

261 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (To provide the weblink):

The College has clearly stated learning outcomes of the Programs and Courses offering in the College and the following mechanism is followed to communicate the learning outcomes to the teachers and students.

- Hard Copy of syllabi and Learning Outcomes are available in the college/departments for ready reference to the teachers and students.
- Learning Outcomes of the Programs and Courses are highlighted and made aware to the students in the induction ceremony-cum-orientation programme at the beginning of the session.
- The importance of the learning outcomes has been discussed and communicated to the teachers in staff meeting and IQAC meeting.

**Programme: B.A.**

### **Programme Outcomes**

The College offers degree in Bachelor of Arts (B.A) with different combinations. Students have the option to choose between English and Khasi (MIL) as a linguistic course. The other subject areas include Economics, Political Science, Sociology, History, Education, Khasi Elective (Literature), English (Literature) and Environmental Studies at sixth semester. The students go through a well-defined study programme for their all-round development. Following the successful accomplishment of BA, students can look for jobs or go for higher education such as postgraduate degree in any of the areas after graduation has been completed. Following are the major outcomes of this programme:

1. Students can go for a career option in various areas following successful accomplishment of their Bachelor of Arts degree. Employment opportunities include Historian, Economist, Educationist, Political Scientist, Social Activist, Personnel Manager, Sociologist, Public Relation Executive, Lawyer, Journalist and so on.
2. This course also offers opportunities to undergraduates in Banking jobs, SSC, Railway and even Civil services. They can appear for almost every exam where science is not the basic eligibility.
3. After completion of this course students can go for M.A, M.Ed, or PhD and choose teaching as career either in school or in university.
4. Study of Humanities makes students socially aware. They know the problems of society. Thus many choose to work in NGOs and some open their own.
5. Students having degree in B.A. have edge in CAT exams as IIMs looking for diversity. Many arts students pursue their career in Management and Marketing.

### **Department of English**

#### **Specific Outcomes:**

Studying English literature will introduce the student to the literary of English literature and will provide the necessary background for the study of English literature. The language component will sensitize the student to the formal aspects of English language. The objective of the course is to orient students with the study of significant texts on criticism and will introduce

to student the critical reading of creative texts as an essential part of reading and skills to interpret literary text which is a reward part of a life-long commitment to learning. Studying of poetry will provide a comprehensive guide to English poetry, its development, its form and movement throughout the ages.

The objective of studying fiction is to acquaint students with important works of fiction of the second half of the nineteenth century and the first half of the twentieth century. Some representative novels of the period have been included so as to familiarize the students with the important trends and to impart students with the following objectives:-

1. Equip students with knowledge of English as a world language.
2. Equip student with analytical skills in linguistics, communications and literary criticism.
3. Recognize and appreciate the importance of major literary genres, subgenres, and periods.
4. Increasing in-depth Knowledge of the Core Areas of the Subject.
5. Train students for careers and advanced studies in a wide range of English, Public Relations, or Communications fields.

### **Course Outcomes:**

Specific learning outcomes for English courses include the following:

1. Writing skills and process: Students will be able to write effectively for a variety of professional and social settings. They will practice writing as a process of motivated inquiry, engaging other writers' ideas as they explore and develop their own.
2. Critical Approaches: Students will express their own ideas as informed opinions that are in dialogue with a larger community of interpreters, and understand how their own approach compares to the variety of critical and theoretical approaches.
3. Oral communication skills: Students will be able to prepare, organize, and deliver an engaging oral presentation in English.

