Outward No.   Date :

Name of the Programme: BBA-CA
Course Outcomes (COs)

Name of the Class	Course Title		Course Outcomes
F.Y.B.B.A (C.A.)	Modern Operating Environment and MS Office	CO1	The student will be able to recognize when to use each of the Microsoft Office programs to create professional business documents.
		CO2	The student will be able to use Microsoft Office programs to create personal and/or business documents following current professional and/or industry standards
		CO3	The student will be able to pursue future courses specializing in one or more of the programs.
		CO4	The student will be able to apply skills and concepts for basic use of computer hardware, software, networks, and the Internet in the workplace and in future coursework as identified by the internationally accepted Internet and Computing Core (IC3) standards.
F.Y.B.B.A (C.A.)	Business Communication Skills	CO1	The student will be able to understand the role of communication in personal and business world.
		CO2	The student will be able to understand system and communication and their utility
		CO3	The student will be able to develop proficiency in how to write business letters.
F.Y.B.B.A (C.A.)	Financial Accounting	CO1	The students have acquired sound knowledge of basic concepts of accounting
		CO2	Students also understood about recording of transactions and preparation of final accounts
		CO3	Students got exposure about various accounting software packages.
F.Y.B.B.A (C.A.)	Principles of Management	CO1	The student will be able to understand basic concept regarding business administration.
		CO2	The student will be able to examining various management principles.
		CO3	The student will be able to develop managerial skills among the students.
F.Y.B.B.A (C.A.)	Principles of Programming and Algorithm	CO1	The student will be able to apply knowledge of mathematics, science, and engineering
		CO2	The student will be able to learn how to solve common types of computing problems.

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		CO3	The student will be able to design and conduct experiments, as well as to analyze and interpret data.
		CO4	The student will be able to design a system, component, or process to meet desired needs within realistic constraints.
		CO5	The student will be able to function on multidisciplinary teams.
F.Y.B.B.A (C.A.)	Business Communication	CO1	Students shall understand the concept, process and importance of communication
		CO2	Students shall develop an integrative approach where reading, writing, presentation skills are used together to enhance the students' ability to communicate and write effectively
		CO3	Students shall be awareness among students about Methods and Media of communication
		CO4	Students shall get familiar with information technology and improve job seeking skills.
F.Y.B.B.A (C.A.)	Principles of Management	CO1	The student will be able to understand basic concept regarding Business Administration.
		CO2	The student will be able to examining various management principles.
		CO3	The student will be able to develop managerial skills among the students.
F.Y.B.B.A (C.A.)	Business Statistics	CO1	Students will be able to understand role and importance of statistics in various business situations
		CO2	Students will be able to develop skills related with basic statistical technique
		CO3	Students will be able to develop right understanding regarding regression, correlation and data interpretation
F.Y.B.B.A (C.A.)	Laboratory Course (Ms. Office, Tally, PPA)	CO1	Students will be gain useful knowledge and demonstrate correct application of features of MS Office.
		CO2	Students will be able to easily create and edit workbooks having multiple sheets for different purposes and situations.
		CO3	Tally gives the platform to report the financial transaction with excessive ease.
		CO4	An ability to design a system, component, or process to meet desired needs within realistic constraints.
F.Y.B.B.A (C.A.)	Procedure Oriented Programming using "C"	CO1	The student will be able to understand the working of a digital computer.
		CO2	The student will able to analyze a given problem and develop an algorithm to solve the problem
		CO3	The student will able to improve upon a solution to a problem.
		CO4	The student will able to use the 'C' language constructs in the right way.
		CO5	The student will able to design, develop and test programs written in 'C'
	Organizational	CO1	The student will able to understand basic concept of HRM & OB
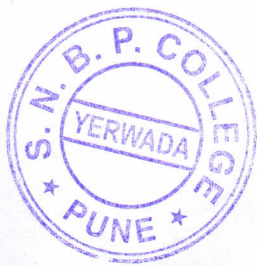
F.Y.B.B.A (C.A.)	Behavior & HumanResource Management	CO2	The student will able to make aware students about traditional & modern methods of procurement & development in organization.
		CO3	The student will able to know the major trends in HRM & OB
F.Y.B.B.A (C.A.)	Database Management Systems	CO1	The student will able to learn the basic concepts and understand the applications ofdatabase systems.
		CO2	The student will able to construct an Entity- Relationship (E-R) model from specifications and to transform to relational model.
		CO3	The student will able to construct unary/ binary/set/aggregate queries in Relational Algebra.
		CO4	The student will able to understand and apply database normalization principles.
F.Y.B.B.A (C.A.)	Financial Accounting	CO1	The student will able to develop right understanding regarding role and importanceof monetary and financial transactions in business.
		CO2	The student will able to cultivate right approach towards classifications of differenttransactions and their implications.
		CO3	The student will able to develop proficiency preparation of basic financial as to how to write basis accounting statement - Trading and P&L.
F.Y.B.B.A (C.A.)	Organizational Behavior	CO1	The students will able to define, explain and illustrate a range of organizational behavior theories.
		CO2	The students will able to analyze the behaviour of individuals and groups in organizations in terms of organizational behaviour theories, models and concepts.
		CO3	The students will able to apply organizational behaviour concepts, models and theories to real life management situations.
		CO4	The students will able to demonstrate a critical understanding of organizational behaviour theories.
		CO5	The students will able to communicate effectively about organizational behaviour theories and their application using appropriate concepts.
		CO6	The students will able to explain group dynamics and demonstrate skills required forworking in groups (team building)
F.Y.B.B.A (C.A.)	Business Mathematics	CO1	The students will able to understand role andimportance of Mathematics in various business situations and while developing softwares.
		CO2	The students will able to develop skillsrelated with basic mathematical technique
F.Y.B.B.A (C.A.)	Computer Applications In Statistics	CO1	Students shall understand the power of excelspreadsheet in computing summarystatistics.
		CO2	Students shall understand the concept of various measures of central tendency and variation and their importance in business
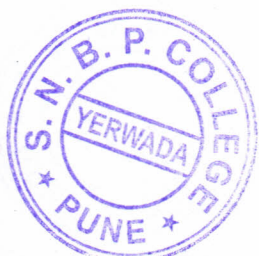
		CO3	Students shall understand the concept of probability, probability distributions and simulations in business world and decision making.
F.Y.B.B.A (C.A.)	Relational Data Base	CO1	The students will able to understand relational database concepts and transaction management concepts in database system.
		CO2	The students will able to write PL/SQL programs that use: procedure, function, package, cursor and trigger.
F.Y.B.B.A (C.A.)	E-Commerce Concepts	CO1	The students will able to Describe an example of system architecture for an e-Business.
		CO2	The students will able to identify the major electronic payment issues and options.
		CO3	The students will able to discuss security issues and explain procedures used to protectagainst security threats.
F.Y.B.B.A (C.A.)	Web Technology (HTML-JSS-CSS)	CO1	The students will able to know & understand concepts of internet programming.
		CO2	The students will able to understand how to develop web based applications using Java Script
F.Y.B.B.A (C.A.)	Laboratory Course (C-Programming, DBMS and Stat)	CO1	Students will be able to Design, develop and test programs written in 'C'
		CO2	Students will be able to easily design and create a good database and use various SQLoperations.
		CO3	Students shall understand the power of excelspreadsheet in computing summarystatistics.
S.Y.B.B.A (C.A.)	Relational Database Management System	CO1	The students will be able to understand basic concepts and the applications of databasesystems
		CO2	The students will able to Understand and apply database normalization principles.
		CO3	The students will be able to understand principles of database transaction management, database recovery, security.
		CO4	The students will be able to understand Functions, Cursors, Triggers and packages.
		CO5	The student will get brief knowledge about SQL Fundamentals.
		CO6	The students will be able to understand Functions, Cursors, Triggers and packages.
		CO7	The students will be able to handle with different Data Base languages
S.Y.B.B.A (C.A.)	Digital Marketing	CO1	The students will be able to give knowledge about using digital marketing in business.
		CO2	The students will be able to make SWOT analysis, SEO optimization and use ofvarious digital marketing tools.
S.Y.B.B.A (C.A.)	Data Structure Using C	CO1	Students will be able to apply concepts of data structure in various domains like DBMS, etc.
		CO2	Students will be able to handle various operations like creation, insertion, deletion, searching, etc. on various data structure.

