

**PROGRAMME OUTCOMES, PROGRAM SPECIFIC OUTCOMES, COURSE OUTCOMES**

Programme and learning course outcomes of the institution are broadly linked to its vision-mission and objectives. These are included in the curriculum and syllabus of the institution for the knowledge of the teachers and the students. The various outcomes of the programmes and courses adopted are also reflected in the college prospectus precisely in order to have some knowledge to the students. Specific programme and course outcomes are also displayed in the departmental notice boards.

**(A) Programme Outcomes**

**1. Graduate in Arts (B.A. Hons.):**

- Acquire broad understanding of the core discipline
- Holistic development out of different learning experiences
- Develop Life-long skill
- Critical thinking, analysis and reasoning and national ethics
- Effective communication
- Understanding social responsibility
- Creative and innovative ideas
- Understanding environment and sustainability
- Transform the acquired knowledge to productive activities
- Participate in the development process of the nation at par with emerging global scenario.
- Employability and entrepreneurship skill
- Leadership quality
- Knowledge of methodologies
- Global competency for higher studies

**2. Graduate in Science (B.Sc. Hons.):**

- Acquire broad understanding of the core discipline
- Broad education necessary to understand the impact of scientific solutions in a global, economic, environmental and social context.
- Holistic development out of different learning experiences
- Develop Life-long skill
- Critical thinking and scientific approach to problems
- Ability to develop scientific temper day-to-day life
- Ability to design and conduct experiments, analyse and interpret data
- Ability to function in multi-disciplinary approach
- Creative and innovative ideas
- Understanding social, cultural values and national ethics
- Contribute towards environment and sustainability issues
- Transform the acquired knowledge to productive activities
- Participate in the development process of the nation at par with emerging global scenario.
- Employability and entrepreneurship skill
- Leadership quality
- Scientific knowledge of contemporary local, national and global issues
- Knowledge of methodologies
- Global competency for higher studies

## **(B) PROGRAM SPECIFIC OUTCOMES**

### **1) Foundation Courses**

#### **i. English:**

- General and basic knowledge of writing and speaking English
- Understanding creative ideas and moral values in poems and prose
- Understanding basics of drama

#### **ii. Manipuri:**

- General and basic knowledge of writing Manipuri and communication
- Broad understanding of Manipuri literature
- Understanding creative ideas and moral values in Manipuri poems and prose

### **2) Value Added Courses**

#### **i. Human Rights & Duties:**

- Understanding social issues relating to violation of rights
- Knowledge rights and duties of citizens as given in the Constitution of India
- Knowledge of human rights commissions and events
- Knowledge of human rights regulations

#### **ii. Women Empowerment:**

- Understanding social issues relating to gender disparity and atrocities
- Knowledge about the concept of women empowerment and its necessity
- Knowledge of women commissions and crime against women
- Knowledge about regulations of women empowerment

### **3) Supportive Course**

#### **Honours Supportive Courses of 13 Departments:**

- Additional knowledge to the experiences gained from the core courses
- Contribute to holistic development of the students
- Increasing competency for employability and higher studies

## **(C) COURSE OUTCOMES**

### **1. Anthropology**

- Students will learn about the genesis and development of biological anthropology.
- Learn about the aspects from which variation and evolution are studied.
- Basic theoretical knowledge about social and cultural anthropology can be achieved.
- Knowledge of first-hand field data collection and analysis can be gained.
- Archaeological background of prehistoric, proto-historic and historic evolution of culture will be gained.
- Practical understanding of prehistoric culture will be gained through tool and pottery techniques.
- Human evolutionary developmental stages will be learnt.
- How fossil finds explain in them the evolutionary development of man will be learnt.
- Anthropological knowledge and approach to the study of tribes, villages and peasantry is known.
- The problems, prospects of development and government policies towards tribes, villages and peasantry will be learnt.
- How human adapt to their eco-setting is known.
- The knowledge on urbanisation and industrialisation process will be gained.

