PROGRAMME OUTCOME/ PROGRAMME SPECIFIC OUTCOME/ COURSE OUTCOME OF B.A. /B.SC. COURSE

PROGRAMME OUTCOME, PROGRAMME SPECIFIC OUTCOME AND COURSE OUTCOME FOR ALL PROGRAMMES OFFERED BY THE INSTITUTION.

Program Outcome –Arts Stream:

The Bachelor of Arts requires three years of full time study consisting of six semesters. The college offers 7 honours programme- Assamese, English, Economics, Education, Geography, History and Political Science. The outcomes of these programmes are to prepare students with sound knowledge and skills across different disciples and socio cultural boundaries. The program will enable students to critically analyze various information relating to the subjects. The program will inculcate sound ethical behavior with positive learning outcomes.

Program Specific outcome:

1. **Assamese:** The program will increase critical attitude on literary studies and developing language. The program will enable students to understand the Assamese culture and diversity. The program will inculcate the learners with the knowledge of linguistic and history of Assamese language. The subject encompasses archeology, agriculture, tourism, folklore and indigenous costumes. The program will enhance communicative and creative writing skills of the learners. Besides the program will through an insight on legendary Assamese poets and their contribution in transformation in Assamese society.

2. **Economics:** The program will enable the learner to understand the basic concepts of economics and its application. The subject will enhance knowledge pertaining to different economic policies, economic variables, statistical and mathematical models for their practical applications. The program will increase the proficiencies of the learners for professional works in business, banking, management and administration..

3. **Education:** The program encompasses different perspectives of teaching, psychology and allied aspects. The course acquaints the students with the preparation and implementation of teaching methodologies. It also enhances the knowledge and understanding pertaining to social-cultural aspects

4. **English:** The program will familiarize students on English literatures, its theories and criticism, and allied concepts. It will enable learners to critically think and analyze cultural, historical and linguistic aspect of English literature. The program will acquaint students with cultural heritage of Indian literature, European cultural literature, American and British literature. The program will give an insights on Indian writing in English, about European drama, British drama and contributions of renowned poets.

5. **Geography:** The program encompasses human and economic geography, oceanography, geomorphology, world geography, environmental geography, cartography, statistic and planning. It will enable student to understand various aspects of natural science. The program will help students to implement their understanding on various data analysis including cartography and remote sensing. The economic geography will enhance their knowledge on sustainable use or natural resources for better future.

6. **History:** The program will acquaints the learner in understanding the sources of History in varied forms, uses and analysis, growth of human civilizations, its basics and glimpses of Ancient world history. It deals with the state formation process, polity and society both in medieval world and in Indian context. The program will enable the students with the significant developments in the world and changing cultural scenario in India. This program will impart knowledge on the significant changes in the socio-political and economic life in the world and also the political contributions in India. This program will basically enhance the students with different school of thought which ushered the great revolutions in Europe and the beginning of Colonial dominion in India till its freedom.

7. **Political Science:** The program will familiarizes the students with the different aspects of Indian politics and Government, public administration, Indian constitution and international relations. The program will help to critically think and analyze dynamics of Indian politics and contemporary political phenomenon. It will provide an insight on recent trends of India's foreign policy. The program will acquaint students with concepts of human rights and different challenges. It will also enable learners to critically think on gender issues and formulation of policies to mitigate problems pertaining to women issues.

Program Outcomes-Science Stream:

The Bachelor of Science requires three years of full time study consisting of six semesters. The college offers 5 honours program- Botany, Chemistry, Mathematics, Physics and Zoology. The outcomes of these programs are enable students to critically think and understand the respective subject and inculcating scientific temper.

Program Specific outcomes:

1. **Botany:** The main objective of the subject is to provide students a holistic understanding of the subject. The subject will enhance knowledge on Taxonomy, Physiology, Morphology, Anatomy, Reproduction, Ecology and Evolution of different plant species. Besides, the subject encompasses Microbiology, Pathology, Biotechnology, Molecular Biology, Bioinformatics and Bioinstrumentation. It will also acquaint the students with the basic knowledge of tools and techniques in biological science. The practical and science projects will enhance knowledge in experimental skills for future research and allied applications.

2. **Chemistry:** The program will create interest on Physical Chemistry, Inorganic Chemistry and Organic Chemistry. These will enable the learners to acquire knowledge on concepts, techniques and facts. The program will enhance practical skills vis-à-vis theoretical aspects of different chemical phenomenon. The learners will be acquainted with instruments used in chemistry. The course will also develop the knowledge on different theoretical tools used for the study of chemistry.

3. **Mathematics:** The program will enhance knowledge on fundamental objects, techniques and theorems. The program will help the students to implement mathematical concepts in real life situations. The inclusion of computer programming and computer lab makes the students able to formulate programs for numerical evaluation of computational problems. They also become familiar with different mathematical software. The students are taught on the application of mathematical principles to the problems of financial mathematics and operation research. The course acquaints the students with the applications of mathematical principles to the problems of mechanics, space dynamics and relativity etc.

4. **Physics:** The program will develop the basic understanding on mathematical physics, quantum mechanics, statistical mechanics, thermodynamics, electrodynamics, solid state physics, atomic and nuclear physics, electronics etc. The program will help in developing scientific intuition and ability to solve scientific problems using theoretical or experimental concepts and techniques. The student will be acquainted with the general physics like laws of motion, sound waves, electrical current, circuits, nuclear physics etc. and mathematical techniques to solve physical phenomenons.

5. **Zoology:** The program will familiarize the students with Animal classifications, Genetics, Biochemistry,, Biodiversity, Public Health and Hygiene, Animal physiology, Endocrinology, Apiculture etc. the program will improve the knowledge and perceptions pertaining to animal behavior, its adaptations and evolutional aspects. The program will enhance technical skill in biological sciences with an opportunity for future research.

Dept. of Assamese

স্নাতক পর্যায়ৰ অসমীয়া পাঠ্যক্ৰম, ডিব্ৰুগড় বিশ্ববিদ্যালয়।

2.6.1. Course outcome:

পাঠ্যক্ৰম সংখ্যা	পাঠ্যক্ৰম শীৰ্ষ	ক্ৰেডিট
C - 1	(অসমীয়া সাহিত্যৰ বুৰঞ্জী)	৬

এই কাকতখনৰ জৰিয়তে অসমীয়া সাহিত্যৰ যুগবিভাজন আৰু লোকসাহিত্য সামৰি শংকৰোত্তৰ যুগৰ সাহিত্য পর্যন্ত ছাত্ৰ-ছাত্ৰীসকলক ধাৰণা দিয়া হৈছে।

C - 2	(অসমীয়া সাহিত্যৰ বুৰঞ্জী)	৬

এই কাকতখন আধুনিক অসমীয়া সাহিত্যৰ আৰম্ভণিকালৰ পৰা সাম্প্ৰতিকলৈকে ছাত্ৰ-ছাত্ৰীসকলক এটি ধাৰণা দিবৰ বাবে প্ৰস্তুত কৰা হৈছে।

C - 3	(ভাষাবিজ্ঞানৰ পৰিচয়)	৬

এই কাকতখন প্ৰাচ্য আৰু পাশ্চাত্যৰ ভষা সম্পৰ্কীয় চিন্তা-চৰ্চাৰ ইতিহাস জনাৰ লগতে ভাষা আৰু ভাষাবিজ্ঞান সম্পৰ্কীয় বিভিন্ন দিশসমূহৰ পৰিচয় ছাত্ৰ-ছাত্ৰীসকলে পাব পৰাকৈ প্ৰস্তুত কৰা হৈছে।

C - 4	(সাহিত্যতত্ত্ব)	৬

. ভাৰতীয় আৰু পাশ্চাত্য সাহিত্যতত্ত্বৰ প্ৰাথমিক জ্ঞান ছাত্ৰ-ছাত্ৰীসকলক দিবৰ বাবে এই কাকতখন প্ৰস্তুত কৰা হৈছে।

C - 5	(সাহিত্য সমালোচনা)	৬

. সাহিত্য সমালোচনাৰ পৰিচয়, পদ্ধতি আৰু বিভিন্ন প্ৰকাৰৰ সাহিত্যৰ স্বৰূপ সম্পৰ্কীয় ধাৰণা ছাত্ৰ-ছাত্ৰীসকলক প্ৰদান কৰাৰ উদ্দেশ্যে এই কাকতখন প্ৰস্তুত কৰা হৈছে।

