SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED [M.S.]

Faculty of Commerce and Management

Name of the Programme:

Bachelor of Commerce (Computer Application)

Programme Code**: B.Com. (CA)**

Choice Based Credit System (CBCS Pattern)

w.e.f. 2016-17

Curriculum of

B.Com. First Year (CA) Effective from Academic Year 2016-2017

Class	Semester	Subject Code	Subject	Continuous Assessment (CA)	End of Semester Exam ESE	Total Marks	Total Credit
B.Com- I	SEM I	Eng Paper-I	English-I	35	40	75	3
		CA- I	Introduction to Dos & Windows OS	35	40	75	3
		B.C.1.1	Fundamentals of Financial Accounting-I	35	40	75	3
		B.C.1.4	Fundamentals of Statistics-I	35	40	75	3
		B.C.1.2	Business Communication-I	35	40	75	3
		B.C.1.3	Principles of Business Economics	35	40	75	3
		CA- II	Office Automation (Ms-Word & Ms – PowerPoint)	35	40	75	3
	SEM II	Eng Paper-II	English	35	40	75	3
		CA- III	Introduction to Tally	35	40	75	3
		B.C.2.1	Fundamentals of Financial Accounting-II	35	40	75	3
		B.C.2.4	Fundamentals of Statistics-II	35	40	75	3
		B.C.2.2	Business Communication-II	35	40	75	3
		B.C.2.3	Business Economics-II	35	40	75	3
		CA- IV	Office Automation (Ms-Excel & Ms-Access)	35	40	75	3

For detail curriculum of the courses (except the 4 CA courses) please refer B.Com. (General) curriculum

Name of the Programme	B.Com (CA)
Semester	I Semester
Name of Course	Introduction to Dos & Windows OS
Course Code	CA-I

Objective of the paper;
- To enhance the computer literacy among the students.
- To gain the basic knowledge of computer and its peripherals.
- To get an information about practical applications of computer

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1. **Fundamentals of computer systems**   **10 Periods**
   Introduction :(Basic structure, ALU, Memory, CPU, I/O Devices), Generation of Computer.
   Classification of Computer :(Micro, Main frame, Super computer, PC, Server, Workstation)
   Characteristics & Features of computer.

2. **Data Representation**   **12 Periods**

   BIT, BYTE, WORD.
   Introduction to Number system: Binary, Octal, Decimal and Hexadecimal conversation from one
   Number system to another number system, Introduction to basic Gates.

3. **I/O & O/P Devices**   **8 Periods**
   Keyboard, mouse, touch screen, scanning devices, bar code reader
   CRT, DVD, Web Camera Modem

4. **Memory**   **4 Periods**
   Types of Memory (Primary & secondary) RAM ROM, PROM, EPROM
   Secondary Storage Devices (FD, CD, HD, Pen Drive, DVD)

5. **Computer Languages**   **7 Periods**
   Types of programming languages, Machine languages, Assembly languages, High level languages

6. **Introduction to Ms-DOS**   **10 Periods**
   What is Dos, History, File and Directory, Study of Internal & External Commands of MS-DOS?
   Types of Files, Configuration of Dos (Config.sys), Batch File Concept& Study of Autoexec.bat File,
   Booting procedure of DOS,

7. **Introduction to Ms-WINDOWS**   **03 Periods**
   What is Window O.S., History, and Files & Folders,
   What is GUI & Windows Concepts of toolbars, menu Title bar, control Dialogue box status bar message
   box and mouse Operations, and File manager –All Options?

