## Draft Syllabus of B.C.A. (Bachelor of Computer Applications)
### B.C.A. FIRST YEAR

<table>
<thead>
<tr>
<th>CODE No.</th>
<th>SUBJECT TITLE</th>
<th>TEACHING PERIODS / WEEK</th>
<th>MAXIMUM MARKS</th>
<th>TOTAL MARKS (A+B)</th>
<th>DURATION OF EXAM Hours</th>
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<tr>
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<td>Theory / Practical</td>
<td>Theory / Practical (A)</td>
<td>Internal Test Marks (B)</td>
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<td>TOTAL MARKS (SEMESTER 1 + SEMESTER 2)</td>
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BCA.S1.1 COMMUNICATION SKILLS - I

(80 Marks)  (Total 50 Lectures)

The Course Contains:

Unit I: Language and communication
   Definition of Language, nature of language
   Characteristics of Human Language
   Varieties of English Language: British, American, Indian, Australian etc.
   English for specific and special purposes.

Communication:
   Importance of communication;
   Animal and human communication;
   Methods of communication (Verbal & Non-Verbal);
   Barriers of communication.

Unit II: Oral Communication
   Basic skills of communication
   Listening to and Understanding-
      a) Extended natural speech in business situations
      Both face to face and on the telephone.
      b) Understanding standard American, British and Indian accents.
   Speaking with correct Pronunciation-
      a) English Consonants
      b) English Vowels
   Speaking with right accent

Unit III: Presentation Skills
   1) Planning and preparing to speak
   2) Strategies for making powerful openings in presentations.
   3) Body Language
   4) Voice Modulations

Unit IV: a) Meetings
   b) Group discussions
   c) Seminars
   d) Conference
   e) Interviews

Suggested Reading:
   1) DEVELOPING COMMUNICATION SKILLS
      Krishna Mohan and Meera Bajaj
   2) THE STERILING BOOK OF COMMON ERRORS IN ENGLISH
      Gratian Vass
3) **SPOKEN ENGLISH FOR YOU.**  
   R. Radha Krishna Pillai and K Rajeevan

4) **INDIAN AND BRITISH ENGLISH- A HAND BOOK OF USAGE AND PRONUNCIATION.**  
   Paroo Nihlani, Ray Tongue and Priya Hosali

5) **A COURSE IN PHONETICS AND SPOKEN ENGLISH**  
   Sethi and Dhamija.

6) **ENGLISH PRONUNCING DICTIONARY.**  
   Daniel Jones.

7) **MACMILLAN’S FOUNDATION ENGLISH.**  
   R. K. Dwivedi and A. Kumar
1. **Computer System Characteristics And Capability:**
   - Basic structure, ALU, memory, CPU, I/O devices.
   - Development of computers.
   - Classification of computers:
     - (Micro, mini frame, super computer, pc, server, workstations)

2. **Data Representation With in Computer:**
   - BIT, BYTE, WORD
   - ASCII, EBCDIC, BCD Code
   - Introduction to Number system: Binary, Octal, Decimal and Hexadecimal.
   - Conversation from one number system to another number system.
   - Introduction to Basic Gates.

3. **Input Devices:**
   - Keyboard
   - Direct Entry: Card readers, scanning devices (BAR CODE, OMR, MICR), Voice input devices, Light pen, Mouse, Touch Screen, Digitizer, Scanner.

4. **Output Devices:**
   - Printers: Impact and Non-impact printers.
   - CRT, LCD, CD-WRITTER, ZIP DRIVE, DVD
   - Introduction to Web Camera, modem

5. **Memory:**
   - RAM, ROM, PROM, EPROM, EEPROM
   - Base memory, extended memory, expanded memory, Cache memory
   - Storage devices Tape, FDD, HDD, CDROM, Pen Drive.

6. **Algorithm & Flowcharts:**
   - Definition and properties
   - Principles of flowcharting
   - Flowcharting symbols
   - Converting algorithms to flowcharts.

7. **Introduction To Programming Environment**
   - History of languages, high-level, Low level, Assembly languages etc.
   - Compilers, Interpreters, Assemblers, Linkers, Loaders.

8. **Microcomputers**
   - What is Microprocessor, Introduction to Family of microprocessor, Ideal microcomputer, An Actual microcomputer, Memory system for microcomputer, Minimum microcomputer configuration.
9. **Voice and Data communication**
   Types of communications, Physical communication, Public Switched Telephone Network, Cellular communication system.

**Reference Books:**
1. FUNDAMENTALS OF COMPUTERS BY V. RAJARAMAN.
2. COMPUTERS AND COMMONSENSE BY R. HUNT AND SHELL Y.
1. **Introduction to Ms-Word**:  
   Starting Word  
   Typing and Saving your Masterpiece, printing  
   Title Bar, Toolbars, The Ruler, Insertion point, Scroll Bars, The Menu bar,  
   The status bar.  
   Dialog Boxes: Command buttons, check boxes, drop-down lists, tabs, radio  
   buttons, Increment buttons.  
   Wizards and Templates.

