anima Das	Lecture, Practical Total Hours: 5
5	Report on a visit to places of zoological importance	Dr. Sarbojit Thaosen	Field Visit Total Hours: 10

Experiments= 14 marks; Field Report/Project= 7 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2

Plan for implementation of B.Sc. (General) Zoology Programme
First Semester
DISCIPLINE SPECIFIC GENERAL ELECTIVE
Course Code: ZOODSC/ZOOGE-101 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Animal Diversity (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Protozoa, Porifera and Cnidaria** 1. General characters and classification of Protozoa up to classes; Locomotory Organellesand locomotion in Protozoa 2. General characters and classification of Porifera up to classes; Canal System in *Sycon* 3. General characters and classification up of Cnidaria to classes; Polymorphism in *Siphonophora*	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
II	**Platyhelminthes, Nemathelmithes and Annelida** 1. General characters and classification of Platyhelminthes up to classes; Life history of *Taenia solium* 2. General characters and classification of Nemathelminthes up to classes; Life history of *Ascaris lumbricoides* and its parasitic adaptations 3. General characters and classification of Annelida up to classes; Digestive System ofLeech	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
III	**Arthropoda, Mollusca and Echinodermata** 1. General characters and classification of Arthropoda up to classes; Vision in Arthropoda, Metamorphosis in Insects 2. General characters and classification of Mollusca up to classes; Torsion in gastropods 3. General characters and classification of Echinodermata up to classes; Water-vascular system in Star Fish	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
IV	**Protochordates, Agnatha and Pisces** 1. General features of Protochordates 2. General features of Agnatha and classification of Cyclostomes up to classes 3. General features and Classification of Pisces up to orders; Osmoregulation in Fishes	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
V	**Amphibia, Reptiles, Aves and Mammals** 1. General features and Classification of Amphibia up to orders; Parental care 2. General features and Classification of Reptilia up to orders;	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial

	Poisonous and non-poisonous snakes, Biting mechanism in snakes 3. General features and Classification of Aves up to orders; Flight adaptations in birds 4. Classification of Mammals up to orders; Monotremata, Marsupials and Placentals –their characteristic features		Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOODSC/ZOOGE-102 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Animal Diversity (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of the following specimens: *Amoeba*, *Euglena, Plasmodium, Paramecium, Sycon*, *Hyalonema,* and *Euplectella, Obelia, Physalia, Aurelia, Tubipora, Metridium, Taenia solium,* Male and female *Ascaris lumbricoides, Aphrodite, Nereis, Pheretima, Hirudinaria, Palaemon, Cancer*, *Limulus*, *Palamnaeus, Scolopendra*, *Julus*, *Periplaneta,Apis, Chiton, Dentalium, Pila, Unio,Loligo, Sepia, Octopus, Pentaceros, Ophiura, Echinus, Cucumaria* and *Antedon, Balanoglossus, Herdmania, Branchiostoma, Petromyzon, Sphyrna, Pristis, Torpedo, Labeo, Exocoetus, Anguilla, Ichthyophis/Ureotyphlus, Salamandra, Bufo, Hyla, Chelone, Hemidactylus, Chamaeleon,Draco, Vipera, Naja, Crocodylus, Gavialis,* Any six common birds from different orders,*Sorex*, Bat, *unambulus, Loris.*	Mrs. Anima Das	Lecture, Practical Remedial Total Teaching Hours: 15
2	Study of the following permanent slides: T.S. and L.S. of *Sycon*, Study of life history stages of *Taenia,* T.S. of Male and female *Ascaris*	Dr. Sarbojit Thaosen	Lecture, Practical Total Teaching Hours: 5
3	Key for Identification of poisonous and non-poisonous snakes. An ‑animal album‖ containing photographs, cut outs, with appropriate write up about the above mentioned Taxa. Different Taxa/ topics may be given to different sets of students for this purpose.	Mr. Bubul Das	Lecture, Practical Total Teaching Hours: 10

Identification= 21 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2

B.Sc. Third SEMESTER Honours Programme
DISCIPLINE SPECIFIC CORE COURSES
Course Code: ZOOHCC-301 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Diversity of Chordates (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction to Chordates and Protochordates** 1. General characteristics and outline classification of chordates 2. General characteristics of Hemichordata, Urochordata and Cephalochordata; 3. Retrogressive metamorphosis in Urochordata 4. Advanced features of vertebrates over Protochordata	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
II	**Agnatha and Pisces** 1. General characteristics and classification of cyclostomes up to class 2. Classification of Pisces up to order 3. General characteristics of Chondrichthyes and Osteichthyes, 4. Migration, Osmoregulation and Parental care in fishes	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
III	**Amphibia and Reptilia** 1. General characteristics and classification up to order; Parental care in Amphibians 2. General characteristics, distribution and affinities of *Sphenodon* 3. Difference between poisonous and non-poisonous snakes 4. Poison apparatus and Biting mechanism in snakes	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
IV	**Aves and mammals** 1. General characteristics and classification of Aves up to order; *Archaeopteryx* — generalcharacteristics and phylogenetic importance 2. Flight adaptations and Migration in birds; Flying and perching mechanism in birds 3. General characters and classification of mammals up to order; Affinities of Prototheria 4. Echolocation of Bats 5. Adaptive radiation of mammals with reference to locomotory appendages	Mrs. Madhumita Daolagupu	Lecture Tutorial Seminar Test Remedial Total Teaching Hours:12
V	**Zoogeography** 1. Zoogeographical realms, geographic range, Physical features and faunal composition;Distribution of animals, types; Continental drift 2. Barriers: Extrinsic and intrinsic barriers; Dispersal – means of dispersal	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-304 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Diversity of Chordates (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Protochordata: *Balanoglossus, Herdmania, Branchiostoma,* Colonial Urochordata Sections of*Balanoglossus* through, proboscis and branchiogenital regions, Sections of *Amphioxus* through pharyngeal, intestinal and caudal regions.	Dr. Sarbojit Thaosen	Lecture, Practical Total Teaching Hours: 10
2	Agnatha: *Petromyzon, Myxine*	Mrs. Anima Das	Lecture, Practical Total Hours: 2
3	Fishes: *Scoliodon, Sphyrna, Pristis, Torpedo, Mystus, Heteropneustes, Labeo rohuta, Catla catla, Exocoetus, Echeneis, Anguilla, Hippocampus, Tetrodon/ Diodon, Anabas*	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
4	Amphibia: *Ichthyophis, Necturus, Bufo, Hyla, Alytes, Salamandra*	Mr. Bubul Das	Lecture, Practical Total Hours: 2
5	Reptilia: *Chelone, Trionyx, Hemidactylus, Varanus, Uromastix, Chamaeleon, Ophiosaurus, Draco, Bungarus, Vipera, Naja, Hydrophis, Crocodylus.* Key for Identification of poisonousand non-poisonous snakes	Mrs. Anima Das	Lecture, Practical Total Teaching Hours: 10
6	Aves: Study of six common birds from different orders. Types of beaks and claws	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
7	Mammalia: Bat (Insectivorous and Frugivorous), *Funambulus, Loris, Herpestes.* Mount ofweberian ossicles, pecten from Fowl head	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
8	Project: Power point presentation on study of any two animals from two different classes bystudents	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Spotting= 14 marks; Project= 7 marks; Regularity= 5 marks;Laboratory Notebook= 2 marks;Viva voce= 2 marks

Course Code: ZOOHCC-302 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Physiology: Controlling and Coordinating Systems (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Animal Tissues** 1. Structure, location, classification and functions of epithelial tissue, connective tissue,muscular tissue and nervous tissue 2. Structure and types of bones and cartilages	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
II	**Nervous System** 1. Structure of neuron 2. Resting membrane potential, Origin of action potential and its propagation across themyelinated and non-myelinated nerve fibers 3. Types of synapse, Synaptic transmission and Neuromuscular junction 4. Reflex action and its types - reflex arc	Mr. Bubul Das	LectureTutorial Seminar, Test Remedial Total Teaching Hours:12
III	**Muscle** 1. Histology of different types of muscle; Ultra structure of skeletal muscle 2. Molecular and chemical basis of muscle contraction 3. Characteristics of muscle twitch; treppe, summation and tetanus, isotonic and isometriccontraction	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
IV	**Reproductive System** 1. Histology of testis and ovary 2. Physiology of male and female reproduction; reproductive cycles 3. Puberty, Methods of contraception in male and female 4. Hormones of testis and ovary and their functions 5. Feedback mechanism of action of hormones 6. Placental hormones	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
V	**Endocrine System** 1. Histology of endocrine glands - pineal, pituitary, thyroid, parathyroid, pancreas, adrenal 2. Hormones secreted by endocrine glands and their functions 3. Classification of hormones; Regulation of their secretion; 4. Mechanism of hormone action – peptide and steroid hormones	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end

semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-305 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Physiology: Controlling and Coordinating Systems (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Recording of simple muscle twitch with electrical stimulation through PowerPoint presentation	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
2	Demonstration of the unconditioned reflex action (Deep tendon reflex such as knee jerk reflex)	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 1
3	Preparation of temporary mounts: Squamous epithelium, Striated muscle fibres and nerve cells	Mrs. Anima Das	Lecture, Practical Total Hours: 5
4	Study of permanent slides of Mammalian skin, Cartilage, Bone, Spinal cord, Nerve cell, Pituitary,	Mr. Bubul Das	Lecture, Practical Total Hours: 1
5	Pancreas, Testis, Ovary, Adrenal, Thyroid and Parathyroid	Mr. Bubul Das	Lecture, Practical Total Hours: 1
6	Microtomy: Preparation of permanent slides of mammalian (Goat/white rat) tissues (at least three)	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5

Experiment= 10 marks, Identification= 6 marks, Microtomy= 5 marks, Regularity= 5 marks, Laboratory Notebook= 2 marks, Viva voce=2 marks

Course Code: ZOOHCC-303 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Fundamentals of Biochemistry (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Carbohydrates** 1. Structure and Biological importance: Monosaccharides, Oligosaccharides, Polysaccharidesand Glycoconjugates	Mrs. Madhumita Daolagupu	Lecture, Tutorial Total Teaching Hours:12
II	**Lipids** 1. Classification of lipids; Structure and Significance: Physiologically important saturated andunsaturated fatty acids, Triacylglycerols, Phospholipids, Glycolipids, Steroids	Mrs. Anima Das	LectureTutorial Seminar, Test Total Teaching Hours:12

III	**Proteins** 1. Amino acids: Structure, Classification and General properties of α-amino acids; Physiologicalimportance of essential and non-essential α-amino acids 2. Classification of proteins, bonds stabilizing protein structure; Levels of organization inproteins 3. Introduction to simple and conjugate proteins	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
IV	**Nucleic Acids** 1. Structure: Purines and pyrimidines, Nucleosides, Nucleotides, Nucleic acids 2. Base pairing, Denaturation and Renaturation of DNA 3. Types of DNA and RNA, Complementarity of DNA	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Enzymes** 1. Nomenclature and classification; Specificity of enzyme action; Mechanism of enzyme action 2. Enzyme kinetics; Factors affecting rate of enzyme-catalyzed reactions; Derivation ofMichaelis-Menten equation, Concept of Km and Vmax 3. Regulation of enzyme action	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-306 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Fundamentals of Biochemistry (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Qualitative tests of functional groups in carbohydrates, proteins and lipids	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
2	Paper chromatography of amino acids	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 10
3	Action of salivary amylase under optimum conditions	Mr. Bubul Das	Lecture, Practical Total Hours: 5

4	Effect of pH and temperature on the action of salivary amylase	Mrs. Anima Das	Lecture, Practical Total Hours: 5
5	Demonstration of proteins separation by SDS-PAGE	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 10

Experiment-I= 11 marks, Experiment-II= 10 marks, Regularity= 5 marks, Laboratory Notebook= 2 marks, Viva voce = 2 marks