C - 6	(অসমীয়া কবিতাৰ চানেকি)	৬

লোককবিতাৰ পৰা আৰম্ভ কৰি সাম্প্ৰতিক সময়লৈকে অসমীয়া কবিতাৰ গতি-প্ৰকৃতি সম্পৰ্কে জ্ঞান প্ৰদান কৰিবৰ বাবে এই কাকতখন প্ৰস্তুত কৰা হৈছে।

C -7	(অসমৰ সংস্কৃতি অধ্যয়ন)	৬

সংস্কৃতিৰ সাধাৰণ ধাৰণাসহ অসমৰ নৃ-গোষ্ঠী আৰু সংস্কৃতি সম্পৰ্কে ছাত্ৰ-ছাত্ৰীক অৱগত কৰিবৰ বাবে এই কাকতখন প্ৰস্তুত কৰা হৈছে।

C -11	(অসমীয়া নাটক)	৬

প্ৰাচীন অসমীয়া নাটকৰপৰা আধুনিক অসমীয়া নাটকৰ গতি-বিধি সম্পৰ্কে পাঁচখন নাটক অধ্যয়নৰদ্বাৰা ছাত্ৰ-ছাত্ৰীসকলে জানিব পাৰিব।

C -12 (অসমীয়া ভাষাৰ ভাষাবৈজ্ঞানিক অধ্যয়ন) ৬

অসমীয়া ভাষাৰ ধ্বনিতত্ত্ব, ৰূপতত্ত্ব, বাক্যতত্ত্ব সম্পৰ্কে পৰিচয় দিয়াৰ লগতে ধ্বনিবিজ্ঞানৰ তাত্ত্বিক জ্ঞান দিবৰ বাবে কাকতখন প্ৰস্তুত কৰা হৈছে।

DSE -1 (অসমীয়া ব্যাকৰণ, অভিধান আৰু জতুৱা প্ৰয়োগ) ৬

অসমীয়া ভাষাৰ শুদ্ধ উচ্চাৰণ, আখৰ জোঁটনি, অসমীয়া জতুৱা ঠাঁচ আৰু খণ্ডবাক্যৰ প্ৰয়োগৰ লগতে পৰিভাষা, অসমীয়া ব্যাকৰণৰ বিবিধ দিশ তথা অসমীয়া অভিধানৰ সাধাৰণ পৰিচয় পাব পৰাকৈ কাকতখন প্ৰস্তুত কৰা হৈছে।

DSE -2 (ভাৰতীয় সাহিত্যৰ পৰিচয়) ৬

বহু ভাষাৰে প্ৰকাশ লাভ কৰা ভাৰতীয় সাহিত্যৰ একক ৰূপত পৰিচয় প্ৰদানৰ লগতে নিৰ্বাচিত ৰচনাৰ অধ্যয়নৰ যোগেদি তাৰ কিছু আভাস দিবৰ উদ্দেশ্যেৰে এই কাকতখনি পাঠ্যক্ৰত সন্নিবিষ্ট কৰা হৈছে।

ASMM 501 (সাহিত্যতত্ত্ব আৰু সমালোচনা)

সাহিত্য আৰু বিভিন্ন সাহিত্য-ৰূপৰ সংজ্ঞা আৰু স্বৰূপ উপলব্ধিৰ বাবে এই কাকতখন প্ৰস্তুত কৰা হৈছে।

ASMM 501 (অসমীয়া নাটক)

অসমীয়া নাট্য সাহিত্য আৰু নাট্যমঞ্চৰ ক্ৰমবিকাশৰ সম্যক ধাৰণা দিবলৈ এই কাকতখন প্ৰস্তুত কৰা হৈছে।

ASMM 503 (সংস্কৃতি অধ্যয়ন)

সংস্কৃতিৰ সাধাৰণ ধাৰণা আৰু অসমীয়া সংস্কৃতিৰ বৈশিষ্ট্যৰ বিষয়ে অৱগত কৰিবলৈ এই কাকতখন প্ৰস্তুত কৰা হৈছে।

ASMM 504 (তুলনামূলক ভাৰতীয় সাহিত্য)

তুলনামূলক সাহিত্যৰ সংজ্ঞা, পৰিচয় আৰু তুলনামূলক ভাৰতীয় সাহিত্যৰ পৰিসৰ আৰু প্ৰাসঙ্গিকতা সম্পৰ্কে বিস্তৃত ধাৰণা দিবলৈ এই কাকতখন প্ৰস্তুত কৰা হৈছে।

ASMM 601 (ভাষা সাহিত্য অধ্যয়নৰ বিবিধ দিশ)

বিভিন্ন মাধ্যমৰ বাতৰি পৰিৱেশন, পাণ্ডুলিপি সম্পাদনা, বিজ্ঞাপন আদিৰ দৰে ভাষা সাহিত্যৰ ব্যৱহাৰিক দিশবোৰৰ প্ৰতি লক্ষ্য ৰাখি এই কাকতখন যুগুত কৰা হৈছে।

ASMM 602 (ভাৰতীয় আৰ্যভাষা আৰু অসমীয়া ভাষা)

সংস্কৃত, পালি আৰু প্ৰাকৃত ভাষাৰ নিৰ্বাচিত পাঠ্যৰ মাধ্যমত ভাৰতীয় আৰ্যভাষাৰ ক্ৰমবিকাশৰ ৰূপৰেখা লগতে অসমীয়া ভাষাৰ উদ্ভৱ আৰু বিকাশৰ এটি স্পষ্ট ধাৰণা কাকতখনত দিয়া হৈছে।

ASMM 603 (অসমীয়া ভাষাৰ ভাষাতাত্ত্বিক অধ্যয়ন)

অসমীয়া ভাষাৰ ধ্বনিতত্ত্ব, ৰূপতত্ত্ব, বাক্যতত্ত্ব আৰু শব্দগঠন, শব্দসাধন সম্পৰ্কে পৰিচয়ৰ উপৰিও ধ্বনিবিজ্ঞানৰ তাত্ত্বিক জ্ঞান পাব পৰাকৈ কাকতখন প্ৰস্তুত কৰা হৈছে।

ASMM 604 (বিশ্বসাহিত্যৰ পৰিচয়)

বিশ্বসাহিতৰ ধাৰণা আৰু পৰিচয় দিবৰ বাবে নিৰ্বাচিত পাঠৰ আধাৰত এই কাকতখন প্ৰস্তুত কৰা হৈছে।

Department of Economics:

Course Code: ECNHC101- Title- Introductory Microeconomics

By going through the course student can able to understand the basic principles of micro economic theory. Through this course student will able to understand the micro economic concepts which they can apply to analyze the real life situations.

Course Code: ECNHC102- Title- Mathematical Methods for Economics-I

This is the first of a compulsory two course sequence of Mathematical Economics. Through this course student can able to understand basic application of Mathematics in the economic analysis particularly on micro economic and macro-economic theory. In this course, particular economic models are not the ends, but the mean for illustrating the methods of applying mathematical technique to economic theory in general.

Course Code: ECNHC201-Title- Introductory Macroeconomics

Through this course students can be able to acquire the knowledge of the basic concepts of macroeconomics. This course discusses the preliminary concepts, associated with the determination and measurement of aggregate macroeconomic variables, like savings, investment, GDP, money, inflation and the balance of payments.

Course Code: ECNHC202- Title- Mathematical Methods for Economics-II

This course is the second part of a compulsory two course sequence Through this course student can able to understand basic application of Mathematics in the economic analysis particularly on micro economic and macro-economic theory. In this course, particular economic models are not the ends, but the mean for illustrating the methods of applying mathematical technique to economic theory in general.

Course Code: ECNHC301- Title: Essentials of Microeconomics

By this course students can acquire a sound training in micro economic theory to formally analyze the behaviour of individual agents. They also acquire the skills of using mathematical tools to understanding the base concepts of macro-economic analysis, particularly the consumers and producers behave and also covers the behavior of a competitive firm.

Course Code: ECNHC302- Title: Essentials of Macroeconomics

By this course, students are able to know how macroeconomic problem can be analyze through formal modeling. It also discusses various alternative theories of output and employment determination in a closed economy in the short run on well as medium run and the role of policy in this context. It also introduces the students to various theatrical issues related to open economy.