2. **Basic Text Editing**:  
   Moving around in a document  
   Adding Text  
   Cut, Copy, Paste, Undo, Redo, Delete

3. **Formatting**:  
   Character formatting  
   Font dialog box  
   paragraph Formatting  
   Keeping text together  
   Adding borders and shading  
   Using tabs, page and section formatting, setting page margins, numbering pages.

4. **Searching and Proofreading Tools**:  
   Find and replace  
   Searching for special character  
   Proofreading tools  
   Choosing custom dictionary  
   Checking Grammar  
   Choosing a writing style  
   Using the Thesaurus

5. **Working with Tables and Columns**:  
   Anatomy of a Table, creating a table, entering text in a table.  
   Using table tools  
   Changing columns widths with Auto fit, Gridlines.  
   Merging Cells  
   Formatting  
   Sorting tables, copying tables, deleting tables.  
   Printing of Documents  
   Mail merge.

6. **Introduction to Ms-Excel**:  
   Spreadsheet overview, Excel highlights, starting excel, creating spreadsheet excel  
   menu
7. Working with Formulas and Functions
   Introduction
   Using basic formulas, advance formulas, designing formulas.
   Using basic and advance functions

8. Formatting:
   Types of formatting
   Using borders, color and patterns
   Conditional format

9. Creating and Formatting Charts:
   Introduction to charts.
   Creating charts, formatting charts, exploring charts.

10. Introduction to Power point.

Reference Books:
1. TEACH YOURSELF OFFICE 97/2000 FOR WINDOWS BY COREY SANDLER, TAM BADGETT, JAN WEINGARTEN (BPB)
2. MICROSOFT OFFICE 2000 BY COMPLETE (BPB)
3. MASTERING WORD 2000 BY MANSFIELD (BPB)
4. ESSENTIAL MS-WORD 2000 B MARCEL (BPB)
5. TEACH YOURSELF MS-EXCEL 2000 IN 24 HOURS (BPB)
6. TEACH YOURSELF MS-EXCEL 2000 PROGRAMMING IN 21 DAYS (BPB)
1. Disk Operating System:
   What is DOS, History.
   Files and Directory
   Study of all internal & External commands.
   Types of files.
   Configuration of DOS (config. sys)
   Batch file concept & study of Autoexec.bat file.
   Booting Procedure of DOS

2. Introduction To Windows Operating System:
   What are Windows O.S., History, files and Folders?
   Architecture of windows O.S., Study of windows directories.
   Basics of windows: Desktop, My computer, Recycle bin, my network places, Quick launch tool bar.

3. Windows Explorer
   Opening windows explorer
   Copying, pasting, moving, deleting, send to files
   Controlling and customizing the toolbars
   Using address bar, history list
   Working with files and folders

4. Features of MS-WINDOWS
   GUI, Multitasking, multi-user, network etc.
   Important files of windows and their locations (For e.g. DLL, INI etc.)

5. Windows Accessory
   Calculator
   Character map
   Notepad, WordPad
   Paint
   System tools and minor troubleshooting using different .ini files, Windows registry files.

6. Using Local Networks
   What is network, E-mail?
   Finding computers and files on network
   Sharing and managing files, folders and printers
   Adding and sharing Internet connection

7. Installation of Windows

Reference Books:-
1) MS-Dos 6.22- Russell A Stultz (BPB Publication)
2) Teach yourself Windows 2000 – Brain Underdahl
3) Peter Norton’s Maximizing Windows (Teachmedia)
4) Advanced MS-Dos Programming – Ray Duncan (BPB)
BCA.S1.PR1- COMPUTER LABORATORY – 1
(50 Marks)

PRACTICAL BASED ON DOS & WINDOWS

1. Booting procedure of DOS.
2. Study of various internal and external commands of DOS.
3. Study of various batch fine commands and creation of batch file used in autoexec.
4. Study of redirection and piping concept.
5. Study of Windows O.S.
6. Study of components and accessories of Windows O.S.
7. Study windows Directories, different .ini files & their locations.

BCA.S1.PR2-COMPUTER LABORATORY-2
(50 Marks)

PRATICAL BASED ON MS-OFFICE 2000

1. At least 15 Practical based on syllabus mentioned in paper no. BCA.S1.3.
Unit I: **Reading**
   a) Reading and understanding business letters, Reports and memos.
   b) Reading and understanding scientific texts.
   c) Reading a dictionary, thesaurus, and encyclopedia.
   d) Reading passages and poems.

Unit II: **Writing**
   a) Letters- Formal and Informal
   b) Note taking and note making
   c) Reports
   d) Curriculum Vitae
   e) Making advertisements for newspapers
   f) Rearranging the jumbled sentences.