SKILL ENHANCEMENT COURSES

Course Code: ZOOSEC-301 T

Credits= 02; Full Marks: Theory= 50

Name of Course:: Apiculture (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Biology of Bees** 1. History, Classification and Biology of Honey Bees 2. Social Organization of Bee Colony	Mr. Bubul Das	Lecture, Tutorial Total Teaching Hours: 6
II	**Rearing of Bees** 1. Artificial Bee rearing (Apiary), Beehives – Newton and Langstroth; 2. Bee Pasturage 3. Selection of Bee Species for Apiculture 4. Bee Keeping Equipment 5. Methods of Extraction of Honey (Indigenous and Modern)	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours: 6
III	**Diseases and Enemies** 1. Bee Diseases and Enemies 2. Control and Preventive measures	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours: 6
IV	**Bee Economy** 1. Products of Apiculture Industry and its Uses (Honey, Bees Wax, Propolis), Pollen etc.	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Hours: 6
V	**Entrepreneurship in Apiculture** 1. Bee Keeping Industry – Recent Efforts, Modern methods in employing artificial Beehives forcross pollination in horticultural gardens	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Teaching Hours: 6

Plan for implementation of B.Sc. (General) Zoology Programme
Third Semester
DISCIPLINE SPECIFIC GENERAL ELECTIVE
Course Code: ZOODSC/ZOOGE-301 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Physiology and Biochemistry (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Nerve and muscle** 1. Structure of a neuron, Resting membrane potential, Graded potential, 2. Origin of Action potential and its propagation in myelinated and non-myelinated nervefibres, 3. Ultra-structure of skeletal muscle, Molecular and chemical basis of muscle contraction	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
II	**Digestion and Respiration** 1. Physiology of digestion in the alimentary canal; Absorption of carbohydrates, proteins &lipids 2. Pulmonary ventilation, Respiratory volumes and capacities, Transport of Oxygen andcarbon dioxide in blood	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
III	**Excretion and Cardiovascular System** 1. Structure of nephron, Mechanism of Urine formation, Counter-current Mechanism 2. Composition of blood, Hemostasis, Structure of Heart, Origin and conduction of the cardiac impulse, Cardiac cycle	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
IV	**Reproduction and Endocrine Glands** 1. Physiology of male reproduction: hormonal control of spermatogenesis; Physiology offemale reproduction: hormonal control of menstrual cycle 2. Structure and function of pituitary, thyroid, Parathyroid, pancreas and adrenal	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Enzymes and Metabolism** 1. Classification and nomenclature of enzymes, Mechanism of action, Enzyme Kinetics 2. Glycolysis, Krebs Cycle, Pentose phosphate pathway, Gluconeogenesis, Electron transport chain 3. Biosynthesis and β oxidation of palmitic acid Transamination, Deamination and UreaCycle	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOODSC/ZOOGE-302 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Physiology and Biochemistry (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Preparation of hemin crystals	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
2	Study of permanent histological sections of mammalian pituitary, thyroid, pancreas, adrenal gland	Mrs. Anima Das	Lecture, Practical Total Hours: 5
3	Study of permanent slides of spinal cord, duodenum, liver, lung, kidney, bone, cartilage	Mrs. Anima Das	Lecture, Practical Total Hours: 5
4	Qualitative tests to identify functional groups of carbohydrates in given solutions(Glucose, Fructose, Sucrose, Lactose)	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 15
5	Study of activity of salivary amylase under optimum conditions	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Experiment= 15; Identification= 6; Regularity= 5; Laboratory Notebook= 2; Viva Voce= 2

B.Sc. Fifth SEMESTER Honours Programme
DISCIPLINE SPECIFIC CORE COURSES
Course Code: ZOOHCC-501 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Molecular Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Nucleic Acids** 1. Salient features and chemical compositions of DNA and RNA 2. Watson and Crick model of DNA; Structure and types of RNA	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
II	**DNA Replication** 1. DNA Replication in prokaryotes and eukaryotes, mechanism of DNA replication,	Mr. Bubul Das	Lecture, Tutorial Seminar, Test

	Semi- conservative, bidirectional and semi-discontinuous replication, RNA priming, replication oftelomeres		Total Teaching Hours:12
III	**Transcription and Regulatory RNAs** 1. RNA polymerase and transcription Unit, mechanism of transcription in prokaryotes andeukaryotes, synthesis of rRNA and mRNA, transcription factors 2. Ribo-switches, RNA interference, miRNA, siRNA	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Translation** 1. Genetic code, Degeneracy of the genetic code and Wobble Hypothesis; 2. Process of protein synthesis in prokaryotes: Ribosome structure and assembly in prokaryotes,aminoacyl tRNA synthetases and charging of tRNA; Proteins involved in initiation, elongation and termination of polypeptide chain 3. Inhibitors of protein synthesis; Difference between prokaryotic and eukaryotic translation	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
V	**Post Transcriptional Modifications, Processing of Eukaryotic RNA and Gene Regulation** 1. Split genes: concept of introns and exons, splicing mechanism, alternative splicing, exonshuffling and RNA editing, Processing of tRNA 2. Transcription regulation in prokaryotes: Principles of transcriptional regulation with examplesfrom lac operon and trp operon	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-503 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Molecular Biology (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of Polytene chromosomes from Chironomous / Drosophila larvae	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
2	Quantitative estimation of DNA using colorimeter or spectrophotometer	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 10
3	Detection of DNA	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5

4	Study and interpretation of electron micrographs/photograph showing (a) DNA replication, (b) Transcription, (c)Split genes	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Experiment= 15 marks; Identification= 6 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks;Viva voce= 2 marks

Course Code: ZOOHCC-502 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Principles of Genetics (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Mendelian Genetics and its Extension** 1. Principles of inheritance 2. Incomplete dominance and co-dominance, Multiple alleles, Lethal alleles, 3. Epistasis, Pleiotropy 4. Sex-linked, sexinfluenced and sex-limited characters inheritance	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
II	**Linkage, Crossing Over and Chromosomal Mapping** 1. Linkage and crossing over - Cytological basis of crossing over 2. Molecular mechanisms of crossing over including models of recombination 3. Linkage map – coincidence, interference	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Mutations** 1. Types of gene mutations and Types of chromosomal aberrations 2. Molecular basis of mutations in relation to UV light and chemical mutagens	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Sex Determination and Extra-chromosomal Inheritance** 1. Chromosomal, environmental and hormonal mechanisms of sex determination 2. Extra-chromosomal inheritance 3. Mitochondrial mutations	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Other Concepts in Genetics** 1. Concept of Polygenic inheritance with suitable examples 2. Conjugation, Transformation, Transduction, Complementation test in Bacteriophage *3.* Transposons in bacteria, Ac-Ds elements in maize and P elements in *Drosophila,* Transposons in humans	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end

semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-504 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Principles of Genetics (Theory)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	To study the Mendelian laws and gene interactions through PowerPoint presentation	Mrs. Anima Das	Lecture, Practical Total Hours: 5
2	Chi-square analyses using seeds/beads/*Drosophila*.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 10
3	Study of human karyotype (normal and abnormal).	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
4	Pedigree analysis of some human inherited traits.	Mr. Bubul Das	Lecture, Practical Total Hours: 10

Experiment= 15 marks; Identification= 6 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks;Viva voce= 2 marks

DISCIPLINE SPECIFIC ELECTIVE COURCES

Course Code: ZOODSE-501 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Immunology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Overview of the Immune System** 1. Introduction to basic concepts in immunology, components of immune system 2. Pinciples of innate and adaptive immune system	Mrs. Madhumita Daolagupu	Lecture, Tutorial Remedial Total Hours:12
II	**Cells and Organs of the Immune System** 1. Haematopoiesis, Cells of immune system 2. Lymphoid organs (primary and lymphoid organs) of the immune system	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12

III	**Antigens and Antibodies** 1. Basic properties of antigens, B and T cell epitopes, haptens and adjuvants; 2. Structure, classes and function of antibodies, monoclonal antibodies, 3. Antigen antibody interactions as tools for research and diagnosis	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Working of the Immune System** 1. Structure and functions of MHC, exogenous and endogenous pathways of antigen presentation and processing, Basic properties and functions of cytokines, 2. Complement system: Components and pathways.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Immune System in Health and Disease** 1. Introduction to concepts of autoimmunity and immunodeficiency; AIDS; 2. General introduction to vaccines, Various types of vaccines	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOODSE-502 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Immunology (Theory)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Demonstration of lymphoid organs through audio-visual aids	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	Histological study of spleen, thymus and lymph nodes through slides/ photographs	Mr. Bubul Das	Lecture, Practical Total Hours: 5
3	Preparation of stained blood film to study various types of blood cells.	Mrs. Anima Das	Lecture, Practical Total Hours: 5
4	ABO blood group determination.	Mrs. Anima Das	Lecture, Practical Total Hours: 5
5	Demonstration of ELISA and Immunoelectrophoresis through audio-visual aids.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 10

Experiment= 15 marks; Identification= 6 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks;Viva voce= 2 marks

Course Code: ZOODSE-502 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Fish and Fisheries (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction and Classification** 1. General description of fish; Account of systematic classification of fishes (up to classes); 2. Classification based on feeding habit, habitat and manner of reproduction.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
II	**Morphology and Physiology** 1. Types of fins and their modifications; Locomotion in fishes; Hydrodynamics; 2. Types of Scales, Use of scales in Classification and determination of age of fish; 3. Gills and gas exchange; Swim Bladder: Types and role in Respiration, buoyancy; 4. Osmoregulation in fishes; Electric organs; Bioluminiscience; Schooling; 5. Parental care; Migration	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Fisheries** 1. Inland Fisheries; Marine Fisheries; Environmental factors influencing the seasonal variationsin fish catches in the Bay of Bengal; 2. Fishing crafts and Gears; Depletion of fisheries resources; 3. Application of remote sensing and GIS in fisheries; Fisheries law and regulations	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Aquaculture** 1. Sustainable Aquaculture; Extensive, semi-intensive and intensive culture of fish; 2. Pen and cage culture; Polyculture; Composite fish culture; Brood stock management; 3. Induced breeding of fish; Management of finfish hatcheries; 4. Preparation and maintenance of fish aquarium; Preparation of compound diets for fish; Roleof waterquality in aquaculture	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Fish Diseases and fishery By-products** 1. Fish diseases: Bacterial, viral and parasitic; EUS; 2. Preservation and processing of harvested fish, 3. Fishery by-products	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOODSE-502 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Fish and Fisheries (Theory)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Morphometric and meristic characters of fishes of IMC	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	Study of *Pristis*, *Exocoetus*, *Hippocampus*, *Labeo, Heteropneustes, Anabas, Catla, Mirgal,Clarias, Notopterus, Cyprinus, Ompok, Telapia*	Mr. Bubul Das	Lecture, Practical Total Hours: 5
3	Study of different types of scales (through permanent slides/ photographs)	Mrs. Anima Das	Lecture, Practical Total Hours: 5
4	Study of crafts and gears used in Fisheries	Mr. Bubul Das	Lecture, Practical Total Hours: 5
5	Water quality criteria for Aquaculture: Assessment of pH, temperature	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
6	Study of air breathing organs in *Channa, Heteropneustes, Anabas* and *Clarias* through audio-visual aids	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
7	Demonstration of induced breeding in Fishes (video)	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
8	Demonstration of parental care in fishes (video)	Mrs. Anima Das	Lecture, Practical Total Hours: 5
9	A Project Report on visit(s) to fish farm/ pisciculture unit/ fish research laboratory	Dr. Sarbojit Thaosen	Field Visit Total Hours= 10

Experiment= 14 marks; Project Report= 7 marks Regularity= 5 marks; Laboratory Notebook= 2 marks;Viva voce= 2 marks

SKILL ENHANCEMENT COURSES
Course Code: ZOOSEC-501 T
Credits= 02; Full Marks: Theory= 50
Name of Course:: Aquarium Fish Keeping (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction to Aquarium Fish Keeping** 1. The potential scope of Aquarium Fish Industry as a Cottage Industry, 2. Exotic and Endemic species of Aquarium Fishes	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Teaching Hours: 6

II	**Biology of Aquarium Fishes** 1. Common characters and sexual dimorphism of Fresh water and Marine Aquarium fishes such as Guppy, Molly, Sword tail, Gold fish, Angel fish, Blue morph, Anemonefish and Butterfly fish	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours: 6
III	**Food and feeding of Aquarium fishes** 1. Use of live fish feed organisms. 2. Preparation and composition of formulated fish feeds	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours: 6
IV	**Fish Transportation** 1. Live fish transport - Fish handling, packing and forwarding techniques.	Mrs. Anima Das	Lecture, Tutorial Total Hours: 6
V	**Maintenance of Aquarium** 1. General Aquarium maintenance – budget for setting up an Aquarium Fish Farm as aCottage Industry	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Teaching Hours: 6

Plan for Implementation of B.Sc. (Zoology) Honours and B.Sc. (Zoology) Pass <u>Non-CBCS Programme</u>

The different units and topics thereof of the Zoology Honours Course of B.Sc. Programme have been allotted to individual teachers of the department as mentioned in the following tables for the odd semesters from July 2018 to December 2018. Details of plan for each unit and topics will be designed by each of the teachers to whom the units and topics are allotted. As per the guidelines of the University, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be counted in the university conducted examinations for each semester.

