

## Programme Outcome, Course Specific Outcome & Course Outcome

### 2.6 Students Performance and Learning Outcomes:

2.6.1 : Programme outcomes, programme specific outcomes and course outcomes for all programmes offered by the institution are as follows :

**UG (B.A. & B.Sc.) Programme Outcomes:** After completing Undergraduate Programme in specific subjects (Major), a student will acquire in depth knowledge of the subjects that he/ she studied in UG programme and become competent for further Higher Studies; to prepare for competitive examination and can apply for jobs of his/her interest.

**Course outcomes:** The learning outcomes i.e. knowledge or skills acquired by the students from each course of various departments of the institution are listed below :

#### 1 B.A. Major Course outcome:

SL No.	Department	Course/Paper	Course outcome
1	Assamese	101	Various ages of Assamese literature, Assamese literature from the time of Shankardeva to the present (A Vaishnavite Saint and Social Reformer of Assam)
		101(MIL)	History of Assamese literature, different ages of Assamese literature and Assamese culture
		201	Assamese literature in detail from the Arunodoi period to Post-War period.
		201 (MIL)	Guidelines for proper pronunciation, spelling, use and construction of Assamese words and sentences, knowledge on translation, letter writing etc.
		301	Language and different subjects related to language distribution.
		302	History of Assamese poetry along with detail knowledge about the poets and poems.
		401	Information and knowledge about the development, characteristics and diversity of Assamese prose.
		402	Use of Assamese language and dialects in Assam, idea of epistle, linguistic, and the flow of Assamese language
		401( MIL)	Assamese poetry and prose flourishing from the period of Sankardev to the present time
		501	Literature and various literary devices, their definition and uses.
		502	Assamese drama and Assamese theatre.
		503	Assamese culture and its characteristics in detail.
		504	Comparative literature, its definition and comparison of Assamese literature with Indian literature.
		601	Practical use of Assamese language in various fields like news reading, editing, advertisement etc.
		602	Significance of the evolution of Arya language of India, introduction of Sanskrit, Pali and Prakrit, grammar and proper use of the language.
		603	Assamese phonetics , different theories related to phonetics, word structure, sentence structure etc.
604	Basic idea of world literature		
2	Economics	101	Basic concept of Microeconomics, Advanced theoretical issues and their practical applications.
		201	Basics of Macroeconomics, theories of income and employment, theories of consumption function and investment spending, determination of interest rate & IS- Lm model, open economy in the context of macroeconomics
		301	Basic concept of Microeconomics to understand the modern economy function
		302	Basic statistical method often be applied in economics.
		401	Basic mathematical method applied in economics.
		402	Basic theoretical concepts of public finance.
		501	Measurement of development with the help of theories along with the conceptual issue of poverty and inequalities with Indian perspectives.
		502	Fiscal policies designed for developed and developing economies with a special thrust to federal system.
		503	Historical developments in the economic thought propounded by different schools.

