

P.D.E.A'S
Annasaheb Magar Mahavidyalaya, Hadapsar, Pune-28
B.B.A. (Computer Applications)
Program Outcomes (Pos)

1. The objectives of the Program shall be to provide sound academic base from which a career in Computer applications can be developed.
2. To develop skills of the students so that they can design and develop the applications using programming Languages.
3. Conceptual grounding in computer usage as well as its practical business applications will be provided.
4. To inculcate quality software development practices. To create awareness about process and product Standards.
5. To train students in professional skills related to Software Industry.
6. To prepare necessary knowledge base for research and development in Computer Technology.
7. To help students build a successful career in Computer Application / Information Technology.

Sr. No.	PO Number	Contents
1	Po1	Develop the career in Computer Application.
2	Po2	Demonstrate Conceptual grounding in computer usage as well as its practical business application will be provided.
3	Po3	Develop the programs in different languages and applications.
4	Po4	Use the knowledge of Software Testing apply it to validate system
5	Po5	Use the knowledge of Networking and apply to hardware configuration
6	Po6	Using different technologies like JAVA, VB, PHP, Dot Net etc and develop applications
7	Po7	To import practical skills and manage database, arrange database using relational Database.
8	Po8	To make industry ready resource.
9	Po9	Design and develop Web and Mobile based computer applications
10	Po10	An ability to gain knowledge on design and control strategy; techniques to secure information and adapt to the fast changing world of information technology needs.
11	Po11	Apply software engineering practices and strategies in software project and development using open source programming environment to deliver a quality product for business success.
12	Po12	Students should be able to apply modern practices and strategies in software project Development using open-ended programming environments to deliver quality product for business success in context with societal needs.

P.D.E.A'S
Annasaheb Magar Mahavidyalaya, Hadapsar, Pune-28
B.B.A. (Computer Applications)

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Business Communication. Subject code: CA-101 Credit -03

Course Outcomes (COs)

On completion of this course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Become adopt to communicate and write effectively.
2	Co2	Developing and delivering effective presentations.
3	Co3	Create awareness among students about Methods and Media of communication.
4	Co4	To understand system and communication and their utility.
5	Co5	Make students familiar with information technology and improve job seeking skills.
6	Co6	To develop proficiency in how to write business letters and other communications in required.

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Principles of Management Subject code: CA-102 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Practice the process of management's four functions: planning, organizing, leading, and controlling.
2	Co2	Evaluate leadership styles to anticipate the consequences of each leadership style.
3	Co3	Understand the working of business organization.
4	Co4	Describe the contributions of Frederick W. Taylor, Mayo and Ducker.
5	Co5	Interpret and design the different forms of organization
6	Co6	Apply the managerial functions in different business setup

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: C programming Subject code: CA-103 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Improve upon a solution to a problem.
2	Co2	Use different data types in a computer program.
3	Co3	To understand the concept of Procedural Programming. Use the 'C' language constructs in the right way
4	Co4	Understand the dynamics of memory by the use of pointers and Structures.
5	Co5	Design programs involving decision structures, loops and Functions. Design, develop and test programs written in 'C'
6	Co6	Analyze a given problem and develop an algorithm to solve the problem

Name of Programme: BBA(CA)
Name of Department: BBA(CA)
Class:- FYBBA(CA)
Name of the Subject: DBMS Subject code: CA-104 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To understand role and importance File Structures and Organization
2	Co2	To develop skills related with Database basic Concepts
3	Co3	To Develop right understanding of various Data models
4	Co4	To Understand the Programming in SQL and Implementation
5	Co5	To Learn about Relational Database Designing.
6	Co6	Understand the concept of data anomalies of un-normalized database, Normalization, normal form etc.