B.Sc. 3rd SEMESTER Honours Programme

Paper: ZOOH-301
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Physiology and Endocrinology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Sense Organ:** Different types of sense organs in vertebrates- Mechanoreceptors, Chemoreceptors, Phonoreceptors, Photoreceptors, Thermoreceptors, electroreceptors, rheoreceptors.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12

II	**Neuro Physiology:** i)Structure & function of Neurons and nerve fibres. ii) Physiology of the transmission of nerve impulse. iii) The synapse and its classification; Biochemical mechanism of synaptic transmission and role of Neurotransmitters.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
III	**Muscle Physiology:** i)Ultra structure, mechanism of contraction of Skeletal muscle. ii) Muscle twitch, Isotonic & Isometric contractions, Tetanic contractions, Muscle fatigue, Muscle treppe	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
IV	**Endocrinology-I:** Structure, histology & functions of pituitary, thyroid, parathyroid, pancreas, adrenal	Dr. Tara Nandi Majumdar	Lecture, Tutorial Total Hours:12
V	**Endocrinology-II:** i) Testis & Ovary as endocrine glands, Gastro-intestinal hormones, Neurohormones ii) Transportation of hormones iii) Mechanism of hormone action	Dr. Tara Nandi Majumdar	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Paper: ZOOH-302
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Biotechniques & Biostatistics (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Biotechniques-I:** i)Principle and use of analytical instruments- pH meter, colorimeter, spectrophotometer, ultracentrifuge, ESR and NMR	Miss. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Biotechniques-II:** i)Microscopy- Compound & Phase Contrast Microscope, Basic concepts of Transmission and Scanning Electron Microscope. ii) Fixation and staining.	Miss. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Tissue Culture-I:** i)Histology & scope of animal cell and tissue culture, its advantages & dis-advantages. ii) Laboratory facilities for tissue culture, substrate, culture media and culture procedure.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
IV	**Tissue Culture-II:** i)Cell culture, cell line and its maintenance. ii) Large scale cell culture.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12

V	**Biostatistics:** i)Concept of Mean, Median & Mode. ii) Standard error & Standard deviation. iii) Correlation & Regression.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Paper: ZOOH-303
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Cell Biology, Genetics & Space Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Cell Biology-I:** i)Diversity of cell size and shape, cell theory, structure of prokaryotic and eukaryotic cells, cell cycle. ii) Cell organelles with reference to Golgi body, Mitochondria, Lysosome, Endoplasmic reticulum & Ribosome	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
II	**Cell Biology-II:** i)Membrane transport ii) Cell reproduction iii) An elementary idea of Cancer	Miss. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Genetics-I:** i)Mendalian inheritance patterns and law of heredity ii) Co and incomplete dominance. Varieties of gene expression- multiple alleles, geneinteractions and epistasis. iii) Linkage and Crossing over.	Dr. Tara Nandi Majumdar	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Genetics-II:** i)Different types of sex-determination and sex-linked inheritance. ii) Gene and Chromosomal Mutations.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Space Biology:** i)Introduction to space biology- Exobiology. ii) Ascent through the air ocean- effects of reduced atmosphere pressure, problem of oxygen tension, oxygen equipment, pressure suit, temperature, problems of gas expansion. iii) Escape from the earth's gravity- weightlessness, radiation in space, heat wave, ultraviolet, radiations & cosmic radiations.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar Test Remedial Total Hours:12

B.Sc. 3rd SEMESTER Pass Course

Paper: ZOOP-301
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Non-Chordates, Organic Evolution & Adaptation (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Protozoa to Coelenterata:** i)Structure and life history of *Polystomella*, Structure and reproduction of *Paramecium.* ii) Structure and canal system of *Sycon.* iii) Structure and life history of *Obelia.*	Mr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
II	**Helminthes:** i)Structure, life history & pathogenicity of Liver-fluke. ii) Structure, life history & pathogenicity of *Ascaris.*	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Annelida, Arthropoda:** i)Type study- Leech with reference to morphology, digestive and urinogenital system. ii) Type study- Prawn with reference to morphology, digestive and nervous system. iii) Social life of insects with reference to Ants & Honey bees.	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Mollusca & Echinodermata:** i) Type study- *Pila* with reference to morphology, digestive and respiratory system. ii) Type study- Star fish with reference to morphology, life cycle and water vascular system	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Organic Evolution & Adaptation:** i)Evidences of organic evolution: Morphological, embryological & palaeontological. ii) Theories of Organic evolution: Lamarkism, Darwinism and Mutation theory. iii) Adaptation: Aquatic & Volant adaptation	Mr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12

B.Sc. 5th SEMESTER Honours Programme

Paper: ZOOH-501
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Developmental Biology, Molecular Biology & Immunology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Developmental Biology-II:** i)Early development of Amphioxus, Frog, Chick and Rabbit up to Gastrulation. ii) Extra embryonic membrane in mammals, Placenta- types and function.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Molecular Biology-I:** i)Modern concept of Genes, Central Dogma of Molecular Biology ii) Nucleic Acids- structure and functions iii) DNA replication- general principle.	Ms. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Molecular Biology-II:** i)Blotting technique. ii) Protein biosynthesis. iii) Regulation of gene expression- general principle.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
IV	**Immunology-I:** i)Immunity- innate and adaptive, cells, tissue and molecules of immunosystem. ii) Immunoglobulin: their structure and functions.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Immunology-II:** i)Immune response: Humoral immunity and cell mediated immunity. ii) AIDS	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12

Paper: ZOOH-502
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Human & Population Genetics, Radiation Biology & Animal Behaviour (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Human Genetics:** i)Study of Human chromosomes ii) DNA fingerprinting iii) Chromosomal abnormality- the syndromes, autosomal syndromes, heterosomal	Ms. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

	syndromes. iv) Prenatal sex and diagnosis- amniocentesis, Human heredity traits.		
II	**Population Genetics:** i)Population genetics- Hardy-Weinberg law ii) Blood groups and Rh factor iii) Inbreeding and Outbreeding, eugenics, euthenics and euphenics, Need of eugenics, Twins.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Radiation Biology-I:** i)Radiation- definition, types and unit. ii) Natural background radiation. iii) Impact of Radioactive radiation.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
IV	**Radiation Biology-II:** i)Ionizing Radiation and its health hazards. ii) Radioactive isotopes- its properties and uses in Biology, Half-life.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Animal Behaviour-I:** Definition, Behaviour as Science, Types of behaviour- Tropism, Taxes, Reflexes, Instinctive behaviour, Learning Behaviour.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12

Paper: ZOOH-503
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Animal Behaviour , Biotechnology & Economic Zoology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Animal Behaviour-II:** Motivation, Sexual behaviour, Social behaviour with reference to non-human primates, Memory and learning: Biorthyms.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Biotechnology-I:** i)Basic concepts in genetic engineering. ii) Restriction enzymes, DNA ligase, Polymerase, etc. iii) Cloning Vehicles: Plasmids, Cosmids, Lamda phage.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Biotechnology-II:** i)Introduction of cloned genes into the host cells: Transformation, Transduction and Particle gun. ii) Gene Therapy: Common genetic disease- target of gene therapy, gene bank.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

IV	**Economic Zoology-I:** i)Apiculture: Theory and practice of bee keeping ii) Sericulture: Culture of Eri and Muga silk worm iii) Lac culture: Morphology, Life history and culture of Lac insect.	Ms. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Economic Zoology-II:** i)Pisciculture: Types of commercial fishes, construction and management of ponds for fish culture, Cultivable freshwater fish species in India; maintenance of fish stock in ponds. ii) Poultry: Poultry in India, Poultry farming, common diseases in poultry farming and their control.	Ms. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

B.Sc. 5th SEMESTER Pass Course

Paper: ZOOP-501
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Cell Biology, Genetics & Biochemistry (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Cell Biology-I:** i)Structure of typical animal cell; Physical properties and chemical composition of cells; cell division. ii) General structure, composition & functions of: Cell membrane, Mitochondria, Golgi apparatus, Nucleus, Endoplasmic reticulum, lysosome & Ribosomes.	Dr. Sarbojit Thaosen	Lecture Tutorial Seminar, Test Total Hours:12
II	**Cell Biology-II:** i)Chromosomes: Types, structure & functions; special types of chromosomes: Salivary gland chromosomes & Lamp brush chromosomes. ii) Nucleic acids: DNA & RNA, Watson & Crick model; Functions of nuclic acids. iii) Protein Synthesis.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Genetics-I:** i)Mendelian principle of inheritance & Mendalism ii) Interaction of genes: complementary, supplementary, inhibitory and duplicate types, Multiple alleles. iii) Linkage & Crossing over.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

IV	**Genetics-II:** i)Sex determination: chromosomal, cytoplasmic & environmental basis. Sex linked inheritance. ii) Mutation- Chromosomal and Gene mutation.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Biochemistry:** i)Amino acids & its types ii) Protein its classification, structure & functions. iii) Carbohydrates: classification, properties & biological significance. iv) Fats: Classification & importance.	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

EVEN SEMESTERS JANUARY 2019 TO JUNE 2019

Plan for Implementation of B.Sc. (Zoology) Honours and B.Sc. (Zoology) General CBCS Programme

B.Sc. Second SEMESTER Honours Programme

DISCIPLINE SPECIFIC CORE COURSES

Course Code: ZOOHCC-201 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Non-chordates II: Coelomates (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction to Coelomates and Annelida** 1. Evolution of coelom and metamerism 2. General characteristics and classification of Annelids up to classes 3. Excretion in Annelida with special reference to Leech	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
II	**Arthropoda** 1. General characteristics and classification up to classes 2. Vision and Respiration in Arthropoda with special reference to Prawn 3. Metamorphosis in Insects 4. Social life in bees and termites	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Onychophora and Xiphosura** 1. Distribution of Onychophora 2. Morphological and anatomical characteristics of Onychophora 3. Affinities of Onychophora 4. Limulus – structure and its phylogenetic significance	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Mollusca** 1. General characteristics and Classification up to classes 2. Respiration in Mollusca with reference to *Pila* 3. Torsion and detorsion in Gastropoda 4. Pearl formation in bivalves	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Echinodermata** 1. General characteristics and Classification	Mr. Bubul Das	Lecture, Tutorial Seminar, Test

	2. Water-vascular system in *Asteroidea* 3. Larval forms in Echinodermata 4. Affinities with Chordates		Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-201 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Non-chordates II: Coelomates (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of following specimens: Annelids - *Nereis, Heteronereis, Chaetopterus, Pheretima, Hirudinaria*	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
2	Arthropods - *Limulus, Palaemon, Daphnia, Balanus, Sacculina, Cancer, Scolopendra, Julus,Bombyx,*	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
3	*Periplaneta, termites and honey bees;* Onychophora - Peripatus	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
4	Molluscs - *Chiton, Pila, Doris, Helix, Unio, Sepia, Octopus, Nautilus*	Mrs. Anima Das	Lecture, Practical Total Hours: 5
5	Echinodermates - *Pentaceros/Asterias, Ophiura, Echinus, Cucumaria and Antedon*	Mr. Bubul Das	Lecture, Practical Total Hours: 5
6	Study of digestive system, nephridia of earthworm and Leech through powerpoint presentation	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
7	T.S. through pharynx, gizzard, and typhlosolar intestine of earthworm	Mrs. Anima Das	Lecture, Practical Total Hours: 5
8	To submit a Project Report on Arthropoda and Mollusca	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Spotting= 14 marks; Project Report= 7 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks;Viva voce= 2 marks