### **Department of Economics:**

1. As the undergraduate course contains the fields of elementary microeconomics, macroeconomics, basic statistics and mathematical economics students are well equipped with the knowledge based on Economic principles including Consumer's behaviour, Producer's behaviour, Market structure. Students are familiar with the tools of Statistics and Mathematical Economics.
2. Economics graduates are familiar with the knowledge of product market, factor market, general equilibrium and welfare economics. They should have the sound knowledge about the market with asymmetric information. They are able to understand the concept of probability, sampling and hypothesis testing and basic concept of econometrics. They should have the basic knowledge on computer operating system and basic statistical software application. Based on statistics and statistical software student would be able to investigate and prepare project report.
3. Economics graduates are familiar with the knowledge of international trade and its theories. They are able to understand the concept of public finance, revenue collection in terms of taxation and its principles and incidences, forms of business enterprises. They should have the basic knowledge on development, growth, models of development, contribution of education, health, nutrition in economic development, rural development

and entrepreneurship development and sustainable development. Students are able to develop ideas of basic features of Indian Economy and various economic problem in respect of structural change, income inequality, poverty, unemployment, population, infrastructure, balance of payment, financial sector reform

**Course Outcome:**

1. To get preliminary idea of economic theory.
2. To study the behaviour of Indian economy.
3. To determine economic variables including inflation, unemployment, poverty, Gross Domestic Product, Balance of payment using statistical methods.
4. To understand the behaviour of consumer and producer.
5. To understand the theories of exchange among rational economic agents in variant market structure.
6. To understand macroeconomic policies including fiscal and monetary policies.
7. To understand economic growth and development.
8. To look into gender related issues in contemporary India.

**Department of History:**

**Programme Outcomes:**

1. Study to familiarize students with the broad socio-economic and political developments in the Indian subcontinents from the Harappan Civilization till the 13<sup>th</sup> century A.D,
2. Study the main trends and developments in India during the medieval period.
3. Study to introduce the students to the main trends and developments in India from the 18<sup>th</sup> – 20<sup>th</sup> Century (1757 – 1947).
4. Study of Historiography is to introduce the students to the basic concept of history writing;
5. Study of the major development from 15<sup>th</sup> century to World War II
6. To introduce the students to the major political, social, economic and scientific development in the contemporary world.
7. To introduce the students with the beginning and growth of modernization in South East Asia, and North East India.

**Course Outcomes:**

1. Survey of sources of Ancient Indian History; The emergence of Vedic culture (Society, economy, polity and religion as reflected in the Rig Veda and the later Vedas). Mauryan empire: society, economy, polity and art, Ashoka's Dhamma, Sangam age. Gupta and post Gupta period (Art, architecture, sculpture, painting, literature and religion). Harshavardhana; Tripartite struggle for supremacy (Gurjara-Pratiharas, Palas and Rashtrakutas). South India art and architecture' cholas administration.
2. Medieval India -Survey of sources of medieval Indian history, Arab invasion of Sind; the Delhi Sultanate and The Mughal Empire; modern India; Rise of regional powers and policies of colonial expansions; British commercial policy and de-industrialisation, western education under the company and its impact and Renaissance in Modern India, participation of women in reform movements; Resistance to colonial rule, revolt of 1857, National movement, rise of economic nationalism. Partition of Bengal and Muslim league; Swaraj to complete independence and role of Gandhi in the national movement;

major trends in historiography from the classical age to the twentieth century; United Nations Organisation (UNO), North Atlantic Treaty Organisation (NATO), Petroleum Exporting Countries (OPEC), Organisation of African Unity (OAU) and Non-Aligned Movement (NAM). Traditional China, Birth of the republic of China, Chinese Community Party (CCP), Traditional Japan, Sino-Japanese relations, Anglo-Japanese alliance, Russo-Japanese War and Japan and World War I.

### **Specific Outcomes:**

Sound Knowledge of different Historical Periods: In each semester history are devoted to the study of particular Historical phase in the historical in the events along with the study of a few major works by some master Historians of that period. These not only help the students to understand a historical period better, but also reduce the load of study in the concerned area. While pursuing Honours course of studies in History it is mandatory that a student develops proper knowledge of the historical events. In this sphere also the present syllabus appears to be illuminating, as it's provides the students with standard and upto date knowledge of historical events, impact, war and history, result. The students may acquire knowledge of the historical events of the Ancient, Medieval, Modern and European history in new aspects. Development of the Historical Perspectives: The current syllabus is well chosen to represent different events from different angles. They are not only meant to make the students familiar with the dominant events of different ages, but also to open out new perspectives, the student may acquire a knowledge of the changing nature of politics or kingdoms of the changing times.