Name of Programme: BBA(CA)
Name of Department: BBA(CA)
Class:- FYBBA(CA)
Name of the Subject: Statistics Subject code: CA-105 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To identify the power of excel spreadsheet in computing summary statistics.
2	Co2	To understand the concept of various measures of central tendency and variation and their importance in business.
3	Co3	To discuss the concept and applications of probability, probability distributions in real life situations.
4	Co4	To understand simulations in business world and decision making.
5	Co5	To develop skills related with basic statistical technique
6	Co6	Develop right understanding regarding regression, correlation and data interpretation

Name of Programme: BBA(CA)
Name of Department: BBA(CA)
Class:- FYBBA(CA)
Name of the Subject: Lab Course based on 103 &104 Subject code: CA-106 Credit-04

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Understanding foundation concepts of information and information processing in computer systems: a matter of information, data Representation, coding systems.
2	Co2	Devise pseudo codes and flowchart for computational problems.
3	Co3	Write, debug and execute simple programs in 'C'.
4	Co4	To develop an ability/skill for creations, manipulation of data in databases through queries
5	Co5	Create database tables in PostgreSQL.
6	Co6	Write and execute simple, nested queries.

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Add-on(PPA) Subject code: CA-107 Credit-02

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Understanding of an algorithm and its definition. Understanding foundation concepts of information and information. Processing in computer systems: a matter of information, data Representation, and coding systems.
2	Co2	Ability to write simple programs in C language by using basic Control structures (conditional, statements, loops, switches, branching, etc.).
3	Co3	Ability to create a programmable model for a problem given. Understanding a function concept and how to deal with function Arguments and parameters.
4	Co4	Ability to use pointers and pointer arithmetic in the simple cases. Basic knowledge of working with Arrays in C language.
5	Co5	Understanding a defensive programming concept. Ability to handle Possible errors during program Execution.
6	Co6	Elementary knowledge of programming code style.

SEM II

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Organizational Behavior & Human Resource Management

Subject code: CA-201

Credit -03

Course Outcomes (COs)

On completion of this course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To define and explain the basic concepts of organizational behaviour and motivation
2	Co2	To explain the essential concepts of organizational conflicts, resolution of conflicts through negotiation, change management and organizational development.
3	Co3	To familiarize the various aspects of HR, to deal effectively with people resourcing and talent management and HR functions in an organization.
4	Co4	To understand the concepts of HRD, its role and importance in the success of organization.
5	Co5	To develop an understanding towards compensation management and industrial relations.
6	Co6	To provide the students to analyse specific strategic human resources demands for future action.

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Financial Accounting Subject code: CA-202 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To help for preparing financial statements in accordance with appropriate standards.
2	Co2	To interpret the business implications of financial statement information.
3	Co3	To Employ critical thinking skills to analyse financial data as well as the effects of differing financial accounting methods on the financial statements.
4	Co4	To effectively define the needs of the various users of accounting data and demonstrate the ability to communicate such data effectively, as well as the ability to provide knowledgeable recommendations.
5	Co5	Acquire the knowledge in accounting, system of maintenance of accounts, journal, ledger, bill of exchange, and account current, average due date and bank reconciliation statement.
6	Co6	Develop the analytical skills in accounting equation, preparation of trial balance and suspense account, normal loss in consignment. Analyzing the reasons for differences between pass book and cash book transactions in the Bank Reconciliation Statement

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Business Mathematics Subject code: CA-203 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Explain the concepts and use equations, formulae, and mathematical expressions and relationships in a variety of contexts
2	Co2	Apply the knowledge in mathematics (algebra, matrices, calculus) in solving business problems
3	Co3	Analyse and demonstrate mathematical skills required in mathematically intensive areas in Economics and business.
4	Co4	Integrate concept in international business concepts with functioning of global trade
5	Co5	Understand the use of equations, formulae, and mathematical expressions and relationships in a variety of contexts.
6	Co6	Demonstrate critical thinking, modelling, and problem-solving skills in a variety of contexts.

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: RDBMS Subject code: CA-204 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To understand concepts of RDBMS, learn about the advantages of RDBMS and different RDBMS products. To know about the relationships between application programs and RDBMS.
2	Co2	To Understand basic building blocks of PL/SQL, Exception Handling, writing functions, Procedures, Triggers and Packages.
3	Co3	To know about the advantages of concurrent execution, the concept of schedule and serializability, properties and states of transaction.
4	Co4	To learn about Deadlock and how it can occur.
5	Co5	To know different types of Failures.
6	Co6	The concept of Locks and its use in Lock based Protocol, to understand the Recovery Techniques.