Course Code: ZOOHCC-202 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Cell Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Overview of Cells** 1. History of discovery of cell, Cell theory; 2. Prokaryotic and Eukaryotic cells, Virus, Viroids, Mycoplasma, Prions	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Membrane and membrane systems** 1. Various models of plasma membrane structure 2. Transport across membranes: Active and Passive transport, Facilitated transport 3. Cell junctions: Tight junctions, Desmosomes, Gap junctions 4. Structure and functions of Endoplasmic reticulum, Golgi apparatus and Lysosomes	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Mitochondria and Peroxisomes** 1. Mitochondria: Structure, Semi-autonomous nature, Endosymbiotic hypothesis 2. Mitochondrial Respiratory Chain, Chemi-osmotic hypothesis 3. Peroxisomes, ATP as energy currency of the cell	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Cytoskeleton and Nucleus** 1. Structure and Functions: Microtubules, Microfilaments and Intermediate filaments 2. Structure of Nucleus: Nuclear envelope, Nuclear pore complex, Nucleolus 3. Chromatin: Euchromatin and Heterochromatin and packaging (nucleosome)	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
V	**Cell Division and Cell Signaling** 1. Mitosis, Meiosis, Cell cycle and its regulation 2. GPCR and Role of second messenger (cAMP)	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester

Course Code: ZOOHCC-202 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Cell Biology (Theory)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Preparation of temporary stained squash of onion root tip to study various stages of	Mrs. Anima Das	Lecture, Practical

	mitosis		Total Hours: 5
2	Study of various stages of meiosis.	Mr. Bubul Das	Lecture, Practical Total Hours: 5
3	Preparation of permanent slide to show the presence of Barr body in human female bloodcells/cheek cells.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5

Experiment= 15 marks; Spotting= 6 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

DISCIPLINE SPECIFIC CORE COURSE/GENERAL ELECTIVE

Course Code: ZOODSC/GE-201 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Comparative Anatomy and Developmental Biology of Vertebrates (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Integumentary System and Skeletal System** 1. Derivatives of integument w.r.t. glands and digital tips 2. Evolution of visceral arches	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Digestive System and Respiratory System** 1. Brief account of alimentary canal and digestive glands 2. Brief account of Gills, lungs, air sacs and swim bladder	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Circulatory System and Urinogenital System** 1. Evolution of heart and aortic arches 2. Succession of kidney, Evolution of urinogenital ducts	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
IV	**Nervous System and Sense Organs** 1. Comparative account of brain	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Early Embryonic Development** 1. Gametogenesis: Spermatogenesis and oogenesis w.r.t. mammals, 2. Fertilization: external (amphibians), internal (mammals), blocks to polyspermy; 3. Early development of humans (structure of mature egg and its membranes, patterns ofcleavage, fate map, up to formation of gastrula); 4. Implantation of embryo in humans, Formation of human placenta and functions, othertypes of placenta on the basis of histology;	Mrs. Anima Das	Lecture Tutorial Seminar Test Remedial Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester.

Course Code: ZOODSC/GE-201 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Comparative Anatomy and Developmental Biology of Vertebrates (Theory)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Osteology: a) Disarticulated skeleton of fowl and rabbit b) Mammalian skulls: One herbivorous and one carnivorous animal.	Mrs. Anima Das	Lecture, Practical Total Hours: 5
2	Frog - Study of developmental stages - whole mounts and sections through permanent slides – cleavage stages, blastula, gastrula, tadpole external and internal gill stages.	Mr. Bubul Das	Lecture, Practical Total Hours: 5
3	Study of the different types of placenta- histological sections through permanent slides or photomicrographs.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
4	Study of placental development in humans by ultrasound scans or photographs	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
5	Examination of gametes - frog/rat - sperm and ova through permanentslides or photomicrographs.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5

Identification= 21 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

B.Sc. Fourth SEMESTER Honours Programme

DISCIPLINE SPECIFIC CORE COURSES

Course Code: ZOOHCC-401 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Comparative Anatomy of Vertebrates (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Integumentary and Skeletal Systems** 1. Structure, functions and derivatives of integument 2. Overview of axial and appendicular skeleton, 3. Visceral arches of birds and mammals	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

II	**Digestive and Respiratory Systems** 1. Alimentary canal and associated glands in mammals 2. Respiratory organs in amphibians and birds 3. Accessory respiratory organs in fishes	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Circulatory and Urinogenital Systems** 1. General plan of circulation, evolution of heart and aortic arches 2. Succession of kidney, Evolution of urinogenital ducts 3. Types of mammalian uteri	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Nervous System** 1. Comparative account of brain in vertebrates 2. Autonomic nervous system, Spinal cord, Cranial nerves in mammals	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Sense Organs** 1. Classification of receptors, chemoreceptors and mechanoreceptors 2. Brief account of visual and auditory receptors in man	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-401 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Comparative Anatomy of Vertebrates (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of Placoid, Cycloid and Ctenoid scales through permanent slides/photographs	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	Disarticulated skeleton of Frog/Toad/Calotes/Fowl/Pigeon/Guineapig	Mrs. Anima Das	Lecture, Practical Total Hours: 5
3	Mammalian skulls: One herbivorous and one carnivorous animal	Mr. Bubul Das	Lecture, Practical Total Hours: 5
4	Dissection of rat to study arterial and urinogenital system through audio-visual aids	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
5	Study of structure of any two organs (heart, lung, kidney, eye and ear) from video recording	Mrs. Anima Das	Lecture, Practical Total Hours: 5

6	Project on skeletal modifications in vertebrates	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5

Identification= 14 marks; Project= 7 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

Course Code: ZOOHCC-402 T

Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)

Name of Course:: Physiology: Life Sustaining Systems (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Physiology of Digestion in Mammals** 1. Structural organization and functions of gastrointestinal tract and associated glands 2. Mechanical and chemical events of digestion of food 3. Absorptions of carbohydrates, lipids, proteins, water, minerals and vitamins 4. Hormonal control of secretion of enzymes in Gastrointestinal tract.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
II	**Physiology of Respiration in Mammals** 1. Histology of lungs; Mechanism of respiration, Pulmonary ventilation; Respiratory volumesand capacities. 2. Transport of oxygen and carbon dioxide in blood; Respiratory pigments, Dissociation curvesand the factors influencing it; Carbon monoxide poisoning; Control of respiration	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Renal Physiology in Mammals** 1. Structure of kidney and its functional unit 2. Mechanism of urine formation; 3. Regulation of water balance; Regulation of acid-base balance 4. Hormonal regulation of the volume of urine	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Mammalian Blood** 1. Components of blood and their functions; Structure and functions of haemoglobin 2. Haemostasis: Blood clotting system and mechanism of coagulation, Fibrinolytic system, 3. Haemopoiesis; Blood as a buffer system; Blood groups: Rh factor, ABO	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Physiology of Mammalian Heart** 1. Structure of mammalian heart; Circulation of blood through the heart of mammal; Coronary 2. circulation; Structure and working of conducting myocardial fibers; Origin and conduction ofcardiac impulses Cardiac cycle; Cardiac output and its regulation, Electrocardiogram,	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12

	3. Blood pressure and its regulation		

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-402 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Physiology: Life Sustaining Systems (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Determination of ABO Blood group	Mrs. Anima Das	Lecture, Practical Total Hours: 5
2	Enumeration of red blood cells and white blood cells using haemocytometer	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
3	Estimation of haemoglobin using haemoglobinometer	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
4	Preparation of haemin and haemochromogen crystals	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
5	Recording of frog's heart beat under *in situ* and perfused conditions	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
6	Recording of blood pressure using a sphygmomanometer	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
7	Examination of sections of mammalian oesophagus, stomach, duodenum, ileum, rectum liver,trachea, lung, kidney	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Experiment-I= 8 marks; Experiment-II= 7 marks; Identification = 6 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

Course Code: ZOOHCC-403 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Biochemistry of Metabolic Processes (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Overview of Metabolism**	Mrs. Madhumita	Lecture, Tutorial

	1. Catabolism *vs* Anabolism, Stages of catabolism, Shuttle systems and membrane transporters 2. ATP as "Energy Currency of cell"; coupled reactions 3. Intermediary metabolism and regulatory mechanisms	Daolagupu	Seminar, Test Total Teaching Hours:12
II	**Carbohydrate Metabolism** 1. Sequence of reactions and regulation of glycolysis, Citric acid cycle, Phosphate pentosepathway, Gluconeogenesis, Glycogenolysis and Glycogenesis	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	**Lipid Metabolism** 1. β-oxidation of saturated fatty acids with even and odd number of carbon atoms 2. Biosynthesis of palmitic acid; Ketogenesis	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Protein Metabolism** 1. Catabolism of amino acids: Transamination, Deamination, Urea cycle; 2. Fate of C-skeleton of Glucogenic and Ketogenic amino acids	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Oxidative Phosphorylation** 1. Redox systems; Review of mitochondrial respiratory chain, Inhibitors and un-couplers ofElectron Transport System	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-403 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Biochemistry of Metabolic Processes (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Estimation of total protein in given solutions by Lowry's method	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	To study the enzymatic activity of Trypsin and Lipase	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
3	Detection of Alkaline Phosphatase assay from tissue		Lecture, Hours: 5
4	Estimation of glucose	Mrs. Anima Das	Lecture, Practical Total Hours: 5

5	Demonstration of effect of inhibitors on activity of Salivary Amylase	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Experiment-I= 7 marks; Experiment-II= 7 marks; Experiment-III= 7 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

SKILL ENHANCEMENT COURSES

Course Code: ZOOSEC-401 T
Credits= 04; Full Marks: Theory= 50
Name of Course:: Medical Diagnostics (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction and Diagnostics Methods Used for Analysis of Blood** 1. Importance of medical diagnostics; 2. Blood composition, Preparation of blood smear and Differential Leucocyte Count (D.L.C) using Leishman's stain, 3. Platelet count using haemocytometer, 4. Erythrocyte Sedimentary Rate (E.S.R), Packed Cell Volume (P.C.V.)	Mrs. Madhumita Daolagupu	Lecture Tutorial Seminar, Test Total Teaching Hours:12
II	**Diagnostic Methods Used for Urine Analysis** 1. Urine Analysis: Physical characteristics; Abnormal constituents	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Hours:12
III	**Non-infectious Diseases** 1. Causes, types, symptoms, complications, diagnosis and prevention of Diabetes (Type I and Type II), Hypertension (Primary and secondary), 2. Testing of blood glucose using Glucometer/Kit	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Infectious Diseases** 1. Causes, types, symptoms, diagnosis and prevention of Tuberculosis andHepatitis	Mr. Bubul Das	Lecture, Tutorial Total Hours:12
V	**Tumours** Types (Benign/Malignant), Detection and metastasis; Medical imaging: X-Ray of Bone fracture, PET, MRI and CT Scan (using photographs).	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

DISCIPLINE SPECIFIC CORE COURSE/GENERAL ELECTIVE

Course Code: ZOODSC/GE-401 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)

Name of Course:: Genetics and Evolutionary Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction to Genetics and Mendelian Genetics** 1. Mendel's work on transmission of traits, Genetic Variation, Molecular basis of GeneticInformation 2. Principles of Inheritance, Chromosome theory of inheritance, Incomplete dominanceand codominance, Multiple alleles, Lethal alleles, Epistasis, Pleiotropy, sex linked inheritance, extra-chromosomal inheritance	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12
II	**Linkage, Crossing Over and Chromosomal Mapping** 1. Linkage and crossing over, Recombination frequency as a measure of linkage intensity,two factor and three factor crosses, Interference and coincidence, 2. Somatic cell genetics – an alternative approach to gene mapping	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Mutations** 1. Chromosomal Mutations: Deletion, Duplication, Inversion, Translocation, Aneuploidyand Polyploidy; 2. Gene mutations: Induced versus Spontaneous mutations, Back versus Suppressor mutations,	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
IV	**History of Life and Evolutionary Theories** 1. Major Events in History of Life Lamarckism, Darwinism, Neo-Darwinism 2. Types of fossils, Incompleteness of fossil record, Dating of fossils, Phylogeny of horse	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Processes of Evolutionary Change and Species Concept** 1. Organic variations; Isolating Mechanisms; Natural selection (Example: Industrial melanism); Types of natural selection (Directional, Stabilizing, Disruptive), Artificialselection 2. Biological species concept (Advantages and Limitations); Modes of speciation (Allopatric, Sympatric)	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Teaching Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester.

