### Office of the Principal Mankachar College, Mankachar P.O: Mankachar-783131 Estd: 1971 NAAC Accredited B+ Grade

### PROGRAMME OUTCOME, PROGRAMME SPECIFIC OUTCOME AND COURSE OUTCOME

### **PROGRAMME OUTCOME:**

### 1. Programme: B.A.

Students who successfully complete this degree will be able to identify and research theoretical and applied topics through academic inquiry. After completing the programme successfully, they can also-

- Pursue higher education in a variety of fields.
- Take part in various employment competition exams.
- Express their knowledge and skills in the intellectual realm.
- Consider their cultural identities and values.
- Apply the proper research approaches to the targeted issues.
- Practice self-directed inquiry and grow intellectually, etc.

### **Department of Assamese**

**Program Outcome:** The history of Assamese literature and linguistics are the subjects of an undergraduate Assamese course. Assamese literature from the ninth to the twenty-first centuries is included, together with Western and Eastern literature and cultural history. The cultural history essay covers a wide range of topics, including fashion, agriculture, tourism, and archaeology. The students must become knowledgeable about native clothes and ornamentation in order to complete this paper. It also includes details on numerous sites of relevance in terms of religion, history, and archaeology. Agriculture's diversity and scope is another subject it addresses.

*Program Specific Outcome:* Students who have successfully completed this course will learn about Assamese heritage and culture. The training will teach creative writing abilities. Their ability to communicate will be strengthened by language proficiency.

*Course Outcome:* Assamese majors have the option of pursuing postgraduate degrees in literature, linguistics, culture studies, mass communication, and tourism. They are able to work as agricultural entrepreneurs, publishers, script writer, journalist as well as lecturers.

## **Department of English:**

**Program Outcome:** English literature and its history are the main topics covered in the undergrad English major. In addition, the course covers American Literature, Linguistics, Women's Writing, Nature Writing, Literary Theory, and Criticism. The many literary genres—fiction, non-fiction, poetry, plays, biographies, autobiographies, journals, films, dramas, etc.—are introduced to the students.

**Program Specific Outcome:** In order to understand literary texts published by renowned English authors from the ancient to the modern periods, the course helps students get familiar with the major historical occurrences, battles, and inventions of Great Britain. It makes them sensitive to social issues and enables them to use critical frameworks to study the linguistic, cultural, and historical context of literature produced in English. The English language's grammar, usage, and linguistic structure knowledge of the pupils will help them improve their communication skills.

*Course Outcome:* The course will help students to develop a solid understanding of the social, cultural, biographical, and historical context of English-language literature from Britain and other European countries, America, and India. The students have a wide range of professional alternatives because the degree is essentially multi-disciplinary, including teaching, news media, communication media, the tourism industry, working as an air hostess, etc. They can choose to pursue higher education in fields including law, mass communication, linguistics, folklore, culture studies, English, linguistics, and tourism. They are able to work as agricultural entrepreneurs, publishers, interpreter, script writer, journalist as well as lecturers.

## **Department of Economics:**

Both the Semester and the recently implemented CBCS systems are currently being used at Mankachar College. The college offers programmes in economics that are both major/core and pass course/generic.

**Program Outcome:** To learn about growth prospects, students in a three-year Undergraduate Economics (Major) course study topics such as Microeconomics, Macroeconomics, Mathematical Economics, Econometrics, International Economics, Statistical Methods, Developmental Economics, Economics of Health and Education, Game Theory, Monetary Economics, Public Finance, Money, Banking and Financial Markets, Financial Economics, The Economy of North-East India, History of Economic Thought, and Indian Economics.

**Program Specific outcome:** The course would give the students the knowledge they need to understand actual economic occurrences. Additionally, the students would be able to comprehend and value current economic events and news in the newly globalised business environment.

*Course Outcome:* Students taking this course will be prepared for careers as academicians, professionals, or researchers in the field of economics. The students have the options of pursuing a master's degree as well as Ph.D. in economics, business management, business economics, or business administration, among other options. In addition to the Civil Services and Indian Economic Service competitive examinations, they may also work as publishers, lecturers or get ready for the banking sector and launch their own businesses using the economic knowledge they have acquired.

### **Department of History:**

**Program Outcome:** The Undergraduate History Major course covers Ancient, Medieval, and Modern Indian history. These periods can be further divided into History of Science and Technology, Historiography, the Sultanate and Mughal periods, India under the East India Company, and the Indian Freedom Movement. The recently launched CBCS offers classes in museology, oral history, and other topics as well as courses on the sociocultural history of the ancient and mediaeval world. The subject incorporates Assam's history from various eras to provide the students with a perspective on regional history.

**Program Specific Outcome:** The main goal of the course is to help students learn how to connect the past and present. E.H.Carr defined History as "an unending dialogue between the past and the present". In light of this, the course deals with historical events as a continuous, systematic narrative of the historical events as relating to a particular nation, place, time, persons, etc., written as a chronological account and relating to the present.