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

#### **Program Specific Outcomes:**

1. Enables the students to grasp the knowledge of political ideals and social & political philosophy, fosters knowledge about constitutionalism and comparative constitutional system.
2. Learns about the politics of India along with constitutional structures and institutions. Enriches the knowledge of students about western political thinkers of the ancient and medieval period.
3. Efforts are being made to appraise the global and regional politics along with the inter - state relationship. They are acquainted with the Indian political thought and movement from ancient to the medieval period. Become aware of the sociological and political issues including institutions and process. They are taught about the organization and theories of public administration with their application in India.

#### **Course Outcome:**

- Familiarity with different approaches to the study of politics and an ability to apply these to contemporary collective and political problems, and political behaviour.
- An ability to formulate and construct logical arguments about political phenomena and an ability to evaluate these through empirical and theoretical methods.
- An understanding of how political institutions emerge, how they operate, how they interact with their external environment, and how they shape individual and collective behavioural knowledge of basic factual information about politics within an area of specialization including political behaviour, comparative politics, international relations, political theory and methodology.

- Comprehend the basic structures and processes of government systems and theoretical underpinnings.
- Analyze political problems, arguments, information, and/or theories.
- Apply methods appropriate for accumulating and interpreting data applicable to the discipline of political science.

## **Department of Commerce**

### **Programme Outcomes:**

The course is designed by the affiliating university to provide students with a wide range of managerial skills and understanding in streams like finance, accounting, taxation and management. A degree in Bachelor of Commerce opens up innumerable career options and opportunities to the aspiring managers both in India and abroad. It also prepares one to start a business of his/her own in the capacity of an entrepreneur.

This program could provide well trained professionals for the Industries, Banking Sectors, Insurance Companies, Financing companies, Transport agencies, etc., to meet the well trained manpower requirements. The graduates will get hands on experience in various aspects acquiring skills for Retail Marketing Manager, Sale Manager, over all administration abilities of the Company and other business houses.

The primary objective of the course is to enable every student to cope up with the latest developments in contemporary, national and global level through effective transaction of the curricular and co curricular aspects of commerce education. The College motivates molds and prepares the students for positions of leadership in business organizations at the local, national and international levels.

### **Specific Outcomes**

It thus appears difficult to measure Programme Specific Outcome on definite terms. Besides, the University itself is yet to provide concrete Programme Specific Outcomes to its affiliated colleges. However, our esteemed teacher of the Department of Commerce ponders over the current syllabus and tried to chalk out some specific outcomes of the course. The Specific Outcomes may be listed as follows:

- After completing his/her study in the College (Department of Commerce) students would gain a through grounding in the fundamentals of Commerce.
- The Commence focused curriculum offers a number of specialization and practical exposures which would equip the student to face the modern day challenges in Commerce and Business.
- The all inclusive outlook of the course offer a number of value-based and job oriented courses ensures that students are trained and up to date about present scenario.
- Student will be able to demonstrate the progress learning of various tax issue and tax reforms related to individual and they will able to demonstrate knowledge in setting up a computerized set of Accounting Books.
- Student will demonstrate progressive affective domain development of values, the role of Accounting in society and business.
- Student will learn relevant Financial Accounting career skills, applying both Quantitative and Qualitative Knowledge to their future career in business.
- Student will be able to prove proficiency with the ability to engage in competitive exams like Chattered Accountant, Company Secretary and other courses.
- Student will be able to recognize features and roles of businessmen, entrepreneur, managers, consultant which will help learners to process and other soft skills and to react aptly when confronted with critical decision making.