Course Code: ECNHC 303- Title: Statistical Methods for Economics

This course provides the knowledge about the basic concepts of statistical methods and how these methods are used in the economic analysis. It deals with the basic concept and terminology that are fundamental to statistical analysis and influence then followed by notion of probability, sampling technique and some topics in statistical influences. This course will be immensely helpful for the students those will engage in

Course Code: ECNHC 401- Course Title – Advanced Micro Economics

This course is the advance version of the Micro economic analysis deal in ECNHC-101 and ECNHC-301. The course will give the conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It also covers the advanced micro economic analysis like general equilibrium and welfare, imperfect markets, market failure.

Course Code: ECNHC 402- Course Title – Advanced Macro Economics

This course is the advance version of the macro economic analysis dealt in ECNHC-201 and ECNHC-302. By going through the course the students will get the knowledge of about the long run dynamic issues like growth and technical progress. It also provides the knowledge about various schools of macroeconomic thoughts like classical, Keynesian, Post Keynesian thoughts.

Course Code: ECNHC 403- Course Title – Introductory Econometrics

This course provides the comprehensive introduction of basic econometric concepts and techniques. It covers statistical concepts of hypothesis testing, estimate and diagrammatic checking of simple and multiple regression models and also covers the consequences of and tests for misspecification of regression model. This paper will provide the strong theoretical base of econometric analysis which will be very much helpful for research as well various empirical analyses.

Course Code: ECOM 501- Course Title- Development Economics with Indian Perspective I

By going through this course the students will acquaint the basic knowledge of development economics and various growth theories related to economic development. Students have also able to acquire the theoretical and conceptual issue of poverty and inequalities with Indian perspective.

Course Code: ECOM 502- Course Title- Public Economics: Policy Issue

By this course the learner will acquaint with the fiscal policy designed for developed and developing economics with a speed trust to the federal system of India.

Course Code: ECOM 503- Course Title –History of Economic Thought

After going through this course, learners will acquaint with the knowledge of historical development and theoretical framework in the economic thoughts propounded by different schools of economics.

Course Code: ECOM 504- Course Title- Monetary Theories and Financial Markets

The course will acquaint the learners with some basic concepts relating to monetary analysis and financial marketing with a reference to Indian Financial markets which will enable the learners to relate the conceptual issues to the real world structures.

Course Code: ECOM 601- Course Title- Development Economics with Indian PerspectiveII

This course is a sequel of course ECOM501 through which the learners will understand the development issue of Indian Economy. It will also enable the learner to understand the developmental problem of North East India.

Course Code: ECOM 602- Course Title- Environmental Economics

By going through this course, the learners will acquaint with the basic concepts environmental economics along with the solution of the environmental problem. It will also increase the environmental consciousness among the learners.

Course Code: ECOM 603- Course Title -International Economics

Through this course, the learners will acquaint with both real and monetary sides of international economics. The course designed from traditional to modern, theoretical to analytical developments in International economics through which learners will get excitement of acquiring knowledge of International economics in the classrooms.

Course Code: ECOM 604- Course Title – Economic Issue of Assam

This course brings the scope for the students to acquire the learners with the characteristics of the economy of Assam. The learner will also able to know the performance of the primary, secondary and tertiary sectors of Assam. Through this course the students have con knowledge about the performance of the economy of Assam.

Generic Elective/ General Course:

Course Code: ECNGE-1 Title: Introductory Microeconomics

By going through the course student can able to understand the basic principles of micro economic theory. Through this course student will able to understand the micro economic concepts which they can apply to analyze the real life situations.

Course Code: ECNGE-2 Title: Introductory Macroeconomics

Through this course students can be able to acquire the knowledge of the basic concepts of macroeconomics. This course discusses the preliminary concepts, associated with the determination and measurement of aggregate macroeconomic variables, like savings, investment, GDP, money, inflation and the balance of payments

Course Code: ECNGE-3 Title: Indian Economy-I

By going through the course learners are acquainted with the major trends in economic indicators in India in the Post –Independence period with particular emphasis on paradigm shifts and turning points.

Course Code: ECNGE-4 Title: Public Finance

By going through the course the student can able to get the non technical overview of government finances with special reference in India. Through the course the learner can assess the efficiency and equity aspects of taxation of the Centre, States and the Governments and the issue of fiscal federalism and decentralisation in India

Course Code: ECNG- 501 Titles: Elementary Statistics for Economics

Through this course the learner will acquainted with some statistical data collecting methods and basic statistical methods that can be applied in economics

Course Code: ECNG- 601 Titles: Development Economics

After going through the course the learners are acquainted with the measurement of development with the help of theories along with the conceptual issues of poverty and inequalities. It also enables the learners to understand the problem from Indian perspective.

Department of English

Course Code: C1 ENGM (Indian Classical Literature):

After completing this course, the learners shall be in a position to understand and appreciate the rich Indian Classical literary tradition, including its distinctive aesthetic philosophies. It would provide them with the conceptual resources to make a comparative assessment between the Indian and the Western classical tradition, thereby enabling their knowledge and understanding of the two great literary traditions.

Course Code: C2 ENGM (European Classical Literature):

After the completion of the course, the learners shall be in a position to understand the source of Western literary paradigm- a formation that was responsible for constituting the great tradition of the Western canon, and one which govern our critical or comparative touchstone on ‘what good literature ought to be’.

Course Code: GE1 (Academic Writing and Composition):

By the end of the course, the students will be able to demonstrate and apply knowledge of basic essay structure, including introduction, body and conclusion; employ the various stages of the writing process, including pre-writing, writing and rewriting; employ descriptive, narrative and expository mode; demonstrate ability to write for an academic audience; write concise sentences, etc.

Course Code: AECC 1 (English Communication):

It is hoped that after studying this course, students will find a difference in their personal and professional interactions. The recommended readings given at the end are only suggestive; the students and teachers have the freedom to consult other materials on various units. Similarly, the questions in the examinations will be aimed towards assessing the skills learnt by the students rather the textual content of the recommended books.

Department of Education

Course Code C-I: Philosophical Foundation of Education

Introduce the modern concept, aims, functions and role of education. Enable the students to understand the basic tenants of Indian and Western Philosophies and their influence in Education.

Course Code C-II: Sociological Foundations of Education

Acquire knowledge about the concept, approaches and theories of educational sociology. Illustrate Social Aspects, Social Processes and role of Education. Explain the role of Education in Social Change and Development. Acquire useful knowledge about Social Groups.

Course Code C-III: Psychological Foundations of Education

Develop the basic concept, nature, scope and uses of psychology in Education. Enable the students to understand the basic concept and theories of learning, intelligence and creativity. Help the students to understand the meaning, concept, factors and theories of personality. Develop the basic concepts of mental health and mental hygiene, measures of mental health in school.

Course Code C-IV: Educational Administration and Management

Introduce the modern trends of Educational Management and types of management. Introduce the students to the basic concept and principles of educational leadership. Learn the styles of leadership and its implication educational leadership. Develop basic knowledge of educational planning and educational supervision. Learn how to measures quality in educational management.

Course Code C-V: Great Educators and Educational Thoughts

Help the students to understand the contribution of the various Indian and Western philosophers in the domain of education. Develop the ability of a student to critically analyse the relevance of the educational thought of the different philosophers.

Course Code C-VI: Measurement and Evaluation in Education

Develop the basic concept, nature, scope, need and types of measurement and evaluation in education. Develop the different skill and increase knowledge about the test construction and tools to measure achievement, intelligence, personality and aptitude. Develop the requisite statistical skill to understand some of the fundamental topics in statistics

Course Code C-VII: Experimental Psychology and Laboratory Practical

To learn about the uses and application of psychological experiments on different mental abilities like memory, attention, learning, personality and intelligence

Course Code C-VIII: **Education in Pre-Independent India**

Introduce the student to basic concept of Indian heritage. Enable the student to critically examine the educational system in Vedic, Buddhist, Medieval and British period.

Course Code C-IX: **Techniques of Teaching**

To learn about meaning, nature, principles of teaching and learning. To know about the role of teacher at teaching and importance of lesson plan in teaching-learning process. To develop the different teaching skills and the stages of microteaching cycle. To know about the different methods and approaches of teaching.

Course Code C-X: Educational Technology

To acquire knowledge about the concept, nature and components of Educational Technology, Instructional Technology and apply ICT in teaching learning. To know about the different aspect of communication. To apply Models of teaching, personalized system of instruction, programmed learning in teaching learning.