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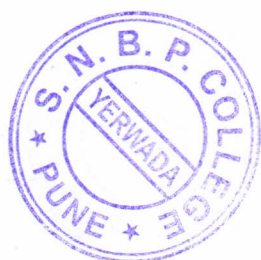
		CO3	Students will be able to use various data structures like stack, queue, linked list, etc inpractically.
		CO4	Students will be able to apply appropriate data structure to specified problem definition.
S.Y.B.B.A (C.A.)	Data Structure	CO1	Students will be able to understand the concepts of ADTs.
		CO2	Students will be able to learn linear data structures – lists, stacks, and queues.
		CO3	Students will be able to understand sorting, searching and hashing algorithms.
		CO4	Students will be able to apply Tree and Graph structures.
S.Y.B.B.A (C.A.)	Introduction to Operating System	CO1	Students will be able to understand the concepts of operating system and itsworking.
		CO2	Students will be able to understand various operating systems features
		CO3	Students will be able to understand basic architectural components involved inoperating system design
		CO4	Students will be able to understand device and resource management techniques fortimesharing and distributed system
		CO5	Students will be able to understand the concept of mutual exclusion, deadlock detection of distributed operating system
S.Y.B.B.A (C.A.)	Software Engineering	CO1	Students will be able to understand System concepts.
		CO2	Students will be able to understand SoftwareEngineering concepts.
		CO3	Students will be able to understand the applications of Software Engineeringconcepts and Design in Software
S.Y.B.B.A (C.A.)	BUSINESS MATHEMATICS	CO1	Students shall understand applications of matrices in business
		CO2	Students shall use L.P.P. and its applications in business
		CO3	Students shall understand the concept of Transportation problems & its applicationsin business world
		CO4	Students shall understand the concept of Profits and loss, loans and EMIs
S.Y.B.B.A (C.A.)	Angular - JS	CO1	The students will be able to understandClient Side MVC and SPA.
		CO2	The students will be able to explore Angularv JS Component.
		CO3	The students will be able to develop an Angular JS Single Page Application.
		CO4	The students will be able to create and bindcontrollers with Javascript.
		CO5	The students will be able to apply filter inAngularJS application.

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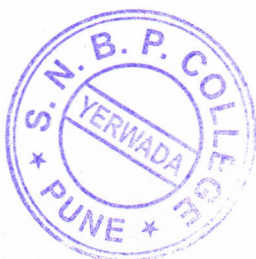
S.Y.B.B.A (C.A.)	PHP	CO1	The students will be able to understand how server-side programming works on the web.
		CO2	The students will be able to use PHP built-infunctions and creating custom functions.
		CO3	The students will be able to understand POST and GET in form submission.
		CO4	The students will be able to understand how preceive and process form submission data.
		CO5	The students will be able to read and process data in a MySQL database.
S.Y.B.B.A (C.A.)	Software Engineering	CO1	The students will be able to use the techniques, skills, and modern engineering tools necessary for engineering practice.
		CO2	The students will be able to analyze, design, verifies, validate, implement, apply, and maintain software systems.
		CO3	The students will be able to design and conduct experiments, as well as to analyzeand interpret data.
		CO4	The students will be able to identify, formulates, and solves engineering problems.
S.Y.B.B.A (C.A.)	Big Data	CO1	The students will be able to develop expert knowledge and analytical skills in currentand developing areas of analysis statistics, and machine learning
		CO2	The students will be able to identify, developand apply detailed analytical, creative, problem solving skills.
		CO3	The students will be able to understand comprehensive platform for career development, innovation and further study.
S.Y.B.B.A (C.A.)	Block Chain	CO1	The students will be able to understand how block chain systems (mainly Bitcoin and Ethereum) work.
		CO2	The students will be able to securely interactwith them.
		CO3	The students will be able to design, build, and deploy smart contracts and distributed applications.
		CO4	The students will be able to integrate ideas from block chain technology into their own projects
S.Y.B.B.A (C.A.)	Computer Laboratory and Practical Work (D.S + RDBMS)	CO1	Student will be able to solve the practical problem using Data Structure using C and Relational Database Management System
		CO2	Students will be able to implement and summarize concepts of searching and sortingtechniques.
		CO3	Students will be able to write well-structuredprogram using procedure oriented design principles.
		CO4	Students will be able to analyze run-time execution of application.
		CO5	Students will be able to implement the StackADT using array and linked list data structures.