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Web Technology Subject code: CA-205 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To Study Internet basic and Internet Protocol (HTTP, FTP, IP) and HTTP Request message and HTTP Response message.
2	Co2	To learn Planning and Publishing Website and Designing Effective Navigation

3	Co3	To Understand HTML, List, Table, Frames, Embedding Audio, Video.
4	Co4	To Understand the need for CSS, implement CSS.
5	Co5	To Study Documents Object Model.
6	Co6	To Study Array in JavaScript, learn Events handling in JavaScript's

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Lab Course based on 204 & 205 Subject code: CA-206 Credit-04

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Write, debug and execute Advance programs in 'C'.
2	Co2	Understand various advanced queries execution such as relational constraints, joins, set operations, aggregate functions, trigger views and embedded SQL.
3	Co3	To learn HTML tags and JavaScript Language programming concepts and techniques.
4	Co4	To develop the ability to logically plan and develop web pages.
5	Co5	To learn to write, test, and debug web pages using HTML and JavaScript.

Name of Programme: BBA(CA)

Name of Department: BBA(CA)

Class:- FYBBA(CA)

Name of the Subject: Add-on(Advance C) Subject code: CA-207 Credit-02

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Improve upon a solution to a problem.
2	Co2	Use Structure and union data types in a computer program.
3	Co3	To understand the concept of file programming. Use the 'C' language constructs in the right way
4	Co4	Understand the arrays and vectors.
5	Co5	Design programs involving arrays, pointers and develop and test programs written in 'C'
6	Co6	Analyze a given problem and develop a coding in c programming to solve the problem

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Name of Programme: BBA(CA)
Name of Department: BBA(CA)
Class:- SYBBA(CA) SEM III
Name of the Subject: Digital Marketing Subject code: CA-301 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Understanding basic concepts of E-commerce related to digital Marketing
2	Co2	Identify SWOT analysis and use of various digital marketing tools
3	Co3	To understand Case study and Exercise on various terms
4	Co4	To understand Digital marketing for business purpose
5	Co5	Explaining the SEO optimization
6	Co6	Applying the different models of social marketing to solve the real world problems

Name of Programme: BBA(CA)
Name of Department: BBA(CA)
Class:- SYBBA(CA)
Name of the Subject: Data Structure Subject code: CA-302 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Understand the concept of dynamic memory allocation, data types, algorithms, asymptotic notation, ADTs.
2	Co2	To learn linear data structures – lists, stacks, and queues
3	Co3	To understand sorting, searching
4	Co4	Student should be able to apply Tree and Graph structures
5	Co5	Student should be able to efficiently implement different data structure
6	Co6	To apply Tree and Graph structures

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class: - SYBBA (CA)
Name of the Subject: Software Engineering Subject code: CA-303 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To understand system concepts.
2	Co2	To identify the quality factor of McCall's for Software
3	Co3	To apply the concepts of Software Engineering to design & Development of Software
4	Co4	Distinguish between SDLC & Spiral Model to solve problems
5	Co5	Describe the use of modules and system testing in solving the real world problems
6	Co6	Students can apply the knowledge, techniques, and skills in the development of a software product.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class: - SYBBA (CA)

Name of the Subject: PHP

Subject code: CA-304

Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Understand how server-side programming works on the web.
2	Co2	Identify the PHP Basic Syntax and able to do programming
3	Co3	Understanding POST and GET in form submission. How to receive and Process form submission data.
4	Co4	Reading and writing cookies.
5	Co5	Creating conditional structures and sorting data in arrays
6	Co6	Create a database in phpMyAdmin, Read and process data in a MySQL Database.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class:- SYBBA(CA)

Name of the Subject: Big Data

Subject code: CA-305

Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	The students will be able to identify Big data and its Business Implications
2	CO2	Student understand and able to develop analytical skills in current and developing areas of analysis statistics and machine learning.
3	CO3	Student can be able to identify, develop and apply detailed analytical creative, problem solving skills.
4	CO4	Course provides a comprehensive platform for career development and innovation to the student.
5	CO5	Student able to understand concepts of Regression Analysis with its types
6	CO6	Student able to understand Data manipulation and data visualization

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class:- SYBBA(CA)