Course Code GEED-1:

To learn about the different aspects of guidance and counselling like functions, principles , tools and techniques. To know about the qualities and role of a counselor

Course Code GEED-2:

To learn about the meaning and nature of gender and its related terms, gender biases and gender inequality in family, school and society. To aware about different laws and policies related to gender equality.

Course Code GEED-3:

To understand about the concepts of mental health and hygiene and psychological and maladjustment problems in the emerging society. To learn about the role of different agencies of society and their impacts on the development of an individual's personality. Acquire the knowledge of positive psychology and integrate yoga in their day-to-day lives for holistic health.

Course Code GEED-4:

Student will be able to learn meaning, scope, uses, importance and historical development of Economics of Education. To learn about the concept of Education as a good, demand and supply, investment and return on investment of education. To know about different types of Educational cost, Education financing, Educational Planning etc.

Course Code EDNM-501:

To enable the students to understand the importance of development and to develop a sensitivity towards the needs and right of children. To understand the importance of play in child development.

Course Code EDNM-502:

To make the students aware of the development of Indian education scenario at the time of Independence. To help the students to understand and appreciate the reasons for the recommendations of the different Educational commissions since Independence.

Course Code EDNM-503:

Students able to know about Educational Technology and usage of mass media. To orient students towards classroom communication skill and use innovative methods of educational technology.

Course Code EDNM-504:

To develop an understanding of the principles of teaching – learning process. To provide knowledge about the importance of lesson planning and different method of teaching. To familiarize the students with the role of audio visual aids.

Course Code EDNM-601:

To learn about the uses and application of psychological experiments on different mental abilities like memory, attention, learning, personality and intelligence.

Course Code EDNM-602:

To make able the student to prepare a project report. To solving the problems faced in educational field through project

Course Code EDNM-603:

To introduce students the concept of management and orient them towards practices of management in education. To understand the concept of planning finance and educational supervision.

Course Code EDNM-604:

To enable the students to know about the educational system of their own country. To help student to compare the education system of different countries. To plan changes in education in the context of global world.

Course Code EDNM-605:

To develop awareness about various plans and policies regarding the educational setup in India and develop significance trends in education. To focus attention on major social and national issues.

Department of Political Science

Course code C1:
To introduce the students to the idea of political theory, its history and approaches and assessment of its critical and contemporary trends related to state, citizenship and democracy.

Course code C2:
To provide brief introduction of the constitution of India, its framework and actual ways of functioning.

Course code C3:
To provide the students about the basic normative concept of political theory, important concepts and details.

Course CodeC4:
To provide the understanding of political process, mode of analysis and to familiarizes them with the working of the Indian state.

Course Code C5:
To familiarize with the basic concepts and approaches about the comparative politics in developed and developing nations.

Course Code C6:
To provide a comprehensive understanding about public administration as a subject and contemporary administrative development.

Course Code C7:
To introduce students about concepts, theories, approaches and changing scenario about International relation especially Global South.

Course Code C8:

To introduce about the political process ans institutions through comparative methods on different political systems.

Course Code C9:
To introduce students about the Public policies, their ways of execution and about general administration of India.

Course Code C10 :
To provide brief understanding about global policies, issues, means of solving global problems.

Course Code C11:
To provide a glimps of ancient political philosophy, interpretation of classics.
Course Code C12:
To introduce the specific elements of Indian Political thoughts spanning over two millennia.

Course Code C13
After going through this course, students has able to get knowledge on a brief introduction about Modern Political philosophy.

Course Code C14:
To provide understanding about Modern Indian political thought.

Course Code DSE 1A:
Primary objective is to introduce NE. Region with especial reference to contemporary Assam politics

Course Code DSE 2A:
To build understanding of Human Rights, specific issues, concepts, theories, approaches and organizations.

Course Code DSE 3A:
To provide theoretical and practical understanding of Public Policy making, implementation in India.

Course Code DSE 4A:
The objectives are to teach students the domestic sources, the structure, evaluation and practice of Indian Foreign Policy.

Course Code GE 1:

This course enables to help students understand the struggle of Indian people against colonial rule.

Course Code GE 2:
To explain contemporary debates on feminism and history of feminism.

Course Code GE 3:
This course deals with concepts and debates on governance, issues and challenges.

Course Code GE 4:
To understand the process of glottalization from a political perspective.

Course Code SEC-3:
This course develops the knowledge, skills and values of Human Rights and empowering individuals, groups and communities through international recognized human rights principles.

Department of Geography

Course Code GGRM101 T4: GEOMORPHOLOGY AND BIO-GEOGRAPHY

GEOMORPHOLOGY

KNOWLEDGE GAINED

- Nature of Geomorphology, Interior structure of the earth.
- Earth Movements , Plate Tectonics, Earthquakes and Volcanoes
- Various geomorphic processes operating on the surface of the earth
- Landforms and its evolution

SKILL DEVELOPED

- The skill for understanding the landforms in a systematic way.

COMPETENCY DEVELOPED

- Understanding and developing knowledge with the continuous progress in geomorphology

BIO-GEOGRAPHY

KNOWLEDGE GAINED

- Significance of Bio-geography
- World distribution of plants and animals and its relation to soil, vegetation, climate and human activities

- Soil forming processes, classification and distribution of soil, major types of soil,
- Soil erosion and conservation of soil.

SKILL DEVELOPED

- Ability to see the distribution of plants and animal world from a geographical perspectives

COMPETENCY DEVELOPED

- Use of the knowledge in further academic development and activities

Course Code GGRM101 P2: GEOMORPHIC TECHNIQUES

KNOWLEDGE GAINED

- Scale and its application, different types of scale
- Interpretation of topographical maps with the help of Cross and Longitudinal Profiles
- Morphometric analysis
- Analysis of slope by Wentworth and Smith's method

SKILL DEVELOPED

- Preparation of various maps and diagrams in geographical study

COMPETENCY DEVELOPED

- Ability for using the maps in relevant areas and fields.

Course Code GGRM102 T4: CLIMATOLOGY:

KNOWLEDGE GAINED

- Composition and structure of atmosphere
- Factors and distribution of insolation and Heat Budget
- Atmospheric Pressure and winds, Forces affecting winds and general circulation of winds , Jet Streams
- Atmospheric moisture and different types of precipitation, Climatic classification by Koppen
- Cyclones , origin and mechanism of Monsoon

SKILL DEVELOPED

- Ability to understand the factors that affect climate and cause climate change

COMPETENCY DEVELOPED

Analyzing and interpreting data on weather and climate

Course Code GGRM102 P2: PRACTICAL'S BASED ON CLIMATIC DATA

KNOWLEDGE GAINED

- Study of weather symbols and interpretation of Indian daily weather maps
- Representation and interpretation of climatic data on Climograph, Hythergraph and Ergograph
- Preparation of rainfall variability maps

SKILL DEVELOPED

- Preparing maps related to meteorology
- Study various methods of data collection on weather and climate

COMPETENCY DEVELOPED

- Weather interpretation and forecasting
- Focus on future research work

Course Code GGRM GE101AT6: DISASTER MANAGEMENT

KNOWLEDGE GAINED

- Concept of Hazard and Disaster, Risk and vulnerability classification
- Flood ,Landslide, Earthquake, Tsunami, Cyclone Disasters, in India, its causes , impact, distribution and mapping
- Man-made disasters- distribution and mapping
- Response, Mitigation and Preparedness to disasters, NDMA and NIDM
- Indigenous Knowledge and Community based Disaster Management, Do's and Don't's

SKILL DEVELOPED

- Ability to understand the emergencies and responses to various kinds of disasters

COMPETENCY DEVELOPED

Respond to extreme events like floods, earthquake, cyclones.

Course Code GGRM201 T6: HUMAN GEOGRAPHY

KNOWLEDGE GAINED

- Major themes of Human Geography and its contemporary relevance
- Space and Society, Cultural Regions, Race ,Religion and Language
- Population Growth, Distribution, Composition and Demographic Transition Theory
- Types of Settlement: Rural and Urban, Classification of Urban Settlement, Trends and Patterns of World Urbanization
- Population- Resource Relationship

SKILL DEVELOPED

- Ability to understand the world today within the context of their environment

COMPETENCY DEVELOPED

Ability to understand the factors behind uneven population and resource distribution across the globe.