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S.Y.B.B.A (C.A.)	Basic Course in Environmental Awareness	CO1	Students will be able to provide an opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment.
		CO2	Students will be able to develop conscious towards a cleaner and better managed environment.
S.Y.B.B.A (C.A.)	Object Oriented Programming UsingC++	CO1	Students will be able to understand features of object oriented programming.
		CO2	Students will be able to produce object-oriented software using C++
		CO3	Students will be able to apply the major object-oriented concepts in programming
		CO4	Students will be able to understand the advanced features of C++ such as stream I/O, Templates, Operator Overloading, etc.
S.Y.B.B.A (C.A.)	Networking	CO1	Students will be able to gain knowledge about Computer Networks concepts.
		CO2	Students will be able to know about working of networking models, addresses, transmission medias and connectivity devices.
		CO3	Students will be able to acquire information about network security and cryptography.
S.Y.B.B.A (C.A.)	Programming in Visual Basic	CO1	Students will be able to understand the basics of visual basic and its implementation
		CO2	Students will be able to develop Graphical User Interface based on problem specified
		CO3	Students will be able to develop and debugapplication very easily
S.Y.B.B.A (C.A.)	Object Oriented Concepts Through CPP	CO1	Students will be able to acquire an understanding of basic object-oriented concepts and the issues involved in effective class design.
		CO2	Students will be able to enable students to write programs using C++ features like operator overloading, constructor and destructor, inheritance, polymorphism and exception handling.
S.Y.B.B.A (C.A.)	Computer Networking	CO1	Students will be able to identify the different components in a Communication Systemand their respective roles.
		CO2	Students will be able to describe the technical issues related to the local AreaNetworks.
		CO3	Students will be able to identify the common technologies available in establishing LANinfrastructure.
S.Y.B.B.A (C.A.)	Operating System	CO1	Students will be able to know the services provided by Operating System
		CO2	Students will be able to know the scheduling concept
		CO3	Students will be able to understand design issues related to memory management and various related algorithms.
		CO4	Students will be able to understand design issues related to File management andvarious related algorithms

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S.Y.B.B.A (C.A.)	Enterprise Resource Planning and Management	CO1	Students will be able to understand ERP and learned about different technologies used.
S.Y.B.B.A (C.A.)	Advance PHP	CO1	Students will be able to know & understand concepts of internet programming.
		CO2	Students will be able to understand how server-side programming works on the web.
		CO3	Students will be able to understanding How to use PHP Framework (Joomla / Druple)
S.Y.B.B.A (C.A.)	Node – JS	CO1	Students will be able to understand the JavaScript and technical concepts behindNode JS.
		CO2	Students will be able to structure a Node application in modules.
		CO3	Students will be able to understand and use the Event Emitter.
		CO4	Students will be able to understand Buffers, Streams, and Pipes.
		CO5	Students will be able to build a Web Serverin Node and understand how it really works.
		CO6	Students will be able to connect to a SQL or Mongo database in Node.
S.Y.B.B.A (C.A.)	Computer Laboratory and Practical Work (VB + C++)	CO1	Student will be able to solve the practical problem using Object Oriented Programming Using C++ and Visual Basic
		CO2	Student will be able to construct the programs using bottom-up design approach
		CO3	Students will be able to debug analyze run- time execution of VB and C++ application
		CO4	Students will be able to implement class, function overloading, operating overloading, Polymorphism, templates, etc.
		CO5	Students will be able to use ActiveX controls to improve design and effectivenessof VB application.
		CO6	Students will be able to prepare report inVisual Basic
S.Y.B.B.A (C.A.)	JQuery	CO1	Students will be able to understand the JavaScript language & the Document ObjectModel.
		CO2	Students will be able to detect and respond to user actions.
		CO3	Students will be able to Alter, show, hide and move objects on a web page.
T.Y.B.B.A (C.A.)	Java Programming	CO1	Students will be able to understand programming language concepts,particularly Java and object-oriented concepts.
		CO2	Students will be able to write, debug, and document well-structured Java applications.
		CO3	Students will be able to implement Java classes from specifications and effectivelycreate and use objects from predefined class libraries.

		CO4	Students will be able to understand the behavior of primitive data types, objectreferences, and arrays.
		CO5	Students will be able to apply decision and iteration control structures to implement algorithms
T.Y.B.B.A (C.A.)	Web Technologies	CO1	Students will be able to write a well formed/valid XML document.
		CO2	Students will be able to write a server side java application called Servlet to catch update and delete operations on DBMS table.
		CO3	Students will be able to write a server side java application called Servlet to catch form data sent from client, process it and store it on database.
		CO4	Students will be able to write a server side java application called JSP to catch formdata sent from client and store it on database.
T.Y.B.B.A (C.A.)	Dot Net Programming	CO1	Students will be able to use features of DotNet Framework along with Visual Basic.
		CO2	Students will be able to develop Graphical User Interface based on problem specified.
		CO3	Students will be able to develop and debug application very easily.
T.Y.B.B.A (C.A.)	Object Oriented Software Engineering	CO1	Students will be able to describe the three pillars of object-orientation methodologiesand explain the benefits of each.
		CO2	Students will be able to create use case documents that capture requirements for asoftware system.
		CO3	Students will be able to create class diagrams that model both the domain modeland design model of a software system.
		CO4	Students will be able to design the interface between the classes and objects.
		CO5	Students will be able to create an interaction diagrams that models the dynamic aspects ofa software system.
		CO6	Students will be able to understand the facets of the Unified Process approach to designing and building a software system.
		CO7	Students will be able to describe how design patterns facilitate development and listseveral of the most popular patterns.
		CO8	Students will be able to design the Axioms and corollaries.
		CO9	Students will be able to build a model for the user interface (UI) of a software application
		CO10	Students will be able to measure the Level of User satisfaction and software quality assurance
T.Y.B.B.A	Project work	CO1	Student is able to prepare software requirements.
		CO2	Students can understand the user/client requirements.

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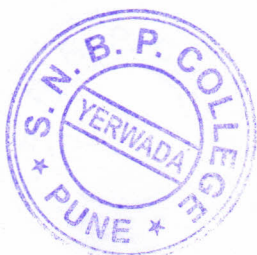
(C.A.)	(Basedon C++ & VB)	CO3	Students can design the software using various tools and functions.
		CO4	Students can able to design the framework of the particular topic.
		CO5	Students can prepare different types of reports of the project.
		CO6	Students can prepare the documentation of the entire project.
T.Y.B.B.A (C.A.)	Lab Course (Java & Web tech)	CO1	Students will be able to setup up and use a webserver for testing and deploying webapplications.
		CO2	Students will be able to learn to create simple static webpages using html tags.
		CO3	Students will be able to learn client side scripting using a scripting language.
		CO4	Students will be able to use DOM concepts for client side scripting.
		CO5	Students will be able to learn server side scripting using database connectivity andreport generation.
		CO6	Students will be able to learn the concept of Java application
		CO7	Students will be able to use different swing concepts.
		CO8	Students will be able to learn how to connect front end with backend.
T.Y.B.B.A (C.A.)	Advanced Web Technologies	CO1	Students will be able to understand the Mark-up language technology such as XMLStructure and tools.
		CO2	Students will be able to understand advanced web technologies such as AJAX.
		CO3	Students will be able to understand advanced web topic such as Web Services.
		CO4	Students will be able to develop a dynamic webpage by using JavaScript and HTML.
		CO5	Students will be able to write a valid XML document
T.Y.B.B.A (C.A.)	Advanced Java	CO1	The students will have the competence in the use of Java Programming language.
		CO2	The students will be able to develop small to medium sized application programs that demonstrate professionally acceptable coding.
T.Y.B.B.A (C.A.)	Recent Trends in IT	CO1	Students will be able to analyze the problems.
		CO2	Students will be able to learn how to analyze and create systems to accomplish tasks.
		CO3	Students will be able to evaluate rapidly evolving trends and to integrate knowledge from appropriate fields to make effective and ethical technology decisions.
T.Y.B.B.A (C.A.)	Software Testing	CO1	Students will understand various test processes and continuous quality improvement.
		CO2	Students will learn types of errors and fault models.