Unit III: **Use of Grammar and usage reference sources.**
   a) Morphology: Word formation processes
   b) Word classes
   c) Phrase, Clause and Sentence
   d) Punctuation and Capitalization.
   e) Common errors in the use of English.

Unit IV: **Situational and functional English**

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**Suggested Reading:**

1) **PRACTICAL ENGLISH GRAMMAR**
   Thomson and Martinet

2) **LIVING ENGLISH STRUCTURE**
   W. S. Allen

3) **UNIVERSITY ENGLISH GRAMMAR**
   Quirk et al

4) **MODERN ENGLISH GRAMMAR (AN INTRODUCTION)**
   L. S. Deshpande & P.H. Dharamsi

5) **ENGLISH FOR PRACTICAL PURPOSES**
   Z.N.Patil, B.S.Walke, A.thorat, Z.Merchant

6) **BUSINESS COMMUNICATION**
   Urmila Rai & S.M. Rai
1. Introduction To C:
   1.1 The character Set, Constants, Variables and Keywords, Types of constants, Types of variables, keywords, data types.
   1.2 Instructions: Type Declaration Instruction, Arithmetic Instruction

2. Data Input and Output:
   2.1 getchar (), putchar (), printf (), scanf (), puts (), gets ()

3. The Decision Control Structure:
   3.1 The if Statement
   3.2 The if-else Statement
   3.3 Use of logical operators

4. The Loop Control Structure:
   4.1 The while loop, the for Loop
   4.2 The break, continue, go to statement
   4.3 The case control structure: Decisions using switch

5. Arrays:
   5.1 What are Arrays?
   5.2 Arrays Initialization
   5.3 Bounds Checking
   5.4 Types of Array
   5.5 Initializing a 2- Dimensional & Multidimensional Arrays

6. Storage Classes:
   6.1 Automatic, Register, Static, External (Local and Global)
   6.2 Scope rules

7. Functions:
   7.1 Arguments and local variables,Returning Function results, Default return type and Type void, passing values between functions, Declaration of function type.
   7.2 Recursion
   7.3 Function with variable arguments

8. Character Strings:
   8.1 What are Strings?
   8.2 Standard library String Functions: strlen (), strcpy (), strcat (), strcmp ()

9. Pointers:
   9.1 Introduction to Pointers
   9.2 Operations on Pointers
9.3 Pointers and Functions
9.4 Pointers and Arrays.

10. Structures And Unions:
10.1 Declaring structure, Initializing structures, structure variables, accessing structure Elements.
10.2 Arrays of structures
10.3 Structures within structures
10.4 Introduction to Union.

11. File Input/Output:
11.1 Introduction, defining and opening a file
11.2 Study of file I/O Operations: fopen (), fclose(), fputs (), fgets (), fread (), fwrite(), Command line arguments

Reference Books:
1. LET US C BY YASHWANT KANETKAR – BPB PUBLICATIONS
2. PROGRAMMING IN ANSI C BY E. BALGURUSAMY – TATA MCGRAW HILL
3. TURBO C/C++: THE COMPLETE REFERENCE BY H. SCHILDIT
4. PROGRAMMING WITH “BY BYRON GOVTFRED SCEOND EDITION TATA MCGRAW HILL.
1. INTRODUCTION:

2. DATA CONDENSATION AND GRAPHICAL METHODS:
2.1 Raw data, Attributes and Variables, Discrete and Continuous variables.
2.2 Construction of frequency distribution and cumulative frequency.
2.3 Graphical representation of frequency distribution: Histogram, frequency polygon.
2.4 Diagrammatic representation: Simple bar, Subdivided bar, pie diagram.

3. MEASURES OF CENTRAL TENDENCY:
3.1 Concept of central tendency.
3.2 Arithmetic mean: Definition for ungrouped and grouped data, merits and demerits.
3.3 Median: Definition formula and computation for ungrouped and grouped data, merits and demerits.
3.4 Mode: Definition, formula and computing for ungrouped and grouped data merits and demerits.

4. MEASURES OF DISPERSION:
4.1 Concept of dispersion and measures of dispersion.
4.2 Range: definition for ungrouped and grouped data.
4.3 Standard deviation: Definition for ungrouped and grouped data, Mean Deviation.
4.4 Variance: Definition for grouped and ungrouped data.
4.5 Numerical problems.

5. PROBABILITY:
5.1 Permutation of n dissimilar objects taken r at time (without repetitions)
5.2 Combination of r objects taken from n objects.
5.3 Sample space (finite, contrably infinite).
5.5 Events: types of events.
5.6 Probability: Classical definition.
5.7 Axioms of Probability.
5.8 Theorems on Probability
   i) $0 \leq P(A) \leq 1$
   ii) $P(A) + P(A^c) = 1$

6. Correlations and Regression
6.1 Definition of correlation and regression, Karl persons for ungrouped data of Correlation.

