

PROGRAMME OUTCOMES, PROGRAM SPECIFIC OUTCOMES, COURSE OUTCOMES

CBCS 2020-21

The POs, PSOs and Cos are included in the curriculum of the institution for information of the teachers and the students. The various outcomes of the programmes and courses adopted are also reflected in the college prospectus and website precisely in order to have some knowledge to the students.

(A) Programme Outcomes (POs)

After completion of the program, it is expected that students will understand and appreciate the following POs:

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

- Acquire broad understanding of the core discipline
- Holistic development out of different learning experiences through multi-disciplinary approach
- Develop Life-long learning skill
- Critical thinking, analysis and reasoning and national ethics
- Effective communication
- Understanding social responsibility and interaction
- Creative and innovative ideas
- Understanding environment and sustainability
- Transform the acquired knowledge to productive ways
- Universal moral values and ethics
- Knowledge of scientific methodologies

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 through multi-disciplinary approach
- Develop Life-long learning skill
- Critical thinking and scientific approach to problems
- Effective communication
- Ability to develop scientific temper day-to-day life
- Ability to design and conduct experiments, analyse and interpret data
- Creative and innovative ideas
- Understanding social, cultural values and national ethics
- Contribute towards environment and sustainability issues
- Transform the acquired knowledge to productive activities
- Employability and entrepreneurship skill

(B) PROGRAM SPECIFIC OUTCOMES (PSOs)

After completion of the program, it is expected that students will understand and appreciate the following PSOs:

1. English:

- Understand European and American literature and criticism
- Understanding Rhetoric and Prosody
- Understanding Linguistics and English Language
- Understanding North East Literature
- Understanding European Literature in Translation
- Understanding Indian Writing in English
- Understanding Literary Theory

2. Manipuri:

- Knowledge of writing Manipuri and communication
- Understanding social & cultural values in Manipuri literature
- Understanding creative ideas and values in Manipuri poems and prose
- Knowledge of Poetry, Rhetoric and Prosody
- Knowledge of Linguistics and Manipuri Language
- Understanding history of Manipuri literature

3. Economics:

- Understand the behaviour of Indian and World Economy
- Analyse macroeconomic policies including fiscal and monetary policies of India.
- Determine economic variables including inflation, unemployment, poverty, GDP, Balance of payments using statistical methods.
- Understand the behaviour of financial and money markets and perform cost-benefit analysis for making investment decisions.

4. Education:

- Understanding of Educational Psychology and Pedagogy
- Understanding of Development of Education in India
- Understanding of Issues and Trends in Contemporary Indian Education
- Understanding of Educational Management
- Understanding of Educational Technology
- Understanding of Educational Guidance and Curriculum construction
- Understanding of Educational Thought and Practice

5. History:

- Knowledge of Sources of History and pre-historical & historical periods
- Knowledge of Indian history
- Knowledge of world history
- Knowledge of Religious Reform Movements
- Knowledge of Europe in the I & II World Wars

6. Geography:

- Understand the development of the subject and understanding various sub-fields such as physiography, resources, global economic systems, socio- cultural aspects, rural and urban milieu

- Understand methods and devices of Cartography
- Acquire scientific methodology of data handling, hypothesis generation, testing and analysis.
- Gain knowledge of various technological applications through study of Remote Sensing and Geographic Information Science.
- Develop an understanding of global issues from economic, social, environmental and political perspectives, which has relevance in further studies all across the globe.

7. Political Science:

- Understand the development of the subject and elements of study
- Knowledge of Indian Government and Politics
- Knowledge of Comparative Government and Politics
- Knowledge of political thoughts and theories

8. Anthropology:

- Understand the scope, development and the domain of the subject
- Understand human evolution and variation
- Understand human society and culture in time and space
- Understand Anthropological knowledge and approach to the study of tribes, villages and peasantry is known
- Understand applied Physical, Archaeological and Cultural Anthropology

9. Botany:

- Understand the morphology, structure and function of various parts of plants
- Understand groups of bacteria, fungi pathology, lichen, algae, bryophyte, Pteridophytes
- Learn about causal organisms of plant diseases
- General character of angiosperm and gymnosperms and classification
- Understand Molecular Biology and importance
- Understand Plant Genetics
- Mechanism of protein synthesis
- Knowledge of Biotechnology and its field of applications

10. Chemistry:

- Knowledge of inorganic, organic and physical chemistry
- Knowledge of nuclear chemistry and radioactivity
- Knowledge about quantum chemistry
- Knowledge of Nanomaterial
- Knowledge 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, medical chemistry, Chromatography, Spectroscopy, Electrochemistry

11. 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

12. Physics:

- Understanding the academic field of Physics and applications in basic Physics
- Establish the ability to use skills in Physics and its related areas of technology for formulating and attempting wide range of related problems in physics.
- Exploratory skills, including skills of independent investigation of Physics related issues, problems analyse and interpret data or information collected using appropriate methods relevant to the theories of Physics.
- Understanding the basic concepts and application of physics in different topics
- Learn to carry out experiments in the areas of Optics, Electronics, Nuclear Physics, Electricity, Magnetism, Sound, etc.