		CO3	Students will understand the methods of test generation from requirements.
		CO4	Students will understand Test adequacy assessment using: control flow, data flow,and program mutations.
		CO5	Students will be able to use of various test tools.
		CO6	Students will be able to use application of software testing techniques in commercialenvironments.
T.Y.B.B.A (C.A.)	Project work (Based on Java & .Net)	CO1	Student is able to prepare software requirements.
		CO2	Students can understand the user/client requirements.
		CO3	Students can design the software usingvarious tools and functions.
		CO4	Students can able to design the framework of the particular topic.
		CO5	Students can prepare different types of reports of the project.
		CO6	Students can prepare the documentation of the entire project.
T.Y.B.B.A (C.A.)	Lab Course (Advance Java and Advance Web tech)	CO1	Students will be able to study the different Java components.
		CO2	Students will be able to learn the different forms of java and php as applicable foreffective presentation.
		CO3	Students will be able to study the major components of java and php their integrated effects
		CO4	Students will be able to study the different formats and application packages to createand edit.
		CO5	Students will be able to learn the techniques of database connectivity using differentsoftware applications.
		CO6	Students will be able to learn the techniques of video capturing and conversion using different software applications

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AISHE CODE : C- 41455   PU/PN/C/359/2009 - College Code : 0883

Outward No.   Date :

Department of Computer Application (BBA. CA)

Programme Outcomes (POs)

1. **PO 1**: The BBA (CA) Programme provides excellent academic base to develop a career in Computer Application with various Management and Business skills, which creates a best career of a student.

2. **PO 2**: This course focuses on conceptual grounding of computer usage as well as its practical Business Application with various in depth programming languages.

3. **PO 3**: This course nurtures good Soft Skills and Managerial Skill in the students which create noble IT Professionals, also necessary to build their own career.

4. **PO 4**: To make industry ready resource.

5. **PO 5**: Students get excellent exposure to learn the process of software development in the Vth and VIth semester by developing their own projects which helps them in campus placement.

6. **PO6**: This course inculcates basic programming ability amongst students which can help them to become a good programmer.
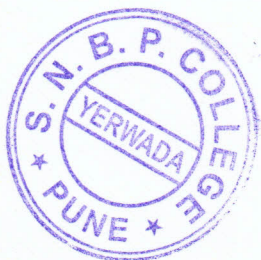
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Outward No. :   Date :

## Department of Computer Application (BBA. CA)

Programme Specific Outcomes (PSOs)

1. **PSO 1**: The focus of BBA CA) programme (CBCS-2019 Pattern) has always been raising the academic standards, excellence and holistic development of students.

2. **PSO2**: Students should be able to apply modern practices and strategies in software project management using open-ended programming environments to deliver quality product for business success in context with societal needs.

3. **PSO3**: 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.

4. **PSO4**: Design and develop Web and Mobile based computer applications.

5. **PSO5**: An ability to use and develop cloud software, administrative features, infrastructure services and architectural patterns; ethical hacking and forensic security technologies.

6. **PSO6**: To expose the students to the basic concepts of Information Technology & sharpen their IT/Programming skills.

7. **PSO7**: To understand the importance of database management and using it purposefully.

8. **PSO8**: To make students understand software engineering methodologies which constitute framework including planning analysis design and maintenance.
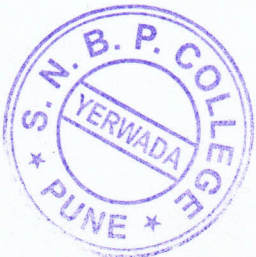
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9. **PSO9**: The projects made by the students give them better understanding of the subject.
10. **PSO10**: To understand and make use of the programming languages easily and use it purposefully.
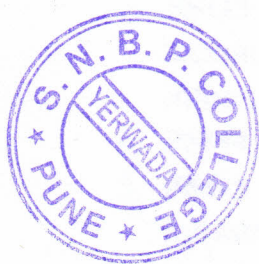
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Outward No.   Date :

Name of the Programme: B.B.A.
Course Outcomes (COs)

Name of the Class	Course Title		Course Outcome
F.Y.B.B.A.	Business Organisation & System	CO1	Students shall be able to explain why information systems are so important today for business and management.
		CO2	Students shall have the knowledge of the different forms of Business systems
		CO3	Students shall develop the spirit of entrepreneurship among the students.
		CO4	Students shall have the knowledge of Domestic and Foreign Trade.
	Business Communication Skills	CO1	Students shall improvise their skills such as linguistic, non-linguistic and Paralinguistic skills.
		CO2	Students shall develop integrative approach where reading, writing, oral and speaking components are used together to enhance the students' ability to communicate and write effectively.
		CO3	Students shall be aware about various Methods and Media of communication.
	Business Accounting	CO1	The students have acquired sound knowledge of basic conceptsof accounting.
		CO2	Students also understood about recording of transactions and preparation of final accounts.
		CO3	Students got exposure about various accounting software packages.
	Business Economics (Micro)	CO1	Students shall understand how households (demand) and businesses (supply) interact in various market structures to determine price and quantity of a good produced.
		CO2	Students shall understand the links between household behaviorand the economic models of demand
	Business Economics	CO3	Students shall represent demand, in graphical form, including the downward slope of the demand curve and what shifts the demand curve.