- Students will learn about markers for biological diversity.
- They also will know the markers used for classification of races and population.
- Students will have the fundamental ideas of the theories of human society.
- They will also have the fundamental ideas of the theories of culture.
- Students will learn the stages of human growth and development.
- They will learn the biological factors that influence growth and development.
- They will also have knowledge of human body composition.
- Knowledge of formation of research design, application of methods & techniques in data collection is learnt.
- Ethics of research are learnt for an effective research study.
- Students will learn about mechanism which create variation in gene frequencies.
- Students will learn method of assessing gene frequencies.
- Students will also learn how ecological factors help maintaining gene frequencies.
- Students will learn the history and development of anthropology in India.
- Knowledge about the diversity in India and North-east in particular, with problems of tribes and constitutional provisions safeguarding their rights will be gained.
- Students will learn about distinguishing human from non-human skeleton remains.
- Students will learn about techniques of making personal identification.
- Students will learn about the racial, linguistic and ethnic dimensions of Indian society.
- Students will be familiar with the anthropological situation in India.

## 2. Botany

- To understand the morphology, structure and knowledge of the organism
- Differentiate between various groups of bacteria, fungi pathology, lichen, algae, bryophyte, pteridophytes
- Learn about causal organisms of plant diseases
- To understand the morphology, structure and function of various parts of plants
- General character of gymnosperms and classification
- Difference between angiosperm and gymnosperm
- Taxonomy terminology
- To learn various families and economic importance
- Learn anatomical structure and function of various tissues
- Differentiation between the normal and anomalous secondary growth learn about the different meristems and their locations and functions
- Developmental stages of micro and mega sporangium
- To understand the pollen morphology and applications of palynology, basic and applied palynology, pollen allergy and pollen taxonomy
- To learn the Phytogeographical regions of India, factors migration methods and endemism and barrier of distribution.
- The interactions taking place in the ecosystem and flow of energy. The role and importance of biotic and abiotic environmental factors in the sustenance of the plant life
- Differentiation between light and dark reactions of photosynthesis
- The respiratory process in presence of light and difference between C<sub>3</sub>, C<sub>4</sub> and CAM plants
- The transport mechanism in plants and differentiate between the physiological processes and their importance
- To understand the term molecular biology and importance of biology
- To understand gene organization of prokaryotes and eukaryotes

- To understand the structure of RNA and DNA, physical properties of DNA and RNA. Biosynthesis of nucleic acids
- Mechanism of protein synthesis
- To understand the structure and function of various cell organelles
- To learn the types, structure and function of chromosomes
- The mechanism, roles and importance of cell divisions, linkage and crossing over
- To understand laws of Mendel, gene interaction, expression, structure of gene and transfer of genetic information, transcription and translation
- The various gene mutation, mutagens and chromosome alterations
- Knowledge of sex chromosomes and sex determination in plants, Extra nuclear inheritance
- To understand breeding behavior, sexual, asexual and apomixis.
- Breeding methods, Heterosis
- Knowledge of biotechnology. Old and new basic aspects
- Application of biotechnology in medicine, agriculture and human welfare, tissue culture and genetic engineering in plant improvement
- Knowledge of biometry, scope and application

### 3. Physics

- Understand the mechanics of a particle for linear and rotational motion.
- Understand about the gravitational field and the central force motion.
- Understand about the special theory of relativity.
- A thorough knowledge of thermodynamics would create.
- Understand the details of the kinetic theory of gases.
- Basic idea of black body radiation and related laws will be studied in details.
- Understand about the main phenomenon of optics like interference, diffraction and polarisation.
- Understand the mechanism of working LASER.
- Understand the domain of electricity and magnetism extends over the whole of nature.
- Understand the concept of different laws of electricity and magnetism.
- Theoretical and practical skills used in industrial application.
- Understand about the generalised coordinate and consequently the formulation of Lagrangian and Hamiltonian.
- Application of the central force motion and detail of the Kepler's law of planetary motion.
- Understand about the calculation of probability and the derivation of the famous statistics: Maxwell-Boltzmann (M-B) statistics, Bose-Einstein (B-E) statistics and Fermi-Dirac (F-D) statistics.
- Atomic and Nuclear Physics finds application in Nuclear reactors.
- Nuclear energy has got a great significance in the present scenario.
- This topic will give ideas about the construction and working of different Atomic mass spectrometer.
- Knowledge of spin orbit interaction, Zeeman Effect and ideas of radioactivity.
- Knowledge of different nuclear model and calculation of Q-value of the nuclear reaction, the details ideas of nuclear fission and fusion reactions and about the release of energy by the Sun.
- Understand the basic application of physics.
- Understand about the carbon dating and its application.
- Understand the different types dating like luminescence and meteorite dating.
- The application of X-ray and Ultrasound.
- Understand about radiotherapy.

