



S.T. Education Society & Co-Op. Education Society Ltd.'s
Affiliated To S.N.D.T. Women's University Mumbai
Sr.Arts Mahila Mahavidyalaya,
Shahada, Dist - Nandurbar
(NAAC Re-Accredited Grade – B CGPA 2.07)

Dr. Sopan B. Borate
(MA. Psychology, Ph.D.)
Principal

Phone No:- 02565-223532
College Code– 070
artsshahada070@gmail.com

Shri. M.F. Patil
(M.Sc. Agri.)
Chairman

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Bachelor of Computer Application (B.C.A.)

Sem. I BUSINESS AND TECHNICAL COMMUNICATION SKILLS : 1101

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
- PO4: To identify and define problems.
- PO5: Possess strong foundation for their higher studies.
- PO6: Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
- PSO2: To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Students will understand and know how to follow the stages of the writing process (prewriting/writing/rewriting) and apply them to technical and workplace writing tasks.
- Students will be able to produce a set of documents related to technology and writing in the workplace and will have improved their ability to write clearly and accurately.
- Students will understand the basic components of definitions, descriptions, process explanations, and other common forms of technical writing.
- Students will be familiar with basic technical writing concepts and terms, such as audience analysis, jargon, format, visuals, and presentation.



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-
- Students will be able to read, understand, and interpret material on technology. They will have an appreciation for some of the ideas, issues, and problems involved in writing about technology and in workplace writing.
 - Students will be familiar with basic sources and methods of research and documentation on topics in technology, including on-line research. They will be able to synthesize and integrate material from primary and secondary sources with their own ideas in research papers.



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Bachelor of Computer Application (B.C.A.)

Sem. I PROBLEM SOLVING USING C : 1102

Programme Outcomes (Pos)

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Course Outcomes (COS)

Students will be able

- To develop logic which will help them to create programs in C.
- Demonstrate an understanding of computer programming language concepts.
- Design and develop computer programs, analyze, and interpret the concept of pointers, declarations, initialization, operations on pointers and their usage.
- By learning the basic programming constructs they can easily switch over to any other language in future.
- Develop applications



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Sem. I WEB PROGRAMMING : 1103

Programme Outcomes (Pos)

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Course Outcomes (COS)

- To design web pages using HTML5 language, applying stylish information to web pages using CSS.
- To develop interactive web pages using JavaScript.
- To develop dynamic pages on the web server using PHP language and implement Database Driven Websites.
- Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites
- To develop and implement client-side and server-side scripting language programs



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Bachelor of Computer Application (B.C.A.)

Sem. I COMPUTER FUNDAMENTALS AND OPERATING SYSTEM : 1104

Programme Outcomes (Pos)

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Course Outcomes (COS)

- Learners will be able to describe basic concepts, mechanisms used by operating systems.
- Learners will be able to compare process scheduling algorithms, apply synchronization primitives and evaluate deadlock conditions and to analyze virtual memory management algorithms.



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Sem. I OFFICE AUTOMATION TOOLS: 1105

Programme Outcomes (Pos)

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Course Outcomes (COS)

- On completion, the students would be able to make word documents, spreadsheets, power point presentations using the Microsoft suite of office tools.



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Sem. I PROBLEM SOLVING USING C LAB: 1201

Programme Outcomes (Pos)

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Course Outcomes (COS)

The student would be able

- Read, understand and trace the execution of programs written in C language.
- Write the C code for a given algorithm.
- Implement Programs with pointers and arrays, perform pointer arithmetic, and use the preprocessor.
- Write programs that perform operations using derived data types.
- Implement simple file operations



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Sem. I WEB PROGRAMMING LAB: 1202

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Sem. II ENVIRONMENTAL SCIENCE AND RTI : 2101

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Course Outcomes (COS)

Students will learn to

- Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.
- Understand the practical applicability of the Right to Information Act, 2005



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Sem. II PROGRAMMING METHODOLOGY AND C++ : 2102

Programme Outcomes (Pos)

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Course Outcomes (COS)

Students will learn to

- Describe the object-oriented programming approach in connection with C++
- Apply the concepts of object oriented programming
- Analyze a problem and construct a C++ program that solves it
- Discover errors in a C++ program and describe how to fix them
- Illustrate the process of data file manipulations using C++



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Sem. II DATABASE MANAGEMENT SYSTEM : 2103

Programme Outcomes (Pos)

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Course Outcomes (COS)

- Able to find and understand the Concept Of database approach.
- Able to find and understand database architecture and data modeling, data Normalization.
- Design and draw ER and EER diagram for real life problem.
- Able to find and understand the commands of SQL.
- Able to understand the concept of transaction, concurrency and recovery.