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	(Micro)	CO4	Students shall understand the links between production costs and the economic models of supply.	
		CO5	Students shall represent supply, in graphical form, including the upward slope of the supply curve and what shifts the supplycurve.	
		CO6	Students shall understand how different degrees of competitionin a market affect pricing and output.	
	Business Mathematics	CO1	Students shall understand applications of matrices in business.	
		CO2	Students shall understand the concept and application of Permutations& Combinations in business.	
		CO3	Students shall use L.P.P. and its applications in business.	
		CO4	Students shall understand the concept of Transportation problems & its applications in business world.	
		CO5	Students shall understand the concept of shares & share market.	
	Business Demography and Environmental Studies	CO1	Students shall understand Distribution of Population and Population Growth.	
		CO2	Students shall be aware regarding Environment and Environmental issues related to Business	
		CO3	Students shall understand the problems of urbanization	
F.Y.B.B.A.	Principles of Management	CO1	Students shall demonstrate an understanding of effective management principles as outlined in selected text learning objectives.	
		CO2	Students shall apply effective management strategies, principlesand techniques.	
		CO3	Students shall demonstrate research and analytical skills by using both human and technological resources	
		CO4	Students shall demonstrate the ability to communicate effectively.	
	Principles of Marketing	CO1	Students shall get familiar to basic concepts of marketing, it's general nature, scope and importance.	
		CO2	Students shall receive appropriate knowledge and understandingof its primary functions and applications and its gradual evolution and development.	
		CO3	Students shall develop basic and essential skills related to marketing.	
		CO4	Students shall get a learning platform for preparing for marketing employability opportunities essential for industries.	

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	Principles of Finance	CO1	Students understood the nature, importance, structure of inancerelated areas.
		CO2	Knowledge regarding sources of finance for a business.
	Basics of Cost Accounting	CO1	Students got the Knowledge of Basic cost concepts, element ofcost & preparation of Cost Sheet.
		CO2	Basic knowledge of important Methods of costing was given tothe students.
	Business Statistics	CO1	Students shall be able to understand the basics of statistics – concept of population and sample & to use frequency distribution to make decision.
		CO2	Students shall be able to understand and calculate various typesof averages and variation.
		CO3	Students shall be able to understand Correlation and use of regression analysis to estimate the relationship between two variables and its applications.
		CO4	Students shall be able to understand the concept – Time Series and its applications in business.
		CO5	Students shall be able to understand the concept – Index numbers and applications in business.
		CO6	Students shall be able to imbibe research culture among students.
	Business Informatics	CO1	Students shall know the basics of Computer
		CO2	Student shall understand the basics of networking
		CO3	Student shall the basics of internet.
		CO4	Student shall the basics of databases.
S.Y.B.B.A.	Personality Development	CO1	Students shall be aware about the dimensions and importance ofeffective personality
		CO2	Students shall understand personality traits and formation and vital contribution in the world of business
		CO3	Students shall get aware about various dynamics of personalitydevelopment
	Business Ethics	CO1	Students shall get knowledge of Business Ethics
		CO2	Students shall witness promotions of Ethical Practices in the Business
		CO3	Students shall develop Ethical and Value Based thought processamong the future manager's entrepreneurs

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S.Y.B.B.A.	Human Resource Management and Organisation Behaviour	CO1	Students studying HRM /OB acquire the knowledge, critical thinking, and practical skills that will enable them to create organizational effectiveness, lead human resources managementstrategies, and enhance the human condition at work.
		CO2	HRM/OB students learn to think critically about the challengesinvolved in creating high performance workplaces where innovation, diversity, and ethical behaviour are valued andrewarded.
		CO3	HRM/OB Majors are educated in Human Resources Management (HRM), Organizational Behaviour (OB) and Industrial Relations (IR).
S.Y.B.B.A.	Management Accounting	CO1	Students got the basic knowledge of Management Accounting.
		CO2	To know the implications of various financial ratios in decisionmaking.
		CO3	Significance of working capital in business.
		CO4	Students got the concept of budgetary control and its applicationin business.
		CO5	Students got the calculating ability of various techniques of management accounting.
S.Y.B.B.A.	Business Economics (Macro)	CO1	Students shall study the behavior of working of the economy asa whole.
		CO2	Students shall develop an analytical framework to understand the inter-linkages among the crucial macroeconomic variables.
		CO3	Students shall apply economic reasoning to problems ofbusiness and public policy.
S.Y.B.B.A.	I.T. in Management	CO1	The study describes the role of information systems in business.
		CO2	It studies the current issues of information technology and relatethose issues to the firm.
S.Y.B.B.A.	Production and Operations Management	CO1	Students shall identify and articulate how operations management contributes to the achievement of an organization's strategic objectives.
		CO2	Students shall critically evaluate the operations function in manufacturing and service production settings.
		CO3	Students shall appraise and apply forecasting methods as the basis of management's planning and control activity.
		CO4	Students shall assess and formulate decision making strategies to address operating issues that have short, intermediate or longlead times.

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		CO5	Students shall evaluate approaches to problem solving and process improvement in production settings.
	Industrial Relations & Labour Laws	CO1	Students understood the relationship between Labour and Management.
		CO2	Resolving of Industrial disputes and Grievances
		CO3	Students understood the laws which effects the industry and Labour
S.Y.B.B.A.	Business Taxation	CO1	Students got to understand the basic concepts and definitions under the Income Tax Act, 1961.
		CO2	Students were given latest development in the subject of taxation.
		CO3	Acquired knowledge about Computation of Income under different heads of Income of Income Tax Act, 1961.
		CO4	Acquired knowledge about the submission of Income Tax Return, Advance Tax, Tax deducted at Source, Tax Collection Authorities.
		CO5	Students became Competent enough to take up to employment in Tax planner.
		CO6	To develop ability to calculate taxable income of firms, co-operative societies and charitable trust.
S.Y.B.B.A.	International Business	CO1	Students shall get acquainted with emerging issues in international business
		CO2	Students shall study the impact of international business environment on foreign market operations
		CO3	Students shall understand the importance of foreign trade for Indian economy.
S.Y.B.B.A.	Management Information System	CO1	Students became Competent enough to understand the conceptsof Information System
		CO2	Understood the concepts of system analysis and design
		CO3	Students understood the issues in MIS.
S.Y.B.B.A.	Business Exposure(Field Visits)	CO1	Students shall develop their understanding with a realistic and practical perception of the industry its layout, procedures, processes, organization structure.
		CO2	Students shall gain firsthand information regarding the functioning of the Industry which presents the students with opportunities to plan, organize and engage in active learning experiences both inside and outside the classroom.
		CO1	Upon successful completion of program students able to describe major logistics functions and activities.
		CO2	Differentiate logistics and supply chain management.
		CO3	Describe methods of inventory planning.