- The basic concept of physics of semiconductors.
- Basic principles of biasing and transistor amplifiers.
- The construction of Oscillators.
- Fundamental concepts of digital electronics.
- Working of special diodes and transistors.
- Understand Mathematical techniques which are very useful in the study of physics and engineering application.
- Function of Complex variable and Fourier analysis occur frequently in all branches of physics.
- Special functions and partial differential equations.
- Powerful tool of modern physicist and most of the experimentally observed phenomena in Modern Physics are explained only by Quantum Mechanics.
- Understanding Quantum mechanics.
- Understand the origin of Quantum theory and its formalism.
- Concept of commutator, eigen value, eigen function and hydrogen energy spectrum etc.
- The principles of Physics which are applied to study of solids, the relationship between structure and property.
- Details of magnetic properties.
- Understand the burning subjects of physics such as materials science, supercomputer, nano science, etc.

#### 4) Chemistry:

- Basics of inorganic, organic and physical chemistry
- Knowledge of nuclear chemistry
- Knowledge of radioactivity
- Understanding transition element series
- Understanding rotational, infrared, UV-visible spectroscopy
- Knowledge about quantum chemistry
- Knowledge of nanomaterial
- Knowledge about energetics
- Knowledge about elimination reactions
- Knowledge about carbohydrates
- Amino acids, peptides, proteins, enzymes, fats
- Steroids, terpenoids, alkaloids
- Understanding thermodynamics, and conductance
- Understanding electronic spectral, organometallic bioinorganic chemistry
- Knowledge about polymers and compounds
- Knowledge about computer application in chemistry
- Understanding photochemistry
- Knowledge about medical chemistry
- Chromatography
- Spectroscopy
- Electrochemistry
- Ability to perform related experiments in laboratories

#### 5) Mathematics

- Knowledge of Calculus and Ordinary Differential Equations
- Knowledge of Vector, Geometry and Probability
- Knowledge of Algebra- abstract, linear; real, numerical analysis; logic; C- programming
- Knowledge of Mechanics - Dynamics, Statics, Rigid Dynamics

- Knowledge of Partial differential equation, Laplace transform, metric space, complex analysis, spherical trigonometry
- Knowledge of Abstract Algebra and Linear Algebra
- Knowledge of Analysis -(Real Analysis) Numerical Analysis and Computer Programming in C Practical
- Knowledge of Partial Differential Equations, Laplace Transform, Calculus of Variation
- Knowledge of Analysis – (Metric Space & Complex Analysis)
- Knowledge of Higher Mechanics

## 6) Zoology

- Knowledge of Principles of Classification, Zoogeography
- Knowledge of Functional Anatomy of Non-Chordata
- Knowledge of Functional Anatomy of Chordata
- Knowledge of Biostatistics, Chordate and Biotechnology
- Knowledge of Environmental Biology, Wildlife Computer Application
- Knowledge of Applied Zoology
- Knowledge of Computer Application
- Knowledge of Bioinformatics,
- Knowledge of Biodiversity, Environmental changes
- Knowledge of Fisheries
- Knowledge of Cell Biology and Genetics
- Knowledge of Evolution, Ethology Biotechnology & Bioinstrumentation
- Knowledge of Animal Physiology & Endocrinology
- Knowledge of Developmental Biology, Histology
- Knowledge of Biological Chemistry

## 7) English

- Understanding History of English literature (Old English – the 19<sup>th</sup> Century)
- Understanding Poetry and drama (Old English – the 19<sup>th</sup> Century)
- Understanding British Fiction
- Understanding Western Criticism
- Understanding Rhetoric and Prosody
- Understanding Literary Genres and Major Movements of English Literature
- Understanding Linguistics and English Language
- Understanding North East Literature
- Understanding Commonwealth and American Literature
- Understanding European Literature in Translation
- Understanding 20<sup>th</sup> Century British Literature
- Understanding Indian Writing in English
- Understanding Literary Theory
- Understanding North-East Literature
- Understanding European Literature in Translation

## 8) Economics

- Knowledge of Indian Economy
- Knowledge of Microeconomics
- Knowledge of Elementary Mathematics for Economics
- Knowledge of Macroeconomics
- Knowledge of Elementary Statistics

