



SYLLABUS

TOTAL CLASS DURATIONS

| SL.NO. | SUBJECT | NO. OF CLASSES |
|-----------------------------|---------------------------------------|-----------------------|
| 1 | COMPUTER FUNDAMENTALS+DOS | 13+5=18 |
| 2 | MS-WINDOWS | 8 |
| 3 | MS-WORD | 20 |
| 4 | MS-EXCEL | 20 |
| 5 | MS-POWERPOINT | 10 |
| 6 | INTERNET | 4 |
| 7 | MS-ACCESS | 15 |
| 8 | C PROGRAMMING | 15 |
| 9 | C++ PROGRAMMING | 10 |
| 10 | DTP(PAGE MAKER,COREL DRAW,SHREE LIPI) | 20 |
| 11 | TALLY | 20 |
| TOTAL NO. OF CLASSES | | 157 |

DETAILED SYLLABUS

COMPUTER FUNDAMENTALS

WHAT IS COMPUTER, CHARACTERISTICS OF COMPUTERS, GENERATIONS, INPUT DEVICES(KEYBOARD, MOUSE, TRACKBALL, JOYSTICK, SCANNER, OMR, BAR-CODE READER, MICR DIGITIZER, CARD READER, VOICE RECOGNITION, WEB CAM, VIDEO CAMERAS), OUTPUT DEVICES((MONITORS(LCD,TFT,CRT), MONITORS, PRINTERS - DOT MATRIX, INKJET, LASER, PLOTTERS, MULTIMEDIA PROJECTOR) , STORAGE UNITS, CPU(CONTROL UNIT, ARITHMETIC UNIT, MEMORY UNIT(PRIMARY, SECONDARY ETC)), NUMBER SYSTEM, COVERSION OF DECIMAL TO BINARY, DECIMAL TO OCTAL DECIMAL TO HEXADECIMAL, OCTAL TO BINARY, BINARY TO HEXA, NEGATIVE NO. REPRESENTATION , RELATIONSHIP BETWEEN HARDWARE AND SOFTWARE; SYSTEM SOFTWARE, APPLICATION SOFTWARE, COMPILER, NAMES OF SOME HIGH LEVEL LANGUAGES, FREE DOMAIN SOFTWARE , TRANSLATORS (COMPILERS, INTERPRETER, ASSEMBLERS), LINKERS, BCD, ASCII, MEMORY UNITS, WHAT IS OPERATING SYSTEM AND TYPE OF OPERATING SYSTEMS.

MICROSOFT WINDOWS

DEFINING A GRAPHICAL USER INTERFACE (GUI), INSTALLING WINDOWS, THE WINDOWS DESKTOP, MY COMPUTER, WINDOWS EXPLORER, USING WINDOWS APPLICATIONS, AND USING DOS (DISK OPERATING SYSTEM) APPLICATIONS UNDER WINDOWS.

WORD PROCESSING

WORD PROCESSING CONCEPTS: SAVING, CLOSING, OPENING AN EXISTING DOCUMENT, SELECTING TEXT, EDITING TEXT, FINDING AND REPLACING TEXT, PRINTING DOCUMENTS, CREATING AND PRINTING MERGED DOCUMENTS, CHARACTER AND PARAGRAPH FORMATTING, PAGE DESIGN AND LAYOUT. EDITING AND PROOFING TOOLS: CHECKING AND CORRECTING SPELLINGS. HANDLING GRAPHICS. CREATING TABLES AND CHARTS. DOCUMENT TEMPLATES AND WIZARDS*.

SPREADSHEET PACKAGE

SPREADSHEET CONCEPTS. CREATING, SAVING AND EDITING A WORKBOOK, INSERTING, DELETING WORK SHEETS, ENTERING DATA IN A CELLI FORMULA COPYING AND MOVING DATA FROM SELECTED CELLS, HANDLING OPERATORS IN FORMULAE, FUNCTIONS: MATHEMATICAL, LOGICAL, STATISTICAL, TEXT, FINANCIAL, DATE AND TIME FUNCTIONS, USING FUNCTION WIZARD.

FORMATTING A WORKSHEET: FORMATTING CELLS - CHANGING DATA ALIGNMENT, CHANGING DATE, NUMBER, CHARACTER, OR CURRENCY FORMAT, CHANGING FONT, ADDING BORDERS AND COLORS, PRINTING WORKSHEETS, CHARTS AND GRAPHS- CREATING, PREVIEWING, MODIFYING CHARTS. INTEGRATING WORD PROCESSOR, SPREAD SHEETS, WEB PAGES*.