Course Code GGRM202 T4 GEOGRAPHY OF INDIA:

KNOWLEDGE GAINED

- Physiographic divisions, climate, vegetation, soils of India
- Distribution, growth and structure of population by race, caste, religion, language and tribes
- Distribution and utilization of minerals, power resources agricultural and production in India, industrial development
- Physical geography and other resources and industries of North-east India

SKILL DEVELOPED

- Ability to understand the various aspects of India

COMPETENCY DEVELOPED

Applying their knowledge in understanding the factors responsible for diversities in India.

Course Code GGRM202 P2: PRACTICAL ON THEMATIC CARTOGRAPHY

KNOWLEDGE GAINED

- Preparation of thematic maps on minerals, forest, agriculture, soils of India and Assam
- Shape Index analysis
- Age-sex pyramid of developing and developed countries

SKILL DEVELOPED

- Application of thematic mapping and shape index analysis

COMPETENCY DEVELOPED

Application of mapping in development activities.

Course Code: GGRM GE201BT6 REGIONAL DEVELOPMENT:

KNOWLEDGE GAINED

- Concept, types and evolution of Region, Need of Regional Planning, Regional Imbalance and Problems of Functional Region
- Choice of a region for planning, Characteristics and delineation of planning regions, Agro-Ecological Zones of India
- Strategies / Models for Regional Planning
- Problem Regions and Regional Plans, Special Area development plans, DVC-Success story and failures

SKILL DEVELOPED

- Ability to understand the basic of regions and need for regional planning

COMPETENCY DEVELOPED

Applying the strategies and models for economic development of backward areas

Course Code: GGRM301 T4 CARTOGRAPHY (THEORY)

KNOWLEDGE GAINED

- History of development, classification and use of map projection, choice of map projection
- Basic principles and necessity of surveying in geography
- Plane table surveying, Prismatic compass surveying, Theodolite traversing and Leveling

SKILL DEVELOPED

- Handling various surveying instruments

COMPETENCY DEVELOPED

Applying the methods of surveying and map projections in analytical work

Course Code: GGRM301 P2 CARTOGRAPHIC TECHNIQUES (PRACTICAL)

KNOWLEDGE GAINED

- Drawing of Conical One Standard , Bonne's, Cylindrical, Equal Area, Equidistant, Gall's Stereographic, Mercator's Projection

SKILL DEVELOPED

- Uses of different types of Map Projection

COMPETENCY DEVELOPED

Applying the map projections in relevant areas.

Course Code: GGRM302 T6 REGIONAL GEOGRAPHY OF WORLD (THEORY):

KNOWLEDGE GAINED

- Physiography, climate, soil, vegetation of Asia, Africa, Europe, North America
- Mineral resources and industrial development in developed, developing countries
- Population distribution of the world
- Regional studies of Middle East, South East Asia and Mediterranean region

SKILL DEVELOPED

- Ability to understand the physiography and economic development of developed and developing countries

COMPETENCY DEVELOPED

Applying knowledge in further developmental studies of these regions.

Course Code: GGRM303 T6 STATISTICAL METHODS IN GEOGRAPHY

KNOWLEDGE GAINED

- Use and sources of data, Significance of statistical methods in geography
- Tabulation and Descriptive statistics, Central Tendency, Dispersion
- Sampling and Theoretical Distribution
- Association and Correlation

SKILL DEVELOPED

- Developed knowledge about the various statistical method used in geographical studies

COMPETENCY DEVELOPED

Developed knowledge to describe and summarize spatial data

Course Code: GGRMGE301AT6 CLIMATE CHANGE: VULNERABILITY AND ADAPTATION

KNOWLEDGE GAINED

- Understanding climate change, Greenhouse gases and Global Warming, Global Climatic Assessment-IPCC
- Climate change and Physical, Social and Economic Vulnerability
- Impact of climate change on Agriculture and Water, Flora, Fauna and Human Health
- National Action Plan on Climate Change

SKILL & COMPETENCY DEVELOPED

- Ability to understand climate change and the factors responsible for it.

Understanding and mitigating the negative impacts of climate change

Course Code: GGRM401T6 ECONOMIC GEOGRAPHY

KNOWLEDGE GAINED

- Concept and classification of economic activity
- Factors affecting location of economic activity , Von Thunen's Theory, Weber's Theory
- Primary Activities, Secondary Activities, Special Economic Zones and Technology Parks, Tertiary Activities

SKILL DEVELOPED

- Ability to understand the basic ideas of primary, secondary and tertiary activities and its spatio-temporal patterns

COMPETENCY DEVELOPED

Acquired knowledge on some economic development models in relation to agriculture and industry

Course Code: GGRM402T6 ENVIRONMENTAL GEOGRAPHY

KNOWLEDGE GAINED

- Concept and scope of Environmental Geography
- Human- environment relationships, Adaptation in different Biomes
- Environ mental Problems in Tropical, Temperate and Polar Ecosystems
- Environmental Programmes and Policies- Global ,National and Local Levels

SKILL DEVELOPED

- Developed conceptual and theoretical ideas of environment as well as relationship between man and environment in different Biomes

COMPETENCY DEVELOPED

Knowledge on the nature and intensity of some important environmental issues at local, regional, global level along with mitigating issues through some policies.

Course Code: GGRM403T4 REMOTE SENSING AND GIS (THEORY)

KNOWLEDGE GAINED

- Historical Development and relevance of remote sensing in Geography
- Concept and basics of energy sources, energy and radiation principles
- Energy interactions in the atmosphere and earth surface features
- Remote sensing platforms, sensors and radiation records

SKILL DEVELOPED

- Ability to understand the field of latest satellite based technology

COMPETENCY DEVELOPED

Ability to collect information on spatial data and integrate these data with other.

Course Code: GGRM403P2 REMOTE SENSING AND GIS (PRACTICAL)

KNOWLEDGE GAINED

- Definitions, Components, Development, Platforms of Remote Sensing and GIS
- Aerial Photography and Satellite Remote Sensing, Satellites (Landsat and IRS) and Sensors
- GIS Data Structures and types
- Image Processing and Data Analysis, Pre-processing, Enhancement, Classification, Geo-Referencing, Editing and Output, Overlays
- Interpretation and Application of Remote Sensing and GIS in LULC, Urban Sprawl Analysis, Forests monitoring

SKILL DEVELOPED

- Developed skills in diversified applications of remote sensing data and technology

COMPETENCY DEVELOPED

- Ability to analyze, synthesize and evaluate spatial data using GIS.

Course Code: GGRMGE 401AT6 INDUSTRIAL GEOGRAPHY

KNOWLEDGE GAINED

- Nature and scope of Industrial Geography
- Types, Geographical characteristics and Location of Industries, Coal and Iron based industries, Rural based industries, Footloose industries
- Mega Industrial Complexes in India
- Environmental, Social, Economic impact of industries in India, Industrial Policy in India

SKILL DEVELOPED

- Ability to understand the types and various industrial policies in India

COMPETENCY DEVELOPED

Ability to understand the impact of industries in the environment, society and economy of India.

Course Cod: GGRM-501 REGIONAL GEOGRAPHY OF INDIA (PART-I)

KNOWLEDGE GAINED

- Physical Geography of India- Geological structure, physiographic divisions, drainage systems, climate, natural vegetation, soils and their spatial distribution

- Mineral and power resources-production and spatial distribution, present status of utilization and conservation of resources
- Physical Geography of North-East India- Geological structure, physiographic divisions, drainage systems, climate, natural vegetation, soils and their spatial distribution

SKILL DEVELOPED

- Developed comprehensive idea about the various geographical aspects of India and North-east India

COMPETENCY DEVELOPED

- Developed knowledge on the spatial distribution of resources.

Course Code GGRM-502 PRACTICAL (CARTOGRAMS AND PROJECT REPORT)

KNOWLEDGE GAINED

- Flow Line and Cartographic Study- Traffic Flow and Isochronic Cartogram , Mean Centre of Gravity
- Project Report- Conducting field survey and identify landforms, settlements, land-use patterns, socio-economic conditions of the study area

SKILL DEVELOPED & COMPETENCY DEVELOPED

- Developed skills in preparation of cartograms and report writing

Course Code GGRM-503 REGIONAL GEOGRAPHY OF THE WORLD (PART-I)

KNOWLEDGE GAINED

<u>ASIA</u>

- Physiographic divisions, climate, natural vegetation, soils, mineral resources, industrial development, distribution of population, regional studies of Middle-East and South-East Asia

<u>NORTH AMERICA</u>

- Physiographic divisions, climate, natural vegetation, soils, mineral resources, industrial development, distribution of population, Agricultural belts of USA

<u>SOUTH AMERICA</u>

- Physiographic divisions, climate, natural vegetation, soils, mineral resources, industrial development, distribution of population, importance of Panama Canal

SKILL DEVELOPED & COMPETENCY DEVELOPED

- Knowledge on the geographical aspects of the three continents of Asia, North America, South America.

