KTSP Mandals

Hutatma Rajguru Mahavidyalaya, Rajgurunagar

Tal – Khed, Dist. – Pune, Pin – 410505

Department of : B.B.A(CA)

Academic Year 2022-2023

PO No.	Programme Outcomes Upon completion of the B.B.A(CA)Degree Programme the graduate will be able to
PO-1	To provide sound academic base from which an advanced career in Computer Application can be developed. Conceptual grounding in computer usage as well as its practical business application will be provided.
PO-2	To produce skill oriented human resource.
PO-3	To import practical skills among students.
PO-4	To make industry ready resource.
PO-5	To bring the spirit of entrepreneurship.

PSO No.	Programme Specific Outcomes Upon completion of these courses the student would
PSO-1	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.
PSO-2	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.
PSO-3	Design and develop Web and Mobile based computer applications
PSO-4	An ability to use and develop cloud software, administrative features, infrastructure services and architectural patterns; ethical hacking and forensic security technologies.

Course Title	Business Communication
CODE	CA - 101
CO No.	Course Outcomes
CO-1	To understand what is the role of communication in personal and business world
CO-2	To understand system and communication and their utility
CO-3	To develop proficiency in how to write business letters and other communications
CO-4	Apply the managerial functions in different business setup
CO-5	Implement decisions to ensure organizational effectiveness

Course Title	Principles of Management
CODE	CA - 102
CO No.	Course Outcomes
CO-1	Interpret and design the different forms of organization
CO-2	Demonstrate social responsibility and ethical issues involved in business situations and organizations
CO-3	Integrate management principles in real time situations
CO-4	Apply the managerial functions in different business setup
CO-5	Implement decisions to ensure organizational effectiveness

Course Title	C Programming
CODE	CA - 103
CO No.	Course Outcomes
CO-1	To understand the concept of Procedural Programming
CO-2	To acquire basic programming skills using C Programming Language
CO-3	Students will Improve logical thinking through practical knowledge of C Programming
CO-4	By learning the basic programming constructs they can easily switch over to any other language in future.

Course Title	Database Management System
CODE	CA - 104
CO No.	Course Outcomes
CO-1	To understand role and importance File Structures and Organization
CO-2	To develop skills related with Database basic Concepts.
CO-3	To Develop right understanding of various Data models
CO-4	To Understand the Programming in SQL and Implementation
CO-5	To Learn about Relational Database Designing.

Course Title	Statistics
CODE	CA - 105
CO No.	Course Outcomes
CO-1	To understand role and importance of statistics in various business situations
CO-2	To develop skills related with basic statistical technique
CO-3	Develop right understanding regarding regression, correlation and data interpretation

Course Title	Computer Laboratory Based on 103 &104
CODE	CA - 106
CO No.	Course Outcomes
CO-1	To assess the knowledge of student in C and DBMS
CO-2	To acquire knowledge on writing computer programs using C Language
CO-3	To create and manage Database using SQL

Course Title	Principles of programming and algorithm
CODE	CA - 107
CO No.	Course Outcomes
CO-1	To develop analytical /logical thinking and problem solving capabilities
CO-2	To know the fundamentals of programming and designing.
CO-3	To learn the algorithm analysis and notations
CO-4	To understand the concept, problem and algorithm.

Course Title	Organization Behavior & Human Resource Management
CODE	CA - 201
CO No.	Course Outcomes
CO-1	To understand basic concept of HRM & OB
CO-2	To know the major trends in HRM & OB
CO-3	To make aware students about traditional & modern methods of procurement & development in organization
CO-4	To make aware students about on the job & Off the Job Training methods

Course Title	Financial Accounting
CODE	CA - 202
CO No.	Course Outcomes
CO-1	To develop right understanding regarding role and importance of monetary and financial transactions in business
CO-2	To cultivate right approach towards classifications of different transactions and their implications
CO-3	To develop proficiency preparation of basic financial as to how to write basis accounting statement - Trading and P&L

Course Title	Business Mathematics
CODE	CA - 203
CO No.	Course Outcomes
CO-1	To understand role and importance of Mathematics in various business situations and while developing softwares.
CO-2	To develop skills related with basic mathematical technique

Course Title	Relational database management System.
CODE	**CA - 204**
CO No.	**Course Outcomes**
CO-1	Enables students to understand relational database concepts.
CO-2	Enables students to understand transaction management concepts in database system..
CO-3	Enables student to write PL/SQL programs that use: procedure, function, package, cursor and trigger..
CO-4	To Understand SQL/PLSQL the programming language of oracle
CO-5	Get Fundamental Knowledge of subject in Brief along with Software.