7. Analysis of Time series:
7.1 Component of time series, measure of trends, moving average and least square.

REFERENE BOOKS:
2. Statistical Methods by S.P. Gupta
3. Business Statistics by S. Shaha
4. Modern Elementary Statistics by J.E. Freund
1. **Introduction**
   What is Data, information, and database. Manual vs. computerized database, what is DBMS?
   Architecture of DBMS, User of DBMS, Database Administration, DBMS facilities, Advantages and disadvantages of DBMS, Data Models.

2. **Introduction To Database & FoxPro:**
   What is Simple and Relational Database, Advantages of using FOXPRO.

3. **Creating Database Structure:**
   Defining structures of database file
   Entering field names
   Saving a database file
   Copying and modifying structures of database files.
   Searching for specified records

4. **Adding Editing And Viewing Data:**
  Appending data
   Changing or editing data
   Resizing or changing the order of fields
   Editing multiple records, portioning the window
   Replacing field contents
   Deleting Records
   Moving the record Pointer

5. **Modify Structure, & File Utilities:**
   Modifying structure of a database file
   File Utilities in FoxPro

6. **Sorting And Indexing Database Files**
   Sorting
   Type of Indexes (Single, Compound, Structural Compound, Compact)
   Indexing Command
   Understanding Expressions
   Selecting and Controlling Index Files
   Finding information with FIND AND SEEK

7. **Generating Reports:**
   Designing the report forms
   Page Layout
   Page Preview
   Layout Tools
   Tiles / Summary
   Data Grouping
8. Memory Variables, Date & Time Functions

Memory variables
Array
Time & Date functions and commands
Date Arithmetic

9. Programming With Foxpro:
Introduction to foxpro programs.
Accept and Input.
Creating program files.
Looping statements
Editing a Program files
Making Decisions

10. Multiple Database File:
Concept
Opening multiple database files
Linking Database with SET RELATION
Updating information

11. Windows, Menus and Popups
Define, Activate, Deactivate and Hide.

Reference Books: -

1. FOXPRO 2.5 MADE SIMPLE FOR DOS & WINDOWS BY R.K.TAXLI (BPB)
2. PROGRAMMING GUIDE TO FOXPRO 2.5 HOWARD DICKER, BPB PUBLICATIONS.
3. MASTERING FOXPRO 2.5 & 2.6 (SPECIAL EDN.) – BPB
4. PROGRAMMERS GUIDE TO FOXPRO 2.5/2.6 (W/D) - BPB
5. PROGRAMMERS GUIDE TO FOXPRO (THIRD EDITION) BY ABRAHAM SILBERSCHATZ, HENRY
   KORTH, S. SUDARSHAN (MCGRAW HILL)
BCA.S2.PR3 - COMPUTER LABORATORY – 3
(50 Marks)
1. At least 15 Practical based on syllabus mentioned in paper no. BCA.S2.6.

BCA.S2.PR4-COMPUTER LABORATORY-4
(50 Marks)
1. At least 15 Practical based on syllabus mentioned in paper no. BCA.S2.8.
Effective communication skills are fundamental to good interactions between two or more people. This book, An Introduction to Communication Skills, is the first in the series. It starts by explaining more about the theory and nature of communication, then moves on to discuss effective spoken communication, the importance of body language and other aspects of non-verbal communication, and the essential skill of listening to others, before discussing barriers to communication, and how to improve communication. Not sure it’s for you? Try our Interpersonal Skills Self-Assessment to find out where your strengths and weaknesses lie, and whether you could benefit from improving your communication skills. The assessment covers listening skills, verbal communication Communication-1. Previous year question paper with solutions for Communication-1 from 2012 to 2019. Our website provides solved previous year question paper for Communication-1 from 2012 to 2019. Doing preparation from the previous year question paper helps you to get good marks in exams. From our C-1 question paper bank, students can download solved previous year question paper. The solutions to these previous year question paper are very easy to understand. Syllabus C-1 (BCA 1st). SECTION-C. Presentation skills-Its Purpose in business world, How to find material for, presentation, How to sequence the speech with proper introduction and conclusion, How to Prepare PPT & Complete set of required body language while delivering presentation. Communication skills are abilities that allow you to clearly convey ideas, whether it be through writing, talking, signing, or body language. They’re usually soft skills, but some are considered hard skills (like public speaking or Spanish fluency). Individuals with strong communication skills can explain complex concepts in ways everyone can understand, and translate technical jargon into something easy to digest. There are many types of communication skills out there. Some are universally useful, whereas others hold more value for people who regularly work with colleagues in a professional setting. Incorporating these basic business communication skills into your work life can help you grow as an employee or manager, and they can get you hired if you’re on the job hunt.