Course Code GGRM-504 PRACTICAL (SLOPE ANALYSIS AND DIAGRAM)

KNOWLEDGE GAINED

- Slope Analysis – Wentworth's Method and Smith's Method
- Drawing of Block Diagrams- One –point perspective and two point perspective block diagram

SKILL DEVELOPED & COMPETENCY DEVELOPED

- Developed skills to draw and analyze slopes and block diagrams

Course Code: GGRM 505 POLITICAL GEOGRAPHY AND GEOGRAPHICAL ISSUES

KNOWLEDGE GAINED

- Nature, scope, subject matter and approaches , Political Geography and Geo politics
- Formation, location, shape and size of States
- Boundaries and Frontiers, border lands, buffer states, landlocked states and shatter belts, Functions, classifications of international boundaries
- Mackinder, Spykman, Mahan's Global Strategic Views
- International boundaries of India and related issues, Geopolitics of Indian Ocean
- Geopolitical situations of North East India

SKILL DEVELOPED & COMPETENCY DEVELOPED

- Comprehensive idea about the political geography and geopolitical issues of the world in general and India and North East India in particular

Course Code: GGRM 506 PRACTICAL (POLITICAL GEOGRAPHY AND REGIONAL PLANNING)

KNOWLEDGE GAINED

- Shape Index of different states
- Map of Global Strategic Models: Map of Mackinder's Heartland Theory, Spykman's Rimland Theory, ASEAN and SAARC
- Map of Planning Regions of India: Sen Gupta's Scheme, TCPO, Land Use Map of Assam, Agro-climatic Zones of India

SKILL DEVELOPED & COMPETENCY DEVELOPED

- Preparation of maps on various issues of political and regional planning

Course Code GGRM 601: MAP PROJECTIONS AND CARTOGRAPHIC METHODS

KNOWLEDGE GAINED

- History of development of cartography, classification, use and choice of map projections
- Basic principles of surveying and their necessity in geography
- Surveying and leveling: plane table surveying, prismatic compass, theodolite traversing, leveling
- Introduction to aerial photography and satellite imagery and their basic properties, concept of GIS and GPS
- Principles and components of remote sensing
- Remote Sensing platforms and sensors, geo-stationary and polar orbiting satellites

SKILL DEVELOPED & COMPETENCY DEVELOPED

Basic knowledge of map projection, surveying and modern cartographic methods as a tool for data generation and mapping

Course Code GGRM 602: PRACTICAL (MAP PROJECTION)

KNOWLEDGE GAINED

- Construction of Map Projections- Polar Zenithal Perspective group and Non- perspective group
- Cylindrical projection - Simple, Equal Area, Gall's, Mercator's
- Conical projection – One and two standard parallel's, Bonne's and Polyconic
-

SKILL DEVELOPED & COMPETENCY DEVELOPED

Developed skills in constructing and drawing different projections

Course Code GGRM 603: REGIONAL GEOGRAPHY OF INDIA (PART-II)

KNOWLEDGE GAINED

- Salient features of Indian agriculture, multipurpose river valley projects, major crops of India, Green Revolution, White Revolution and Blue Revolution
- Growth and development of industries, industrial regions of India, New Industrial Policy of India, Tourism Industry
- Different modes of transport and their regional socio-cultural structure
- Population growth, distribution, composition, major tribes of India
- Settlement pattern, classification and trend of urbanization, problems of urbanization
- Integrated Rural Development Programmes in India
- Major minerals and resource base of North east India and their distribution and production
- Major crops of North east India and problems of agriculture

- Agro based and forest based industries of North east India and problems and prospects of industrialization

SKILL DEVELOPED & COMPETENCY DEVELOPED

Comprehensive idea on economy and socio-cultural structure of India and North east India

Course Code GGRM 604: PRACTICAL (INTERPREATION OF SATELLITE IMAGERY)

KNOWLEDGE GAINED

- Interpretation of satellite imagery
- Comparative study of satellite imagery features with toposheet

SKILL DEVELOPED & COMPETENCY DEVELOPED

Developed the skills of the use and interpretation of satellite imageries

Course Code GGRM 605: REGIONAL GEOGRAPHY OF THE WORLD (PART-II)

KNOWLEDGE GAINED

AFRICA

- Physiography, climate, soil, natural vegetataion
- Natural resources
- Distribution of Population

AUSTRALIA AND NEW ZEALAND

- Physiography, climate, soil, natural vegetataion
- Natural resources and industrial growth
- Distribution of Population

EUROPE

- Physiography, climate, soil, natural vegetataion
- Natural resources, mineral resources and industrial growth
- Regional study of Mediterranean region

SKILL DEVELOPED & COMPETENCY DEVELOPED

Knowledge on the geographical aspects of the three continents of Africa, Australia and New Zealand and Europe

Course Code GGRM 606: PRACTICAL (PATTERN ANALYSIS)

KNOWLEDGE GAINED

- Statistical Data representation- Graphical representation of Mean , Median
- Near Neighbour Analysis
- Principal Component Analysis
- Location Quotient Analysis
- Lorenz Curve

SKILL DEVELOPED & COMPETENCY DEVELOPED

Developed skills in the use and analysis of statistical data

Course Code GGRM 607: GEOGRAPHIC THOUGHTS AND QUANTITATIVE METHODS

KNOWLEDGE GAINED

- Geographic Thoughts- Development of geographical thought- Classical and Medieval Period
- Age of exploration and discovery
- Development of geography during modern period
- Quantitative methods-its application in geographical studies, measures of central tendency, measures of dispersion, concept of correlation and regression, sampling and its application, measures of inequality

SKILL DEVELOPED & COMPETENCY DEVELOPED

Knowledge on the history of development of geographic thought through time and knowledge on the use of quantitative methods in geographical study

Course Code GGRM 608: PRACTICAL (SURVEYING)

KNOWLEDGE GAINED

- Fundamentals of Surveying- Plane Table Surveying and Prismatic Compass Surveying
- Dumpy's Level- Profile Leveling
- Application of GPS in geographical studies

SKILL DEVELOPED & COMPETENCY DEVELOPED

Developed skills on the use and application of surveying instruments and GPS

Department of History

Core Code: HISHC-101: History of India-I

The students are acquainted with various sources for reconstruction of ancient Indian History. Various cultures, technological, economic, political religion and philosophy as key to historical construction of ancient period have been dealt with.

Core Code: HISHC-102: Social Formations & Cultural Patterns of the Ancient World

The learners are acquainted with the evolution of Mankind, beginning of food production, Bronze Age, advent of Iron, Slave society, economy and polity in ancient Greece. Moreover all the phases of Human Development have been well dealt with.

Core Code: HISHC-103: History of India-II

The students gained knowledge on agrarian structure of economy, growth of urban centres in Northern and central India and Deccan as well as craft production, trade routes and coinage. Besides Varna-Jati, gender, marriage, property relation, state formation process, land grants, land rights, peasantry, Urban decline, Mauryan and Post Mauryan Polity has been discussed. The Gupta and Post Gupta polity and administration along with religion philosophy and society has been covered.

Core Code: HISHC-104: Social Formations & Cultural Patterns of the Medieval World

The learners are acquainted with the Roman Empire and slave society as well as their culture and trade. Besides economic development in Europe from 7^{th} to 14^{th} century covering production, technological developments, growth of towns and towns are also covered.

Code Code: HISHC-105: History of India-III(c.750-1206)

The learners are acquainted about the sources for the reconstruction of early Medieval Indian History. Besides political, socio religious and agrarian structure and Trade and commerce, guilds and process of Urbanization are discussed.

Core Code: HISHC-106: Rise of the Modern West-I

The students gained knowledge on the transition from feudalism to capitalism, Voyages to the new World, Renaissance, Reformation 16^{th} century economic developments, the emergence of European state systems are being discussed.

Core Code: HISHC-107: History of India-IV(1206-1550)

The students are acquainted with the sources, vernacular histories and epigraphy, various ruling dynasties of Delhi, Bahmani and Vijaynagara Empire. Social and economic developments, religion, society and culture during the late Medieval India have been dealt with.