*Course Outcome:* Students who have successfully completed the BA (History) special will be able to comprehend both the fundamental and contemporary historical trends, ideas, and subjects. Students could become familiar with a variety of topics linked to India's and Assam's histories. The semester course programmes aid in their development of historical and critical writing and conversation thinking. This course prepares students for further study in history, archaeology, culture studies, mass communication, etc. Additionally, it might aid students in their employment applications to universities, colleges, schools, museology and archaeology departments, and other places. Students have an edge in all competitive exams in addition to civil services competitive examination.

### **Department of Political Science:**

**Program Outcome:** Indian politics, government, public administration, and international relations are all major topics in the political science major degree. Studying the constitutions of China, Switzerland, the United Kingdom, and America is another requirement. Women and Politics, Western and Indian Political Thinkers, Human Rights, and Sociology are all concerned area in this course.

**Program Specific Outcome:** The course familiarises the students with various methods for studying politics and introduces them to current issues and political behaviour, enabling them to build a general understanding of political phenomena. They can better understand the fundamental design and workings of governmental systems.

*Course Outcome:* Students taking the course are prepared to pursue higher study in political science. It prepares students for lectureship as well as competitive tests at the national and state levels, including APSC, UPSC, etc. Law is another subject that plenty of student's study.

## **Department of Education:**

**Program Outcome:** The Undergraduate Education Major programme supports students in comprehending the significance, objectives, purpose, and role of education. The course covers the fundamentals as well as contemporary issues, Indian and Western philosophical ideas, and their effects on education. It talks about the beliefs and contributions of outstanding educators from all across the world. The course also covers various theories of intelligence, teaching methods, measurement and assessment in education, as well as the definitions and points of view of sociological, psychological, and technological foundations of education. The course also includes the suggestions of the several Education Commissions.

**Program Specific Outcome:** The students' teaching abilities will be developed through micro-teaching, creating lesson plans, and classroom practise, all of which are required components of the curriculum. Additionally, students will pick up some basic psychological information.

*Course Outcome:* The course gets students ready for graduate work in psychology and education. It prepares students for a variety of opportunities, including teaching, research, competitive exams, and careers in the DIET, DLED, and B.Ed.

# 2. Programme: B.Sc.

## **Department of Zoology:**

**Program Outcome:** After completing a bachelor's degree in zoology, students acquire knowledge and skills in the field of animal sciences, as well as an understanding of how different living things interact and the internal structure and purposes of different bodily parts, as well as comprehend the intricate evolutionary processes and animal behavioural patterns. Students can relate the biochemical and physiological functions of animals.

**Program Specific Outcome:** The students will comprehend ecological variables, environmental conservation processes and their significance, pollution control,

biodiversity, and the protection of endangered species as a result of completing the course. Along with tissue preparation, molecular, and statistical procedures, they will learn about practical fields like sericulture, fisheries, apiculture, poultry, and dairy farms. They will comprehend various genetic principles and the significance of genetics to human health. They will be able to put their newfound knowledge to use in the real world, opening up a variety of career options for them. provides the knowledge necessary for nation building.

*Course outcome*: After completing the course, students will have a basic understanding of applied zoology, cell biology, genetics, taxonomy, physiology, and genetics. They'll be able to examine how animals interact with their ecosystems. As a result of passing the course, they are capable of carrying out procedures in accordance with laboratory standards in the fields of Taxonomy, Physiology, Ecology, Cell biology, Genetics, Applied Zoology, Clinical science, tools and techniques of Zoology, Toxicology, Sericulture, Biochemistry, Fish biology, Animal biotechnology, Immunology, and research methodology. Concepts are developed in relation to numerous organic evolution theories and experiments. teaches the learner about different ecological principles, ecosystem kinds, population and community dynamics, and so on. Students learn about sustainable development, animal behaviour and socio-biology, applied zoology, conservation biology & wildlife, bio-informatics, and concepts of fisheries, sericulture, apiculture, poultry, dairy, along with techniques of tissue and cell culture. They also gain a basic understanding of environmental pollutions caused by toxic materials and their effects over ecosystems.

## **Department of Physics:**

**Program Outcome:** After completing the Physics programme, students should have a conceptual understanding of physics concepts. Thermodynamics, Electromagnetism, Newtonian Mechanics, and Quantum Mechanics principles will be put on display by them. They will be able to convert a physical description into a mathematical equation and explain the physical meaning of the equation in the other direction. They will also be able to portray important physics concepts using graphs and diagrams and apply geometric arguments to solve problems.

**Program Specific Outcome:** Students who complete a bachelor's degree in physics learn the fundamental mathematical techniques required to comprehend the various fields of physics. Through numerical tasks, they receive training on how to use these strategies. They become familiar with practical application of the physical ideas they study in class lectures through hands-on instruction in a fully furnished and equipped laboratory. It qualifies them for additional post-graduate studies in fields like physics, electronics, instrumentation, and computer applications. They will learn how physics concepts are used in fields like mathematics, computer science, chemistry, and more. Students who enrol in a three-year undergraduate physics degree are also prepared for careers as professors or researchers in a variety of areas of both pure and applied physics.