Course Code: ZOODSC/GE-401 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Genetics and Evolutionary Biology (Theory)

Sl.	Topic	Teachers to whom	Mode of

No.		allotted	Teachings
1	Study of Mendelian Inheritance and gene interactions (Non Mendelian Inheritance)using suitable examples. Verify the results using Chi-square test.	Mrs. Anima Das	Lecture, Practical Total Hours: 5
2	Study of Human Karyotypes (normal and abnormal) using pictures and models.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
3	Study of fossil evidences from plaster cast models and pictures	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
4	Study of homology and analogy from suitable specimens/ pictures	Mr. Bubul Das	Lecture, Practical Total Hours: 5
5	Charts: Phylogeny of horse with diagrams/ cut outs of limbs and teeth of horseancestors	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5

Experiment= 7 marks; Identification= 14 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

B.Sc. Sixth SEMESTER Honours Programme

DISCIPLINE SPECIFIC CORE COURSES

Course Code: ZOOHCC-601 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Developmental Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction** 1. Historical perspective and basic concepts: Phases of development, Cell-cell interaction,Pattern formation, Differentiation and growth, Differential gene expression 2. Cytoplasmic determinants and asymmetric cell division	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
II	**Early Embryonic Development** 1. Gametogenesis: Spermatogenesis, Oogenesis; Types of eggs, Egg membranes 2. Fertilization (External and Internal): Changes in gametes, Blocks to polyspermy; Planes andpatterns of cleavage 3. Types of Blastula; Fate maps (including Techniques);	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

	4. Early development of frog and chick up to gastrulation; 5. Embryonic induction and organizers		
III	**Late Embryonic Development** 1. Fate of Germ Layers – Fate Map 2. Extra-embryonic membranes in birds and mammals 3. Implantation of embryo in humans, Placenta (Structure, types and functions of placenta)	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Post Embryonic Development** 1. Metamorphosis: Changes, hormonal regulations in amphibians and insects; 2. Regeneration: Modes of regeneration, epimorphosis, morphallaxis and compensatoryregeneration (with one example each); 3. Ageing: Concepts and Theories	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Implications of Developmental Biology** 1. Teratogenesis: Teratogenic agents and their effects on embryonic development; 2. *In vitro* fertilization, 3. Stem cell (ESC), Amniocentesis	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-601 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Developmental Biology (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of whole mounts and sections of developmental stages of frog through permanent slides:Cleavage stages, blastula, gastrula	Mr. Bubul Das	Lecture, Practical Total Hours: 5
2	Study of whole mounts of developmental stages of chick through permanent slides: Primitivestreak (13 and 18 hours), 21, 24, 28, 33, 36, 48, 72, and 96 hours of incubation	Mrs. Anima Das	Lecture, Practical Total Hours: 5
3	Study of the developmental stages and life cycle of *Drosophila* through audio-visual aids	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
4	Study of different sections of placenta (photomicropgraph/slides)	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5

5	Project report on *Drosophila* culture/chick embryo development	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5

Identification= 14 marks; Project= 7 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

Course Code: ZOOHCC-602 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Evolutionary Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	1. Life's Beginnings: Chemogeny, RNA world, Biogeny, 2. Origin of photosynthesis, Evolution of eukaryotes 3. Historical review of evolutionary concept: Lamarckism, Darwinism, Neo-Darwinism	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
II	1. Evidences of Evolution: Fossil record (types of fossils, transitional forms, geological timescale, evolution of horse 2. Neutral theory of molecular evolution, molecular clock; 3. Sources of variations: Heritable variations and their role in evolution	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Teaching Hours:12
III	1. Population genetics: Hardy-Weinberg Law (statement and derivation of equation); 2. Natural selection (concept of fitness): Density-dependent selection, heterozygous superiority,kin selection, sexual selection. 3. Genetic Drift (mechanism, founder's effect, bottleneck phenomenon) 4. Role of Migration and Mutation in changing allele frequencies	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	1. Product of evolution: Micro evolutionary changes (inter-population variations, clines, Races;Species concept) 2. Isolating mechanisms, modes of speciation—allopatric, sympatric; Adaptive radiation /macroevolution (exemplified by Galapagos finches and mammals) 3. Extinctions, Background and mass extinctions (causes and effects)	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
V	*1.* Origin and evolution of man, Unique hominid characteristics contrasted with primate characteristics, primate phylogeny from *Dryopithecus* leading to *Homo sapiens* 2. Phylogenetic trees, Construction of phylogenetic trees and their interpretation	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOOHCC-602 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Evolutionary Biology (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of fossils from models/ pictures	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	Study of homology and analogy from suitable specimens	Mr. Bubul Das	Lecture, Practical Total Hours: 5
3	Study and verification of Hardy-Weinberg Law by chi square analysis frequencies using simulation studies	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
4	Graphical representation and interpretation of data of height/ weight of a sample of 100 humans inrelation to their age and sex.	Mr. Bubul Das	Lecture, Practical Total Hours: 5

Identification= 15 marks; Project= 6 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

DISCIPLINE SPECIFIC ELECTIVE COURCES

Course Code: ZOODSE-601 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Reproductive Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Reproductive Endocrinology** 1. Reproductive System of Rat and Human: Development and differentiation of gonads, genitalducts, external genitalia. 2. Gonadal hormones and mechanism of hormone action, steroids, glycoprotein hormones, andprostaglandins, hypothalamo – hypophyseal – gonadal axis	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Functional Anatomy of Male Reproduction**	Mr. Bubul Das	Lecture, Tutorial

	1. Outline and histology of male reproductive system in rat and human; 2. Testis: Cellular functions, germ cell, system cell renewal; 3. Spermatogenesis: kinetics and hormonal regulation; Epididymal function and sperm maturation; 4. Accessory glands functions; Sperm transportation in male tract		Seminar, Test Remedial Total Teaching Hours:12
III	**Functional Anatomy of Female Reproduction** 1. Outline and histology of female reproductive system in rat and human; 2. Ovary: folliculogenesis, ovulation, corpus luteum formation and regression; Steroidogenesisand secretion of ovarian hormones;	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Hormonal regulation of Female Reproductive Cycles** 1. Reproductive cycles (rat and human) and their regulation, changes in the female tract; Ovumtransport in the fallopian tubes; Sperm transport in the female tract, fertilization; Hormonal control of implantation; 2. Hormonal regulation of gestation, pregnancy diagnosis, foeto –maternal relationship; 3. Mechanism of parturition and its hormonal regulation; Lactation and its regulation	Mrs. Madhumita Daolagupu	Lecture Tutorial Seminar, Test Remedial Total Hours:12
V	**Reproductive Health** 1. Infertility in male and female: causes, diagnosis and management 2. Assisted Reproductive Technology: sex selection, sperm banks, frozen embryos, in vitrofertilization and embryo transfer 3. Modern contraceptive technologies; Family planning	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester.

Course Code: ZOODSE-601 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Reproductive Biology (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of animal house through powerpoint presentation: set up and maintenance of animal house,breeding techniques, care of normal and experimental animals.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	Surgical techniques through powerpoint presentation: principles of surgery in endocrinology.Ovarectomy, hysterectorny, castration and vasectomy in rats.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
3	Examination of histological sections from photomicrographs/ permanent slides of rat/human:testis, epididymis and accessory glands of male reproductive systems;	Mrs. Anima Das	Lecture, Practical Total Hours: 5

4	Sections of ovary, fallopian tube, uterus (proliferative and secretory stages), cervix and vagina.	Mrs. Anima Das	Lecture, Practical Total Hours: 5
5	Study of permanent slides of T.S. of mammalian testes and ovary	Mr. Bubul Das	Lecture, Time: 5h
6	Project on artificial insemination in cattle population	Dr. Sarbojit Thaosen	Lecture, Time: 5h

Identification= 14 marks; Project= 7 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

Course Code: ZOODSE-602 T
Credits= 04; Full Marks: Theory= 50, Internal= 20 (Theory= 14, Attendance= 06)
Name of Course:: Animal Behavior and Chronobiology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction to Animal Behaviour** 1. Origin and history of Ethology; 2. Brief profiles of Karl Von Frish and Ivan Pavlov, Proximate and ultimate causes of behaviour, 3. Methods and recording of a behaviour	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
II	**Patterns of Behaviour** 1. Stereotyped Behaviours (Orientation, Reflexes); Individual Behavioural patterns; 2. Instinct vs. Learnt Behaviour; 3. Associative learning, classical and operant conditioning, Habituation, Imprinting.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Social and Sexual Behaviour** 1. Social Behaviour: Concept of Society; Communication and the senses; 2. Altruism; Insects' society with Honeybee as example; 3. Sexual Behaviour: Asymmetry of sex, Sexual dimorphism, Mate choice, 4. Intra-sexual selection (male rivalry), Inter-sexual selection (female choice),	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Introduction to Chronobiology** 1. Historical developments in chronobiology; Biological oscillation: the concept of Average,amplitude, phase and period. 2. Biological clocks: Adaptive significance of biological clocks; 3. Chronopharmacology, Chronomedicine, Chronotherapy: Role of melatonin	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
V	**Biological Rhythm** 1. Types and characteristics of biological rhythms: Short- and Long- term rhythms; 2. Circadian rhythms; Tidal rhythms and Lunar rhythms; Concept of synchronization andmasking; Circannual rhythms;	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12

	3. Photoperiod and regulation seasonal reproduction of vertebrates		

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two unit tests of 20 marks (Theory=14, Attendance=06) for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two unit tests will be counted in the university conducted end semester examinations.

Course Code: ZOODSE-602 P
Credits= 02; Full Marks= 30 (Practical)
Name of Course:: Animal Behavior and Chronobiology (Practical)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	To study nests and nesting habits of the birds and social insects.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 10
2	To study geotaxis behaviour in earthworm.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
3	To study the phototaxis behaviour in insect larvae.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
4	Visit to Forest/ Wild life Sanctuary/Biodiversity Park/Zoological Park preferably outside Assam to study behavioural activities of animals and prepare a field report on their observations.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 15
5	Study of circadian functions in humans (daily eating, sleep and temperature patterns).	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5

Experiment= 7 marks; Field Report= 14 marks; Regularity= 5 marks; Laboratory Notebook= 2 marks; Viva voce= 2 marks

SKILL ENHANCEMENT COURSES

Course Code: ZOOSEC-601 T
Credits= 04; Full Marks: Theory= 50
Name of Course:: Sericulture (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Introduction** 1. Sericulture: Definition, history and present status; Silk route 2. Types of silkworms, Distribution and Races	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial

	3. Exotic and indigenous races; Mulberry and non-mulberry Sericulture		Total Hours:12
II	**Biology of Silkworm** *1.* Life cycle of *Bombyx mori* 2. Structure of silk gland and secretion of silk	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Rearing of Silkworms** 1. Selection of mulberry variety and establishment of mulberry garden Rearing house andrearing appliances; 2. Disinfectants: Formalin, bleaching powder, RKO; 3. Silkworm rearing technology: Early age and Late age rearing Types of mountages; Spinning, harvesting and storage of cocoons	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
IV	**Pests and Diseases** 1. Pests of silkworm: Uzi fly, dermestid beetles and vertebrates 2. Pathogenesis of silkworm diseases: Protozoan, viral, fungal and bacterial Control and prevention of pests and diseases	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
V	**Entrepreneurship in Sericulture** 1. Prospectus of Sericulture in India: Sericulture industry in different states, employment,potential in mulberry and non-mulberry sericulture. 2. Visit to various sericulture centers	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12

Plan for Implementation of B.Sc. (Zoology) Honours and B.Sc. (Zoology) Pass <u>Non-CBCS Programme</u>

The different units and topics thereof of the Zoology Honours Course of B.Sc. Programme have been allotted to individual teachers of the department as mentioned in the following tables for the odd semesters from July 2018 to December 2018. Details of plan for each unit and topics will be designed by each of the teachers to whom the units and topics are allotted. As per the guidelines of the University, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be counted in the university conducted examinations for each semester.

