Marathwada Mitra Mandal College of Commerce

BBA(CA)

BBA(CA) 2019 CBCS Pattern

Program Outcomes (PO)

- PO1 To acquire knowledge of statistics, accounts, management, organizational behaviour and computer application for analysing and solving real world problems under choice based credit system
- PO2 To develop logical reasoning skills and analytical aptitude skills
- PO3 To build the necessary skill set for problem analysis.
- PO4 To develop designing skills and solutions as per requirement
- PO5 To learn the usability of techniques and skills of modern software
- PO6 To inculcate professional and social responsibilities
- PO7 To understand the role of computer application in environment and sustainable development
- PO8 To apply professional ethics in work environment
- PO9 To gain inter disciplinary knowledge for entrepreneurship development
- PO10 To develop business communication skills for working with teams
- PO11 To prepare for emerging computer technologies and their applicability

Program Specific Outcomes (PSO)

- PSO1- Implement programming language and database concepts.
- PSO2- To learn ability enhancement programs like Scratch, j Query, Advanced C etc
- PSO3- Understand computer networks and security concepts
- PSO4- Design and develop interdisciplinary software projects by applying concepts of software engineering
- PSO5- To practice ability enhancement skills through web application development, analytical tools etc
- PSO5-To be aware of communication and environmental sustainability.
- PSO6-To develop skills required for software projects in multidisciplinary areas

Course Outcomes (CO)

Semester - I

CA101 Business Communication Skills

- 1. To understand what is the role of communication in personal and business world
- 2. To understand system and communication and their utility
- 3. To develop proficiency in how to write business letters and other communications

required in business

CA102 Principles of Management

- 1. To understand basic concepts regarding org. Business Administration
- 2. To examining how various management principles
- 3. To develop managerial skills among the students

CA103 C-Programming

- 1. To get awareness of Programming languages
- 2. To understand fundamental knowledge about Input and Output operation
- 3. To build logic of implementing a program using basic programming constructs

CA104 Database Management Systems

- 1. To understand the basics of data storage, data manipulation and data retrieval
- 2. To learn basics of data entity relationship and normalization
- 3. To acquaint with various types of data storage models.
- 4. To learn data abstraction layer

CA105 Business Statistics

- 1. To understand role and importance of statistics in various business situations
- 2. To develop skills related with basic statistical technique
- 3. Develop right understanding regarding regression, correlation and data interpretation

CA 106 Computer Laboratory Based on CA103 and CA 104

- 1. To understand the basics of C programming
- 2. To implement various algorithms using programming constructs
- 3. To create data storage entity such as tables
- 4. To execute different database queries using structured query language

Semester - II

CA 201 Organizational Behavior & Human Resource Management

- 1. To understand basic concept of HRM & OB
- 2. To make aware students about traditional & modern methods of procurement & development in organization.
- 3. To know the major trends in HRM & OB

CA 202 Financial Accounting

- 1. To develop right understanding regarding role and importance of monetary and financial transactions in business
- 2. To cultivate right approach towards classifications of different transactions and their implications
- 3. To develop proficiency preparation of basic financial as to how to write basis accounting statement Trading and P&L

CA 203 Business Mathematics

- 1. To understand the role and importance of Mathematics in various business situations and while developing softwares.
- 2. To develop skills related with basic mathematical technique

CA 204 Relational Data Base

- 1. Enables students to understand relational database concepts and transaction management concepts in database system.
- 2. Enables student to write PL/SQL programs that use: procedure, function, package, cursor and trigger.

CA 205 Web Technology (HTML-JSS-CSS)

- 1. To know & understand concepts of internet programming.
- 2. To understand how to develop web based applications using JavaScript.

CA 206 Computer Laboratory Based on CA 204 & CA 205

- 1. To know & understand concepts of internet programming
- 2. To understand markup language and client side scripting

- 3. To enable students to understand relational database concepts and transaction management concepts in database system.
- 4. To enable student to write PL/SQL programs that use: procedure, function, package, cursor and trigger.
- 5. To understand concurrency control and recovery in database system

Semester - III

CA 301 Digital Marketing

- 1. To give knowledge about using digital marketing in and as business
- 2. To make SWOT analysis, SEO optimization and use of various digital marketing tools.

CA 302 Data Structure

- 1. To understand the concepts of ADTs
- 2. To learn linear data structures lists, stacks, and queues
- 3. To understand sorting, searching and hashing algorithms
- 4. To apply Tree and Graph structures

CA 303 Software Engineering

- 1. To understand System concepts.
- 2. To understand Software Engineering concepts.
- 3. To understand the applications of Software Engineering concepts and Design in Software development

CA 304-A Angular - JS

- 1. To understand Client Side MVC and SPA
- 2. To explore AngularJS Component
- 3. To develop an AngularJS Single Page Application
- 4. To create and bind controllers with Javascript
- 5. To apply filter in AngularJS application

CA 304-B PHP

- 1. To understand how server-side programming works on the web.
- 2. To learn use of PHP built-in functions and creating custom functions
- 3. To understand POST and GET in form submission.
- 4. To understand processing of form and submission of data.
- 5. To read and process data in a MySQL database.

CA 305-A Big Data

- 1. To enable learners to develop expert knowledge and analytical skills in current and developing areas of analysis statistics, and machine learning
- 2. To enable the learner to identify, develop and apply detailed analytical, creative, problem solving skills.
- 3. To provide the learner with a comprehensive platform for career development, innovation and further study.