Reference books

Fundamental of Computers -V. Raja Raman
Peter Norton's Introduction to computers-Peter Norton's
Fundamental of computer-Bechkar & Sontake

Name of the Programme	B.Com (CA)
Semester	I Semester
Name of Course	Office Automation (Ms-Word & Ms –PowerPoint)
Course Code	CA-II

Objective of the paper;
- Give students an in-depth understanding of creating document, calculate the data & analyze it.
- To creating effective & interactive Presentation.
- To design a form, reports & records for data analysis.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1. Word Processing Tool 07 Periods
Menus, Shortcut Menus, Toolbars, Customizing Toolbars, Creating & Opening, Saving, Renaming Documents, Working On multiple documents

2. Working with Text & Tables 07 Periods
Typing & Inserting, Selecting, Deleting Text, undo, formatting toolbar,
Insert table button, Draw a table, Inserting rows & columns, moving and Resizing a table, Tables and Borders toolbar, table Properties

3. Spelling and Grammar 07 Periods
Autocorrect, Spelling and grammar check, Synonyms, Thesaurus.

4. Formatting 06 Periods
Page margins, Page size & Orientation, Headers and Footers, page members, print preview and printing, Paragraph attributes, moving, copying & Pasting text,
The Clipboard, Columns, Drop Caps. Formatting printer

5. Graphics 07 Periods
Adding Clip art, Add an image from a file, Editing a graphic, AutoShapes

6. Presentation Tool 06 Periods
AutoContent Wizard, Create a presentation from a template, create a blank presentation, open an existing presentation, Auto Layout, presentation screen:
Screen Layout, Views, Working with Slides: Insert a new slide, Applying a design template, changing slide layouts, recording slides, hide slides, create a custom slide show.

7. Color & Background 07 Periods
Color schemes, Backgrounds, Graphics, Adding ClipArt, image from a file, Editing a graphics, AutoShapes.

8. WordArt Slide Effects 07 Periods
Action button, Slide animation, Animation preview, slide transitions, slide show options, master slides, Header & Footer, slide numbers, Date & Time saving and printing, Page setup, Print.

Reference Books
Microsoft Office 2002 By Complete (BPB)

Name of the Programme	B.Com (CA)
Semester	II Semester
Name of Course	Introduction to Tally
Course Code	CA-III

Objective of the paper;
- To learn Basics of Accountancy and its principles.
- To understand concepts, conventions, recording procedures, Bank reconciliation, final accounts etc
- To learn and practice Computerized Accounting Systems using Tally.ERP.9

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1) Introduction to Tally   **10 Periods**

  Need of computerized accounting,
Accounting software package-Tally and its
  Advantages opening screen of tally.

2) Basic accounts   **10 Periods**

  Company creation, group, ledger, voucher entry, single mode voucher entry,
  Accounts voucher printing, daybooks summaries, Trial balance, final accounts,
  Report printing.

3) Traders accounts   **10 Periods**

  Customer suppolier,profile,sales purchase Voucher entry,bills register, sale purchase
  Summary,bill reference,outstanding reports.

4) Advanced financial accounts   **10 Periods**

  Advanced accounting features,cost category
  And cost centre,voucher types and classes,
  Bank reconciliation,budget and scenarios ,
  Voucher class, foreign currency.

5) Basic Inventory   **14 Periods**

  Inventory master,Inventory
  Voucher,invoicing
  Inventory reports,Invoice register,sales   .
  purchase analysis,stock journal reports

Reference books:
1. Implementing Tally 9----- Asok k nadhani Kisor k nadhani(Bps)
2. Implementing Tally 7.2—(Bps)

Name of the Programme	B.Com (CA)
Semester	II Semester
Name of Course	Office Automation (MS-Excel & MS-Access)
Course Code	CA-IV

Objective of the paper;
- To learn to tabulate the information for analysis of data.
- To create a chart for understanding the data graphically.
- To manage the data using the database MS-Acess.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1. Introduction to MS- Excel   **10 Periods**

Spreadsheet basics, Adding & Renaming Worksheets, the standard toolbar, Opening, Saving, Closing And more (Moving through cells), adding Worksheet rows & columns, Selecting cells, moving & Copying cells, Formatting toolbars, format cells, dialog box, dates & times;

2. Formulas & Function   **10 Periods**

Formulas, Linking worksheets, Basic function, Auto sum, basic ascending & descending sorts, Auto fill, Adding clipart, add an image from a file, editing a graph, AutoShapes.