B.Sc. 4th SEMESTER Honours Programme

Paper: ZOOH-401
Lecture= 60, Full Marks= 35, Pass Marks= 12

Name of the Paper:: Zoogeography, Museology & Environmental Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Zoogeography-I:** i)Kinds of animal distribution : Cosmopolitan, Discontinuous, Bipolar, Isolation, Bathymetric distribution and their explanations. ii) Factors affecting distribution: barriers and modes of dispersal in animals.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
II	**Zoogeography-II:** Different Zoogeographical Realms of the World: their physical features, geographic range, faunal characteristics	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Museology-I:** Taxonomic collection: Value of collection, equipments of collection, preservation of specimens, curating of collections and their identification.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
IV	**Museology-II:** Stuffing and Mounting with special reference to Fishes, Reptiles, Birds and Mammals.	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Hours:12
V	**Environmental Biology:** i)Concept of ecosystem, ecological niche and ecotone. ii) Energy flow through ecosystem, Productivity, Food chain, Food web, ecological pyramids. iii) Population interactions.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Teaching Hours:12

Paper: ZOOH-402
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Biosphere, Pollution, Adaptation & Wetland Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Biosphere & Environmental Pollution:** i)Concepts of Biosphere and Biogeochemical cycles (Carbon, Nitrogen, Oxygen & Water) ii) Laws of Limiting factors iii) Environmental pollution- Air, Water, soil and noise pollution.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
II	**Adaptation-I:** Different types of adaptation: Aquatic, Volant, Cursorial, Fossorial, Arid and Arborial.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Total Hours:12
III	**Adaptation-II:** i)Adaptive radiation in mammalian	Ms. Anima Das	Lecture, Tutorial Seminar, Test

	ii) Colouration and Mimicry		Total Hours:12
IV	**Wetland Biology-I:** i)Concepts of wetland & its importance ii) Ramser convention, Wetland loss.	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Hours:12
V	**Wetland Biology-II:** i)Wetland management for sustainable development ii) National wetland policy	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12

Paper: ZOOH-403
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Evolution, Toxicology & Development Biology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Evolution:** i)Concepts of evolution, Origin of life ii) Evidences of Organic evolution: morphological, embryological, palaeontological iii) Theories of organic evolution: Natural selection, Neo-Darwinism, Mutation and Synthetic theory	Ms. Anima Das	Lecture Tutorial Seminar, Test Remedial Total Hours:12
II	**Speciation & Phylogeny:** i)Concepts of species and speciation ii) Phylogeny of horse and elephant	Ms. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Toxicology-I:** i)Introduction to toxicology- definition of toxicity, classification of toxicants ii) Toxic agents & mode of action- pesticides, metals, solvents, radiation, carcinogens and poisons iii) Environmental toxicology- food additives, air, water and soil pollutants	Mr. Bubul Das	Lecture Tutorial Seminar, Test Remedial Total Hours:12
IV	**Toxicology-II:** i)Industrial toxicology- industrial chemicals and pollutants ii) Biomonitoring & Biomagnifications	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Developmental Biology-II:** i)Gamates & Gametogenesis- Spermatogenesis and oogenesis ii) Fertilization and its significance iii) Types of animal eggs, pattern of cleavage.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Remedial Total Hours:12

Paper: ZOOH-404 (Practical)
Lecture= 60, Full Marks= 90, Pass Marks= 30

Group- A (Marks-45)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Dissection of endocrine glands of fish/toad.	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours:5
2	Study of histological slides of the following endocrine glands of mammal: Pituitary, thyroid, parathyroid, thymus, adrenal, pancreas, testis, ovary.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours:5
3	Isolation of mitochondria by differential centrifugation and identification of succinic dehydrogenase in the mitochondrial pellet	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours:5
4	Preparation of chromosome squashes from tadpole tail/onion root tips for the observation of the stages of mitosis	Mr. Bubul Das	Lecture, Practical Total Hours:5
5	Preparation of chromosome squashes from Grasshopper/Cockroach testis for the observation of the stages of meiosis	Mrs. Anima Das	Lecture, Practical Total Hours:5

Group- B (Marks-45)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Separation of amino acids by paper chromatography	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 5
2	Quantitative estimation of proteins and carbohydrates	Mrs. Anima Das	Lecture, Practical Total Hours: 5
3	Haemoglobin estimation	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 5
4	Microtomy technique (Submission of at least 5 different slides)	Dr. Sarbojit Thaosen	Lecture, Practical Total Hours: 20

B.Sc. 4th SEMESTER Pass Course

Paper: ZOOP-401
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Museology, Environmental Biology & Economic Zoology (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Museology:**	Dr. Sarbojit Thaosen	Lecture

	i)Taxonomic collection, value of collection, equipments of collection, preservation of specimens ii) Curetting of collection & identification.		Tutorial Seminar, Test Total Hours:12
II	**Environmental Biology-I:** i)The ecosystem & Ecological niche. ii) Energy flow in ecosystem: Productivity, food chain & food web, Ecological Pyramids.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
III	**Environmental Biology-II:** Environmental Pollution: Air, Water & Soil	Mr. Bubul Das	Lecture, Tutorial Total Hours:12
IV	**Economic Zoology-I:** i)Pisciculture: Types of commercial fishes, cultivable freshwater fish species of India, construction & management of ponds for fish culture, maintenance of fish stocks in ponds. ii) Poultry: Outline of poultry management, poultry trade.	Ms. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
V	**Economic Zoology-II:** i)Apiculture: theory & practice of bee keeping. ii) Sericulture: Culture of Eri & Muga silk moth.	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12

Paper: ZOOP-402 (Practical)
Lecture= 60, Full Marks= 30, Pass Marks= 10

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	**Dissections (Non-Chordates):** a)Reproductive & Nervous system of Earthworm b) Urinogenital system of Leech c) Digestive system of *Pila* d) Nervous system of Cockroach.	Dr. Sarbojit Thaosen	Lecture Practical Total Hours: 10
2	**Temporary slide preparations:** The following material may be selected: Setae of earthworm, Nephridia of leech, Mouth-parts and wings of mosquito, Radula of *Pila*, *Obelia, Mysis, Daphnia, Cyclops,*	Mrs. Anima Das	Lecture, Practical Total Hours: 5
3	**Study of the prepared permanent slides:** Whole Mounts: *Euglena, Plasmodium, Paramecium, Vorticella, Monocystis,* Sponge spicules, Obelia colony, larval forms of crustacean.	Mr. Bubul Das	Lecture, Practical Total Hours: 10

	Section through: *Sycon* (LS), TS of pharynx, gizzard & intestine of earthworm, TS of anterior sucker & crop region of leech, TS of arm of star-fish. **Study of Museum Specimens:** *Grantia, Spongilla, Euspongia, Porpita, Physalia, Velella, Aurelis, Adamsia, Pennatula, Gorgonia, Madrepora, Beroe, Planaria, Fasciola, Taenia, Ascaris, Sipunculus, Heteronereis, Lepus, Balanus, Squilla, Apus, Limulus,* Spider, Ticks, Honey Bee, Wasp, Loligo, Sepia, Octopus, Star fish.		
4	**Ecological Experiments:** i)Estimation of temperature, DO & pH of water. ii) Study of texture, temperature, pH & moisture content of soil. iii) Study of aquatic ecosystem: Qualitative study of phytoplanktons & zooplanktons iv) To record of atmospheric temperature & relative humidity (RH) v) Study of economically important insects.	Mrs. Madhumita Daolagupu	Lecture, Practical Total Hours: 15

B.Sc. 6th SEMESTER Honours Programme

Paper: ZOOH-601
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Physiology & Bioinformatics (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Stress Physiology:** i)Basic concept of environmental stress and strain. ii) Nervous control of stress physiology; Role of adrenal in resisting stress. iii) Concept of homeostasis, Endothermy and physiological mechanism of regulation of body temperature.	Mrs. Madhumita Daolagupu	Lecture Tutorial Seminar, Test Remedial Total Hours:12
II	**Adaptive Physiology-I:** i)Adaptation, acclimation and acclimatization ii) Physiological adaptation to osmotic and ionic stress, mechanism of cell volume regulation	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Adaptive Physiology-II:** i)Osmoregulation in freshwater, marine and terrestrial environments ii) Bioelectrogenesis in fishes	Mr. Bubul Das	Lecture, Tutorial Seminar, Test

	iii) Bioluminescene in animals and its chemistry		Total Hours:12
IV	**Bioinformatics-I:** i)Historical perspective on computer and their application to biology ii) Operating System (WINDOWS)	Mr. Bubul Das	Lecture, Tutorial Total Hours:12
V	**Bioinformatics-II:** i)Biological Database ii) Human genome project- Basic ideas	Mr. Bubul Das	Lecture, Tutorial Total Hours:12

Paper: ZOOH-602
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Applied Zoology-I (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Applied Entomology-I:** i)Stored grain pest: Rice weevil (*Sitophilus oryzee*), Khapra beetle (*Trogoderma granarium*) & Pulse beetle (*Callaosbruchus chinensis*) ii) Tea pest- Red spider mite (*Oligonychus coffeae*)	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Remedial Total Hours:12
II	**Applied Entomology-II:** i)Paddy pest- Stem borer (*Tryporya incertulus*), Gandhi bug (*Leptocorisa acuta*), Rice hispa (*Dicladispa armigera*) ii) Principles of integrated pest management	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Medical Zoology-I:** i)Introduction to Parasitology ii) Brief accounts of life history, mode of infection and pathogenecity of the following pathogens a)Pathogenic Protozoans: *Entamoeba, Leishmania, Giardia* b)Pathogenic Helminthes: *Echinococcus, Ancylostoma*	Mrs. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12
IV	**Medical Zoology-II:** Epidemic diseases, such as typhoid, cholera, small pox, their occurance and eradication programmes	Mrs. Anima Das	Lecture, Tutorial Total Hours:12
V	**Fisheries:** i)Riverine & beel fisheries in Assam ii) Bundh breeding and induced breeding iii) Composite fish culture, Integrated fish farming with poultry, duckery and piggery	Dr. Sarbojit Thaosen	Lecture, Tutorial Total Hours:12

Paper: ZOOH-603

Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Applied Zoology-II & Biophysics (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Aquaculture:** i)Common fish diseases with their remedial measure- EUS, Ichthyophthiriasis Saprolegniasis, Furunculosis, Dropsy, Argulosis and Learnaesis	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Wildlife Management-I:** i)Introduction; Values of Wildlife, Depletion and necessity of conservation of wildlife ii) Conservation and management of wild life in India iii) Knowledge of wildlife sanctuaries, National Parks, Biosphere reserves iv) Kaziranga National Park, Project Tiger	Mrs. Anima Das	Lecture, Tutorial Remedial Seminar, Test Total Hours:12
III	**Wildlife Management-II:** i)General concept of Biodiversity and its conservation, Activities of IUCN, WWF, and Red Data Book and Biodiversity convention. ii) Habit, Habitat and Ethology of Rhinoceros, Pigmy Hog, Hoolock Gibbon, Gangetic river Dolphin.	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12
IV	**Biophysics-I:** i)Introduction- Defination, concept and division of Biophysics ii) pH- Definition, Biological importance, Indicator- Definition, type, Biological application iii) Buffer- Definition, Buffer in Biological system and their significance.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Remedial Total Hours:12
V	**Biophysics-II:** i)Diffusion- Definition and types, Osmosis and Osmotic pressure- Deffinition, salient feature of osmotic pressure and Biological importance ii) Adsorption and viscosity- Definition, adsorption and absorption, factors influencing the viscosity, biological importance of adsorption. iii) Colloids- Definition, phases, difference between lyphophobic and lyphophilic, importance.	Mrs. Madhumita Daolagupu	Lecture, Tutorial Remedial Test Total Hours:12

Paper: ZOOH-604 (Practical)
Lecture= 60, Full Marks= 90, Pass Marks= 30
Group- A (Marks-45)

Sl.	Topic	Teachers to whom	Mode of Teachings

No.		allotted	
1	Determination of ABO blood groups & Rh factor in man	Mrs. M. Daolagupu	Practical, Hours: 5
2	Total count of WBC and RBC	Mrs. M. Daolagupu	Practical, Hours: 5
3	Determination of activity of Pepsin on Protein	Dr. Sarbojit Thaosen	Practical, Hours: 5
4	Study of Polytene chromosomes from any suitable material	Mrs. M. Daolagupu	Practical, Hours: 5
5	Determination of population by quadrate method	Mrs. Anima Das	Practical, Hours: 5
6	Determination of temperature, pH & dissolved O_2 in water	Dr. Sarbojit Thaosen	Practical, Hours: 5
7	Recording of atmospheric temperature & relative humidity	Mr. Bubul Das	Practical, Hours: 5
8	Qualitative study of phytoplankton & zooplankton	Mr. Bubul Das	Practical, Hours: 5
9	Study of frog/toad development through prepared slides and models	Mrs. Anima Das	Practical, Hours: 5
10	Study of whole mount of chick embryos 18 hrs, 33-36 hrs, 48 hrs, 72 hrs and 96 hrs of development	Mrs. Anima Das	Practical, Hours: 5
11	Computer aided techniques for data presentation, computer MS Words	Mr. Bubul Das	Practical, Hours: 5
12	Drosophila culture	Dr. Sarbojit Thaosen	Practical, Hours: 5
13	Identification of food fishes, exotic fishes, prawns, crabs	Dr. Sarbojit Thaosen	Practical, Hours: 5
14	The Academic Field Study to include visits to some places of Zoological importance Museum, Advanced laboratories preferably outside Assam, in order to acquaint the students with the recent development in the subject. A report is to be prepared independently by each student to be certified by the Teacher-in-charge and to be submitted at the time of the Examination.	Dr. Sarbojit Thaosen	Practical, Hours: 15