Core Code: HISHC-108: Rise of the Modern West-II

The students learned about the 17th Century European crisis, the English revolution, growth of Mercantilism, end of Absolute Monarchy and growth of Parliamentary Democracy, The American and Industrial Revolution.

Core Code: HISHC-109: History of India-V(1550-1605)

The students are acquainted with the information regarding Persian sources and vernacular literary traditions, growth and consolidation of the Mughal Empire, society economy and polity under the Mughals.

Core Code: HISHC-1010: History of India-VI(1605-1750)

The learners gained knowledge about various sources and historiography of the Mughal Period, Expansion of Mughal rule, Sufi Orders, Aurangzeb 's religious policy, Decline of the Mughal Empire, Growth of regional powers, 18th century debate, trade, crafts, monetary and market systems, urban centres an d Indian Ocean trade networks.

Core Code: HISHC-1011: History Modern Europe-I (1780-1919)

The students are acquainted with the various factors that led to French Revolution of 1789, Art and Culture of the Revolution, the restoration of royal dynasties, the radical movements, the evolution of social classes, Industrialization , the first World War and administrative reorganisation in Italy and Germany.

Core Code: HISHC-1012: History of India-VII(1750- 1857)

The students gained knowledge on Indian Nationalism and Freedom Movement. They are also acquainted with the transition from pre-Colonial to Colonial Era.

Core Code: HISHC-1013: History of India-VIII(1857-1950)

The learners are acquainted with ideologies of Nationalism and transition from colonial to post-colonial era with the making of Constitution and Planningthereafter.

Core Code: HISHC-1014: History Modern Europe-II (1780-1939

The students inherit knowledge with liberal Democracy, working Class Movements and Socialism in the 19th and 20th Centuries, crisis of Feudalism in Russia and Experimental Socialism, War and Crisis and post 1919 political developments, cultural and intellectual

Developments since 1850s.

Core Code: HISHDS: Early and Medieval Assam till 1826

The learners deal with the sources and state formation process of Early Assam as well as Medieval Assam and its political structures. They also learned about the expansion political developments and decline of Ahom era.

Core Code: HISHDSE502: History of Modern Assam 1826- 1947

This paper deals with the establishment and consolidation of British rule in Assam. Various Strategies of revenue and administrative measures, peasant uprising growth of national consciousness and freedom movement have been dealt with.

NON-CBCS

Course Code: HISM-501: History of India (1750-1947)

The students gained knowledge on growth of regional powers in India and their relations with British power. They are also acquainted with Indian Nationalism and Freedom Movement.

Course Code: HISM-502: History of Europe (1453-1815)

Through this paper the students are well acquainted with Renaissance, Reformation movement Colonial expansion of 15^{th} and 16^{th} centuries, Thirty years war, Absolute Monarchy, benevolent despotism, French Revolution of 1789 and its aftermath.

Course Code: HISM-503: History of Europe (1815-1945)

This paper dealt with the post Napoleonic phase and congress of Vienna. The students gained knowledge on the unification of Italy and Germany, Crimean war, Berlin Congress, Militarism, Power-Blocs, First World War its aftermath and Second World War and Formation of United Nations Organisation.

Course Code: HISM-504: Tourism in North- East India: Historical Dimensions

The students acquainted various problems and prospects of Tourism in North East India. Besides Eco-Tourism, Environmental aspects and various tourist hotspots and their characteristics are well covered.

Course Code: HISM-601: History of Ecology and Environment: India

The readers are well acquainted with the Environmental History as a distinct branch of History. Mode of Resource use Pattern, Commercialization of forest product, ecology, agrarian production, various environmental movements have been dealt with.

Course Code: HISM-602: Women in Indian History

The learners inherit the knowledge on Writings on Women's history, its concepts and dimensions, Indian women in pre- Gandhian and Gandhian phase and contributions of Assamese women in freedom struggle.

Course Code: HISM-603: World Revolutions

The students are acquainted with the meaning and nature of revolutions and various revolutions of the world. Besides, the concept of Globalisation is also discussed.

Course Code: HISM-604: History of Science and Technology in India

The students gained knowledge on development of science and technology in India in different Historical periods. Contributions of various professionals in the field of Medicine, astronomy, geography etc. are discussed in detail here.

COURSE OUTCOME AND PROGRAMME OUTCOME OF THREE YEAR BSC. COURSE

Department of Botany

Core Course C I: Microbiology & Phycology

This course provides the knowledge of General account of microorganisms including bacteria, fungi, actinomyctes, algae and viruses.

Range of thallus structure, ecology, distribution of cyanophyta, Xanthophyta, Chlophyta, Charophyta, Theophyta and Rhodophyta.

Core Course C II: Biomolecules and Cell biology

General account of biomolecules like carbohydrates, proteins, lipids, nucleic acids.

Structure of cells including the cell organelles and cell division. Bioenergetics and enzymes.

Core Course C III: Mycology and Phytopathology

This course provides the knowledge of General account of fungi and their structures and reproduction behaviors and life cycle patterns.

Applied mycology and phytopathology.

Core Course CIV: Archegeniate

This course enables the students to explore on Bryophyte, Gymnosperms and Fossil Plants.

Core Course C V: Anatomy of angiosperm

General account of tissues, adaptive and protective systems and applications.

Core Course C VI: Economic botany

General account of origin, morphology, processing and economic importance of cereals, legumes, sugars, spices, beverages, natural rubbers, timber, fibre, aromatic and drug yielding plants and petrocrops.

Core Course C VII:Genetics

General account of Mendelian and extra-chromosomal inheritance, Linkage, crossing over, chromosome mapping, gene mutation, fine structure of gene, population and evolutional genetics.

Course Code BOTM 501:Development and Reproduction in Angiosperms

Development and Reproduction of Angiosperms including reproduction, fertilization, polyembryony and endosperm, organization of tissues, stellar body and anatomico – physiological consideration.

Course Code BOTM 502: CoGenetics and Plant breeding, Biostatistics

General account of Mendels Laws, linkage, crossing over, cytoplasmic inheritance, chromosomal mutation, gene mutation, biochemical mutation, microbial genetics and human genetics : Methods of plant breeding and application of biostatistics.

Course Code BOTM 503: Functional and chemical Biology

General account of polymeric substances, secondary plant products, plant hormone and mechanism of source sink mechanism

Course Code BOTM 601: Plant Physiology

General account of plant water relationship, ascent of sap, mineral nutrition, photosynthesis, respiration, growth regulators and translocation of solutes

Course Code BOTM 603: Molecular Biology and immunology

General account of nucleic acids, genetic code, replication of nucleic acids, regulation of gene expression, plant health management, immunity and immunization, environment and immunity

Course Code BOTM 605: Biophysics and Bioinformatics

This Course provides the knowledge of general account of microscopy, spectrophotometry, chromatography autoradiography, isotope types.
An account of biological database, NCBI, gene bank and SWISS PROT, BLAST and FASTA

Course Code BOTM 607: Agro technology and Utilization of Crops

Origin of economic plants, Agro technology of cereals, beverages, timber yielding plants and oil yielding plants, bio-fertilizer, bio-pesticides.

General Elective

Course Code GEI: Microbial biodiversity and archegoniate

This course describes a brief account of bacteria, fungi, algae, lichen and archegoniate.

Course Code GEII: Plant physiology and metabolism

This course describes general account of plant water relations, mineral nutrition, translocation in phloem, photosynthesis, respiration, enzymes, nitrogen metabolism and plant growth regulators.

Course Code GEIII: Economic Botany and Biotechnology

Origin of cultivated plants, general account of cereals, legumes, spices, beverages, oils and fats, fibre yielding plants.
Introduction to biotechnology including tissue culture, recombinant DNA technique.

Department of Chemistry

CHEMISTRY-C -101:

i Sign of wave function, counter boundary and probability diagrams etc.

ii. Variations of orbital energy with atomic number.

iii. Properties of elements, atomic radii, ionic radii, size effect of ionic bond, solvation energy, covalent character of ionic bond, redox equations, principle involved in volumetric analysis etc.

CHEMISTRY-C -102:

i. Kinetic molecular model of a gas, behaviour of real gases etc

ii. Effect of addition of various solute on surface tension and viscosity. Cleansing action of detergents.

iii. Nature of solid state, elementary idea of symmetry.

iv. Idea of solubility and solubility product of sparingly soluble salts.