3. Charts   **10 Periods**

Char wizard, resizing a char, moving a chart, Formatting toolbar, Page properties & printing: page Break, page orientation, margins, Header & Footer, Page numbers print Preview, print, editing a graph

4. Introduction to MS- Access   **10 Periods**

What is database, Part of an Access window, creating a new database, creating database through table wizard, open and close the database file. Primary Keys, Switching Views ,Entering Data, Manipulating Data

5. Queries and Forms   **10 periods**

Using the Query window, using criteria and saving queries, form design without wizards, Form design toolbar, toolbox toolbar.

6. Reports   **04 Periods**

Introduction, creating a single-column Report, creating a grouped data report, adding a chart to a report.

Reference Books
1. MS-Office 2000 Michael Busby and Russell A. Stultz
2. MS-Office 2000   Sanjay Sexena

B.Com. Second Year (CA) Effective from Academic Year 2017-2018

Class	Semester	Subject Code	Subject	Continuous Assessment (CA)	End of Semester Exam ESE	Total Marks	Total Credit
B.Com II	SEM III	Eng Paper-III	English	35	40	75	3
		CA- V	Programming in C	35	40	75	3
		CC XI	New Trends in Corporate Accounting	35	40	75	3
		CC XII	Corporate Law	35	40	75	3
		CC XIII	Principles of Business Management and Practice	35	40	75	3
		CC XIV	Cost Accounting – I	35	40	75	3
		CC XV	Banking and Finance	35	40	75	3
		CA- VI	RDBMS Through ORACLE	35	40	75	3
		SEC A	A-1 : DTP-I OR A-2 : E-Commerce *OR* A-3 : E-Business Marketing	35	40	75	3
	SEM IV	Eng Paper-IV	English	35	40	75	3
		CA- VII	Object Oriented Programming With C++	35	40	75	3
		CC-XVII	Advanced Corporate Accounting	35	40	75	3
		CC-XVIII	Business Law	35	40	75	3
		CC-XIX	Risk Management	35	40	75	3
		CC-XX	Advanced Planning in India	35	40	75	3
		CC-XXI	Advanced Cost Accounting	35	40	75	3
		CA- VIII	Web Page Designing	35	40	75	3
		SEC	: DTP-II OR : E-Governance *OR* : Retail Business Accounting-II	35	40	75	3

For detail curriculum of the courses (except the 4 CA courses) please refer B.Com. (General) curriculum.

Name of the Programme	B.Com (CA)
Semester	III Semester
Name of Course	Programming in C
Course Code	CA-V

Objective of the paper;
- To provide an exposure to problem solving and improves the logic through programming language.
- To develop knowledge of basic computer programming language through C programming.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1   Introduction to C Language:-   **14 periods**
Definition of programming Language, Types of computer Languages,
History of C Language, The character set, Constants, Variables and Keywords,
Types of Constants, Types of Variables, Keywords, Data Types.
Instructions- Type declaration Instruction, Arithmetic Instruction,
Structure of C Program,
Data I/O Functions: getchar(), putchar(), printf(), scanf(), puts(), gets()

2   The Decision and Looping Control Structure:-   **10 periods**
The if statement, the if-else statement, Nested if-else statement, if-else ladder.
The while loop, the for loop, the do-while loop, the break, continue, go to statement.
The case control structure: Decisions using switch

3   Arrays   **10 periods**
What are arrays?, array initialization, bound checking, types of arrays,
initializing a 2-Dimensional and Multidimensional Arrays.

4   Storage Classes and Functions:-   **10 periods**
Automatic, Register, Static, External (Local and Global)
Arguments and local variables, Returning Function results,
Default return type and Type void, passing values between functions,
Declaration of function type, Recursion, Function with variable arguments.

5   Character Strings, Structures and Union:-   **10 periods**
What are strings?,
standard library string functions- strlen(), strcpy(), strcat(), strcmp().Declaring structure,
Initializing structures, structure variables, accessing structure elements, Arrays of structures,
structures within structures, Introduction to Union.