CA 305-B Block Chain

- 1. To understand how blockchain systems (mainly Bitcoin and Ethereum) work,
- 2. To securely interact with Blockchain systems
- 3. Design, build, and deploy smart contracts and distributed applications
- 4. Integrate ideas from blockchain technology into their own projects

CA 306 Computer Laboratory Based on CA 302, CA 304 and CA 305

- 1. To understand different methods of organising large amounts of data
- 2. To efficiently implement different data structure
- 3. To understand server side programming and database connectivity
- 4. To understand the concepts of XML and AJAX.
- 5. To be aware of web services

Semester - IV

CA 401 Networking

- 1. To gain knowledge about Computer Networks concepts.
- 2. To know about working on networking models, addresses, transmission media and connectivity devices.
- 3. To acquire information about network security and cryptography.

CA 402 Object Oriented Concepts Through CPP

- 1. To acquire an understanding of basic object-oriented concepts and the issues involved in effective class design.
- 2. To enable students to write programs using C++ features like operator overloading, constructor and destructor, inheritance, polymorphism and exception handling.

CA 403 Operating System

- 1. To know the services provided by Operating System
- 2. To know the scheduling concept
- 3. To understand design issues related to memory management and various related algorithms.
- 4. To understand design issues related to File management and various related algorithms

CA 404 - A Advance PHP

- 1. To know & understand concepts of internet programming.
- 2. To understand how server-side programming works on the web.
- 3. To understanding how to use PHP Framework (Joomla / Drupal)

CA 404-B Node - JS

- 1. To understand the JavaScript and technical concepts behind Node JS
- 2. To structure a Node application in modules
- 3. To understand and use the Event Emitter
- 4. To understand Buffers, Streams, and Pipes
- 5. To build a Web Server in Node and understand how it really works
- 6. To learn to connect to a SQL or Mongo database in Node

CA 405 Project

- 1. To develop a software for a given problem domain
- 2. To document the project development cycle
- 3. To work as a team member for the software project completion

CA 406 Computer Laboratory Based on CA 402, CA 404

- 1. To solve basic programs on class and objects
- 2. To understand function overloading and use the concept to solve the programs
- 3. To implement the theory learnt in CA 404

Semester - V

CA-501 Cyber Security

- 1. Have a good understanding of Cyber Security and the Tools.
- 2. Identify the different types of Cyber Crimes.
- 3. Have a good understanding of Cyber laws
- 4. To develop Cyber forensics awareness.
- 5. Identify attacks, security policies and credit card frauds in mobile and Wireless Computing Era.

CA-502 Object Oriented Software Engineering

- 1. Students will be able to give Design Specifications for Project
- 2. Students will acquire Knowledge in Basic Modeling.
- 3. Students will acquire Project Management Skills

CA-503 Core Java

- 1. To solve real world problems using OOP techniques.
- 2. To understand the use of abstract classes.
- 3. To solve problems using java collection framework and I/o classes.

- 4. To develop multithreaded applications with synchronization.
- 5. To develop applets for web applications.
- 6. To design GUI based application

CA-503 MongoDB

- 1. To work with MongoDB shell and MongoDB tools.
- 2. To do Schema design, Data modelling and all sorts of CRUD Operations.
- 3. To optimize query performance.
- 4. To analyze the data stored in MongoDB

CA-504 Python

- 1. Define and demonstrate the use of built-in data structures "lists" and "dictionary"
- 2. Design and implement a program to solve a real world problem.
- 3. Design and implement GUI application and how to handle exceptions and files.

CA-505 Project

- 1. To develop a software for a given problem domain
- 2. To document the project development cycle
- 3. To work as a team member for the software project completion

CA- 506 Computer Laboratory Based on 503 and 504(2 credits each)

- 1. To create databases that allow embedding of documents to describe nested structures
- 2. Write Python functions to facilitate code reuse.
- 3. To develop the skill of designing Graphical user Interfaces in Python
- 4. To develop the ability to write database applications in Python

Semester - VI

CA-601 Recent Trends in IT

- 1. To discuss the basic concepts AI.
- 2. To apply basic, intermediate and advanced techniques to mine the data.
- 3. To provide an overview of the concept of Spark programming

CA-602 Software Testing

- 1. Students will be introduced to testing tools
- 2. Students will acquire Knowledge of Basic SQA.
- 3. Students will be able to design basic Test Cases

CA-603 Advanced Java

- 1. Students will know the concepts of JDBC Programming.
- 2. Students will know the concepts of Multithreading and Socket Programming.

- 3. Students will know the concepts of Spring and Hibernate.
- 4. Students will develop the project by using JSP and JDBC.
- 5. Students will develop applications in Spring and hibernate.

CA-604 Android Programming

- 1. Student will be able to write simple GUI applications, use built-in widgets and components, work with the database to store data locally, and much more.
- 2. Demonstrate their understanding of the fundamentals of Android operating systems
- 3. Demonstrate their skills of using Android software development tools

CA-604 Dot Net Framework

- 1. Use the features of Dot Net Framework along with the features of VB, C# and ASP
- 2. Design and develop window based and web based .NET applications.
- 3. Design and develop a Website. Design and Implement database connectivity using ADO.NET for VB, C# and ASP.

CA-605 Project

- 1. To develop a software for a given problem domain
- 2. To document the project development cycle
- 3. To work as a team member for the software project completion

CA-606 Computer Laboratory Based on 603 and 604(2 credits each)

- 1. To use HTML and Server controls
- 2. To demonstrate database application using ADO.net
- 3. To create web application using JSP
- 4. To use JDBC and demonstrate create, update, delete records
- 5. To use multithreading to develop animated application