Name of the Subject: Lab Course based on 301,304,305

Subject code: CA-306

Credit-04

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	Identify different sorting technique on different types of data.
2	CO2	Distinguish between linear and non-linear data structures using linked list
3	CO3	Implement various kinds of searching and sorting technique and decide when to choose which technique.
4	CO4	write PHP scripts to handle HTML forms
5	CO5	Create PHP programs that use various PHP library functions and that manipulate file and directories
6	CO6	Able to understand R programming, Decision making and loop control structures
7	CO7	Apply the Vector, list, Array and Matrices in R programming
8	CO8	The students will learn practical application for how to implement different data structures to solve the problems.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class:- SYBBA(CA)

Name of the Subject: Environment Awareness

Subject code: CA-307

Credit-02

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	Provide an opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment
2	CO2	To develop conscious towards a cleaner and better managed environment
3	CO3	To reduce dependency on chemicals
4	CO4	To built the models to sustain the environment

SEM IV**Name of Programme: BBA(CA)****Name of Department: BBA(CA)****Class:- SYBBA(CA)****Name of the Subject: Networking Subject code: CA-401 Credit-03****Course Outcomes (COs)****On completion of the course, the students will be able to:**

Sr. No.	CO Number	Contents
1	Co1	To understand various network topologies and Network types
2	Co2	To get information about IP addressing
3	Co3	To understand about guided media such as twisted pair cable, coaxial cable, fiber optic cables.
4	Co4	To Learn about standard Ethernet, fast Ethernet, Gigabit Ethernet, Ten-Gigabit Ethernet.
5	Co5	To study about Hubs, Repeaters, Bridges, Switches, Routers and Gateways.
6	Co6	To get knowledge of cryptography, Plain Text, Cipher Text, Encryption and Decryption

Name of Programme: BBA(CA)**Name of Department: BBA(CA)****Class:- SYBBA(CA)****Name of the Subject: Object Oriented Concepts through CPP Subject code: CA-402 Credit-03****Course Outcomes (COs)****On completion of the course, the students will be able to:**

Sr. No.	CO Number	Contents
1	Co1	To study basic concepts, features, advantages and applications of OOP. And Input and Output Operator, Namespace, Manipulators, Variable, Data types and Keywords in C++.
2	Co2	To study Concepts of Classes and Objects, understand about Access Specifier, Study Data Member and Member Functions, Friend Function and Friend Class.
3	Co3	To understand Concepts of Constructors and Types of Contractors, Dynamic Constructor, multiple constructor in a class,
4	Co4	To learn about different types of Inheritance, and learn about Virtual Base Class, Abstract class, derived class.
5	Co5	To study about Compile time and run time polymorphism, function overloading, operator overloading.
6	Co6	To learn about Unformatted I/O operations and Formatted console I/O operations and different File operations.

Name of Programme: BBA (CA)**Name of Department: BBA (CA)****Class: - SYBBA (CA)****Name of the Subject: Operating System Subject code: CA-403 Credit-03****Course Outcomes (COs)****On completion of the course, the students will be able to:**

Sr. No.	CO Number	Contents
1	Co1	To understand about Operating System, Services provided by OS, Types of OS, Computer system architecture.
2	Co2	To learn about System Structure, Process Management, CPU scheduling.
3	Co3	To study Process Synchronization, Deadlock, Deadlock Prevention and Avoidance, Deadlock Detection.
4	Co4	To learn about Memory Management, Address Binding, Dynamic Loading & Linking,

		Segmentation, Virtual Memory, Page replacement algorithms.
5	Co5	To understand the concept of File System, Access methods, File structure, Free space management.
6	Co6	To learn about I/O System, Application of I/O Interface, Kernel I/O Subsystem, Disk scheduling.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class: - SYBBA (CA)

Name of the Subject: Advance PHP

Subject code: CA-404

Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To Understand OOP's concept of visibility, inheritance and interface and examining classes and Object characteristics.
2	Co2	To learn about processing forms, how to used sticky forms, how to set response headers and server Information.
3	Co3	To understand concept of XML how php work with XML, XML Parser, study documents object model and XML extensions.
4	Co4	To study the AJAX basic concepts and Asynchronous and Asynchronous communication between web client and web server.
5	Co5	To understand model of web services tools and technologies used to unable web services core building block of web services and the basic steps of implementing a web service.
6	Co6	To learn about PHP framework, MVC Architecture, understand Drupal or Joomla.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class: - SYBBA (CA)