Reference Books:-
1. Programming in ANSI C – By E. BalguruSamy (TMH)
2. Let Us C – By Yeshwant Kanetkar (BPB)
3. Programming with C – By Byron Gotterfred (TMH)
4. Turbo C/C++ The Complete Reference – By H. Schild.

Name of the Programme	B.Com (CA)
Semester	III Semester
Name of Course	RDBMS Through ORACLE
Course Code	CA-VI

Objective of the paper;
- To impart the knowledge of basic consept of Data Base Management System
- To develop SQL queries for Manage the data.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1. BASIC CONCEPTS: 14 Periods

Structure of DBMS, Users of DBMS, Advantages and Disadvantages of DBMS. Relational Database: Attributes and domains, tuples relations and their schemes. Integrity rules Relational algebra : Basic operations.

2. INTRACTIVE SQL: 10 Periods

Oracle and Client server technology, Data manipulation in DBMS, The component parts of Two dimensional matrix, The data types.

3. TABLE CREATION AND MANIPULATION: 12 Periods

Two dimensional matrix creation, Insertion of data into tables, viewing data in the tables, deletion operation, updating the contents of tables, modifying the structure of tables, renaming tables, destroying tables.

4. MANIPULATION OF DATA: 12 Periods

Computation on table data, oracle dual table, sysdate, oracle functions. Grouping of data form tables, Manipulating dates, Subquries, Study of the clauses : Union, Intersect, Minus.

5. SQL PERFORMANCE TUNING: 06 Periods

Indexes, RowID, Views, Sequences.

Reference Books:

1.   An Introduction to Database Systems By Bipin C Desai. Golgotia Publication
2.   SQL, PL/SQL The Programming language of ORACEL 2ed Edition By Ivan Bayross (BPB).

Name of the Programme	B.Com (CA)
Semester	IV Semester
Name of Course	Object Oriented Programming With C++
Course Code	CA-VII

Objective of the paper;
- To understand the concept of Object Oriented Language.
- To impart the computer programming language through C++.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1. **Introduction to OOP's:-** 05 Periods

   Object Oriented Programming, Basic Concepts of OOP's, Benefits of OOP's.

2. **Introduction to C++** 15 Periods

   Tokens, Keywords, Identifiers, Data Types, Constants, Variables, Operators,
   Operator precedence and associatively, I/O statements, Structure of C++ Program, Control and Looping Statements, Arrays, Pointers, Function, Function Prototype, Inline function, Default arguments, Function overloading.

3. **Class and Object:-** 12 Periods

   Define Class, Members, Object, Visibility modes, Static Members, Friend functions, Constructor and Destructor.

4. **Operator Overloading and Type Conversions:-** 12 Periods

   Concept of Operator Overloading, Unary and Binary operator overloading,
   Rules for Overloading, Type conversions- Basic to class, Class to basic.

5. **Inheritance and Polymorphism:-** 10 Periods

   Concept of Inheritance, Types of Inheritance, Introduction to Polymorphism.

Reference Books:-

3. Object Oriented Programming With C++ - By E. Balgurusamy
4. Object Oriented Programming in C++ - By Richard Johnson Baugh & Martin Kalin
5. C++ Comleted Reference- By H. Sheild

Name of the Programme	B.Com (CA)
Semester	IV Semester
Name of Course	Web Page Designing
Course Code	CA-VIII

Objective of the paper;
- Apply a structured approach to designing, launching website.
- To understand various forms creation using HTML.
- To use coding in HTML using various tag's to develop an attractive website.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1. Introduction to Web Publishing   **10 Periods**

    Web Browser
    WWW
    Web Design Process
    Implementation
    Maintenance phases of Website

2. HTML Documents   **10 Periods**

    Overview
    Rules and Guidelines
    Structure of HTML Document

3. Tags in HTML   **10 Periods**

    HTML, HEAD, TITLE, BODY
    Paragraph
    Formatted and Unformatted tags
    Horizontal rule Font (size, color) Background Color