*Course outcome*: The physics course covers a variety of natural item features, such as mechanical, thermal, electrical, and magnetic characteristics. The students become familiar with the computation facility with motives for physics applications in line with modern developments in information technology. They study fundamental mathematical concepts such differential equations, complex analysis, determinants, matrices, and vector analysis. There is also discussion of the general and mechanical qualities of matter. There are several natural particles that move at speeds close to that of light. Through the study of special theory of relativity, students gain an understanding of Einstein's modification to the notion of space-time. This course also covers the physics of stationary charges and moving charges. Both acoustical and electro-magnetic waves and oscillations are taught to the students. Three methods to thermal physics include kinetic theory, thermodynamics, and statistical mechanics. Students discover their specifics and varying methods. They are educated on the various statistics.

### **Department of Mathematics:**

**Programme Outcome:** Students who complete a bachelor's degree in mathematics are more equipped to comprehend and perceive mathematical structures. For their future careers, they will develop their numerical aptitude by applying both qualitative and quantitative information. The elective paper on fuzzy set theory teaches students a solid understanding of fuzzy mathematics, which is particularly helpful for them to conduct future research projects. In order to help students, address numerical computer-related challenges, the UG curriculum includes need-based computer courses.

**Program Specific Outcome:** After successfully completing the programme, students have the option of enrolling in an advanced course at Gauhati University or another Indian university in areas like pure mathematics, applied mathematics, computer applications, etc. A graduate in mathematics has a very promising job market. After completing the course, the undergraduate math students would have a complete understanding of how to prepare for competitive exams held by various banking sectors, APSC, and UPSC. The UG program's abstract classes and mathematical structures help students become ready for higher education that leads to M.Sc./MCA degree courses.

**Course outcome:** The Bachelor of Science in Mathematics curriculum is well-designed to cover a broad range of mathematical disciplines, including classical, abstract, and linear algebra, as well as their applications. vector analysis and analytical geometry in dimensions 2 and 3; Calculus with integrals and differences; both real and complex analyses; basic topology and functional analysis courses; the theory of integral transforms, as well as ordinary and partial differential equations; kinetic theory and hydrostatics game theory and operations research Programming in computers, numerical analysis, computer-aided calculations, and probability and statistics.

## **Department of Chemistry:**

**Programme Outcome:** The curriculum for the B.Sc. in Chemistry is set up to give students a thorough understanding of the various fields of chemistry, including organic chemistry, inorganic chemistry, physical chemistry, and analytical chemistry. The laboratory's hands-on activities teach the students about a variety of chemical reagents and reactions. By improving their ability to handle caustic, toxic, explosive, and carcinogenic chemicals, they become more employable in a variety of chemical sectors. They receive training on both the detrimental effects of dangerous compounds and first aid procedures.

**Program Specific Outcome:** The pupils will get knowledge of the complex structure of the matter, which is still made up of molecules, atoms, and subatomic particles. They will learn to quantify and qualitatively analyse both inorganic and organic compound estimates. By being aware of various reactions, students will be taught how to create and synthesis some chemical substances.

*Course Outcome:* Students will be well-versed in the basic and practical applications of contemporary chemical and scientific ideas, such as those in analytical, inorganic, organic, and physical chemistry. Laboratory titrations, chromatography, and other separation methods are examined in general and analytical chemistry, as well as the periodicity in elemental characteristics. Additionally, students can learn about some industrial applications of inorganic and organic chemistry, different bio and synthetic fuels, industrially significant organic compounds, fundamental metallurgical processes, and a fundamental understanding of nano chemistry. The course also covers the understanding of numerous atom models, various bond types, and exposure to a variety of newly developed organic chemistry fields. The chemistry of natural products and biomolecules will also be understood by the students.

## **Department of Botany:**

**Programme Outcome:** The better comprehension of scientific issues for practical application is covered in the botany bachelor's programme. It helps the students comprehend how development affects environmental safety and its importance for sustainable development. This program's core topics centre on how plants are necessary for life's nourishment as well as their anatomy, physiology, and morphology.

**Program Specific Outcome:** The programme primarily emphasises the value, diversity, and conservation of plants. Students become knowledgeable in both pure and applied botany, recognize how botany contributes to expanding and improving our supply of foods, medicines, textiles, and other plant products, to comprehend environmental conservation, preserve human health, and address the pollution issue. Understandably, a background in botany is a necessary prerequisite for careers in many applied sciences, including agronomy, horticulture, sericulture, forestry, pharmacology, and medicine.

*Course outcome*: The students study the general traits, morphology, reproduction, and economic applications of algae and lichen, fungi and plant diseases, bryophytes, pteridophytes, and gymnosperms, as well as fossil plants and the taxonomy, morphology, embryology, and anatomy of angiosperms. Students gain proficiency in economic botany and phytogeography.

Students learn the fundamentals of Biochemistry and plant metabolism, Ecology and pharmacology, Microbiology, Plant Physiology, Cell Biology, Genetics, Molecular Biology, Plant Biotechnology, and Tissue Culture. They also absorb conceptual information in these areas. The students learn about biofertilizers, ethnobotany, mushroom cultivation, floral design and its uses, nurseries, and gardening.