13. Zoology:

- Understanding the nature and basic concepts of cell biology, biochemistry, taxonomy and ecology
- Analyse the relationships among animals, plants and microbes
- Perform procedures as per laboratory standards in the areas of Biochemistry, Bioinformatics, Taxonomy, Economics Zoology and ecology.
- Understanding the applications of biological sciences in Apiculture, Aquaculture, Agriculture and Medicine

(C) COURSE OUTCOMES (COs)

After completion of the courses, it is expected that students will understand and appreciate:

1. Anthropology

- Understanding the genesis and development and the specialities of anthropology.
- They will also have knowledge of human body composition.
- Students will learn about distinguishing human from non-human skeleton remains.
- Learn about man's socio-cultural and biological variation and evolution.
- 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.
- 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.
- How human adapt to their echo-setting is known.
- The knowledge on urbanisation and industrialisation process will be gained.
- They also will know classification of races and population.
- Students will have the fundamental ideas of the theories of human society & culture.
- Students will learn the stages of human growth and development & influencing factors.

- Knowledge of formation of research design, application of methods & techniques in data collection is learnt.
- 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 techniques of making personal identification & forensic study.
- Students will learn about the racial, linguistic and ethnic dimensions of Indian society.
- Understanding applied anthropology
- Understanding tourism anthropology
- Understanding industrial and corporate anthropology
- Understanding museum method and culture resource management

2. Botany

- To understand the morphology, structure and knowledge of the organism
- Differentiate between various groups of bacteria, fungi, 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
- 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 of migration methods and endemism and barrier of distribution.
- The interactions taking place in the ecosystem and flow of energy.
- Differentiation between light and dark reactions of photosynthesis
- The respiratory process in presence of light and difference between C₃, C₄ 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 apomixes.
- 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

- Understanding the academic field of Physics and applications in basic Physics like Mechanics, Special theory of relativity, Thermal Physics, Optics, Electricity, Magnetism, Atomic Physics, Nuclear Physics, Classical Mechanics, Electronics, Mathematical Physics, Physics of Material, Quantum Mechanics, Nano-particle, application in dating and radiation physics.
- Technical knowledge that creates different types of professionals related subject area of Physics, including involvement of research work and teaching to government and public service.
- Establish the ability to use skills in Physics and its related areas of technology for formulating and attempting wide range of related problems in physics.
- Exploratory skills, including skills of independent investigation of Physics related issues, problems analyse and interpret data or information collected using appropriate methods relevant to the theories of Physics.
- Development of communication skills involving the ability to read texts throughout and research papers and present their ideas in a more concise manner to the audiences of technical group.
- Personal skills such as the ability to work both independently and in a group in the group discussion and project presentation and seminar presentation.
- Understanding the basic concepts and application of physics in different topics and the observation of the involvement of physics in nature logically with mathematical reasoning.
- Learn to carry out experiments in the areas of Optics, Electronics, Nuclear Physics, Electricity, Magnetism, Sound, etc.

1) 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

2) 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

3) Zoology

- animal diversity,
- few applications of Zoology,
- the structure, functions and life processes at cellular, tissue, organ and system level,
- basic knowledge and significance of evolution,
- basic concepts of human health,
- The students would also gain an insight into laboratory and field work through the practical course, field work and the project.
- Efforts have been made to seek inputs of all the stakeholders to make it more relevant.

4) English

- Understanding History of English literature (Old English – the 19th Century)
- Understanding Poetry and drama (Old English – the 19th 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 20th Century British Literature
- Understanding Indian Writing in English
- Understanding Literary Theory
- Understanding North-East Literature
- Understanding European Literature in Translation

5) 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

6) 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

7) Geography:

- Understand the development of the subject and delve around issues suited to the needs of the contemporary world.
- Understanding various sub-fields such as physiography, resources, global economic systems, socio- cultural aspects, rural and urban milieu, environmental and disaster studies and mapping methods.
- Trained to read and interpret maps, prepare transect charts and thematic atlas.
- Able to read and analyze weather phenomenon through weather maps and charts.
- Acquire scientific methodology of data handling, hypothesis generation, testing and analysis.

- Gain knowledge of various technological applications through study of Remote Sensing and Geographic Information Science.
- The curriculum also provides an opportunity to digitally produce maps and modelling applications.
- Learn hand on skills to prepare building disaster plans, community disaster preparedness and also awareness creation.
- Develop an understanding of global issues from economic, social, environmental and political perspectives, which has relevance in further studies all across the globe.
- Develop effective communication skills, team work, travel exposure and zeal of investigation and exploration.
- The learners can greatly contribute to the subject through teaching, research and field oriented studies.
- The students will also be able to pursue a career in spatial planning, sustainable practices, environmental and resource management.
- The geography graduates will be well informed citizens who can play immense role in the civil society too.
- They will be able to pursue wide range of careers as planners, administrators, academicians, and managers.

8) History

- Knowledge of Sources of History- Archeological and Literary
- Knowledge of Harappan culture and Vedic civilization
- Knowledge of India in the 6th 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)

9) 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

10) 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