		504	Basic concepts relating to monetary analysis and financial marketing with a reference to Indian financial market.
		601	Development problems of the North east India.
		602	Basic concepts of environmental economics along with the solution to the environmental problems.
		603	Real and monetary sides of international economics.
		604	Characteristics of the economy of Assam.
3	<b>Education</b>	101	Meaning, Nature, Scope of Education and relation between Education and Philosophy, Indian with western philosophy.
		201	Educational sociology, different political ideologies and equality and relation between education and development
		301	Concept of psychology, different factors of learning, concept of mental health, hygiene for adjustment in society etc.
		302	Meaning, nature, scope and need of measurement of education, tools of measurement and evaluation, personality assessment, statistics in education etc.
		401	Impact of socio-political changes of the nationalist movement in India during early 20 <sup>th</sup> century and role of education in the development of emergent India.
		402	Contribution of educators of different countries to educational theory, issues and problems of Indian educations and development of educational thoughts
		501	Importance of child psychology and the need of guidance of child development, to develop a sensitivity towards the needs and rights of children and understanding about children and new insight about them.
		502	Developments of Indian education since independence, reasons for the recommendations of the different Educational commissions since independence , causes for various educational movements and its accompanying challenges & Indian Constitution.
		503	Educational technology and its use in education system, the role of communication technology in class-rooms, to use and innovative methods of educational technology in teaching learning process.
		504	Principles of Teaching Learning Process, role of audio- visual aids, importance of lesson planning in teaching learning process, knowledge about teaching different subjects and different methods and approaches of teaching
		505	Practice teaching : to develop skill of preparing lesson plan for micro and macro teaching
		601	Laboratory practical : uses of psychological test, report conduct in psychological laboratory
		602	Field study : to provide knowledge of preparing a report after field visit , to familiarize students with the changing educational realities of today's society
		603	Concept, nature and scope of measurement, concept of educational supervision, concept of planning and finance, type of resources in school managements.
		604	To understand the educational system of own country, drawbacks of the system as compared to other countries, to plan changes in education in the context of global world and help in reforms.
605	Significant trends in education, to focus attention on certain major social and national issues related to India, to develop various plans and policies regarding the educational set up in India.		
4	<b>English</b>	101	Events, ideas, personalities and texts that form the backbone of each literary period with clear awareness of related trends in the continents
		201	Signpost of English society and culture from the 18 <sup>th</sup> century to the twentieth.
		301	Major events and characters in classical mythology which help to connect the students with western literature , as part of larger socio-cultural context
		302	Major poets and poems from Shakespeare to Eliot
		401	Major essayist, Non- fictional prose writers and novelists form Bacon to Jane Austan
		402	Major English novels from Dickens to Lawrence and encompassing the

			different socio-political context of their original reception.
		501	English drama from Marlowe to Beckett encompassing the cultural context of their production and reception.
		502	Major critical text from the Classical period as well as from the Renaissance and the neo- classical period in order to contextualize critical terms and reference that would be useful for the understanding and analysis of literary text.
		503	Major philosophical text from the early modern period to the 20 <sup>th</sup> century to contextualize the philosophical terms and frames of reference that initiates the understanding and analysis of literary texts.
		504	Seminal IWE text in order to understand the complexities of Indian life and culture as well as the relevance of IWE in the contemporary world.
		601	Major critical text from Romantic period to the 20 <sup>th</sup> century that initiate the contextualization of of critical terms and analysis of literary text
		602	Seminal American text that would help to understand the complexities of American culture and the relevance of American ideas to the Indian situation.
		603	Post colonial novels to understand the complex negotiation between the colonizer and colonized and transformation in societies and cultures in India and Africa.
		604	Some basic concepts associated with language, sound system of English and English syntax to stimulate effective communication in English
5	History	101	Basics of the discipline of History and to understand its sources in their varied forms, contents, uses and analysis.
		201	Critical outline of the political history of Assam from the earliest times to its occupation by the English East India company in the first quarter of the 19 <sup>th</sup> century.
		301	Focus and aspects of changes and developments in the sociopolitical economic life in Assam during colonial period.
		302	Socio Economic history of ancient, medieval and colonial Assam
		401	Political development in between 1200- 1750
		402	Major factors led to the establishment and consolidation of the British rule in India
		501	Major factors that led to the establishment and consolidation of British rule in India and process of growth of nationalist movement.
		502	Major trends and developments that took place in Europe which ushered in the modern age.
		503	Major political developments in Europe from 1815 to 1945
		504	Tourism in North- East India with special reference to the historical monuments and places of North Eastern region.
		601	Ecology and environment history, relation between ecology and human civilization with particular reference to post independence India
		602	Feminist movement, the key concepts in women's studies as well as sources for reconstruction of women's history
		603	Significant historical changes in the sociopolitical and economic life in the world beginning with the 17 <sup>th</sup> century European enlightenment to the coming Globalization.
		604	Developments of Indian science and technology since early times.
		6	Political Science
201	Constitution and Indian political system		
301	Basic concepts, principles and dynamics of Public Administration		
302	Important theories and issues of International relations.		
401	Understanding of political process and phenomenon in the North Eastern context.		
402	Constitution, government and political structures of some selective countries of the world in a comparative manner.		
501	Student will acquire the knowledge of the basic concept and ideological		