PRESENTATION PACKAGE

CREATING, OPENING AND SAVING PRESENTATIONS, CREATING THE LOOK OF YOUR PRESENTATION, WORKING IN DIFFERENT VIEWS, WORKING WITH SLIDES, ADDING AND FORMATTING TEXT, FORMATTING PARAGRAPHS, CHECKING SPELLING AND CORRECTING TYPING MISTAKES, MAKING NOTES PAGES AND HANDOUTS, DRAWING AND WORKING WITH OBJECTS, ADDING CLIP ART AND OTHER PICTURES, DESIGNING SLIDE SHOWS, RUNNING AND CONTROLLING A SLIDE SHOW, PRINTING PRESENTATIONS*.

DATA BASE OPERATIONS

INTRODUCTION TO DATABASE, TABLE, QUERIES, FORMS, REPORTS, MACROS, RDBMS ETC

DATA MANIPULATION-CONCEPT: DATABASE, RELATIONAL DATABASE, INTEGRITY.

OPERATIONS : CREATING, DROPPING, MANIPULATING TABLE STRUCTURE.

MANIPULATION OF DATA : QUERY, DATA ENTRY FORM, REPORTS, MACROS

PROGRAMMING IN C LANGUAGE

INTRODUCTION TO 'C' LANGUAGE

CHARACTER SET. VARIABLES AND IDENTIFIERS, BUILT-IN DATA TYPES. VARIABLE DEFINITION, ARITHMETIC OPERATORS AND EXPRESSIONS, CONSTANTS AND LITERALS, SIMPLE ASSIGNMENT STATEMENT, BASIC INPUT/OUTPUT STATEMENT, SIMPLE 'C' PROGRAMS

CONDITIONAL STATEMENTS AND LOOPS

DECISION MAKING WITHIN A PROGRAM, CONDITIONS, RELATIONAL OPERATORS, LOGICAL CONNECTIVES, IF STATEMENT, IF-ELSE STATEMENT, LOOPS: WHILE LOOP, DO WHILE, FOR LOOP. NESTED LOOPS, INFINITE LOOPS, SWITCH STATEMENT, STRUCTURED PROGRAMMING

ARRAYS

ONE DIMENSIONAL ARRAYS: ARRAY MANIPULATION; SEARCHING, INSERTION, DELETION OF AN ELEMENT FROM AN ARRAY; FINDING THE LARGEST/SMALLEST ELEMENT IN AN ARRAY; TWO DIMENSIONAL ARRAYS, ADDITION/MULTIPLICATION OF TWO MATRICES, TRANSPOSE OF A SQUARE MATRIX; NULL TERMINATED STRINGS AS ARRAY OF CHARACTERS, REPRESENTATION SPARSE MATRICES

FUNCTIONS

TOP-DOWN APPROACH OF PROBLEM SOLVING, MODULAR PROGRAMMING AND FUNCTIONS, STANDARD LIBRARY OF C FUNCTIONS, PROTOTYPE OF A FUNCTION: FUNCTIONAL PARAMETER LIST, RETURN TYPE, FUNCTION CALL, BLOCK STRUCTURE, PASSING ARGUMENTS TO A FUNCTION: CALL BY REFERENCE, CALL BY VALUE, RECURSIVE FUNCTIONS, ARRAYS AS FUNCTION ARGUMENTS

STRUCTURES AND UNIONS

STRUCTURE VARIABLES, INITIALIZATION, STRUCTURE ASSIGNMENT, NESTED STRUCTURE, STRUCTURES AND FUNCTIONS, STRUCTURES AND ARRAYS: ARRAYS OF STRUCTURES, STRUCTURES CONTAINING ARRAYS, UNIONS

POINTERS

ADDRESS OPERATORS, POINTER TYPE DECLARATION, POINTER ASSIGNMENT, POINTER INITIALIZATION, POINTER ARITHMETIC, FUNCTIONS AND POINTERS, ARRAYS AND POINTERS, POINTER ARRAYS

FILE PROCESSING

CONCEPT OF FILES, FILE OPENING IN VARIOUS MODES AND CLOSING OF A FILE, READING FROM A FILE, WRITING ONTO A FILE

PROGRAMMING IN 'C++'

C++ OVERVIEW

C++ CHARACTERISTICS ,OBJECT-ORIENTED TERMINOLOGY ,POLYMORPHISM ,OBJECT-ORIENTED PARADIGM ,ABSTRACT DATA TYPES

FUNCTIONS AND VARIABLES

FUNCTIONS: DECLARATION AND DEFINITION ,VARIABLES: DEFINITION, DECLARATION, AND SCOPE ,VARIABLES: DYNAMIC CREATION AND DERIVED DATA ,ARRAYS AND STRINGS IN C++ , QUALIFIERS