## **Course Outcomes**

### **Financial Accounting:**

This course intends to develop conceptual understanding of fundamentals of financial Accounting system and to impart skills in accounting for various kinds of business transactions. Students are enabled to prepare financial statements in accordance with appropriate standards

and interpret the business implications of financial statements. They become able to prepare accounting information for planning and control and for the evaluation of finance.

### **Business Organization and Management**

Management students will develop an awareness of their own values, strengths, and passions through self-reflection. They will learn to become leaders by understanding how to influence others and also will develop a capacity to generate novel ideas and put them into practice. Develop executives with the capability of integrating knowledge of core business functions and applying in complex, ambiguous and unfamiliar management situations. Students are developed with the capability to lead teams as well as be effective team members and who can work and communicate effectively with diverse team members to identify and solve problems and make responsible recommendations.

### **Fundamentals of Business Communication**

To impart knowledge about basic communication to enable the students to think, observe and express effectively in this competitive world. To develop the ability of the students to communicate clearly and correctly in English and regional languages on the matters related with business operation with emphases on quality of presentation. To help the students to understand various aspects of business and to develop communication skills and overall personality development of the students

### **Corporate Accounting:**

This course aims to enlighten the students on the accounting procedures followed by the Companies. To enable the students to be in conformity with the provision of the Companies Act while dealing on Corporate Accounting and become experts in corporate account management like liquidation, holding account, amalgamation, absorption and external reconstruction etc. They become familiar about accounts of insurance companies, banking. To give an exposure to the students about company final accounts. The contents of 'Corporate Accounting' have been designed to impart basic knowledge of various aspects of accounting of corporate world.

### **Indian Contract Act:**

The basic objective of this course is to provide knowledge about Indian Contract Act.

### **Cost Accounting:**

To keep the students conversant with the ever – enlarging frontiers of Cost Accounting knowledge and techniques. The students understand clearly how to reduce and control the cost during the course of production because cost is a vital aspect in the modern business. To provide knowledge base about the ascertainment of the profitability of each of the products and advised the management to maximize its profits.

### **Auditing:**

This course enables the student to be well versed in the fundamental concepts of Auditing. This course gives the knowledge of examines the principles and practices of internal and external auditing. The students can capable to understand the auditing as a component of recurrent and strategic activities, risk assessment, internal control, systems evaluation, forensic accountability, and contemporary audit issues and challenges

## **Indian Partnership Act**

To equip the students with the basic concept of Indian Partnership Act and latest judgments made from time to time and to make student understand the concept and practices of partnerships and be clear about the Act. Students clearly understand the 'principal - agent relationship' among the partners. They are enabled to differentiate between partnership and other various forms of organization.

### **Public Finance:**

The goal is to develop students' analytical and consulting skills in the area of public finance. The course is targeted to those students whose major is in public administration, business government relations, or management in the service industry (education, health care, culture, etc.). To introduce students to the public sector reform with focus on public finance issues. This course is aimed at students who are interested in fiscal policy including tax and expenditure law and policy concerning how to fund government effectively. It examines the key challenges of fiscal policy in achieving sufficient revenues, economic prosperity and development and in addressing social justice and inequality in a context of globalization. The course provides an introduction to public finance law and policy; tax policy principles; and tax reform and law design principles.

### **Department of Khasi:**

#### **Programme Outcomes:**

Teaching – learning process is delivered through lectures, group-work, workshops, seminars, guided reading, etc. Considerable attention is given to methods in teaching - learning and assessment such as sessional examination, class tests, group discussions, discussion of previous year question papers, assignments and project works. Tutorial classes and remedial coaching classes are also conducts to cover up the loss classes as well as to help slow learners improving performance in the university examinations.

The method of teaching is not static, but continually evolves and changes with technological as well as pedagogical developments, including developments in the use of information technology and other media. Further, study tour is organized to familiarize students with the knowledge they have acquired and taught in the class.