			orientation of the discipline.
		502	Contribution of the main tradition of Indian Political thought
		503	Domestic sources and structural constraints on the genesis, evolution and practice of Indian foreign policy
		504	Diverse perspective on International Law
		601	Human Right among students through study of aspects of human right.
		602	Concepts, issues related to feminism and gender study
		603	Process of administration in Indian context
		604	Process of rural development administration in Indian Perspective
7	Sociology	101	General Sociology : emergence, notions and concepts
		201	Theoretical knowledge on social change and development.
		301	Theoretical perspective in sociology
		302	Theoretical knowledge on social change and development : Classical, modern and Indian sociological thinkers
		401	Social survey, research and Statistics : Conceptual meaning of Sociology of development, scope, models, aspects of economic development along with socio-economic planning
		402	Social problems & social welfare : Fundamentals and the emerging issues of Social problems, social welfare and security from sociological perspective
		501	Sociology of development : meaning of Sociology of development and changing conception of development, basic knowledge of theories, path and agencies of development along with Indian experience of development
		502	Sociology in North- East India : Historical background of the North-East Frontier Region as an unique sociological spot of observation as it has been occupied by different ethnic groups or people, their diverse cultural traits and preservation of respective social system.
		503	Understanding social psychology: Basic understanding of Social psychology, development of student's own personality in the society.
		504	Sociology of mass communication: Sociological understanding of mass communication, to develop the process of interaction in day to day and everyday working life.
		601	Globalization and society : Characteristics and issues relating to globalization, various agencies involved in the process and examines its socioeconomic and cultural impact
		602	Science, technology and society : Sociological understanding of Science and technology, the impact of science and technology on the society
		603	Sociology and Industry: Theoretical knowledge of society of industry, to understand the social structure of industry and its practical aspects.
		604	Sociology of health & hospital management : inter-relationship between society and health, the problems of health in India in its dimensions and also the relationship between political economy and health at national and international levels

## 2 B.Sc. Major courses outcome:

S L No.	Department	Course/ Paper	Course outcome
1	Physics	101	Concept of Neutronian mechanics, forces, collisions, properties of matters and classical mechanics
		201	Concept & Ideas of kinetic energy of gases, thermodynamics, blackbody and waves and oscillations.
		301	Concept & Ideas of geometrical optics, interference, diffraction, polarization and dispersion of light
		302	Concept & Ideas of Electrostatics, current electricity, magnetism and electromagnetic waves.
		401	Concept & Ideas of vector calculus, tensor algebra, matrices and calculus of variation
		402	Quantum mechanics, wave equation and operators
		501	Concept & Ideas of differential equations, complex variable and Fourier series