Course Title	Web Technology HTML-JS-CSS
CODE	**CA - 205**
CO No.	**Course Outcomes**
CO-1	To know & understand concepts of internet programming.
CO-2	To understand how to develop web based applications using JavaScript

Course Title	Computer Laboratory Based on 204 & 205
CODE	**CA - 206**
CO No.	**Course Outcomes**
CO-1	To assess the knowledge of student in RDBMS and Web Technology
CO-2	To acquire knowledge on writing computer programs using concept of Web Technology
CO-3	To create and manage Database using concept of RDBMS

Course Title	Add On (Advance C)
CODE	**CA - 207**
CO No.	**Course Outcomes**
CO-1	To study advanced concepts of programming using the ‘C’ Language.
CO-2	To understand code organization with complex data types and structures.
CO-3	To work with files.

Course Title	Digital Marketing
CODE	CA-301
CO No.	Course Outcomes
CO-1	The aim of this syllabus is to give knowledge about using digital marketing in and as business.
CO-2	To make SWOT analysis, SEO optimization and use of various digital marketing tools.
CO-3	To understand Case study and Exercise on various terms
CO-4	To understand Digital marketing for business purpose

Course Title	Data Structure
CODE	CA-302
CO No.	Course Outcomes
CO-1	To understand the concept of ADT's
CO-2	To learn linear data structures – lists, stacks, and queues
CO-3	To understand sorting, searching and hashing algorithms
CO-4	To apply Tree and Graph structures

Course Title	Software Engineering
CODE	CA-303
CO No.	Course Outcomes
CO-1	To understand system concepts.
CO-2	To understand Software Engineering concepts.

CO-3	To understand the applications of Software Engineering concepts and Design in Software development	

Course Title	**Angular - JS**
CODE	**CA-304**
CO No.	**Course Outcomes**
CO-1	By the end of this course, the students should be able to Understand Client Side MVC and SPA
CO-2	Explore AngularJS Component
CO-3	Develop an AngularJS Single Page Application
CO-4	Create and bind controllers with Javascript
CO-5	Apply filter in AngularJS application

Course Title	**Big Data**
CODE	**CA-305**
CO No.	**Course Outcomes**
CO-1	To enable learners to develop expert knowledge and analytical skills in current and developing areas of analysis statistics, and machine learning
CO-2	To enable the learner to identify, develop and apply detailed analytical, creative, problem solving skills.
CO-3	Provide the learner with a comprehensive platform for career development, innovation and further study.

Course Title	Basic Course in Environmental Awareness
CODE	CA-307
CO No.	Course Outcomes
CO-1	Provide an opportunities to acquire the knowledge, values, attitudes, commitment, and skills needed to protect and improve the environment
CO-2	To develop conscious towards a cleaner and better managed environment

Course Title	Computer Laboratory Based on 302 , 304 and 305
CODE	CA-306
CO No.	Course Outcomes
CO-1	To assess the knowledge of student in Data Structure, Angular JS and R programming
CO-2	To acquire knowledge on writing computer programs using concept of Data Structure , Angular JS and R programming
CO-3	To create and manage Applications using Data Structure , Angular JS and R programming

Course Title	Networking
CODE	CA-401
CO No.	Course Outcomes
CO-1	To gain knowledge about Computer Networks concepts.
CO-2	To know about working of networking models, addresses, transmission medias and connectivity devices.
CO-3	To acquire information about network security and cryptography.

Course Title	Object Oriented Concepts Through CPP
CODE	CA-402
CO No.	Course Outcomes
CO-1	Acquire an understanding of basic object-oriented concepts and the issues involved in effective class design.
CO-2	Enable students to write programs using C++ features like operator overloading, constructor and destructor, inheritance, polymorphism and exception handling.

Course Title	Operating System
CODE	CA-403
CO No.	Course Outcomes
CO-1	To know the services provided by Operating System
CO-2	To know the scheduling concept
CO-3	To understand design issues related to memory management and various related algorithms.
CO-4	To understand design issues related to File management and various related algorithms

Course Title	Advance PHP
CODE	CA-405
CO No.	Course Outcomes
CO-1	To know & understand concepts of internet programming.
CO-2	Understand how server-side programming works on the web.
CO-3	Understanding How to use PHP Framework (Joomla / Druple)

Course Title	Computer Laboratory Based on 402 and 404
CODE	CA-406
CO No.	Course Outcomes
CO-1	To assess the knowledge of student in CPP and Adv. PHP
CO-2	To acquire knowledge on writing computer programs using concept of CPP and Adv. PHP
CO-3	To create and manage Applications using CPP and Adv. PHP

Course Title	Cyber Security
CODE	**CA-501**
CO No.	**Course Outcomes**
CO-1	To understand the fundamentals of cyber security.
CO-2	To understand various categories of Cybercrime, Cyber-attacks on mobile, tools and techniques used in Cybercrime and case studies.
CO-3	To have an overview of the Cyber laws and concepts of Cyber forensics.