Name of the Subject: Project

Subject code: CA-405

Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	Demonstrate a sound technical knowledge of their selected project topic.
2	CO2	Undertake problem identification, formulation and solution
3	CO3	Design system solutions to complex problems utilizing a systems approach.
4	CO4	Demonstrate how to control errors with exception handling
5	CO5	Communicate with Customer to check the requirements.
6	CO6	Demonstrate the knowledge, skills and test to implement the system project.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class: - SYBBA (CA)

Name of the Subject: Lab Course based on 402,404(C++, Adv PHP)

Subject code: CA-406 Credit-04

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	To understand the concept of Object Oriented Programming. Use the 'C++' language constructs in the right way
2	CO2	The students will learn practical application for how to implement different data types, to solve the problems.
3	CO3	Create C++ programs that for Classes and object, data members and function, Static data member and function, Friend function and Friend class.
4	CO4	Te students will learn practical program of C++ for Inheritance, Polymorphism.
5	CO5	Create PHP programs that use various PHP library functions and that manipulate file and directories
6	CO6	Make your application secure by using built-in security features
7	CO7	Create lightweight APIs using PHP web services
8	CO8	Understand and implement object-oriented features of PHP programming

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class: - SYBBA (CA)

Name of the Subject: Add-On (J-Query)

Subject code: CA-407

Credit-02

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Understand the JavaScript language & the Document Object Model.
2	Co2	To study Detect and respond to user actions.
3	Co3	To learn Alter, show, hide and move objects on a web page.

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Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class:- TYBBA(CA) SEM V

Name of the Subject: Cyber Security Subject code: CA-501 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Interpret and forensically investigate security incidents. Develop and implement an incident response strategy.
2	Co2	Implement identity and access management controls
3	Co3	Develop policies and procedures to manage enterprise security risks.
4	Co4	Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities and training.
5	Co5	Design, develop, test and evaluate secure software.
6	Co6	Analyze and resolve security issues in networks and computer systems to secure an IT infrastructure.

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class:- TYBBA(CA)

Name of the Subject: Object oriented Software Engineering Subject code: CA-502 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Compare Different Process Models
2	Co2	Formulate Concepts of Requirements Engineering and Analysis Modeling
3	Co3	To Understand The Fundamental of Objects Oriented Design
4	Co4	Apply Systematic Procedure For Software Design
5	Co5	Find Error with Various Testing Techniques
6	Co6	Evaluate Project Schedule Estimate Project Cost and Effort Required

Name of Programme: BBA (CA)

Name of Department: BBA (CA)

Class:- TYBBA(CA)

Name of the Subject: Core Java Subject code: CA-503 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Define the concepts of Object oriented programming in java
2	Co2	Able to write programs using Java collection API as well as the java standard class library.
3	Co3	Solve the inter-disciplinary applications using concept of inheritance
4	Co4	Apply JDBC to provide a program level interface for communicating with DB using java programming
5	Co5	Develop applets for web applications.
6	Co6	Design GUI based applications

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Python Subject code: CA-504 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Define Python Syntax and semantics and use of Python Flow control
2	Co2	Express proficiency in the handling of strings and function.
3	Co3	Determine the methods to create and manipulate Python program by utilizing the data structure like list, dictionaries, tuple and sets.
4	Co4	Identify the commonly used operation involving file system and regular expression.
5	Co5	Explain the object oriented programming concept such as encapsulation, Inheritance and Polymorphism as used in Python.
6	Co6	Develop application using built-in data structures “lists” and “dictionary”.

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Project Subject code: CA-505 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Students can express their ideas clearly and effectively, both verbally and in written form
2	Co2	Students can work as a team to achieve common goals.
3	Co3	Students are able to make links across different areas of knowledge to generate and develop
4	Co4	Students are able to learn on their own, reflect on their learning and improve upon it.
5	Co5	Evaluate ideas and Information related to the project.
6	Co6	Apply the techniques to solve real world problems

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: lab course based on 503,504 Subject code: CA-506 Credit-04

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	Write Test and Debug Python Programs.
2	CO2	Implement conditionals and loops for python program.
3	CO3	Use functions and repeat compound data using Lists, Tuples and Dictionaries.
4	CO4	List and use object oriented programming concept for problem solving.
5	CO5	Write programs using java collection API as well as the Java standard class library.
6	CO6	Solve the inter disciplinary application using the concept of Inheritance.
7	CO7	Apply JDBC to provide a program level interface for communication with database using Java program.
8	CO8	To create and manage Applications using Java Programming, Python

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: IOT (Add-On) Subject code: CA-507 Credit-02

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	CO1	To understand Technical aspects of Internet of things.
2	CO2	To describe smart objects and IOT Architecture.
3	CO3	To study and compare different Application protocols of IOT.
4	CO4	To understand IOT platform using Arduino Uno.