Departmental meetings were conducted to share views and opinions and to assess the student's understanding of the subject/topics being taught in the class. Apart from academic activities, the faculty members are actively involved in extracurricular activities of the College.

It also collaborates with other agencies and various departments of the College to organize and participate in seminars, talks, etc. Eminent literary personalities were invited to deliver lecture and interact with the students and teachers.

#### **Specific Outcomes:**

The Department has two main streams – Khasi Modern Indian Language (Compulsory) and Khasi Second Language (Elective). The Khasi honours subject includes 8 (Eight) papers and the curriculum is most comprehensive, encompassing Khasi culture, History of Khasi literature, Khasi grammar which was studied in the wider context of linguistics and almost all the literary genres like Drama, Fiction, Poetry and Khasi literature in translation. The Department has emerged as a training ground for in-depth study and reference work of different authors.

## POs, PSOs and COs of B. Sc.(MPC&MPCS):

**Programme Outcomes** The primary objective of the department is to impart quality education in the subject of Physics as a basic science and its applied branches to the students from rural Telangana with very minimum fees.

To provide quality education in a branch of Physics i.e Mathematics with different specializations. To facilitate higher education & research in physics.

To provide quality education offering skill based programs and motivate the students for self-employment in applied branches of Physics.

To inculcate the value-based education and entrepreneurial skills among the students. to inculcate the spirit of resource conservation and love for nature.

To provides opportunities for professional and personal development through curricular and co- curricular activities.

### Programme Specific Outcomes:

1. The specific learning goals for Thermal Physics and Statistical Mechanics: the course makes the students able to understand the basic physics of heat and temperature and their relation with energy, work, radiation and matter.
2. The students learn how laws of thermodynamics are used in a heat engine to transform heat into work.

Objectives of our Department are as follows:

- Develop the ability of the students to conduct, observe, analyzes and report an experiment
- Make the student aware of broad spectrum of physics courses Emphasize the role of physics in life and other discipline
- Provide the students with the current modern techniques in physics
- Make the students aware of opportunities in higher education and employability with physics as one of the core subjects.

### Course Outcomes:

- Introduction to mathematical methods physicists often use, including differential calculus, the operator Del-Gradient, Divergence, curl, integral calculus, matrices and curvilinear coordinates.
- Learn the fundamentals of harmonic oscillator model, including damped and forced oscillators and grasp the significance of terms like quality factor and damping coefficient.
- Learns the basic of potentials and fields, central forces and kepler's laws. have a gained elaborated knowledge about electrostatics and laws governing the charge distribution.



- Students solve complex problems involving linear electrical networks employing the symmetry concepts together with various network theorems.
- Students will demonstrate an understanding of core **knowledge** in physics, including the major premises of **classical mechanics**, E&M and **Modern Physics**.
- Students will demonstrate written and oral **communication skills** in communicating physics-related topics. a general idea about what is science, what is scientific temper, history of science and scientific revolution.
- Learn how to draw the structure of bipolar junction transistor and gain Knowledge on the operation of each device in terms of junction bias voltage and charge carrier movement. Identify and explain the various current components in a transistor.
- Gain knowledge on the concepts of the amplifier circuit for given specification and analyze them to discuss oscillator principles, oscillator types, and frequency stability as it relates to its operation Modulation techniques.
- Understand the intuitive ideas of the Quantum physics and Nuclear physics.
- Derive Schrodinger time dependent and time independent wave equations
- To understand dual nature of matter