4. List and Images   **12 Periods**

    Ordered list, unordered list, Definition list.
    Inserting image into a webpage, Inline image, Background graphics, animation, Sound

5. Table and Linking   **12 Periods**

    Table tags, General table format, Cellspacing and Cellpadding,
    Rowspan and Colspan
    URL, Anchor tag, External image, Link within same page

Reference Books:-

Complete HTML by BPB publication

B.Com. Third Year (CA) Effective from Academic Year 2018-2019

Class	Sem.	Subject Code	Subject	Continuous Assessment (CA)	End of Semester Exam ESE	Total Marks	Total Credit
B. Com. III	SEM V	XXIII	Advanced Accounting – I	35	40	75	3
		XXIV	Management Accounting – I	35	40	75	3
		XXV	Auditing-I	35	40	75	3
		XXVI.E (CA-IX)	Visual Basic 6.0	35	40	75	3
		GE-I.1	Indian Economy-I (CBCS) OR Rural Management-I (CBCS) OR Labour Laws & Industrial Laws-I (CBCS) OR Travel & Tourism-I (CBCS) OR The Right to Information Act-2005-I (CBCS)	35	40	75	3
		XXVII.E (CA-X)	E-commerce & cyber Security	35	40	75	3
		SEC-III	A-Tax Procedure & Planning) OR B- Accounting & Tally OR C- Financial Literacy	35	40	75	3
		CZ-1001	Environmental Studies	35	40	75	3
	SEM VI	XXIX	Advanced Accounting – II	35	40	75	3
		XXX	Management Accounting – II	35	40	75	3
		XXXI	Auditing-II	35	40	75	3
		XXXII.E (CA-XI)	Core JAVA Programming	35	40	75	3
		GE.-II.1	Indian Economy-II (CBCS) OR Rural Management-II (CBCS) OR Labour Laws & Industrial Laws-II (CBCS) OR Travel & Tourism-II (CBCS) OR The Right to Information Act-2005-II (CBCS)	35	40	75	3
		XXXIII.E (CA-XII)	VB.Net	35	40	75	3
		SEC-IV.2	A- Tax Consultancy OR B- Accounting & Auditing Practices OR C- Accounting & Auditing Practices	35	40	75	3
		XXXIVE	Training & Project Work	35	40	75	3

For detail curriculum of the courses (except the 4 CA courses) please refer B.Com. (General) curriculum.

Name of the Programme	B.Com (CA)
Semester	V Semester
Name of Course	Visual Basic 6.0
Course Code	CA-IX

Objective of the paper;
▪ To understand the programming algorithm, process, structure & database.
▪ Creating & developing desktop applications.
▪ Easy to develop Concept of Graphics User Interface
▪ To develop necessary skill to use front-end Tool

Scheme of marking;
• University written exam- 40 marks
• Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1   Introduction   10 Periods
       IDE-Tool bar, Project explorer, Tool box , Property window
       Project types

2   Working with forms   10 Periods
       The anatomy of forms ,Form properties, Events & methods
       Working with MDI form

3   Programming in VB   10 Periods
       Data types ,Key words ,Variables, Controls, Operators,Message box
       Control statement – if & select case ,
       Looping statement – While, do…while, do…until , Array Library function

4   Visual Basics control   14 Periods
       Labels, Text box, Command button, Check box, Option button ,Frame,
       List box ,Combo box ,Picture box, images controls , Scroll bar, Drive list,
       directory list and file list, Properties events & methods of each control

5   Database connectivity   10 Periods
       ▪   Introduction to JET engine
       ▪   ODBC & ISAM loading access database

       Reference Book:
       1.   Mastering in visual basics 6.0 by PBP publication
       2.   Complete visual basic by PBP publication
       3.   Guide to visual basics by Peter Norton.