Group- B (Marks-45)

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Study of life cycle of any insect & an amphibian from museum specimen	Mr. Bubul Das	Practical, Hours: 5
2	Preparation of pituitary extract from fish	Dr. Sarbojit Thaosen	Practical, Hours: 5
3	Study of laboratory equipments such as: Autoclave, hot air oven, incubator, water bath, centrifuge, refrigerator, calorimeter, pH meter, haemoglobinometer, microtome and balances	Mr. Bubul Das	Practical, Hours: 5
4	Measurement of O_2 uptake by animals (cockroach/toad/rat)	Mrs. M. Daolagupu	Practical, Hours: 5
5	Determination of minimum size of Quadrate	Mrs. M. Daolagupu	Practical, Hours: 5
6	Analysis of producers and consumers in aquatic ecosystem	Mrs. M. Daolagupu	Practical, Hours: 5
7	To study pH and moisture content of soil	Mr. Bubul Das	Practical, Hours: 5

8	To study the physical characteristics of soil texture, colour and temperature	Mr. Bubul Das	Practical, Hours: 5
9	To determine the turbidity, temperature and light intensity of water,	Dr. Sarbojit Thaosen	Practical, Hours: 5
10	a)Identification of insect pest: Paddy pest: (*Tryporyza incertulus, Sesamia inferens, Hispa armigera, Leptocorisa varicornis*)	Mr. Bubul Das	Practical, Hours: 5
	b)Stored grain pests: (*Sitophilus oryzae, Tribolum eastanium, Tribolium confusum, Oryzaephilus surinamesis, Rhizopertha dominica*)	Mr. Bubul Das	Practical, Hours: 5
	c)Identification of fishes: *Labeo rohita, L. gonius, L. calbasu, Cirrhina mrigala, Catla catla & one exotic carp*	Dr. Sarbojit Thaosen	Practical, Hours: 5
	d)Identification of Zooparasites: *Plasmodeum, Trypanosoma, Giardia, Entamoeba, Fasciola, Echinococcus, Oxyuris, Taenia, Trichinella*	Mrs. Anima Das	Practical, Hours: 5
11	Project work: based on field/survey/experimental work under the guidance of departmental teacher to be assigned by the department	Dr. Sarbojit Thaosen	Practical,Hours: 15

B.Sc. 6th SEMESTER Pass Course

Paper: ZOOP-601
Lecture= 60, Full Marks= 35, Pass Marks= 12
Name of the Paper:: Biomolecules, Developmental Biology & Wild Life Management (Theory)

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	**Biomolecules:** i)Enzymes: Their types, properties & mechanism of enzyme action ii) Vitamins: Types & functions	Mrs. Madhumita Daolagupu	Lecture, Tutorial Seminar, Test Total Hours:12
II	**Developmental Biology-I:** i)Gametes and gametogenesis ii) Different types of eggs and their structures	Mr. Bubul Das	Lecture, Tutorial Seminar, Test Total Hours:12
III	**Developmental Biology-II:** i)Fertilization and cleavage pattern ii) Blastulation & gastrulation in Amphioxus, Frog and chick	Dr. Sarbojit Thaosen	Lecture, Tutorial Remedial Total Hours:12
IV	**Wild Life Management:** i)Depletion and necessity of wild life conservation ii) Preliminary knowledge of wild life sanctuary, National Park & Biosphere reserve iii) Kaziranga National Park, Project Tiger	Ms. Anima Das	Lecture, Tutorial Seminar, Test Total Hours:12

V	**Wild Life Management-II:** i)Conservation & management of wildlife in India with special reference to North East India ii) General concept of Biodiversity & its conservation iii) Habit, Habitat and ethology of Rhinoceros, Hoolock Gibbon and Gangetic river Dolphin	Dr. Sarbojit Thaosen	Lecture, Tutorial Seminar, Test Total Hours:12

Paper: ZOOP-602 (Practical)
Lecture= 60, Full Marks= 30, Pass Marks= 10

Sl. No.	Topic	Teachers to whom allotted	Mode of Teachings
1	Preparation of fixatives & alcoholic grades	Mr. Bubul Das	Practical, Hours: 5
2	Squash preparation of any biological material for the study of mitosis (Onion root tip/ tadpole tail/ any other material may be selected)	Mrs. Madhumita Daolagupu	Practical, Hours: 5
3	Preparation and study of polytene chromosomes in any suitable material (Chironomous larva/ Dipteran larva/ any other)	Mrs. Madhumita Daolagupu	Practical, Hours: 5
4	Biochemical detection of carbohydrate, protein & lipid (at least three test for each to be performed)	Dr. Sarbojit Thaosen	Practical, Hours: 5
5	Study of blastula & gastrula of toad and chick, Study of prepared slides of chick embryo from 18 hours onwards to 96 hours	Mr. Bubul Das	Practical, Hours: 5
6	Study of cell organelle: mitochondria, golgi complex, nucleus	Mr. Bubul Das	Practical, Hours: 5
7	Study of endocrine glands: Pituitary, thyroid, adrenal, pancreas, testis & ovary	Mrs. Anima Das	Practical, Hours: 5
8	Estimation of Haemoglobin content of blood	Mrs. M. Daolagupu	Practical, Hours: 5
9	ABO blood groups & Rh factor determination	Mrs. Anima Das	Practical, Hours: 5
10	Academic field work & submission of a Report based on field study certified by the concerned teacher-in-charge	Dr. Sarbojit Thaosen	Practical, Hours: 5

Principal
Haflong Govt. College, Haflong

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Department of Commerce: Haflong Government College

Plan for Curriculum Implementation

ACADEMIC SESSION 2018 - 2019

Prepared by
Curriculum Implementation Committee
Department of Commerce
Haflong Government College

Department of Commerce: Haflong Government College

Plan for Curriculum Implementation

The Department of Commerce of Haflong Government College has made the following plan for implementation of the Curriculum designed by the affiliating Assam University for the Session 2018-2019. Assam University has introduced the TDC CBCS programme for B. Com General as well as B. Com Honours programme from the session 2018-19; which is being implemented accordingly for the students enrolled in TDC 1st and 2nd semester respectively for the session 2018-19.The earlier programmes of TDC Commerce Honours and Commerce Pass Course Programme designed by Assam University will also continue for TDC 3rd, 4th, 5th and 6th Semesters in the session 2018-19. The following is the outline plan for implementation of the curriculum for the academic session 2018-19.

ODD SEMESTERS from August 2018 to December 2018

Plan for implementation of B. Com Honours and B. Com General CBCS Programme

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

B. Com First SEMESTER Honours Programme
Course Code: AECC-1, Credits-04, Full Marks-50
Name of Course: BUSINESS COMMUNICATION

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Nature of Communication	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
II	Business Correspondence 1	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Business Correspondence 11	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Report writing	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Oral Presentation	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com First SEMESTER Honours Programme
Course Code: BCH-CC-101, Credits-05, Full Marks-70
Name of Course: FINANCIAL ACCOUNTING

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Theorotical framework of accounting	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05
II	Computerized Accounting System (Tally 9.0)	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
III	Business Income and Final Accounts	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
IV	Accounting for Hire Purchase and Installment system	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
V	Accounting for Inland Branches	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14

B. Com First SEMESTER Honours Programme
Course Code: BCH-CC-103, Credits-01, Full Marks-30
Name of Course: PRACTICAL ON FINANCIAL ACCOUNTING

II	Computerized Accounting System (Tally 9.0)	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:30

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam

B. Com First SEMESTER Honours Programme
Course Code: BCH-CC-102, Credits-06, Full Marks-100
Name of Course: BUSINESS LAW

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	The Indian Contract Act, 1972: General Principles of Contract	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	The Indian Contract Act: Specific Contracts	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	The Sale of Goods Act 1930	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Partnership Laws- i) The Partnership Act, 1932 ii) The Limited Liability Partnership Act, 2008	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	The Negotiable Instrument Act, 1881	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com First SEMESTER Honours Programme
First Semester: Course Code: BCH-GE-101, Credits-06, Full Marks-100
Name of Course: MICRO ECONOMICS

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Demand and Consumer Behaviour	Mr. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	Production and Cost	Mr. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Perfect Competition	Mr. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Monopoly	Mr. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
V	Imperfect Competition		*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:16

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College,

B. Com First SEMESTER General (Pass) Programme
Course Code: AECC-1, Credits-04, Full Marks-50
Name of Course: BUSINESS COMMUNICATION

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Nature of Communication	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
II	Business Correspondence I	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Business Correspondence II	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Report writing	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Oral Presentation	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.

B. Com First SEMESTER General (Pass) Programme
Course Code:BCP DSC-101, Credits-05, Full Marks-70
Course: FINANCIAL ACCOUNTING

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Theorotical framework of accounting	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05
II	Computerized Accounting System (Tally 9.0)	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
III	Business Income and Final Accounts	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
IV	Accounting for Hire Purchase and Installment system	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
V	Accounting for Inland Branches	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com First SEMESTER General (Pass) Programme
Course Code:BCP DSC-101, Credits-05, Full Marks-70
Name of Course: BUSINESS ORGANISATION AND MANAGEMENT

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Foundation of Indian Business	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05
II	Business Enterprises	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
III	Management and Organisation	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
IV	Leadership, Motivation and Control	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
V	Functional areas of Management	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Plan for TDC Programme for 3rd and 5th Semester from August 2018 to December 2018

The different units and topics thereof of the Courses of B. Com Programme have been allotted to individual teachers as mentioned in the following tables. Details of plan for each unit and topic will be designed by each of the teachers to whom the units of the course/ courses are allotted. As per the guidelines of the university, internal assessment will be done by taking two unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be reflected in the university conducted end semester examinations for each semester.

B. Com 3rd SEMESTER Honours(Accounting & Finance/ Management)) Programme
Course Code: BCMH 301, Full Marks-50
Name of Course: BUSINESS MATHEMATICS

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Algebra	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	Differential Calculus	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Partial Derivatives	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Integration	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	Linear Programming	Dr. Amalendu Choudhury and Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com 3rd SEMESTER Honours (Accounting & Finance/ Management) Programme
Course Code: BCMII A 302, Full Marks-50
Name of Course: FINANCIAL MANAGEMENT-I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
II	Time Value of Money	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
III	Capital Structure	Mr. Madan Chandra Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
IV	Cost of Capital	Dr. Durlabh Baruah and Mr. Madan Chandra Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
V	Capital Budgeting	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com 3rd SEMESTER Honours (Accounting & Finance) Programme
Course Code: BCMH 303, Full Marks-50
Name of Course: ADVANCE COST ACCOUNTING-I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Cost Accounting Fundamentals	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	Job and Batch Costing	Mr. Madan Chandra Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Process Costing	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Contract Costing	Mr. Madan Chandra Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	Unit or Output Costing	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com 3rd SEMESTER Honours (Management) Programme
Course Code: BCMH 303, Full Marks-35
Name of Course: MARKETING MANAGEMENT-I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Product Planning	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Pricing	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Promotion	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Physical Distribution	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 3rd SEMESTER General (Pass) Programme
Course Code: BCMP- 301, Full Marks-50
Name of Course: BUSINESS COMMUNICATION - I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Barriers to Communication	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Business Correspondences	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Report Writing – Characteristics and Importance Structure & Layout	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	Public Communication: Structure and Layout	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 3rd SEMESTER General (Pass) Programme
Course Code:BCMP- 302, Full Marks-50
Name of Course: COST ACCOUNTING

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction to Cost Accounting	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
II	Basic Concept	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
III	. Material Cost	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
IV	Labour Cost	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
V	Overheads	Mr Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 3rd SEMESTER General (Pass) Programme
Course Code: BCMP- 303, Full Marks- 50
Name of Course: BUSINESS ENVIRONMENT – I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Business Environment – Conceptual Framework	Mr. M. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Economic Trends In India & Latest Union Budget	Mr. M. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Micro and Small Industries in India	Mr. M. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Role of Government	Mr. M. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 07
V	Financial Sector Reforms in India	Mr. M. Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 3rd SEMESTER General (Pass) Programme
Course Code: BCMP- 304, Full Marks- 50
Name of Course: ENTREPRENEURSHIP – I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Social Economic Environment and Entrepreurship	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Promotion of Venture	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Entrepreneurial Development Programme	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 07
V	Great Entrepreneurs in India	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College