## **COURSE OUTCOMES**

<b>Department of Computer Science</b>			
<b>BCOM (Comp.)Semester I</b>			
<b>Semester -I</b>			
<b>Course Code</b>	<b>Course Name</b>	<b>Credits</b>	<b>Course Outcomes</b>
BS106	Programming in 'C'	5	
			• Write a maintainable C program for a given algorithm.
			• Trace the given C program manually.
			• Write C program for simple applications of real life using structures and files.
			• Explain role of Operating system in computer system and applications of computer networks.
			• Design an algorithmic solution for a given problem
			• The students will be able to enhance their analyzing and problem solving skills and use the same for writing programs in C.
<b>Semester-II</b>			
BS206	Programming in C++	5	
			• Explain how an existing C++ program works.
			• Discover errors in a C++ program and describe how to fix them.
			• Critique a C++ program and describe ways to improve it.
			• Analyze a problem and construct a C++ program that solves it.
			• Choose and apply the required Linux commands to develop C++ programs in a command-line environment.
<b>Semester -III</b>			
BS306	Data Structures	5	
			• Ability to analyze algorithms and algorithm correctness.
			• Ability to summarize searching and sorting techniques.
			• Ability to describe stack, queue and linked list operation.

			<ul style="list-style-type: none"> <li>• Ability to have knowledge of tree and graphs concepts.</li> </ul>
<b>Semester-IV</b>			
BS406	Database Management Systems	5	<ul style="list-style-type: none"> <li>• Describe the fundamental elements of relational database management systems.</li> </ul>
			<ul style="list-style-type: none"> <li>• Improve the database design by normalization.</li> </ul>
			<ul style="list-style-type: none"> <li>• Design ER-models to represent simple database application scenarios.</li> </ul>
			<ul style="list-style-type: none"> <li>• Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.</li> </ul>
			<ul style="list-style-type: none"> <li>• Familiar with basic database storage structures and access techniques: file and page organizations,</li> </ul>
			<ul style="list-style-type: none"> <li>Indexing methods including B tree, and hashing.</li> </ul>
<b>Semester -V</b>			
BS505	Programming in Java	4	<ul style="list-style-type: none"> <li>• Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs.</li> </ul>
			<ul style="list-style-type: none"> <li>• Read and make elementary modifications to Java programs that solve real-world problems.</li> </ul>
			<ul style="list-style-type: none"> <li>• Validate input in a Java program.</li> </ul>
			<ul style="list-style-type: none"> <li>• Identify and fix defects and common security issues in code.</li> </ul>
			<ul style="list-style-type: none"> <li>• Document a Java program using Javadoc.</li> </ul>
			<ul style="list-style-type: none"> <li>• Use a version control system to track source code in a project.</li> </ul>
<b>Semester-V</b>			
			<ul style="list-style-type: none"> <li>• Learn the basic concepts of operating systems. and about process management</li> </ul>
			<ul style="list-style-type: none"> <li>• Apply different optimization techniques for the improvement of system performance</li> </ul>
			<ul style="list-style-type: none"> <li>• Discuss various protection and security aspects.</li> </ul>
			<ul style="list-style-type: none"> <li>• Apply different deadlock prevention techniques</li> </ul>
			<ul style="list-style-type: none"> <li>• Learn and apply different memory management techniques</li> </ul>
			<ul style="list-style-type: none"> <li>• Explain the objectives and functions of modern operating systems</li> </ul>