CLASSES IN C++

DEFINING CLASSES IN C++ ,CLASSES AND ENCAPSULATION ,MEMBER FUNCTIONS ,INSTANTIATING AND USING CLASSES ,USING CONSTRUCTORS ,MULTIPLE CONSTRUCTORS AND INITIALIZATION LISTS ,USING DESTRUCTORS TO DESTROY INSTANCES , FRIEND CLASS

OPERATOR OVERLOADING

OPERATOR OVERLOADING ,WORKING WITH OVERLOADED OPERATOR METHODS

INITIALIZATION AND ASSIGNMENT

INITIALIZATION VS. ASSIGNMENT ,THE COPY CONSTRUCTOR ,ASSIGNING VALUES ,SPECIALIZED CONSTRUCTORS AND METHODS ,CONSTANT AND STATIC CLASS MEMBERS

STORAGE MANAGEMENT

MEMORY ALLOCATION,DYNAMIC ALLOCATION: NEW AND DELETE

INHERITANCE

OVERVIEW OF INHERITANCE ,DEFINING BASE AND DERIVED CLASSES ,CONSTRUCTOR AND DESTRUCTOR CALLS

INPUT AND OUTPUT IN C++ PROGRAMS

STANDARD STREAMS , MANIPULATORS , UNFORMATTED INPUT AND OUTPUT , FILE INPUT AND OUTPUT

DETAILED SYLLABUS OF 'TALLY'

ACCOUNTS

COMPANY CREATION, WHAT IS TRANSACTION, TYPES OF ACCOUNTS, CLASSIFICATION & DEFINITION OF ACCOUNTS, MODE OF ACCOUNTING (DAY BOOK, CASH BOOK, LEDGER BOOK, BANK RECONCILIATION, LEDGERS, GROUPS, TRIAL BALANCE, BALANCE SHEET TYPE OF VOUCHERS, & CLARIFICATIONS, JOURNAL CREATION, JOURNAL ENTRY CLARIFICATIONS, SHORTCUT KEYS, VARIOUS TYPES OF JOURNAL ENTRY CLASSIFICATIONS.

PROJECT -1 (WITH ACCOUNTS ONLY SYSTEM)

PROJECT -2 (WITH ACCOUNTS ONLY SYSTEM)

INVENTORY SYSTEM

COST CENTRE, PROJECT -3 (WITH ACCOUNTS ONLY SYSTEM), PROJECT -4 (WITH ACCOUNTS ONLY SYSTEM), VAT APPLICATION & PURCHASE, SALE, PROJECT-5 (WITH VAT APPLICATION & PURCHASE, SALE), PROJECT-6 (WITH VAT APPLICATION & PURCHASE, SALE), CST APPLICATION, PROJECT-7 (WITH CST & VAT APPLICATION), TDS APPLICATION PROJECT-8 (WITH TDS APPLICATION), PROJECT-9 (WITH VAT,CSD,& TDS APPLICATION), DISCOUNTS, RATE CHART GENERATION, PROJECT-10 (WITH VAT,CSD,& TDS APPLICATION WITH DISCOUNT & RATE CHART), PROJECT-11 (WITH ALL APPLICATIONS), REPORT GENERATIONS & DOUBT CLEARANCE.

PROJECT -1 (WITH ACCOUNTS AND INVENTORY SYSTEM)

PROJECT -2 (WITH ACCOUNTS AND INVENTORY SYSTEM)

DETAILED SYLLABUS OF "DTP"

PAGEMAKER

INTRODUCTION TO PAGEMAKER, CONSTRUCTING PUBLICATION, TOOLBOX, PALLETS, TEXT FORMATTING, WORD PROCESSING, CREATING BULLETS & NUMBERING, CHANGE CASE, MASKING, UNMASKING, LOCK, UNLOCK, INSERT PAGES, SORT PAGES, COLUMN GUIDES, FONT STYLES, FONT SIZES, PARAGRAPH SETTINGS, INDENTIONS, TABS, FILL AND STROKE, ARRANGE, GROUP, UNGROUP, LOCK , UNLOCK, MASK, UNMASK, POLYGON SETTINGS, LINK MANAGER(OPTIONS), PLUGINS(DROP CAP. ADD CONTD. LINE ETC), VIEW.

COREL DRAW

INTRODUCTION TO COREL DRAW, EXPLORING THE TOOL BOX(PICK TOOL, SHAPE TOOL ETC), LOGO CREATION, COVER PAGE DESIGNS CREATION, LEAFLET CREATION, BROCHURE CREATION.

SHREE LIPI (MULTI LINGUAL SOFTWARE)

HANDS ON PRACTICE ON HINDI, ORIYA, TAMIL, TELGU ETC. ADDITIONAL LANGUAGES.