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	Supply Chain and Logistics Management	CO4	Explain how technology has and continues to change logistics and supply chain management
		CO5	Compare modes of transportation.
		CO6	Describe warehouse processes, systems, and performance measures.
		CO7	Describe documentation and terms of sale for international shipments.
T.Y.B.B.A.	Entrepreneurship Development	CO1	Graduate Entrepreneurship Students will be able to demonstrate a fundamental comprehension of business opportunity evaluation, from the perspective of a prospective investor.
		CO2	Identify the most recognized sources of potential funding and financing for business start-ups and/or expansion.
		CO3	Demonstrate extemporaneous speaking skills developed through in-class discussion of text materials, case study analyses, and current entrepreneurship-related issues.
		CO4	Assess their own personal work products creativity and how those could apply to their own real life, future business ventures.
	Business Law	CO1	Students understood basic legal terms and concepts used in law pertaining to business
		CO2	Applicability of legal principles to situations in Business world.
	Research Methodology (Tools and Analysis)	CO1	Students shall gain basic understanding of research process and tools for the same.
		CO2	Students shall gain understanding of the tools and techniques necessary for research and report writing.
T.Y.B.B.A.	Analysis of Financial Statements	CO1	Students learnt the interpretation and analysis of financial statements effectively.
		CO2	The student got well acquainted with current financial practices
		CO3	Students became intensive users of financial statements as part of their professional responsibilities.
	Sales Management	CO1	Students shall demonstrate an understanding of the role that a sales force plays in marketing strategies
		CO2	Students shall describe the selling process.
		CO3	Students shall Understand the factors that affect sales force success.
		CO4	Students shall identify and explain the processes involved in recruiting, selecting, training, motivating, compensating, and retaining salespeople.
		CO1	Students shall understand HR Recruitment and Selection.

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	HRM Principles &Functions	CO2	Students shall get aware about Training, development and evaluation system in HR
		CO3	Students shall understand how to prepare Personnel records reports and audit.
		CO4	Students shall study in detail New trends in HRM and exit policy
	Long Term Finance	CO1	Students got the capability to make long-term financing.
		CO2	Students were well-acquainted regarding current financial structure.
	Retail Management	CO1	Compare and contrast traditional retailers and category specialists Describe how technology (e.g., customer databases, integrated systems, and buying and sales forecasting systems)is used to support retail businesses
		CO2	Evaluate the effectiveness of merchandising decisions in the retail industry Explain the factors relating to visual merchandising, such as store layouts and presentation Compare
			the strategies that are used within the different stages of a product's life cycle
		CO3	Students shall describe the flow of goods and services in a retail environment.
	Human Resource Practices	CO1	Students shall get introduced to Strategic HRM
		CO2	Students shall understand Working Conditions & Welfare
		CO3	Students shall understand Employee Grievance & Discipline
		CO4	Students shall get aware of E- Human Resource studies
T.Y.B.B.A.	Business Planning and Project Management	CO1	Students shall learn to manage the scope, cost, timing, and quality of the project, at all times focused on project
		CO2	Students shall align the project to the organization's strategic plans and business justification throughout its lifecycle
		CO3	Students shall identify project goals, constraints, deliverables, performance criteria, control needs.
		CO4	Students shall implement project management knowledge, processes, lifecycle and the embodied concepts, tools and techniques in order to achieve project success
	Event Management	CO1	Students shall get acquainted with concepts, issues and various aspects of event management.
	Management Control System	CO1	Students understood the function of management control, its nature, functional areas, and techniques.
	E-Commerce	CO1	Students shall understand the basic concepts and technologies used in the field of management information systems.
		CO2	Students shall be aware of the ethical, social, and security issues of information systems.

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		CO3	Students shall assess the impact of the Internet and Internet technology on business electronic commerce and electronic business.
		CO4	Students shall identify the major management challenges to building and using information systems and learn how to find appropriate solutions to those challenges.
	Financial Services	CO1	Students got aware of various financial services and financial markets in India.
	Advertising and Sales Promotion	CO1	Students shall develop knowledge and understanding of importance and functions of advertising
		CO2	Students shall understand Key features of Sales Promotion
	Labour Laws	CO1	Students shall get an introduction to Labour Laws in India
		CO2	Students shall understand the Acts Such as - The Employees Provident Funds and Miscellaneous Provisions Act,1952; The Child Labour (Prohibition and Regulation) Act,1986; Maternity Benefits Act,1961 and The Employees State Insurance Act,1948.
	Cases in Finance	CO1	The students understand and prepare a project report on Varioustopics of finance.
	Cases in Marketing	CO1	Students shall get hands on application of theory by practicing via projects and cases.
	Cases in HRM	CO1	Students shall understand the actual application of theoretical aspects and laws by the means of live projects.

S. E. SOCIETY'S

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Phone : 2668 6162, Email : snbp_pune2010@yahoo.co.in

AISHE CODE : C- 41455   PU/PN/C/359/2009 - College Code : 0883

Outward No.   Date :

Department of (BBA)

Programme Outcomes (POs)

Upon completion of the B.B.A Degree Programme the graduate will be able to

1. **PO1**: Provides a wide knowledge of all disciplines of the course and training in management of both animate and inanimate entities and develops leadership skills.

2. **PO2**: Enables students to effectively communicate business issues, management concepts, plans and decisions both in oral and written form using appropriate supportive technologies.

3. **PO3**: Equips students to demonstrate the capabilities required to apply cross-functional business knowledge and technologies in solving real-world business problems.

4. **PO4**: Enables students to demonstrate use of appropriate techniques to effectively manage business challenges.

5. **PO5**: Makes students capable of recognizing and resolving ethical issues.

6. **PO6**: Helps to prepare students for managerial roles and as entrepreneurs.

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Outward No.   Date :

Department of (BBA)

Programme Specific Outcomes (PSOs)

1. **PSO1**: Ability to analyze various functional issues affecting the organization.
2. **PSO2**: Ability to define, analyze the solutions for different business problems and using logical reasoning patterns for evaluating information, materials, and data for practical implementation.
3. **PSO3**: Develop Ethical Practices and Imbibe Values for Better Corporate Governance.
4. **PSO4**: Understand ethical challenges and choices in a business setting
5. **PSO5**: Demonstrate understanding of sustainability related concerns in varied areas and understand key features of sales promotion.
6. **PSO6**: Analyze Global Environment and its Impact on Business
7. **PSO7**: Understand the ecosystem of start up in the country& marketing strategies and market.
8. **PSO8**: Demonstrate the ability to create business plans.
9. **PSO9**: Provides verbal, reasoning, Data Interpretation, Quantitative and communication skill to solve specific business problems and decision making.
10. **PSO10**: Apply ethical principles and commitment towards professional ethics and responsibility.