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Sem. II MATHEMATICS-I : 2104

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Course Outcomes (COS)

- Have a better understanding of sets, relations and functions
- Be able to understand Permutation and Combinations, Mathematical induction, Binomial Theorem and Graph Theory.
- Apply logic and construct simple mathematical proofs and solve problems.
- Demonstrate different traversal methods for graph.



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Sem. II PRINCIPLES AND PRACTICE OF ACCOUNTING : 2105

Programme Outcomes (Pos)

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Course Outcomes (COS)

- Students will be able to learn fundamental accounting concepts, Conventions & terminologies.
- Students will be able to describe the importance, functions & objectives of books of entry, subsidiary books, bank reconciliation statement and Final accounts.
- Students will be able to prepare books of entry, subsidiary books, bank reconciliation statement and Final accounts using double entry book keeping.



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Sem. II PROGRAMMING METHODOLOGY AND C++ LAB : 2201

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Course Outcomes (COS)

Students will be able to:

- Create simple programs using classes and objects in C++.
- Implement Object Oriented Programming Concepts in C++.
- Develop applications using stream I/O and file I/O.
- Implement simple graphical user interfaces.
- Implement Object Oriented Programs using templates and exceptional handling



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Sem. II DATABASE MANAGEMENT SYSTEM LAB : 2202

Programme Outcomes (Pos)

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Course Outcomes (COS)

- Design and implement a database schema for a given problem-domain
- Normalize a database
- Populate and query a database using SQL DML/DDL commands.
- Programming PL/SQL including stored procedures, stored functions, cursors, packages.



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Sem. III DATA STRUCTURES : 3101

Programme Outcomes (Pos)

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Course Outcomes (COS)

- Understand basic data structures such as array, linked list, stack, queue, binary tree and graph along with algorithms.
- Ability to analyze algorithm and algorithm correctness.
- Apply searching and sorting techniques.



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Sem. III JAVA PROGRAMMING : 3102

Programme Outcomes (Pos)

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- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- To teach Object-Oriented programming concepts, techniques, and applications using the Java programming language.
- Problem solving skills – to analyze real life problem, find and develop algorithmic steps to solve it and then implement these steps in JAVA.
- Experience with developing and debugging software in Java.
- To develop real life projects using database connectivity with JDBC.



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Chairman

Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Bachelor of Computer Application (B.C.A.)

Sem. III MATHEMATICS-II : 3103

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
- PO4: To identify and define problems.
- PO5: Possess strong foundation for their higher studies.
- PO6: Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
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- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Apply numerical methods to find solutions of algebraic equations using different methods viz. Bisection method, Regula - Falsi, Newton Raphson's, Ramanujan's method, Matrix Inversion and Gauss Elimination.
- Apply Least squares Curve fitting procedures.
- Derive numerical methods for various mathematical operations and tasks such as interpolation, differentiation, integration, the solution of linear and non linear equations and solution of differential equations.



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Bachelor of Computer Application (B.C.A.)

Sem. III COMPUTER ORGANISATION & ARCHITECTURE : 3104

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
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Course Outcomes (COS)

- Understand the architecture and functionality of central processing unit.
- Analyze some of the design issues in terms of speed, technology, cost, performance.
- Learn the concepts of parallel processing, pipelining and inter-processor communication.
- Exemplify the I/O and memory organization.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Bachelor of Computer Application (B.C.A.)

Sem. III DATA STRUCTURES LAB: 3201

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
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Programme Specific Outcomes (PSOs)

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Course Outcomes (COS)

- Select appropriate data structures as applied to specified problem definition.
- Implement operations like traversing, insertion, deletion, searching etc. on data structures.
- Students will be able to implement linear and non - linear data structures.
- Implement appropriate sorting and searching techniques for given problems.



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Sem. III JAVA PROGRAMMING LAB: 3202

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
- PO4: To identify and define problems.
- PO5: Possess strong foundation for their higher studies.
- PO6: Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

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- PSO2: To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Basic knowledge of programming in JAVA.
- Experience with developing and debugging software in Java.
- Implementation of AWT.
- Able to develop real life projects using database connectivity with JDBC.



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Sem. IV PYTHON PROGRAMMING : 4101

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
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- PO5: Possess strong foundation for their higher studies.
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Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
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Course Outcomes (COS)

- Able to apply the principles of python programming.
- Write clear and effective python code.
- Create applications using python programming.
- Implementing database using SQLite.
- Access database using pythonprogramming.
- Develop web applications using python programming.
- Develop and use Web Services using python.



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Sem. IV INTRODUCTION TO MICROPROCESSOR : 4102

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
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Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
- PSO2: To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Understand the architecture and addressing modes of 8085 microprocessor and memory organization and its Interfacing.
- Understand various types of instructions and Instruction Cycled with proper timing diagrams.
- Develop various assembly language programs by using different types if instructions and understand PPL interfacing.
- Understand 8259 interrupt controller IC with its internal organization and single and cascade operation.
- To understand 8086/8088 microprocessor, architecture, instruction set, addressing modes, simple programs, memory organization and interfacing.