- Knowledge of Public Finance
- Knowledge of Political Economy of Development
- Knowledge of Methods of Economic Analysis
- Knowledge of Development Economics
- Knowledge of Environmental Economics
- Knowledge of International Economics

#### **9) Education**

- Understanding of Education of Philosophical and Sociological Foundations
- Understanding of Educational Psychology and Pedagogy
- Understanding of Development of Education in India
- Understanding of Peace and Human Rights Education
- Understanding of Issues and Trends in Contemporary Indian Education
- Understanding of Population and Environmental Education
- Understanding of Educational Evaluation
- Understanding of Statistics in Education
- Understanding of Educational Management
- Understanding of Educational Technology
- Understanding of Educational Guidance and Curriculum construction
- Understanding of Educational Thought and Practice
- Understanding of Child Psychology
- Understanding of Experimental Education

#### **10) Geography:**

- Understanding of Geomorphology: Nature and Scope.
- Understanding of Earth: Interior Structure and Isostasy
- Understanding of Evolution of Landforms: Fluvial, Karst, Aeolian, Glacial, and Coastal.
- Understanding of Cartography
- Understanding of Physical Geography
- Understanding of Human Geography
- Understanding of Demography
- Understanding of Climatology
- Understanding of Geography of India
- Understanding of Statistical Methods in Geography
- Understanding of Economic Geography
- Understanding of Environmental Geography
- Understanding of Remote Sensing and GIS
- Understanding of Regional Planning and Development
- Understanding of Field Work and Research Methodology
- Understanding of Geographical Thought- Pre-Modern and Modern

#### **11) History**

- Knowledge of Sources of History- Archeological and Literary
- Knowledge of Harappan culture and Vedic civilization
- Knowledge of India in the 6<sup>th</sup> century BC: The sixteenth Mahajanapadas and rise of Magadha
- Knowledge of Religious Reform Movements –Buddhism and Jainism
- Knowledge of Foreign Invasions-Persian and Greek; Maurya Empire

- Knowledge of Gupta Empire-Rulers & their Achievements
- Knowledge of Harsha & his times
- Knowledge of Foundation of Delhi Sultanate and Rise of Provincial Kingdoms;
- Knowledge of Mughal Empire and Rise of Marathas and Rise of Regional States
- Knowledge of Life in Medieval India
- Knowledge of British Annexation and Consolidation
- Knowledge of Revolt of 1857
- Knowledge of French Revolution
- Knowledge of Napoleon Bonaparte; Expansion, Consolidation & Downfall and Congress of Vienna, 1815
- Knowledge of Social & Political Development (1815-1848)
- Knowledge of Unification of Italy and Germany
- Knowledge of Liberalism and Democracy in Britain.
- Knowledge of Europe in the I & II World Wars
- Knowledge of Fascism and Nazism
- Knowledge of Emergence of Indian Nationalism, History of Indian National Movement
- Knowledge of History of Manipur From 33 A.D. to 1891 A.D.
- Knowledge of South-East Asia, 1800-1945
- Knowledge of History of America/USA (1776-1945)

## **12) Manipuri**

- Knowledge of Poetry, Rhetoric and Prosody
- Knowledge of Novel and Short Story
- Knowledge of Linguistics and Manipuri Language
- Knowledge of Manipuri Language and Literature
- Knowledge of Literary Criticism
- Knowledge of Folklore and Culture
- Knowledge of Kavy and Drama
- Knowledge of Indian Literature in Translation
- Knowledge of History of Manipuri Literature – old and modern
- Knowledge of Manipuri Culture
- Knowledge of Folkloristics and Manipuri Folklore

## **13) Political Science**

- Knowledge of Political Theory
- Knowledge of Western Political Thought
- Knowledge of Indian Government and Politics
- Knowledge of Comparative Government and Politics
- Knowledge of International Politics
- Knowledge of Socialist Thought
- Knowledge of Public Administration
- Knowledge of Government and Politics of North -east India
- Knowledge of Gandhian Studies
- Knowledge of Ancient Philosophical Traditions of India: Manu and Kautilya
- Knowledge of Raja Ram Mohon Roy; Swami Vivekananda; and Aurobindo Ghosh
- Knowledge of Bal Gangadhar Tilak; Gopal Krishna Gokhale; and M.N.Roy



- Knowledge of Md Iqbal; Jawaharlal Nehru and Subashchandra Bose
- Knowledge of Dr. B.R. Ambedkar and Jayaprakash Narayan