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11. **PSO11**: Function effectively as a member, leader, individual or group in diverse environment.
12. **PSO12**: Ability to conceptualize a complex issue into a coherent written statement and oral presentation and to communicate effectively on complex activities with technical community.
13. **PSO13**: Providing an opportunity for the students to gain practical exposure towards the work place and make them industry ready.
14. **PSO14**: Promotes entrepreneurship by providing understanding of the fundamentals of creating and managing innovation, new business development, and high-growth potential entities.
15. **PSO15**: Ability to demonstrate technical competence in domestic and global arena of business through the study of major disciplines within the fields of business.
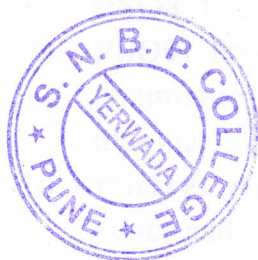
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Phone : 2668 6162, Email : snbp_pune2010@yahoo.co.in
AISHE CODE : C - 41455   PU/PN/C/359/2009 - College Code - 0883

Outward No. :   Date :

Name of the Programme: B. Sc. (Computer Science)
Course Outcomes (COs)

Name of the Class	Course Title	Course Outcomes	
F.Y.B.Sc (Computer Science)	Problem Solving Using Computer and 'C' Programming - I	CO1	Explore algorithmic approaches to problem solving.
		CO2	Develop modular programs using control structures and arrays in 'C'.
F.Y.B.Sc. (Computer Science)	Database Management Systems	CO1	Solve real world problems using appropriate set, function, and relationalmodels
		CO2	Design E-R Model for given requirements and convert the same into database tables.
		CO3	Use SQL.
F.Y.B.Sc. (Computer Science)	Practical course on Problem Solving using Computer and 'C' programmingand Database Management Systems	CO1	On completion of this course, students will be able to .Devise pseudo codes and flowchart for computational problems.
		CO2	Write, debug and execute simple programs in 'C'.
		CO3	Create database tables in postgre SQL.
		CO3	Write and execute simple, nested queries.
F.Y.B.Sc (Computer Science)	Advanced 'C' Programming	CO1	The student will be able to Develop modular programs using control structures, pointers, arrays, strings and structures
		CO2	The student understands the importance Design and develop solutions to real world problems using C.
F.Y.B.Sc (Computer Science)	Relational Database Management Systems	CO1	On completion of the course, student willbe able to Design E-R Model for given requirements and convert the same into database tables.
		CO2	Use database techniques such as SQL & PL/SQL..
		CO3	Explain transaction Management in relational database System responsible for our performance in life.

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		CO4	Use advanced database Programming concepts.
F.Y.B.Sc (Computer Science)	Practical Course on Advanced 'C' Programming and Relational Database Management Systems	CO1	On completion of this course, students will be able to :
			Write, debug and execute programs using advanced features in 'C'.
		CO2	To use SQL & PL/SQL
		CO3	To perform advanced database operations
S.Y.B.Sc (Computer Science).	Data Structures and Algorithms –I	CO1	On completion of the course, student willbe able to use well-organized data structures in solving various problems.
		CO2	To differentiate the usage of various structures in problem solution
		CO3	Implementing algorithms to solve problems using appropriate datastructures.
S.Y.B.Sc. (Computer Science).	Software Engineering	CO1	On completion of the course, student willbe able to Compare and chose a process model for a software project development.
		CO2	Identify requirements analyze and prepare models.
		CO3	Prepare the SRS, Design document, Project plan of a given software system.
S.Y.B.Sc. (Computer Science).	Practical course on CS 231 (Data Structures and Algorithms I) and CS 232 (Software Engineering)	CO1	Student will be able to To use well-organized data structures insolving various problems.
		CO2	Implementing algorithms to solveproblems using appropriate data structures.
		CO3	Prepare detailed statement of problem for the selected mini project
		CO4	Identify suitable process model for the same
		CO5	Develop Software Requirement Specification for the project.
		CO6	Identify scenarios and develop UML Use case
		CO7	Other artifacts: Class Diagram, activity diagram, sequence diagram, component diagram and any other diagrams as applicable to the project.
S.Y.B.Sc. (Computer Science).	Data Structures and Algorithms - II	CO1	On completion of this course students will be able to Implementation of different data structures efficiently.
		CO2	The students will able to understand the Usage of well-organized data structures to handle large amount of data

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		CO3	The students will be able to understand Usage of appropriate data structures for problem solving.
S.Y.B.Sc. (Computer Science).	Computer Networks-I	CO1	Have a good understanding of the OSI and TCP/IP Reference Models and in particular have a good knowledge of Layers.
		CO2	The learner understands the basic Understand the working of various protocols..
		CO3	Analyze the requirements for a given organizational structure and select the most appropriate networking architecture and technologies.
S.Y.B.Sc. (Computer Science)	Practical course on CS 241(Data Structures and Algorithms II) and CS 242 (Computer Networks I)	CO1	The students will able to understand the codes should be uploaded on either the local server, Moodle, Github or any open source LMS.
		CO2	To understand the basic commands run on cmd. And find the information about the computer pursuing the protocol and different types of address which is required to make communication possible over the network.
		CO3	To understand & identify the class full addressing in IPV4.
T.Y.B.Sc. (Computer Science)	Operating Systems – I	CO1	After completion of this course students will be able to understand the concept of Processes and Thread Scheduling by operating system
		CO2	Synchronization in process and threads by operating system
		CO3	Memory management by operating system using with the help of various schemes.
T.Y.B.Sc. (Computer Science)	Computer Networks - II	CO1	On completion of the course, student willbe able to Student will understand the different protocols of Application layer.
		CO2	Develop understanding of technical aspect of Multimedia Systems
		CO3	Develop various Multimedia Systems applicable in real time
		CO4	Identify information security goals.
		CO5	Understand, compare and apply cryptographic techniques for data security.
		CO1	Learners shall be able to understand basic concepts and Web Page