Name of the Programme	B.Com (CA)
Semester	V Semester
Name of Course	E -Commerce & Cyber Security
Course Code	CA-X

Objective of the paper;
- Provide a fundamentals of the different types and key components on a business models
- Provide guiding principles behind the design and strategy of the customer web interface.
- Understand the traditional and new communication/marketing approaches that create competitive advantage in the New Economy.
- To know the importance of cyber security in business.

Scheme of marking;
- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1   Introduction to E-Commerce,   10 Periods

What is E-Commerce, Advantages & Disadvantages,
Classification of E-Commerce, B2B, B2C, C2B, C2C

2   E-Marketing   10 Periods

Definition, E-Market uses, Advantages & disadvantages of e-marketing
EDI

3   E-Security   10 Periods

Security on Net,
E-Business Risk Management

4   Cyber Security   14 Periods

Encryption, Symmetric Cryptography, Asymmetric Cryptography
RAS Algorithm, Cyber Attacks, Hacking, Phishing, IP Spoofing,
Firewalls, SSL

5   Digital Signature   10 Periods

Technology behind digital signature, Creating a digital signature
Verifying the digital signature, Digital signature & PKI

References:
1) C.V.S. Murthy – E-Commerce Concept Models , Strategies
2) P.T. Joseph – A Managerial Perspective
3) E-Commerce by Kamlesh Bajaj, Debjani Nag

Name of the Programme	B.Com (CA)
Semester	VI Semester
Name of Course	Core Java Programming
Course Code	CA-XI

Objective of the paper;

- Knowledge of object oriented paradigm in java programming language.
- Have the ability to write a computer program to solve specified problem.
- To solve the business problem & determine suitable logic for solving the problem.
- To understand principles of inheritance, packages & interface.

Scheme of marking;

- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1 Introduction to Java **12 Periods**

History of Java, Java Feature , Java Programming structure, Data Types
Variables, Constant, Operators, Simple Java Programming.

2 Decision Making & Looping Statement **12 Periods**

Simple if statement, If… else statement, Nested if… else statement
Switch Statement, While Loop, for…Loop, do… While Loop

3 Array, String **10 Periods**

What is array, Types of array, One dimensional array, Two dimensional array
What is string, String methods, Length( ), toLowerCase( ), toUpperCase( ),
replace( ), charAt( ),substring( ), & others.

4 Classes & Object **10 Periods**

Defining a class, Methods declaration, creating objects, Accessing class members
Constructor, Static members, Inheritance, Types of Inheritance, Interface
Final Variable & Final Class

5 Applet & Packages **10 Periods**

Introduction, Applet life cycle, Applet tag, Preparing to write applet
Building applet code, Package, Simple package creation

References
1) Programming with JAVA a Primer by E. Balguruswamy TATA McGraw Hill
2) The Complete Reference JAVA2 by H. Schildt

Name of the Programme	B.Com (CA)
Semester	VI Semester
Name of Course	VB.Net
Course Code	CA-XII

Objective of the paper;

- Design/develop programs with GUI interfaces
- Code programs and develop interface using Visual Basic .Net
- Perform tests, resolve defects and revise existing code
- To develop object oriented concept.

Scheme of marking;

- University written exam- 40 marks
- Internal exam based on assignments, seminars and participation in other activities - 35 marks

Course inputs;

1 Introduction   **10 Periods**

      Introduction, Installation Steps of VB.NET, IDE

      Creating Simple Computer Application

2 Net Framework   **10 Periods**

      CLR. Variables, Constant, Operators, Data types

3 Control Statements & Looping Statement   **12 Periods**

      If statement, If then else statement, Nested if…then else statement

      What is loop, Types of loop, For… next, Do…loop, While…end while

4 Dialog boxes   **12 Periods**

      The Message dialog box, The open dialog box, The save dialog box

      The font dialog box, The color dialog box

5 Creating Menus   **10 Periods**

      Creating menus, Context menus

Reference Book

1) Beginning VB.Net 2003/2008, Willis
2) VB Mastering
3) VB Practical