CHEMISTRY-C -201:

i. Knowledge of basic organic chemistry, definition, classification of stereoisomerism, optical activity, absolute and relative configuration etc.

ii. Knowledge of elimination reaction, electrophilic and nucleophilic addition.

iii. Relative stability of cyclic hydrocarbon, Bayer's strain theory etc.

CHEMISTRY-C -202

i. The application of mathematical tools to calculate thermodynamic properties

ii. The concept of free energy change and spontaneity.

iii. Thermodynamics derivation of relation between Gibbs free energy of reaction and reaction quotient.

iv. Derive relation between the four colligative properties using chemical potential (Thermodynamics derivation)

CHEMISTRY-C -301

i. Predict the purification of metal, study of compounds with emphasis on structure, bonding, preparation and properties.

ii. Real world applications, shapes etc of noble gas.

iii. Structural aspects and applications of inorganic polymer

CHEMISTRY-C -302:

i. The prediction of mechanism for organic reactions

ii. How to design synthesis of organic molecule.

iii. The reactivity and stability of organic molecule based on structure

iv. An idea of alcohols, phenols, carbonyl compounds, acids and their derivatives etc

CHEMISTRY-C-303

i. Types of catalysis, Michaelis – Menten mechanism, mechanism of catalysed reaction at solid state.

ii. Steady - state approximation in reaction mechanism.

iii. Concept of phases, phase diagrams for systems of solid- liquid equilibria involving eutectic, congruent and incongruent mp, solid solution etc

CHEMISTRY-C-401:

i. Predicting metal ion present in biological systems

ii. Use of chelating agents in medicine.

iii. Quantitative aspect of ligand field and MO theory, stability of various oxidation states and emf of transition elements

CHEMISTRY-C-402

i. Reaction for preparation of Heterocyclic compounds, polynuclear hydrocarbons
ii. Reaction and mechanism of substitution in heterocyclic compounds.
iii. Methods of structure elucidation of terpenoids

CHEMISTRY-C-403:

i. Quantitative aspects of Faraday's laws of electrolysis
ii. Application of conductance measurement
iii. Electrical and magnetic properties of atoms and molecules

Department of Physics

Course Code C1:

1. Develop the requisite mathematical skills of a student to understand the fundamental topics in Physics.
2. Develop the ability of a student to critically Analyse a topic.
3. Prepare a student for more advanced topics in Physics by providing a solid grip over the fundamental concepts in Physics.
4. Demonstrate the use and importance of computational methods in Physics and enable a student to construct a Physics problem computationally.

Course Code CII:

1. Introduce the students to the basic concepts of mechanics.
2. Enable the students to understand conservation laws as they are the fundamental laws of nature and will help them in realizing a crucial phenomenon of nature- symmetry.
3. Enable the students to understand simple harmonic oscillator as it is a unique mechanical problem and will help them to understand the advanced treatment in quantum mechanics and modern Physics.
4. Develop knowledge of special relativity to understand relativistic formulation of modern theories.

Develop knowledge of mechanics which will help students in their everyday life.

Course Code CIII:

1. Develop the basic theoretical knowledge as well as experimental skills of the students on electrical networking.
2. Train the students to handle and repair instruments based on electric and magnetic field effects.

Course Code CIII:

1. Develop the basic theoretical knowledge as well as experimental skills of the students on electrical networking.
2. Train the students to handle and repair instruments based on electric and magnetic field

Effects.

Course Code C IV:

1. Enable the students to Analyse different phenomena due to the interaction of light with light and matter.
2. Train the students to use different optical instruments.

Help the students to understand various natural phenomena using different apparatus in the laboratory.

Course Code C V:

1. Develop the requisite mathematical skills to understand some of the fundamental topics (slightly more advanced than those in Mathematical Physics I) in Physics.
2. Develop the ability of a student to critically Analyse a topic.
3. Prepare a student for more advanced topics in Physics by providing a solid grip over the fundamental concepts in Physics.
4. Enable a student to understand the use and importance of computational / numerical methods in Physics and enable a student to construct a Physics problem computationally.

Course Code C VI:

1. Apply the laws of thermodynamics in real world problems.
2. Conduct scientific problems and experiments on thermodynamics and allied disciplines.

Demonstrate a working knowledge of the physical principles in Thermal Physics.

Course Code C VII:

1. Identify and understand digital electronic principles and systems.
2. Apply the knowledge to Analyse and apply digital circuits in solving circuit level problems.

Build real life applications using digital systems.

Course Code C VIII:

1. Develop mathematical skills of a student to understand some of the fundamental topics (slightly more advanced than those in Mathematical Physics I and II).

Develop the ability of a student to critically Analyse a topic.

Department of Mathematics

Core Code C1:
This course enables the students to apply in real life problem. Formulate mathematical models.

Core Code C2:
Through this course students can be able to acquire the knowledge about various algebraic structures on sets, identify the algebraic structures present in different branches of sciences.

Core Code C3:
Analysis the properties of number lines. Describe various analytical properties of real number system.

Core Code C4:
Through this course students can be able to acquire the knowledge about the techniques for solving differential equation. Various mathematical models used in real life problems.

Core Code C5:
Discuss limit, continuity and differentiability of real valued functions. Expand functions in series and different form of remainders.

Core Code C6:
Discuss various group structures on sets, identify the group structures present in different branches of sciences.

Core Code C7:
Through this course students can be able to acquire the knowledge about mathematical formulations and their solutions of various physical problems.

Core Code C8:
Through this course students can be able to acquire the knowledge about various numerical methods and interpolation formula, Numerical techniques for solving differential equation.

Core Code C9:
Riemann integration, improper integrals, Differentiation and integration of power series.

Core Code C10:
This course describes various ring structures as sets, Solve the system of linear equations.

Core Code C11:

Extend the concepts from one variable calculus to function of several variables. Demonstrate the ability to think critically and solving application of real world problems involving double/ triple integrals.

Department of Zoology

Core Code CC 1:

This course provides knowledge on the invertebrates and their characteristics. Helpful to students who want to take up microbiology in their higher education.

Core Code CC II:

This course provides knowledge on the importance of relationship between environment and organisms, importance of wildlife, how to minimize pollution, study of population, etc.

Core Code CC III:

This course provides knowledge on the invertebrates and their characteristics. Helpful to students who want to take up microbiology in their higher education

Core Code CC IV:

This course provides knowledge on different types of cells that make up the organ systems; the process of cell division, etc.

Core Code CC V:

This course provides knowledge on the diversity of livings organisms, their origin, etc.

Core Code CC VI:

This course provides knowledge on human organs and their vital functioning like digestion, respiration, excretion, reproduction, etc.

Core Code CC VII:

This course provides knowledge on different biomolecules in organisms including human beings.

Core Code CC VIII:

This course helps the students in proper understanding of anatomical features of different organs of the organisms and also gives an idea of the gradual development of such organ systems.

Core Code CC IX:

This course provides knowledge on human organs and their vital functioning like digestion, respiration, excretion, reproduction, etc.

Core Code CC X:

This course provides knowledge on physiological and metabolic processes of body systems of living organisms including human beings.

Course code ZOOM501:

This course provides knowledge on genetically transmitted diseases like Turner Syndrome, Edward Syndrome, Philadelphia, colour blindness, etc. The course also gives knowledge on the origin of different species.

Course code ZOOM503:

This course provides knowledge on human organs and their vital functioning like digestion, respiration, excretion, reproduction, etc.

Course code ZOOM504:

This course provides knowledge on the importance of relationship between environment and organisms, importance of wildlife, how to minimize pollution, how to conserve wildlife, etc.

Course code ZOOM507:

This course provides knowledge on different types of endocrine glands and physiological disorders related to those glands; and how these glands control the behavior, reproduction and different physiological processes and cell signaling within the body.

Course code ZOOM601:

This course provides knowledge on zoonotic diseases, benefits in veterinary science discipline like cattle farming, poultry, fisheries, etc., regarding various diseases caused by insect vectors.

Course code ZOOM603:

This course provides immunity related knowledge on diseases like HIV, Cancer, auto-immune diseases, rheumatism, SLE, etc.

Course code ZOOM604:

This course provides enhancement towards the disciplines like agriculture, horticulture, etc through knowledge on GMO, hybrids, transgenic organisms

Course code ZOOM606:

This course provides knowledge on sericulture, apiculture, edible insects, etc., and enhances the economy of a society/community.

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