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Bachelor of Computer Application (B.C.A.)

Sem. IV COMPUTER NETWORKS : 4103

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
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- PO4: To identify and define problems.
- PO5: Possess strong foundation for their higher studies.
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Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
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- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Distinguish between analog and digital signals and understand their characteristics
- Understand the basic concepts of data communications.
- Understand the purpose of network layered models, network communication using the layered concept, and able to compare and contrast Open System Interconnect (OSI) and the Internet Model.
- Understand basic computer network technology.
- Identify the different types of network topologies and protocols.



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Sem. IV SOFTWARE ENGINEERING : 4104

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
- PO4: To identify and define problems.
- PO5: Possess strong foundation for their higher studies.
- PO6: Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
- PSO2: To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- PSO3: To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Provide the ability to select and apply the knowledge of defined engineering technology activities.
- Able to describe key activities in software development and the role of modeling.
- Able to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
- Able to explain key concepts in software development such as change management, testing and quality.



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Sem. IV PYTHON PROGRAMMING LAB : 4201

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
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Programme Specific Outcomes (PSOs)

- PSO1: To pursue further studies to get specialization in Computer Science and Applications, business administration
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Course Outcomes (COS)

- Will be able to interpret the fundamental Python syntax use Python control flow statements.
- Enable the handling of strings and functions.
- Will be able to create and run Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes

Bachelor of Computer Application (B.C.A.)

Sem. IV INTRODUCTION TO MICROPROCESSOR LAB : 4202

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
- PO2: This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- PO3: Develop various real time applications using latest technologies and programming languages.
- PO4: To identify and define problems.
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Programme Specific Outcomes (PSOs)

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Course Outcomes (COS)

- The student will be familiar with the architecture and Instruction set of Intel 8085 microprocessor
- Will be able to implement assembly level programs.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes
Bachelor of Computer Application (B.C.A.)
Semester-V MOBILE APPLICATION : 5101

Programme Outcomes (Pos)

- PO1: The course teaches the students about the basic concepts of programming languages and its applications
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- PO4: To identify and define problems.
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Programme Specific Outcomes (PSOs)

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- **PSO3:** To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Recognizes mobile development environments...
- Write clear and effective Android code.
- Create Native & Hybrid Mobile applications using Android App Development
- Implementing database using SQLite & Firebase Real-time Database.
- Be exposed to technology and business trends impacting mobile application
- Be competent with designing and developing mobile applications using one application development framework.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes **Bachelor of Computer Application (B.C.A.)**

Sem-V MOBILE (ANDROID) APPLICATION LAB : 5201

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
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- **PO3:** Develop various real time applications using latest technologies and programming languages.
- **PO4:** To identify and define problems.
- **PO5:** Possess strong foundation for their higher studies.
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- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Build and deploy his/ her Android application.
- The candidates get a better understanding of the UI - components, layouts, event handling, and screen orientation.
- Students also develop a working knowledge of the custom UI elements and positioning.
- The candidates may also have an in-depth understanding of broadcast receivers and services.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes
Bachelor of Computer Application (B.C.A.)
Sem.V ARTIFICIAL INTELLIGENCE : 5102

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
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- **PO4:** To identify and define problems.
- **PO5:** Possess strong foundation for their higher studies.
- **PO6:** Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
- **PSO2:** To pursue the career in corporate sector can opt for MBA.
- **PSO3:** To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Students will be able to demonstrate fundamental understanding of the history of artificial intelligence (AI) and its foundations.
- Students will be able to understand the fundamentals of various applications of AI techniques in intelligent agents, expert systems models.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes
Bachelor of Computer Application (B.C.A.)
Sem. V CYBER SECURITY : 5103

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
- **PO2:** This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
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- **PO4:** To identify and define problems.
- **PO5:** Possess strong foundation for their higher studies.
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Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
- **PSO2:** To pursue the career in corporate sector can opt for MBA.
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- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

The student will

- Understand the basic security principals
- Understand the concepts of data confidentiality security concern and its solution through cryptography
- Be able to verify identity through various authentication mechanisms
- Learn about Safeguarding the network at the network layer
- Learn about attacks on the networks and security related services



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes **Bachelor of Computer Application (B.C.A.)**

Sem. V MULTIMEDIA AND APPLICATION: 5104

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
- **PO2:** This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- **PO3:** Develop various real time applications using latest technologies and programming languages.
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- **PO6:** Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
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Course Outcomes (COS)

- Learner will Developed understanding of technical aspect of Multimedia Systems.
- Learner will understand various file formats for images, video, text media, color models and software tools.
- Learner will develop various Multimedia Systems applicable in real time with action script.
- Learner will design interactive multimedia software program multimedia data and be able to design and implement media applications.
- Learner will understand different graphics algorithm, Display devices, Video signal formats and TV broadcasting system.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes **Bachelor of Computer Application (B.C.A.)**

Sem. V MANAGEMENT INFORMATION SYSTEM: 5105

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
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- **PO4:** To identify and define problems.
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- **PO6:** Become employable in various IT companies and government jobs.

