



# Diploma in Computer Application

CCE offers many job oriented computer courses.”Diploma in Computer Application” is one of the CCE approved course. The detailed contents of this course are in the attachment.

COURSE CODE : CCE-D5

ELIGIBILITY: 10th

DURATION: 1 Year

SYLLABUS

## **Semester-I**

### **Fundamental of Computer & Information Technology**

Introduction To Computers , Types Of Computer , History Of Computer , Generation Of Computer , PC & Its Components , Disk Defragmentor , Categories Of PC , Evolution Of Micro Processors , Registers Of Micro Processors , Basic Components Of Computer System , Input Output& Storage Units , Software , Types Of Software , Types Of Operating System , Categories Of OS , Example Of Utility Program , Programming Languages , Generations Of Programming Language , Application Software , User &Example Of Application Software , Viruses , Types Of Virus , Virus Detection &Prevention , Communication Process , Communication Protocols , Communication Channel/Media , Modem , Components Of LAN , Types Of Internet Connections , Internet& Its Advantages , Internet Services , WWW & Common Technologies of Internet

### **PC Package (Word , Excel , Power Point , Access)**

### **Office package**

- Word processor Software , Spreadsheet software , Presentation software , Database Management software

### **MS Word**

- Introduction to Ms Office , Introduction to Ms Word , How to Start , Components of Ms Word , File Menu , Edit Menu , View Menu , Insert Menu , Format Menu , Tools Menu , Table Menu , Window Menu , Help Menu

### **MS Excel**

- Introduction to MsExcel , Calculations , Formula , Functions , Insert Row/Columns , Create Chart , Format Sheet

### **Tools Menu**

- Goal Seek , Scenario , Auditing

### **Data Menu**

- Sort , Filter , Advance Filter , Sub total , Forms , Validations , Table , Consolidate , Pivot table , Window , Help

### **Ms PowerPoint**

- Introduction , Insert New Slide , Format Slide , Slide Show

### **MS Access**

- Introduction , Different Between DBMS /RDBMS , Hierarchy , Database File , How to Start work , Create database using wizard , Create blank Database

### **Data base object**

- Table , Primary key , Manipulate data , Field properties , Relationships , Forms , Sub forms , Queries , Operators , Calculations , Update Query , Reports , Macro , Import data

### **D.T.P. (Page Maker , Photoshop , Corel Draw)**

#### **Pagemaker**

##### **Adobe Pagemaker**

- Components of Pagemaker , ToolBox , Palettes , Working with text

## **Constructing a Publication**

- Creating a new Page , Save publication , Preferences

## **Edit Text**

- Edit Story , Master Pge , Measurement , Ruler & guideline , Pge numbers

## **Layout menu**

- Sorting page , Deleting Pge

## **Text formatting**

- Type Menu , Control Palette , Expert Tracking , Indents And Teb

## **Element Menu**

- Fill , Fill and Stroke , Create a Frame , Arrange , Wrap textGroup Object , Image Control , Using PhotoShop Effect , Change the Shape Of Polygon/ Rectangle

## **Utilities Menu**

- Checking Spelling & Grammer , Change Case , Intex Entry

## **Coreldraw**

- Introduction to corel draw , Toolbars , Components of Corel draw

## **What is New in edit Menu**

- Introduction to corel draw , Duplicate , Clone

## **View menu**

- Full screen Preview , Grid and ruler setup

## **Layout Menu**

- Insert page , Delete page , Switching page Orientation , Page setup

## **Arrange menu**

- Introduction , Transformation , Order , Behind , Group , Shaping

## **Effects Menu**

- Adjust , Transform , Artistic Media , Contour , Extrude

## **Bitmap Menu**

- convert to bitmap , Mode , 3d Effect

## **Art Strokes**

- Charcol , Pastels , Pen & ink , Scrap oared , Sketchpad , Watercolor , Blur , Smooth , Color transform , Halftone

## **Art Stockes**

- Edge Detect , Find edge

## **Creative**

- Crafts , Glass black , Sample glass

## **Distort**

- Blocks , swirl

## **Noice**

- Add Noice

## **Text menu**

- Edit text , Fit text to path

## **Tools & windows**

## **Photoshop**

- Introduction to Photoshop , About wark area , Toolbox overview

## **File menu**

- What is new in file

## **Edit menu**

- What is s new in file , Transform & Patten

### **Image menu**

- Mode , Rotate image

### **Layer menu**

- New layer , Layer styles , New fill layer , Add layer mask

### **Select menu**

- Inverse , Feather , Modify , Grow

### **Filter menu**

- Extract , Artistic , Blur , Brush stroke , Distort , Pixel ate , Render , Sharpen , Sketch

## **Accounting Package (Tally 5.4 , 6.3 , 7.2 , 9 , ERP)**

### **Computerized Accounting With Tally**

Tally Fundamentals , Basic & Advanced Accounting , Accounting fundamentals , Types of Accounts and their rules , Company Create Alter and Delete , Types of Accounting Vouchers , Cost Centers , Inventory features , Types of Inventory Vouchers , Statutory Accounting , Price Levels , Voucher classes , Multi Currency , TDS , VAT , Payroll system , Job Costing , ODBC , Import and Export Tally Data

## **Semester-II**

### **Programming Tools & Techniques using “C” & C++**

#### **Introduction to programming concept**

- Types of programming language , Low level language , High level language , Types of language processor , Header file

