Center for Information and Language Engineering (CILE)

Diploma in Computer Application (DCA)

Semester I

DCA 01 Fundamentals of Computers - 4 credits
DCA 02 PC Packages - 4 credits

Semester II

DCA 03 C Programming - 4 Credits
DCA 04 Internet and Web Page Designing - 4 credits
DCA 04 Project and viva – 4 credits

DCA 01 Fundamentals of Computers 4 credits

UNIT I

Brief History of Development of Computers, Computer System Concepts, Computer System Characteristics, Capabilities And Limitations, Types of Computers, Basic Components of A Computer System - Control Unit, ALU, Input/output Functions and Characteristics, Memory RAM, ROM, EPROM, PROM and other types of Memory

UNIT II

Input/Output & Storage Units:- Keyboard, Mouse, Trackball, Joystick, Digitizing tablet, scanners, Digital Camera, MICR, OCR, OMR, Barcode Reader, Voice Recognition, Light pen, Touch Screen, Monitors - characteristics and types of monitor -Digital, Analog, Size, Resolution, Refresh Rate, Interlaced / Non Interlaced, Dot Pitch, Video Standard - VGA, SVGA, XGA etc

UNIT III

Printers And Its Types -Dot Matrix, Inkjet, Laser, Plotter, Sound Card And Speakers, Storage Fundamentals - Primary Vs Secondary Data Storage And Retrieval Methods - Sequential, Direct And Index Sequential, Various Storage Devices - Magnetic Tape, Magnetic Disks, Hard Disk Drives, Floppy Disks , Optical Disks, Flash Drives Video Disk, MMC Memory Cards, Physical Structure of Floppy & Hard Disk, Drive Naming Conventions In PC.
UNIT IV


Reference and Text Book


DCA 2 PC Packages

4 credits

Office Packages:

Office activates and their software requirements, Word-processing, Spreadsheet, Presentation graphics, Database, introduction and comparison of various office suites like MS-Office, Lotus-Office, Star-Office, Open-Office etc

MS Word Basics:

Introduction to MS Office, Introduction to MS Word, Features & area of use. Working with MS Word, Menus & Commands, Toolbars & Buttons, Shortcut Menus, Wizards & Templates, Creating a New Document, Different Page Views and layouts, Applying various Text Enhancements, Working with -Styles, Text Attributes, Paragraph and Page Formatting, Text Editing using various features ; Bullets, Numbering, Auto formatting, Printing & various print options

UNIT II

Advanced Features of MS-Word: Spell Check, Thesaurus, Find & Replace; Headers & Footers, Inserting - Page Numbers, Pictures, Files, Autotexts, Symbols etc., Working with Columns, Tabs & Indents, Creation & Working with Tables including conversion to and from text, Margins & Space management in Document, Adding References and Graphics, Mail Merge, Envelops & Mailing Labels. Importing and exporting to and from various formats.

UNIT III

MS Excel: Introduction and area of use, Working with MS Excel, Toolbars, Menus and Keyboard Shortcuts, concepts of Workbook & Worksheets, Using Wizards, Various Data Types, Using different features with Data, Cell and Texts, Inserting, Removing & Resizing of Columns & Rows, Working with Data & Ranges, Different Views of Worksheets, Column Freezing, Labels, Hiding, Splitting etc., Using different features with Data and Text, Cell Formatting including Borders & Shading,
UNIT IV

**MS PowerPoint:** Introduction & area of use, Working with MS PowerPoint, Creating a New Presentation, Working with Presentation, Using Wizards; Slides & its different views, Inserting, Deleting and Copying of Slides; Working with Notes, Handouts, Columns & Lists, Adding Graphics, Sounds and Movies to a Slide; Working with PowerPoint Objects, Designing & Presentation of a Slide Show, Printing Presentations, Notes, Handouts with print options.

**Text and Reference books**

Windows XP complete Reference ,BPB Publication

MS OFFICE XP Complete  BPB Publication

MS WINDOWS XP Home Edition Compete, BPB Publication.

**DCA 03  C Programming**

4 credits

UNIT I

History of C, where C stands  C character set, tokens, constants, variables, keywords, identifiers, C operators- arithmetic, logical, assignment, relational, increment and, decrement, conditional, bitwise, special, operator precedence, C expressions data types.

UNIT II

Problem solving techniques : flowchart and algorithm, Formatted input, formatted output instructions

UNIT III

Decision making and branching if-statement – if, if-else, else-if ladder, nested if else, switch case statement, break statement,Decision making

UNIT IV

looping - while, do, do- while statement, for loop, continue statement

**Text and Reference books**

Programming in C Paperback – 2011 by J.B. Dixit

Programming in ANSI C by Balagurusamy
DCA 04 Internet and Web Page Designing  

Unit – I

Internet, Evolution, Protocols, Interface Concepts, Internet Vs Intranet, Growth of Internet, ISP, Connectivity – Dial-up, Leased line, VSAT etc. URLs, Domain names, Portals, Application. E-Mail • Concepts, POP and WEB Based E-mail, merits, address, Basic of Sending & Receiving, E-mail Protocols, Mailing List, and Free E-mail services, FTP.

Unit – II


Unit – III


Unit – IV

HTML Concepts of Hypertext, Versions of HTML, Elements of HTML syntax, Head & Body Sections, Building HTML documents, Inserting texts, Images, Hyperlinks, Backgrounds and Colour controls, Different HTML tags, Table layout and presentation, Use of font size & Attributes, List types and its tags.

DCA 04 Project and viva –  

4 credits