B. Com 5th SEMESTER Honours(Accounting & Finance/ Management)) Programme
Course Code: BCMII 501, Full Marks-35
Name of Course: INFORMATION TECHNOLOGY IN BUSINESS - I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Information Revolution & IT	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 05
II	Fundamental of Computer	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 05
III	MS Word & Excel	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 05
IV	Data Base Management System	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 5th SEMESTERHonours (Accounting & Finance/ Management)Programme
Course Code: BCMH A 502, Full Marks-50
Name of Course: LAW AND PRACTICE OF TAXATION – I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Income Tax Act – Heads of Income	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Computation of Tax Liability	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Assessment of Collection of Tax	Dr Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 07
IV	Tax Administration	MrDilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Wealth Tax Act, 1957	MrDilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com5th SEMESTERHonours (Accounting & Finance) Programme
Course Code: BCMH 503, Full Marks-50
Name of Course: MANAGEMENT ACCOUNTING-I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Concept of Management Accounting	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	Standard Costing	Mr. Madan Chandra Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Variance Analysis	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Budgetary Analysis	Mr. Madan Chandra Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 5th SEMESTERHonours (Management) Programme
Course Code: BCMH 502, Full Marks- 50
Name of Course: HUMAN RESOURCE MANAGEMENT – I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Concept & Significance	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Approaches of Personnel Management	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Human Resource Planning	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Recruitment and Selection	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Compensation	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 5th SEMESTERHonours (Management) Programme
Course Code: BCMH 503, Full Marks- 50
Name of Course: ORGANISATIONAL BEHAVIOUR – I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Goals	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Human Behaviour	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Perception and Attitude	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Learning	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam

Principal
HAFLONG GOVT. COLLEGE

B. Com 5th SEMESTER General (Pass) Programme
Course Code:BCMP-502, Full Marks-50
Name of Course: AUDITING

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Elements of Auditing	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Preparation and Conduct of Audit	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Vouching and Verification and Valuation of Assets and Liabilities	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Audit of Limited Companies	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Investigation and Audit of Typical Organisation	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 5th SEMESTER General (Pass) Programme
Course Code:BCMP-503, Full Marks-50
Name of Course: BUSINESS REGULATORY FRAMEWORK

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Law of Contract – I	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Law of Contract – II	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Sale of Goods Act, 1930	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Indian Partnership Act,1932	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 07
V	Negotiable Instrument Act,1881	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

B. Com 5th SEMESTER General (Pass) Programme
Course Code: BCMP 504, Full Marks-35
Name of Course: INFORMATION TECHNOLOGY IN BUSINESS - I

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Information Revolution & IT	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 05
II	Fundamental of Computer	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 05
III	MS Word & Excel	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours: 05
IV	Data Base Management System	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce.
Haflong Govt College, Assam

Plan for Curriculum Implementation

EVEN SEMESTERS from January 2019 to June 2019

Plan for Implementation of B Com Honours and B Com General CBCS Programme

Continuous and Comprehensive Assessment (CCE): As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 20 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations and the better marks secured out of the two-unit tests will be counted in the university conducted end semester examinations.

B. Com 2nd SEMESTER Honours Programme
Course Code: BCH-CC-201, Credits-06, Full Marks-100
Name of Course: CORPORATE ACCOUNTING

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Accounting for share capital and debentures	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12
II	Final Accounts of Companies	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:09
III	Valuation of Goodwill and valuation of shares	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:06
IV	Accounting of Holding Companies/Parent Companies	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12
V	Banking and Insurance Accounts	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:17

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 2nd SEMESTER Honours
Course Code: BCH-CC-202, Credits-06, Full Marks-100
Name of Course: CORPORATE LAWS

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction to Corporate Law	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
II	Documents	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
III	Management of Companies	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
IV	Dividends, Accounts.	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
V	Depositories Law	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 2nd SEMESTER Honours Programme
Course Code: BCH-GE-201, Credits-06, Full Marks-100
Name of Course: MACRO ECONOMICS

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction to Macro Economics	Mr. M.Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:05
II	Economy in the short run	Mr. M.Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:20
III	Inflation, Unemployment and Labour Market	Mr. M.Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:20
IV	Open Economy	Mr. M.Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	Investments	Mr. M.Manoj Kr. Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head.
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 2nd SEMESTER General (Pass) Programme
Course Code:BCP-DSC-201, Credits-06, Full Marks-100
Name of Course: BUSINESS LAW

Unit	Topic	Teachers to whom allotted	Mode of Teachings
MI	The Indian Contract Act, 1872; General Principles	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	The Indian Contract Act, 1872; Specific Contracts	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	The Sale of Goods Act, 1930	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Partnership Laws a) The Partnership Act, 1932 The Limited Liability Partnership Act, 2008	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	The Negotiable Instrument Act, 1881	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam

B. Com 2nd SEMESTER General (Pass) Programme
Course Code:BCP-DSC-201, Credits-06, Full Marks-100
Name of Course:BUSINESS MATHEMATICS AND STATISTICS

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Matrices	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	Differential Calculus	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Uni-variate analysis	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Bi-variate analysis	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	Index numbers and Time series	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Plan for TDC Honours Programme for 4th and 6th Semester from January 2019 to June 2019

The different units and topics thereof of the Courses of B. Com Honours Programme have been allotted to individual teachers as mentioned in the following tables. Details of plan for each unit and topic will be designed by each of the teachers to whom the units of the course/ courses are allotted. As per the guidelines of the university, internal assessment will be done by taking two-unit tests of 25 marks for each course in each semester. Qualifying the tests is mandatory for appearing in the end semester examinations though the marks secured in Internal Assessment will not be reflected in the university conducted end semester examinations for each semester.

B. Com 4th SEMESTER Honours(Accounting & Finance / Management) Programme
Course Code: BCMH-401, Full Marks- 50
Name of Course:BUSINESS STATISTICS

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Introduction to Statistics	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Analysis of Univariate Data	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Analysis of Bi – Variate Data	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Index Numbers and Time Series	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Probability	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 4th SEMESTER Honours (Accounting & Finance / Management) Programme
Course Code:BCMH-402, Full Marks-50
Name of Course: FINANCIAL MANAGEMENT – II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Working Capital Management	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Cash Management	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Dividend Policy	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Capital Market	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Lease Financing and Venture Capital Financing	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 4th SEMESTER Honours(Accounting &Finance) Programme

Course Code:BCMH-403, Full Marks- 50

Name of Course: ADVANCED COST ACCOUNTING – II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Joint Products & By Products Costing	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Marginal Costing	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Cost – Volume – Profit Analysis	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Cost Control & Cost Reduction	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Reconciliation of Cost & Financial Accounts	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 4th SEMESTER Honours (Management) Programme
Course Code: BCMH403, Full Marks - 50
Name of Course: MARKETING MANAGEMENT – II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Consumer Behaviour	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	Marketing Research	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Marketing Environment	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Sales Management	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
V	Marketing of Services	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 4th SEMESTER General (Pass) Programme
Course Code: BCMP 401, Full Marks-50
Name of Course: BUSINESS COMMUNICATION-II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Work Team Communication	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12
II	Non-Verbal Communications and its Effective Presentation	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:09
III	Communication Technology: History and Type	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Instrument Communication	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12
V	Types of Communication	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 4th SEMESTER General (Pass) Programme
Course Code: BCMP 402, Full Marks-50
Name of Course: BUSINESS FINANCE

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Nature and Significance of Business Finance	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
II	Source of Finance	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
III	Banking Institutions	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
IV	Capital market	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
V	Mutual fund and SEBI	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 4th SEMESTER General (Pass) Programme
Course Code: BCMP 403, Full Marks-50
Name of Course: BUSINESS ENVIRONMENT

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Business environment anslysis	Mr. Manoj Kumar Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
II	Indian Planning	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
III	Poverty, Inequality and Unemployment	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
IV	International Organisations	Mr. Manoj Kumar Singh	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
V	Regional Environment	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER Honours (Accounting & Finance/ Management) Programme

Course Code: BCMH 601, Full Marks-35

Name of Course: INFORMATION TECHNOLOGY IN BUSINESS-II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Internet	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
II	E- Commerce	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
III	Tally Latest Version	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07
IV	Power- Point	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:07

B. Com 6th SEMESTER Honours (Accounting & Finance/ Management) Programme

Course Code: BCMH 605, Full Marks-30

Name of Course: INFORMATION TECHNOLOGY IN BUSINESS (PRACTICAL)

Topic	Teachers to whom allotted	Mode of Teachings
Practical in Computer using MS-Excel, Power Point, Tally, etc.	Dr. Amalendu Choudhury and Mr. Sekhar Chakraborty	Computer teaching*Test Total Teaching Hours:28

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER Honours (Accounting & Finance)Programme

Course Code: BCMH 602, Full Marks-50

Name of Course: LAW AND PRACTICE OF TAXATION-II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Basic Concepts	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
II	Assam Value Added Tact Act, 2003	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:10
III	Central Excise	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
IV	Central Sales Act	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15
V	Customs	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:15

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER Honours (Accounting & Finance) Programme
Course Code: BCMH 603, Full Marks-50
Name of Course: MANAGEMENT ACCOUNTING-II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Cash Flow for Investment Analysis	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:06
II	Capital Budgeting	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
III	Responsibility Accounting	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
IV	Ratio Analysis	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:28
V	Management Information System: (MIS)	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:09

Associate Professor and Head,
Department of Commerce,
Haflong Govt College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER Honours(Management)Programme
Course Code: BCMH 602, Full Marks-50
Name of Course: HUMAN RESOURCE MANAGEMENT-II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Performance Appraisal	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:06
II	Industrial Relation	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:14
III	Regulation and Control	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
IV	Trade Union	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:28
V	Collective Bargaining	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:09

Associate Professor and Head,
Department of Commerce.
Haflong Govt. College, Assam

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER Honours(Management)Programme
Course Code: BCMH 603, Full Marks-50
Name of Course: ORGANISATIONAL BEHAVIOUR-II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Motivation	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
II	Group Dynamics	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
III	Organizational Conflict	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
IV	Organizational Change and Effectiveness	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:08
V	Communication	Mr. Dilbudh Urang	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:09

Associate Professor and Head
Department of Commerce.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER General (Pass) Programme
Course Code: BCMP 602, Full Marks-50
Name of Course: COMPANY LAW

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Meaning and Nature of a Company	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:18
II	Kinds of Companies and Formation	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:17
III	Membership	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12
IV	Management	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:12
V	Meeting and Winding Up	Dr. Jyotish Bordoloi	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:06

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER General (Pass) Programme
Course Code: BCMP 603, Full Marks-50
Name of Course: ELEMENTS OF INCOME TAX

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Concepts of Income tax	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	Incomes from Salary	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Income from Salary (Continued)	Dr. Durlabh Baruah	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	Incomes from House Property	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
V	Administration of Income Tax Act	Mr. Madan Ch. Bakali	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam.

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

B. Com 6th SEMESTER General (Pass) Programme
Course Code: BCMP 604, Full Marks-35
Name of Course: INFORMATION TECHNOLOGY IN BUSINESS - II

Unit	Topic	Teachers to whom allotted	Mode of Teachings
I	Internet	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
II	E- Commerce	Mr. Sekhar Chakraborty	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
III	Tally Latest Version	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13
IV	PowerPoint	Dr. Amalendu Choudhury	*Lecture, *Tutorial, *Seminar, *Test, *Remedial Total Teaching Hours:13

B. Com 6th SEMESTER General (Pass) Programme
Course Code: BCMP 603, Full Marks-30
Name of Course: INFORMATION TECHNOLOGY IN BUSINESS (PRACTICAL)

Topic	Teachers to whom allotted	Mode of Teachings
Practical in Computer using MS-Excel, Powerpoint, Tally, etc.	Dr. Amalendu Choudhury and Mr. Sekhar Chakraborty	Computer teaching*Test Total Teaching Hours:28

Principal
HAFLONG GOVT. COLLEGE
HAFLONG

Associate Professor and Head,
Department of Commerce,
Haflong Govt. College, Assam