#### **Structure of programming language**

- Program structure :-Comment , Define columns &Rows

#### **Data type in C**

- Introduction to data type , Variables , Input statement

## **Operators and expression**

- Arithmetic operators , Increment and Decrement operator , Relational operator , Logical operator , And operator , Or operator , Not operator , Conditional operator

## **Decision control structure**

- Introduction to Decision Making statement , The switch statement

## **loop control structure**

- Introduction , For loop , While loop , Do while loop , Loop termination

## **Arrays**

- Introduction to arrays

## **Function**

- Introduction to function , Types of function

## **Structure**

- What is Structures , Structure in c , The dot operator , Arrays of Structure

## **Introduction to C++**

### **Overviews of C++**

- Object oriented Programming, concept , Advantage & ,usage of C++ . Classes and objects :classes structure and classes, union and classes, Friend function ,Friend classes, Inline function ,Scope resolution operator, Static class members, Static data members function, passing object to function, Returning objects , Object assignment.

## **Constructor & Destructor**

- Constructor and destructor: Introduction constructor , parameterized constructor , multiple constructor in a class , constructor with default argument , copy constructor , copy constructor , Default argument ,destructor.

## **Operator overloading**

- function & operator overloading: function overloading , overloading constructor function finding the address of an overloading function , operator overloading: creating a member operator function , Creating prefix and postfix form of the increment & decrement operator , overloading the shorthand operation (i .e. +=,-=etc) , operator overloading restrictions , operator overloading using friend function , overloading loading Some special operators , overloading [ ],(),-,comma operator , overloading <<.

## **Inheritance**

- Base class access control , protected member , Protected base class Inheritance , Inheritance multiple base class , constructors , destructors & Inheritance , when constructor & destructor function are expected , Passing parameter to base class constructors , grating access , Virtual functions & Polymorphism: virtual function , pure virtual function , early Vs , late binding.

## **The C++ input /output system basic**

- C++ stream , the basic stream classes: C++ Predefined stream , formatted I/o: formatting using the ios member , setting the format flags , clearing format flags , an overloaded form of self

## **Visual Basic**

- Computer programming , Introduction to Programming languages , Low level languages , Assembly language , Machine languages , Language Processors

## **Introduction to Visual Basic**

- Introduction to programming , Advantages& Disadvantages , Features , Edition

## **Building a VB Application**

- Project , Forms , Controls , Properties , Event procedures , Modules , VB Operate Modes , Setting Properties , Writing codes

## **Controls**

- VB standard controls

## **Data types**

- Types declaration character , Variables , Variable declaration , Default variant , Implicit , Explicit , Procedure level , Form level , Global level

## **Message Box**

## **Operator in Visual basic**

- Introduction to operator , Arithmetic operator , Relational operator , Logical operator

## **Conditional branching**

- The if statement & select statement , Simple if statement , If else statement , Nested if statement , If else ladder , The select statement

## **Special Events**

- Change event , Key down , Key press , Lost focus

## **System built in Function**

- Data type functions , Math's functions , String function , Conversion function , Date function , Input box function

## **Loops**

- For loops , For each loops , While loops , Do while loops , With ....end with

## **Procedure & Modules**

- Introduction to procedure & function , Sub procedure , Function procedure , Property procedure , Let method , Get method , Set method , Modules

## **Menu editor**

- Introduction to menu editor , document interface , MDI form , Popup menus

## **Special controls**

- Toolbar control , Status bar , Calendar control , Date picker , Ms tabbed dialog control

## **Error in Debugging**



- Introduction to errors , Kinds of errors , Debugging , Handling run time error

### **Common Dialog Controls**

- Introduction to common dialog control , Open dialog control , Save dialog control , Font dialog control , Print dialog control

<b>File</b>	<b>System</b>	<b>Object</b>	<b>Component</b>
<b>Visual basic and data base</b>			
<ul style="list-style-type: none"> <li>• Introduction to data base , Data control , Database engine , ADO data control , Data control properties , Data bound control , ADO data control methods</li> </ul>			
<b>Programming with ADO</b>			
<ul style="list-style-type: none"> <li>• Connection object , Command object , Recordset object , Cursor type , ADO library</li> </ul>			
<b>ADO Data Environment</b>			
<b>Ms Hierarchical flex grid control</b>			
<b>Data Report</b>			
<ul style="list-style-type: none"> <li>• Introduction to data report , Report section , Other report section</li> </ul>			
<b>Component Basic</b>			
<ul style="list-style-type: none"> <li>• Introduction to com , Active X EXE , Active X DLL , Active X Control , Check the control , Creating active XDDL , Creating active X control , Package &amp; Development Wizard</li> </ul>			










## **INTERNET & E-COMMERCE**

### **Introduction to HTML**

- Introduction to html , HTML element and tags , Evolution of HTML , Creating HTML document , Body element , Block formatting element , Heading element , Marquee

element , Paragraph element , List element , Anchor element , Graphics element , Table element , Form element , Frame element

### **Java Script**

- Introduction to java script , Event in java script , Script element , Functions in java script , variables , Operators , Comment Indicator , Conditional branching Statement , The switch Statement , Loops , Arrays , System defined function , Catching Errors , Cookies , Event handles , Object Hierarchy model

### **VB Script**

- Introduction to VB Script , Variables , Operators , Conditional branching statement , Conversion functions , Predefined functions , String handling functions , Data type functions , Date Function

### **Dynamic HTML**

- DHTML features , Event , DHTML property , Example of DHTML , Style Sheet , Cursor CSS properties , The inner HTML property , The Div element , Text Positioning , Multi media effects Macromedia Dream viewer