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- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Enable Learners to describe the role of information technology and information systems in business and analyze how information technology impacts a firm.
- It is help learners to interpret how to use information technology to solve business problems.
- Analyze the relationship between information systems and organizations.
- Describe how managers make decisions in organizations.
- Evaluate the role of information systems in supporting various levels of business strategy.



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Affiliated To S.N.D.T. Women's University Mumbai
Sr.Arts Mahila Mahavidyalaya,
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(NAAC Re-Accredited Grade – B CGPA 2.07)

Dr. Sopan B. Borate
(MA. Psychology, Ph.D.)
Principal

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Shri. M.F. Patil
(M.Sc. Agri.)
Chairman

Programme Outcomes, Programme Specific Outcomes and Course Outcomes **Bachelor of Computer Application (B.C.A.)**

Sem. VI INTELLECTUAL PROPERTY RIGHTS, PATENTS AND CYBER LAWS : 6101

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
- **PO2:** This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- **PO3:** Develop various real time applications using latest technologies and programming languages.
- **PO4:** To identify and define problems.
- **PO5:** Possess strong foundation for their higher studies.
- **PO6:** Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
- **PSO2:** To pursue the career in corporate sector can opt for MBA.
- **PSO3:** To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Students will learn how to protect their creative work using Intellectual Property Rights.
- Identify the use of Intellectual Property.
- An ability to use Intellectual property to protect their work.
- Understand the registration process of Copyright, Patent and Trademark



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes **Bachelor of Computer Application (B.C.A.)**

Sem. VI DATA WAREHOUSING AND DATA MINING : 6102

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
- **PO2:** This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- **PO3:** Develop various real time applications using latest technologies and programming languages.
- **PO4:** To identify and define problems.
- **PO5:** Possess strong foundation for their higher studies.
- **PO6:** Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
- **PSO2:** To pursue the career in corporate sector can opt for MBA.
- **PSO3:** To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Understand the functionality of the various data mining and data warehousing component
- Appreciate the strengths and limitations of various data mining and data warehousing models
- Explain the analyzing techniques of various data
- Describe different methodologies used in data mining and data ware housing.
- Compare different approaches of data ware housing and data mining with various technologies.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes
Bachelor of Computer Application (B.C.A.)
Sem. VI INTERNET OF THINGS (IOT) : 6103

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
- **PO2:** This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- **PO3:** Develop various real time applications using latest technologies and programming languages.
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- **PO6:** Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
- **PSO2:** To pursue the career in corporate sector can opt for MBA.
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- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Enable learners to understand System On Chip Architectures.
- Enable to learn Arduino Open Source Platform with hardware and installation.
- To develop physical interfaces and electronics of Raspberry Pi and program them using hand-on training.



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Programme Outcomes, Programme Specific Outcomes and Course Outcomes **Bachelor of Computer Application (B.C.A.)**

Sem. VI BIG DATA AND CLOUD COMPUTING : 6104

Programme Outcomes (Pos)

- **PO1:** The course teaches the students about the basic concepts of programming languages and its applications
- **PO2:** This degree course is best option which encompasses the entry point for all streams students to make a career in computers.
- **PO3:** Develop various real time applications using latest technologies and programming languages.
- **PO4:** To identify and define problems.
- **PO5:** Possess strong foundation for their higher studies.
- **PO6:** Become employable in various IT companies and government jobs.

Programme Specific Outcomes (PSOs)

- **PSO1:** To pursue further studies to get specialization in Computer Science and Applications, business administration
- **PSO2:** To pursue the career in corporate sector can opt for MBA.
- **PSO3:** To Work in the IT sector as programmer, system engineer, software tester, junior programmer, web developer, system administrator, software developer etc.
- **PSO4:** To work in public sector undertakings and Government organizations and For teaching in Schools and Colleges.

Course Outcomes (COS)

- Learners will be able to articulate the main concepts, key technologies, strengths, and limitations of cloud computing.
- Learners will be able to apply form state-of-the-art cloud computing using open source technology.
- Learner will be able to identify the architecture and infrastructure of cloud computing, including
- SaaS, PaaS, IaaS, public cloud, private cloud, hybrid cloud, etc.
- Learner will be able to explain the core issues of cloud computing such as security, privacy, and interoperability.