<b>Semester -VI</b>			
			<ul style="list-style-type: none"> <li>• Independently understand basic computer network technology.</li> </ul>
			<ul style="list-style-type: none"> <li>• Understand and explain Data Communications System and its components</li> </ul>
			<ul style="list-style-type: none"> <li>• Identify the different types of network topologies and protocols.</li> </ul>
			<ul style="list-style-type: none"> <li>• Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer.</li> </ul>
			<ul style="list-style-type: none"> <li>• Identify the different types of network devices and their functions within a network.</li> </ul>
			<ul style="list-style-type: none"> <li>• Understand and building the skills of subletting and routing mechanisms.</li> </ul>
<b>Semester -VI</b>			
			<ul style="list-style-type: none"> <li>• Students are able to develop a dynamic webpage by the use of java script</li> </ul>
			<ul style="list-style-type: none"> <li>• Students will be able to connect a java program to a DBMS and perform insert</li> </ul>
			<ul style="list-style-type: none"> <li>• Students will be able to write a well formed / valid XML document DHTML.</li> </ul>
			<ul style="list-style-type: none"> <li>• Students will be able to write a server side java application called Servlet to catch update and delete operations on DBMS table.</li> </ul>
			<ul style="list-style-type: none"> <li>• Students will be able to write a server side java application called JSP to catch form data sent from client,</li> </ul>
			process it and store it on database
<b>BCOM (Comp.)</b>			
<b>Semester -I</b>			
			<ul style="list-style-type: none"> <li>• Understand basic concepts and terminology of information technology.</li> </ul>
			<ul style="list-style-type: none"> <li>• Have a basic understanding of personal computer.</li> </ul>
			<ul style="list-style-type: none"> <li>• Acquire knowledge about generation of computers and types of computers.</li> </ul>

			<ul style="list-style-type: none"> <li>• Know about hardware/software methods and tools.</li> <li>• Know about different versions in windows operating system.</li> </ul>
<b>Semester -II</b>			
BCC207	Management Information System	4	<ul style="list-style-type: none"> <li>• Define an IT infrastructure and describe its components.</li> <li>• Have the knowledge of the core activities in the systems development process.</li> <li>• Acquire the knowledge of different types of management information systems.</li> <li>• Understand the processes of developing and implementing information systems.</li> <li>• Be familiar with the ethical, social, and security issues of information systems.</li> </ul>
<b>Semester -III</b>			
BCC307	Programming with 'C'	4	<ul style="list-style-type: none"> <li>• Understanding concept on structural Programming language, Pseudo code And Algorithm.</li> <li>• Ability to work with textual information, data types, characters and strings.</li> <li>• Ability to work with Looping and Branching statements practically.</li> <li>• Ability to work with expressions and type casting.</li> <li>• Ability to work with arrays and strings of complex objects</li> </ul>
<b>Semester -IV</b>			
BCC407	Object Oriented Programming with C++	5	<ul style="list-style-type: none"> <li>• Understand the difference between the top-down and bottom-up approach</li> <li>• Apply the concepts of object-oriented programming</li> <li>• Use features of C++ like type conversion, inheritance, polymorphism, I/O streams and files to develop programs for real life problems.</li> </ul>

			<ul style="list-style-type: none"> <li>• Develop the applications using object oriented programming with C++.</li> <li>• Use standard template library for faster development.</li> </ul>
<b>Semester -V</b>			
BCC506	Excel Foundation	4	<ul style="list-style-type: none"> <li>• Examine spreadsheet concepts and explore the Microsoft Office Excel environment.</li> <li>Enter and edit data, Format data and cells.</li> <li>• Construct formulas, including the use of built-in functions, and relative and absolute references.</li> <li>• Summarize data with data analysis, PivotTables, and Pivot Charts.</li> <li>• Create and modify charts, Preview and print worksheets.</li> <li>• Increase productivity with macros, templates, and custom toolbars and menus.</li> <li>• Use the Excel online Help feature.</li> </ul>
<b>Semester -V</b>			
BCC508(a)	Web Technology	5	<ul style="list-style-type: none"> <li>• Analyze a web page and identify its elements and attributes</li> <li>• Create web pages using XHTML and Cascading Styles sheets.</li> <li>• Build dynamic web pages using JavaScript (client side programming).</li> <li>• Make the web pages more dynamic and interactive.</li> <li>• Create XML documents and XML Schema</li> <li>• Build web applications using PHP.</li> </ul>
<b>Semester -VI</b>			
BCC607(a)	E-Commerce	5	<ul style="list-style-type: none"> <li>• Understand the fundamental and importance of E-commerce</li> <li>• Gain knowledge of different types in E-commerce: C2C,C2B,B2C,B2B,G2C</li> <li>• Analyze the impact of E-commerce on business models and strategy</li> <li>• Learn about the infrastructure for E-commerce</li> <li>• Learn the key features of Internet, Intranets, Extranets and web technology and how they relate to each other.</li> </ul>