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA) SEM VI
Name of the Subject: Recent Trends in IT Subject code: CA-601 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To introduce the concept of Artificial Intelligence, Data Mining, Data Warehousing and Spark
2	Co2	To study about the basics of search and control strategies, Problem characteristics, space search and AI techniques.
3	Co3	To know about the different Uninformed search strategies and Informed strategies, different Heuristic search Techniques, to apply search algorithms to real-world problems.
4	Co4	To get information of OLAP and OLTP servers, Multidimensional Data Models, Various types of OLAP servers.
5	Co5	Study the KDD process in details.
6	Co6	To learn about Spark Installation, Apache Spark Architecture, RDD ,SQL and Data Frames KAFKA.

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Software Testing Subject code: CA-602 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	List a range of different software testing techniques and strategies and be able to apply specific(automated) unit testing method to the projects
2	Co2	Distinguish characteristics of structural testing methods
3	Co3	Demonstrate the integration testing which aims to uncover interaction and compatibility problems as early as possible
4	Co4	Discuss about the functional and system testing methods.
5	Co5	Demonstrate various issues for object oriented testing.
6	Co6	Discuss about the automation tools for testing

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Advance Java Subject code: CA-603 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To learn about JDBC Architecture, JDBC Process and working with Resultset Interface.
2	Co2	To understand concept in Life cycle of Thread and Implementation of Thread, Thread Priorities and Execution of Thread Application.
3	Co3	To know about Java.net Package , Networking classes and Interfaces & implement TCP/IP based server and client
4	Co4	To learn Session Tracking using Served and Life cycle of Served and JSP
5	Co5	To understand Spring Architecture and MVC.
6	Co6	To study Hibernate Architecture and Mapping Files.

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Dot Net Framework Subject code: CA-604 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To learn about Form-based application, Web-based application and Web services.
2	Co2	To study about Assemble multiple forms, modules and menus into working VB.NET.
3	Co3	Understand variables and Data types, code decision and control structures.
4	Co4	To understand concept of Read, Write, execute and debug C# application.
5	Co5	Explain the three pillars of object oriented programming.

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Project Subject code: CA-605 Credit-03

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	Students are able to learn on their own, reflect on their learning and improve upon it
2	Co2	Apply the techniques to solve real world problems
3	Co3	Students can express their ideas clearly and effectively, both verbally and in written form
4	Co4	Students can work as a team to achieve common goals.
5	Co5	Students are able to make links across different areas of knowledge to generate and develop

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Computer Laboratory Based on 603 and 604

Subject code: CA-606 Credit-04

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To learn about JDBC Architecture, JDBC Process and working with Resultset Interface.
2	Co2	To know about Java.net Package , Networking classes and Interfaces & implement TCP/IP based server and client
3	Co3	To understand concept in Life cycle of Thread and Implementation of Thread, Thread Priorities and Execution of Thread Application.
4	Co4	To study about Assemble multiple forms, modules and menus into working VB.NET
5	Co5	To learn about Form-based application, Web-based application and Web services.

Name of Programme: BBA (CA)
Name of Department: BBA (CA)
Class:- TYBBA(CA)
Name of the Subject: Add on Course-Soft Skills Subject code: CA-607 Credit-02

Course Outcomes (COs)

On completion of the course, the students will be able to:

Sr. No.	CO Number	Contents
1	Co1	To Improve Effectively communicate through verbal/oral communication and improve the listening skills
2	Co2	Write precise briefs or reports and technical documents
3	Co3	Actively participate in group discussion / meetings / interviews and prepare & deliver presentations
4	Co4	Become more effective individual through goal/target setting, self motivation and practicing creative thinking.