		502	Concept & ideas of electromagnetic fields, propagation of electromagnetic waves and speid relativity		
		503	Concept & ideas of quantum theory of atoms, fine structures of atoms, molecular spectra and laser.		
		504	Concept & ideas of semiconductors, transistor and oscillator, integrated circuits and digital electronics		
		601	Concept & ideas of classical statistical physics, entropy and partition function, quantum statistical physics		
		602	Concept & ideas of crystal structure, properties of solids, semiconductor materials and superconductivity		
		603	Concept of properties of atomic nuclei, nuclear models, nuclear reactions, cosmic rays and elementary particles		
		604	Concept of material science and their classification, nanomaterials, properties of nanostructured materials and nanomaterial characterization.		
2	<b>Chemistry</b>	101	Physical, Inorganic & Organic: Physical, inorganic,& organic chemistry in their advanced treatments		
		201	Physical, inorganic & organic : Importance of chemical thermodynamics, non-transition metals, metals along with different types of organic reaction		
		301	Inorganic Chemistry : Coordination chemistry, mechanism and importance of d- and f- block elements		
		302	Practical related to Inorganic Laboratory		
		303	Importance of halogenated hydrocarbons, chemistry of carbonyls along with sulphur containing compound.		
		304	Practical related to organic laboratory		
		401	Electrochemistry		
		402	Practical related to Physical laboratory		
		403	Active methylene compounds, aliphatic and aromatic amines and heterocyclic compounds		
		404	Practical : Organic chemistry		
		501	Impacts and ideas of kinetics, solution equilibrium and surface phenomena		
		502	Practical : Physical chemistry		
		503	Organometallic compounds, cluster and organic reagents in inorganic analysis		
		504	Practical : Inorganic chemistry		
		505	Different types of organic reaction and biochemistry		
		506	Practical : organic chemistry		
		507	Quantum mechanics with special reference to classical mechanics, symmetry and bonding		
		508	Practical : Inorganic chemistry		
		601	Photochemistry, macromolecules, catalysis etc		
		602	Practical based on paper 601		
		603	Inorganic chemistry		
		604	Practical based on paper 603		
		605	Highlights the concept of different analytical tools like UV,IR,NMR in organic chemistry		
		606	Practical based on paper 605		
		607	Interaction of electromagnetic radiation with matter		
		608	Project Work		
		3	<b>Mathematics</b>	101	Classical ideas of algebraic and analytic structures, generalized notions of trigonometry and vectorial notations of multivariable calculi.
				201	Matrix method for solving linear equations, basic differential equations and numerical method
301	Analytical aspects of Mathematical concepts.				
302	Co-ordinate geometry and analytical aspects of Mathematics				
401	Simple programmes for numerical evaluation of computational problems and hand on experience on various mathematical soft ware				
402	Linear programming problems of operation research and LPP techniques				
501	Basics of Mathematical logic, counting principles and generalized analytical aspects				
502	Algebraic structures for explaining geometric concepts, fundamentals of numbers and their properties				

		503	Fundamental concepts of fluid mechanics and its various application in physical science
		504	Mathematical background of mechanics and the corresponding problem solving techniques
		601	Topological structures and generalization concepts arising out of real analysis
		602	Relation between mathematics and theoretical computer science, fundamentals of graph theory and different representations of a graph for practical applications.
		603	Characteristics of abstract algebraic structures and the process of partial differential equations
		604	(A) Application of mathematical principles to the problems of Financial Mathematics and operation research
			(B) Application of mathematical principles to the problems of space dynamics and relativity
4	Botany	101	Thallus, morphology, reproduction & evolution of lower cryptogames
		102	Preparation, drawing, description of the types, camera lucida drawing of fungal types based on paper 101
		201	Plant diseases caused by fungi, bacteria and viruses ; structure, morphology, alternation of generation & tissue organization, spore dispersal mechanism in bryophytes
		202	Preparation of slides by cutting section, microscopic measurement, drawing, labeling & identification of types based on paper 201
		301	Comparative account of structural morphology, distribution, anatomy, reproduction & evolution of seed habit, stellar structure in pteridophytes, gymnosperms and different fossil plants belonging to pteridophytes and gymnosperms
		302	Slide preparation, drawing, description and identification of types based on paper 301
		303	Basic knowledge of Microbiology and Biotechnology in the light of recent developments
		304	Use of apparatus in microbiological and biotechnology related works, preparation of culture media, pure culture technique and demonstration of tissue culture technique, bacterial staining procedure ( Gram stain)
		401	Fundamentals of angiosperm morphology & classification with special reference to the polygenerid relationship of various taxa
		402	Identification of different genera with identifying key, methods of preservation of botanical specimen, preparation of herbarium sheets, making of permanent & semi-permanent slides root leaves and pollen grain, preparation of field visit
		403	Fundamental knowledge of structural and functional aspects of cell and cell organelles and modern laboratory techniques in biological study
		404	Paraffin methods of making slides, separation of plant pigments and amino acid by paper chromatography/ TLC, demonstration of modern biological tool based on paper 403
		501	Fundamental knowledge of development and reproduction of angiosperms
		502	Single and double staining method to study internal structure of stem, leaf and root, anomalous type based on paper 501 meceration of tissue, preparation of temporary and permanent slides
		503	Basic knowledge of plant genetics and plant breeding and application of statistics in biology
		504	Fixation, staining and squashing/ smearing of materials for chromosome preparation( mitosis & and meiosis study), simple calculation of Mendelian ratio, method of emasculation, computation of central tendency, deviation, t-test, chi square test
		505	Biomolecules, secondary metabolites and plant hormones
		506	Qualitative & quantitative analysis of secondary metabolites of different plant sample, qualitative & quantitative estimation of photosynthetic pigments and determination of antioxidant of various food and medicinal importance.
		507	Plant ecology, its basic principle and concept, structure and function of natural plant units, habitat degradation and role of plant on improvement of habitat, conservation ecology, phytogeography and evolution of plants

