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 analyzeand interpret data.
		CO4	The student will be able to design a system, component, or process to meet desired needswithin 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 ofcommunication
		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 ofcommunication
		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 BusinessAdministration.
		CO2	The student will be able to examining various management principles.
		CO3	The studentwill 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 businesssituations
		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 featuresof MS Office.
		CO2	Students will be able to easily create and edit workbooks having multiple sheets fordifferent purposes and situations.
		CO3	Tally gives the platform to report the financial transaction with excessive ease.
		CO4	An ability to design a system, component, orprocess 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 solvethe problem
		CO3	The student will able to improve upon a solution to a problem.
		CO4	The student will able to use the 'C' languageconstructs 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
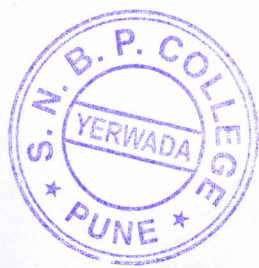
F.Y.B.B.A (C.A.)	Behavior & HumanResource Management	CO2	The student will able to make aware students about traditional & modern methods of procurement & development in organization.
		CO3	The student will able to know the major trends in HRM & OB
F.Y.B.B.A (C.A.)	Database Management Systems	CO1	The 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

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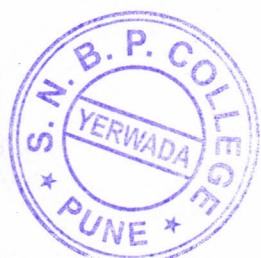
		CO3	Students shall understand the concept of probability, probability distributions and simulations in business world and decision making.
F.Y.B.B.A (C.A.)	Relational Data Base	CO1	The students will able to understand relational database concepts and transaction management concepts in database system.
		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.
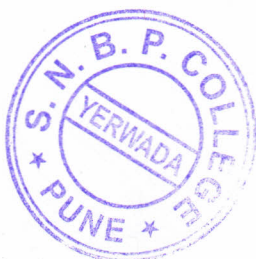
S.Y.B.B.A (C.A.)	PHP	CO1	The students will be able to understand how server-side programming works on the web.
		CO2	The students will be able to use PHP built-infunctions and creating custom functions.
		CO3	The students will be able to understand POST and GET in form submission.
		CO4	The students will be able to understand how breceive 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 Using C++	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 debug application 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 System and their respective roles.
		CO2	Students will be able to describe the technical issues related to the local Area Networks.
		CO3	Students will be able to identify the common technologies available in establishing LAN infrastructure.
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 and various 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.
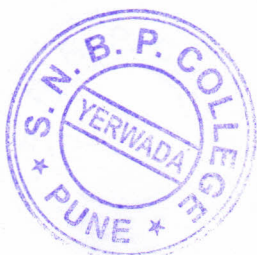
(C.A.)	(Basedon C++ & VB)	CO3	Students can design the software using various tools and functions.
		CO4	Students can able to design the framework of the particular topic.
		CO5	Students can prepare different types of reports of the project.
		CO6	Students can prepare the documentation of the entire project.
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.
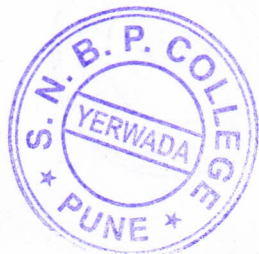
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		CO3	Students will understand the methods of test generation from requirements.
		CO4	Students will understand Test adequacy assessment using: control flow, data flow,and program mutations.
		CO5	Students will be able to use of various test tools.
		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