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T.Y.B.Sc. (Computer Science)	Web Technologies - I	CO2	On completion of the course, student willbe able to Understand how to develop dynamic andinteractive Web Page
T.Y.B.Sc. (Computer Science)	Foundations of Data Science	CO1	On completion of the course, student willbe able to Perform Exploratory Data Analysis
		CO2	Obtain, clean/process, and transform data
		CO3	Detect and diagnose common data issues, such as missing values, special values, outliers, inconsistencies, and localization
		CO4	Demonstrate proficiency with statistical analysis of data.
		CO5	Present results using data visualization techniques
		CO6	Prepare data for use with a variety of statistical methods and models and recognize how the quality of the data andthe means of data collection may affect conclusions.
T.Y.B.Sc. (Computer Science)	Object Oriented Programming using Java - I	CO1	On completion of the course, student willbe able to understand the concept of classes, object,packages and Collections.
		CO2	To develop GUI based application.
T.Y.B.Sc. (Computer Science)	Theoretical Computer Science	CO1	On completion of the course, student willbe able to understand the use of automata during language design.
		CO2	Relate various automata and languages
T.Y.B.Sc. (Computer Science)	Practical Course based on CS - 351	CO1	After completion of this course students will be able to understand the concept of Process synchronization
		CO2	Processes and Thread Scheduling by operating system
		CO3	Memory management by operating system using with the help of various schemes
T.Y.B.Sc. (Computer Science)	Practical Course based on CS - 353 and CS - 354	CO1	Understand how to develop dynamic and interactive Web Page.
		CO2	Prepare data for use with a variety of statistical methods and recognize how the quality of the data may affect conclusions.
		CO3	Perform exploratory data analysis.
T.Y.B.Sc. (Computer Science)	Practical Course based on CS - 355	CO1	Use an integrated development environment to write, compile, run, and test simple object-oriented Java programs
		CO2	Read and make elementary modificationsto Java programs that solve real-world problems.
		CO3	Validate input in a Java program.

T.Y.B.Sc. (Computer Science)	Python Programming	CO1	On completion of the course, student willbe able to develop logic for problem solving
		CO2	Determine the methods to create and develop Python programs by utilizing the data.
		CO3	Structures like lists, dictionaries, tuplesand sets.
		CO4	To be familiar about the basic constructs of programming such as data, operations, conditions, loops, functions etc.
		CO5	To write python programs and develop a small application project.
T.Y.B.Sc. (Computer Science)	Blockchain Technology	CO1	On completion of the course, student willbe able to Learn the fundamentals of BlockchainTechnology.
		CO2	Learn Blockchain programming
		CO3	Basic knowledge of Smart Contracts and how they function.
T.Y.B.Sc. (Computer Science)	Operating Systems-II	CO1	After completion of this course students will be able to understand the concept of Management of deadlocks and File System by operating system
		CO2	Scheduling storage or disk for processes
		CO3	Distributed Operating System and its architecture and the extended features in mobile OS.
T.Y.B.Sc. (Computer Science)	Software Testing	CO1	To understand various software testing methods and strategies.
		CO2	To understand a variety of software metrics, and identify defects and managing those defects for improvement in quality forgiven software.
		CO3	To design test cases and test plans, review reports of testing for qualitative software.
		CO4	To understand latest testing methods used in the software industries
T.Y.B.Sc. (Computer Science)	Web Technologies - II	CO1	On completion of the course, student will be able to– Build dynamic website.
		CO2	Using MVC based framework easy to design and handling the errors in dynamic website
		CO1	On completion of the course, student will be able to– Use appropriate models of analysis, assess the quality of input, and derive insight from results.

T.Y.B.Sc. (Computer Science)	Data Analytics	CO2	Analyze data, choose relevant models and algorithms for respective applications
		CO3	Understand different data mining techniques like classification, prediction, clustering and association rule mining
		CO4	Apply modeling and data analysis techniques to the solution of real world business problems
T.Y.B.Sc. (Computer Science)	Object Oriented Programming using Java – II	CO1	On completion of the course, student will be able to– To access open database through Java programs using JDBC and develop the application
		CO2	Understand and Create dynamic web pages, using Servlets and JSP.
		CO3	Work with basics of framework to develop secure web applications.
T.Y.B.Sc. (Computer Science)	Object Oriented Programming using Java – II	CO1	On completion of the course, student will be able to access open database through Java programs using Java Data Base Connectivity (JDBC) and develop the application
		CO2	Understand and Create dynamic web pages, using Servlets and JSP.
		CO3	Work with basics of framework to develop secure web applications.
T.Y.B.Sc. (Computer	Compiler Construction	CO1	On completion of the course, student will be able to understand the process of scanning andparsing of source code

		CO2	Learn the conversion code written in source language to machine language.
		CO3	Understand tools like LEX and YACC.
T.Y.B.Sc. (Computer Science)	Practical Course based on CS - 361	CO1	After completion of this course studentswill be able to understand the concept of Management of deadlocks by operating system
		CO2	File System management
		CO3	Disk space management and scheduling for processes
T.Y.B.Sc. (Computer Science)	Practical Course based on CS - 363 and CS - 364	CO1	Build dynamic website
		CO2	Using MVC based framework easy to design and handling the errors in dynamicwebsite.
T.Y.B.Sc. (Computer Science)	Practical Course based on CS - 365	CO1	To Learn database Programming using Java
		CO2	Understand and Create dynamic web pages using Servlets and JSP.
		CO3	Work with basics of framework to develop secure web applications
T.Y.B.Sc. (Computer Science)	Software Testing Tools	CO1	To understand various software testing methods and strategies
		CO2	To understand a variety of software metrics and identify defects and managing those defects for improvement in quality for given software.
		CO3	To design test cases and test plans, review reports of testing for qualitative software.
		CO4	To understand latest testing tools used inthe software industries.
T.Y.B.Sc. (Computer Science)	Project	CO1	To understand the use of technologies how it will be implemented while developing the project. And students must co-relate their knowledge and have confident to represent with well understanding facts.

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Outward No. :   Date :

Department of Computer Science (BSc. CS)

Programme Outcomes (POs)

PO1: At the first year of under-graduation, the basic foundations of two important skills required for software development are laid. A course in problem solving and programming along with a course in database fundamentals forms the preliminary skill set for solving computational problems. The practical courses are designed to supplement the theoretical training in the year. Along with Computer Science, the two theoretical and one practical course each in Statistics, Mathematics and Electronics help in building a strong foundation. Career Advancement courses are introduced in both semesters to cover additional areas of Computer Science.

PO2: At the second year of under-graduation, computational problem-solving skills are further strengthened by a course in Data structures. Software engineering concepts that are required for project design are also introduced. Essential concepts of computer networking are also introduced in this year. The practical course included in both semesters complements the theory courses.

PO3: At the third year of under-graduation, all the subjects are designed to fulfill core Computer Science requirements as well as meet the needs of the software industry. Theory courses are adequately supplemented by hands-on practical courses. Skill Enhancement courses enable the students to acquire additional value-added skills.

Principal
S. N. B. P. COLLEGE
Maharashtra Housing Board
Yerwada, Pune - 411 006

Outward No.   Date :

Department of Computer Science (BSc. CS)

Programme Specific Outcomes (PSOs)

PSO 1: Apply knowledge of computing and mathematics appropriate to the discipline.

PSO 2: Develop problem-solving abilities using computer.

PSO 3: Design the application using programming languages.

PSO 4: Ability to understand the principles and development methodologies of computer systems.

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