		508	Knowledge of common instruments, study of floristic composition, determination of minimum sampling size and sample to be taken for vegetation study, determination of abundance density, percentage frequency, determination of root-shoot ratio, relative growth rate, analysis of structure of ecosystem, study of standing crop biomass and productivity of an ecosystem.
		601	Plant physiology
		602	Practical based on paper 601
		603,	Fundamentals of molecular biology and immunology
		604	Biophysics and bioinformatics : Tools and techniques of physical and computer sciences used in biological study
		605	Practical based on paper 603 & 604
		606	Comprehensive knowledge of usefulness of plant resources for human welfare
		607	Determination of soil pH, soil moisture, Water Holding Capacity of different soil sample, botanical characteristics of useful part(s) and products of economically important plant, determination of protein, fat, oil content of certain material
5	Zoology	101	Knowledge about invertebrate world & taxonomy
		201	Biochemistry: various biochemical reactions, structure and forms of nucleic acids, role of DNA as core material
		301	Chordate diversity as well as comparative anatomy of vertebrates.
		302	dissection, identification of vertebrate specimen, preparation of permanent slides, demonstration of digestive, circulatory, respiratory & urinogenital system of reptiles, birds & mammals.
		303	Bioinstrumentation & biostatistics
		304	Knowledge of instruments, separation technique ( chromatography ) & statistical calculations ( central tendency, deviation, correlation, regression, & t-test
		401	Cell biology : structure of cell, cellular organelles, cell cycle & cell division, cell signaling, histological methods, animal tissues & histological structure of various organs of mammals
		402	Study of mitosis & meiosis, histological localization of general lipid & metachromatic substances by Sudan & Toluidine blue method, histological preparation of various organs
		403	Gametogenesis, organogenesis, fertilization, cleavage, gastrulation, induction, extra- embryonic membranes, placentation in mammals
		404	Various embryonic stages of frog & chick embryo, preparation of permanent slides of chick embryo
		501	Genetics : Laws of Mendals, deviations, gene interactions, fine structure of gene, linkages, crossing over, human genome project, Evidences & theories of evolution
		502	Chromosomal study, calculation based on Mendal's law, study of organisms / material of evolutionary significance
		503	Various physiological processes of human being, drug addiction & its impact on society.
		504	Determination of various physiological processes, preparation of haemin crystal osmosis, muscle twitch, RBC/WBC counting, qualitative test for salivary amylase.
		505	Ecosystem, biogeochemical cycle, pollution, conservation of wildlife, non renewable resources & their conservation.
		506	Estimation of size of population, abundance & density determination, structural components of ecosystems, determination of CO <sub>2</sub> , O <sub>2</sub> & alkalinity in water samples & how to prepare field visit
		507	Comparative anatomy of various endocrine glands, hormone secreted by them, mechanism of its actions, IVF, aminocentesis, pregnancy, parturition & lactation, neuroendocrine system of insects
		508	Histological preparation and dissection of endocrine gland, preparation and submission of charts/ models of endocrine glands.
		601	Various parasites, their vectors, as well as various modes of animal behaviours.
		602	Identification of vectors of some diseases, protozoan parasites, habituation of mosquito larvae, tactic behavior of certain organisms.
		603	Structure and function of nucleic acid, replication, transcription, recombination,

			conjugation, regulation of gene expression, operon concept & detail knowledge of immunity & immunoglobulins, AIDS& immunodiagnostic techniques.
		604	Scope and application of Biotechnology, its regulation,ethics,IPR, scope of Bio-informatics, sources, www & web browsers, biological database ( NCBI, SWISS –PROT) , database search and sequence alignment
		605	Study of blood cell types , determination of blood groups & Rh factor, study of lymphoid organ, estimation of RNA, immuno---,database search & similarity search in sequence ( BLAST/ FASTA), creation of database
		606	Various pest of paddy, tea & stored grain, life cycle of silkworm & culture techniques, honey bee, lac insects, aquaculture, piggery, poultry
		607	Identification of silkworms, their various stages, submission of life cycle of silkworm, epiculture techniques and extraction of honey, identification of weeds, analysis of nutrients, demonstration of induced breeding in fish, identification of pest of paddy. Economically important fish, prawn.