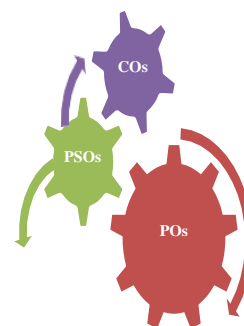
**Semester -VI**

BCC608(a)	Relational Database Management Systems	5	<ul style="list-style-type: none"><li>• Demonstrate an understanding of the elementary &amp; advanced features of DBMS &amp; RDBMS</li><li>• Describe the fundamental elements of relational database management systems</li><li>• Design ER-models to represent simple database application scenarios</li><li>• Convert the ER-model to relational tables, populate relational database and formulate SQL queries on data.</li><li>• Improve the database design by normalization.</li></ul>
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## Student Performance and Learning Outcomes

The Program Outcomes (POs), Program Specific Outcomes (PSOs) and the Course Outcomes (COs), of all the programs offered by the institution are well communicated to the teachers before beginning of the every academic year in the form of manuals or handouts by the IQAC and Academic Coordinator and the same will be communicated to the students by the concerned teachers in their classrooms.

The detailed Program Outcomes, Program Specific Outcomes and Course Outcomes are placed on the college website and are made available to all the stake holders such as teachers, students, parents and alumni. The relevance of the COs will be discussed by the faculty with the students and the feedback on COs is obtained from the students.



Program-Specific Outcomes of all the departments are highlighted through career options open to students after completion of the programs and the achievements of the alumnae are also highlighted.

### 2.6.1 POs, PSOs and COs of B. Sc. (BZC):

Programmed Outcomes the primary objective of the department is to impart quality education in the subject of Zoology as a basic science and its applied branches to the students from rural Telangana with very minimum fees.

To provide quality education in a branch of Biological sciences i.e. Zoology with different specializations. To facilitate Higher education & research in zoology.



To provide quality education offering skill based programs and motivate the students for self-employment in applied branches of Zoology.

To inculcate the value-based education and entrepreneurial skills among the students. To inculcate the spirit of resource conservation and love for nature.

To conduct field studies and different projects of local and global interests.

To provides opportunities for professional and personal development through curricular and co- curricular activities.

Provide consultancy and organize extension activities.

### Programmed Specific Outcomes:

1. The specific learning goals for General Zoology are to provide students with a working knowledge of fundamental principles in zoology that will provide a foundation for their later advanced course work in more specific biological subjects.
2. As General Zoology is a basic course, students will become familiar with animal classification schemes and associated taxonomic group diagnostic characteristics as well as developing an understanding of and ability to apply basic zoological principles.
3. The laboratory and lecture sections of the course are highly integrated and directed toward teaching students the principles of animal evolution, classification, form and function.

### Course Outcomes:

Students will be able to identify and define an invertebrate.

Students will be able to classify animals as an invertebrate.

The larger objective of ecology is to understand the nature of environmental influences on individual Organisms, their populations, and

communities, on echoscopes and ultimately at the level of the biosphere. If ecologists can achieve an understanding of these relationships, they will be well placed to contribute to the development of systems by which humans could sustainably use ecological resources.

Motivating the farmers to plant high yielding mulberry varieties to increase income and productivity- Imparting training in mulberry cultivation, silkworm rearing and silk reeling.

“To provide education on Bee improvement and awareness to the public of the values of the native Irish honey bee.”

To provide information as to where local improvement groups are established. To provide information about ongoing events.

Developing DNA - based diagnostics and genetically engineered vaccines for animals, Studying animal genomics and its varied applications.

To undertake a laboratory or fieldwork project on aspects relevant to research on topics of aquatic and marine Biology.