Course Title	Object Oriented Software Engineering
CODE	**CA-502**
CO No.	**Course Outcomes**
CO-1	To understand the fundamentals of object modeling
CO-2	To understand and differentiate Unified Process from other approaches.
CO-3	To design with static UML diagrams.
CO-4	To design with the UML dynamic and implementation diagrams.
CO-5	To improve the software design with design patterns.
CO-6	To test the software against its requirements specification.

Course Title	Core Java
CODE	**CA-503**
CO No.	**Course Outcomes**
CO-1	To introduce the object oriented programming concepts.
CO-2	To understand object oriented programming concepts, and apply them in solving problems.
CO-3	To introduce the principles of inheritance and polymorphism; and demonstrate how they relate to the design of abstract classes
CO-4	To introduce the implementation of packages and interfaces
CO-5	To introduce the concepts of exception handling and multithreading.
CO-6	To introduce the design of Graphical User Interface using applets and swing controls.

Course Title	Python
CODE	**CA-504**
CO No.	**Course Outcomes**
CO-1	Define and demonstrate the use of built-in data structures “lists” and “dictionary”.
CO-2	Design and implement a program to solve a real world problem.
CO-3	Design and implement GUI application and how to handle exceptions and files.

Course Title	Project
CODE	CA-505
CO No.	Course Outcomes
CO-1	Students can express their ideas clearly and effectively, both verbally and in written form.
CO-2	Students can work as a team to achieve common goals.
CO-3	Students are able to make links across different areas of knowledge and to generate, develop and evaluate ideas and information related to the project.
CO-4	Students are able to learn on their own, reflect on their learning and improve upon it.

Course Title	Computer Laboratory Based on 502 and 503
CODE	506
CO No.	Course Outcomes
CO-1	To assess the knowledge of student in Java Programming, Python
CO-2	To acquire knowledge on writing computer programs using concept of Java Programming, Python
CO-3	To create and manage Applications using Java Programming, Python

Course Title	Ad-on Internet of Things (IoT)
CODE	CA-507
CO No.	Course Outcomes
CO-1	To understand Technical aspects of Internet of things.
CO-2	To describe smart objects and IoT Architecture.
CO-3	To study and compare different Application protocols of IoT.
CO-4	To understand IoT platform using Arduino Uno.

Course Title	Recent Trends in IT
CODE	CA-601
CO No.	Course Outcomes
CO-1	To discuss the basic concepts AI.
CO-2	To apply basic, intermediate and advanced techniques to mine the data.
CO-3	To provide an overview of the concept of Spark programming.

Course Title	Software Testing
CODE	CA-602
CO No.	Course Outcomes
CO-1	Students will be introduced to testing tools.
CO-2	Students will acquire Knowledge of Basic SQA.
CO-3	Students will be able to design basic Test Cases.

Course Title	Advanced Java
CODE	CA-603
CO No.	Course Outcomes
CO-1	Students will know the concepts of JDBC Programming.
CO-2	Students will know the concepts of Multithreading and Socket Programming.
CO-3	Students will know the concepts of Spring and Hibernate.
CO-4	Students will develop the project by using JSP and JDBC.
CO-5	Students will develop applications in Spring and hibernate

Course Title	Dot Net Framework
CODE	CA-604
CO No.	Course Outcomes
CO-1	To know the concept of software testing.
CO-2	To understand how to test bugs in software.
CO-3	To develop programming logic.

Course Title	Project
CODE	605
CO No.	Course Outcomes
CO-1	Students can express their ideas clearly and effectively, both verbally and in written form.
CO-2	Students can work as a team to achieve common goals.
CO-3	Students are able to make links across different areas of knowledge and to generate, develop and evaluate ideas and information related to the project.
CO-4	Students are able to learn on their own, reflect on their learning and improve upon it.

Course Title	Computer Laboratory Based on 601 and 602
CODE	606
CO No.	Course Outcomes
CO-1	To assess the knowledge of student in Advanced Web Technologies and Advance Java
CO-2	To acquire knowledge on writing computer programs using concept of Advanced Web Technologies and Advance Java
CO-3	To create and manage Applications using Advanced Web Technologies and Advance Java

HOD
BBA (CA) Dept.