### 3. B.A. Non-Major course outcome :

SL. No.	Department	Course/ paper	Course outcome
1.	Assamese	102	History of Assamese literature, classification and Assamese culture
		201	Applied knowledge of Assamese language : proper pronunciation, and spelling, use of terminology and translation
		401	Selection from Assamese literature : to introduce some selected Assamese poetry and prose from the period of Sankardev to recent period
2.	Economics	101	Basic concepts of microeconomics, analysis of behavioral patterns of different economic agents, advanced theoretical issues and their practical applications
		201	Basic microeconomics concepts and the theories of macroeconomics.
		301	Basic concepts of public finance along with a reference to the Indian Economy.
		401	Salient features of Indian Economy, performance and problems of the primary, secondary and tertiary sectors of Indian Economy
		501	Statistical data collecting methods and basic statistical methods that can be applied in economics
		601	The measurement of development with the help of theories along with the conceptual issues of poverty and inequalities from Indian perspective
3.	Education	101	Foundations of Education
		201	Educational psychology
		301	Measurement and evaluation in Education
		401	Contemporary issues of Indian education
		501	Development history of Indian Education
		601	Techniques and methodology of teaching.
4.	English	101 (Gen. Eng.)	Basic skills in written communication like reports, notes, memos and other similar items.
		101 (Alt. Eng.)	To familiarize poetry as a genre, the course contains poems of English, American and Indian writers and cultural and social background against which these master piece were produced
		202 (Gen. Eng.)	The course consists of some fictional and non- fictional literary works which will make the students to understand different kinds of creative writing and to enhance their language and communication skliis.
		202 (Alt. Eng.)	The course contains non fictional prose to familiar the students with the ideas of famous writers and thinkers
		301	Communicative skills : Skills and abilities required for various competitive examination and for future academic and professional needs.
		301 (Gen. Eng.)	The poems and dramas included in this paper will enable the students acquaint with the nature of writings of the writers from the Romantic to Modern age.



5	History	101	History of Assam from 1228 to 1826
		201	History of Assam from 1826 to 1947
		301	History of Europe from 1453 to 1815
		401	History of India from earliest time to 1526
		501	History of India : 1526 to 1947
		601	Women in Indian History
6.	Pol. Science	101	Political theory
		201	Indian Govt. and policies
		301	Public Administration
		401	International Relation
		501	Administration of Rural Development of India
		601	Human Right
7	Sociology	101	General Sociology
		201	Society in India
		301	Techniques of social research
		401	Theoretical perspectives in Sociology
		501	Social problems and Social welfare
		601	Sociology of Rural Development
8.	TTMG	501	Fundamentals of Tourism
		502	Skill Development for Tourism Management
		601	Prospect & Problems of Tourism in Northeast
		602	Practical : Preparation of Field bases Project

#### 4. B.SC. Non- Major course out come :

SL No.	Department	Course /Paper	Course out come
1	Physics	101	Concept and idea in Hustonian mechanics and classical mechanics, properties of matter, thermodynamics and thermal radiation.
		201	Behavior of light energy, properties of light.....
		301	Electromagnetic forces, electrodynamics complete and successful theory and ideal model that all other theories strive to emulate.
		401	Quantum mechanics
2.	Chemistry	101	Chemistry in different branches like inorganic, organic and physical chemistry.
		201	Inorganic chemistry in the form of material science
		301	Organic Chemistry in light of different types of reaction, broad field of Organic Chemistry
		401	Physical Chemistry in the form of physical forces which govern the surroundings
3.	Mathematics	101	Classical ideas of algebraic and analytic structures, generalized notions of trigonometry, vectorial notions of multivariable Calculi
		201	Matrix methods for solving linear equations, ideas on the basics of differential equations and numerical methods of obtaining results where complexity of obtaining analytical solution is sufficiently high
		301	Co-ordinate geometry and analytical aspects of Mathematics
		401	Linear Programming techniques to formulate and solve various practical models, computational proficiency in dealing with Mathematical software through the use of computer laboratory
4.	Botany	101	Lower Cryptogams, Bacteria & Virus, Plant pathology , Lichens
		102	Practical based on theory paper 102
		201	Basic knowledge of structure, forms and reproduction, forms and reproduction, evolution of tissue systems, seed habit in higher cryptogames & Gymnosperms
		202	Practical based on theory paper 201
		301	Terminologies used in description of angiospermic plants, basic knowledge of plant classification, tissue & tissue system, development of primary & secondary plant bodies and development of male & female reproductive components and their functions.
		302	Vegetative morphology, reproductive structure of selected species, methods of double staining, study of permanent slides of

			embryology
		401	Basic knowledge of plant physiology
		402	Performance of simple physiological experiments based on paper 401
5.	Zoology	101	Non- cordate diversity, Systematics and Evolution
		102	Practical based on theory paper 101
		201	Cell Biology and Biochemistry
		202	Practical based on theory paper 201
		301	Chordate diversity and developmental Biology
		302	Practical based on theory paper 301
		401	Animal physiology and Endocrinology
		402	Practical based on theory paper 401
6.	Statistics	101	Knowledge of various aspects of tools of Descriptive Statistics.
		102	Practical based on theory paper 101
		201	Basic knowledge of probability and Distribution
		202	Practical based on theory paper 201
		301	Concepts and methods of parametric estimation and testing of Statistical hypothesis
		302	Practical based on theory paper 301
		401	Basic concepts and methodologies of sample survey
		402	Practical based on theory paper 401

#### 5. Compulsory course both for B.A. & B.Sc. Programme

SL No.	Department	Course / Paper	Course outcomes
1	Computer course	COSK (B.Sc. Major )201	Basic knowledge of computer software and it's practical applications, which is recognized as an important tool in all field of modern academics, communications and information technologies.
		COSK (B.A Non-Major) 301	
2	Environmental Science	EVS 401 (B.A.& B.Sc.)	Basic knowledge of Natural resources, Biodiversity and it's conservation, Ecosystem, Pollution & it's control, Disaster management, population growth and environment etc.

#### 6. Short term Add on Certificate Course outcomes:

SL.No.	Short term course	Course outcomes
1	Organic Farming and Production of Organic Inputs	Basic Knowledge and importance of organic farming, production of vermi-compost, organic-compost, liquid bio-fertilizer, bio-pesticide, etc.
2	Basic computer application	Basics of computer hardware, software and networking, basic skills in using Windows and Microsoft office
3	Internet based web designing	Introduction to the World of internet and its operation and designing Web sites, how they are designed and developed as per the changing time
4	Computer Hard ware and Networking	Physical organization of computer, how computers are interconnected in the computer network and about networking device via networking
5	Entrepreneurship development	Necessary knowledge and skills to develop and strengthen entrepreneurial quality, to analyze environmental set up relating to small industry and promoting it, understanding the process and procedure involved in setting up small units., sources of help and support available for starting and a small scale industry etc
6	Personality development and Human Value	Personality Development: Enhance self awareness through identification and articulation. Self awareness will lead to effective leadership, help to develop personal and professional responsibility. Human value : Help students discriminate between valuable and superficial in real life situation; teach students to live in

		harmony; sensitize students about creation of a human society; help to develop critical ability and commitment toward society.
7	Leadership development	Will learn to have an honest understanding of themselves and others; to articulate a vision; will be excellence oriented, decisive, intelligent and a problem solver; will help create an environment where people can thrive, grow and live in peace; create communications of reciprocal care.

8. Spoken Tutorial Course (Online) : It is an open source software training programme. After completing the course students become IT literate.