

# Post Graduate Diploma in Information Technology (PGDIT)

**Course Code :** PG-02

**Eligibility :** Graduate in Any Discipline

**Duration :** 1 Year

## Semester-I

### Fundamentals Of Computers

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.

### Operating System (Dos , Windows)

DOS :-- Disk Operating System(Dos) , Introduction , History & Versions Of Dos , Basic-Physical Structure Of Disk, Drive Name , Fat , File & Directory Structure And Naming Rules , Booting Process , Dos , System Files , Dos Commands Internal & External Dir,Md,Cd,Rd,Copy,Del,Ren,Vol,Date,Time,Cls,Path,Type Etc. , Chkdsk,Xcopy,Print,Diskcopy,Diskcomp,Doskey,Tree,Move,Label,Append,Format,Sort,Fdisk,Backup,Edit,Move.

Windows XP :-- Introduction To Window XP And Its Features , Hardware Requirements Of Windows , Window Structure,Desktop,Taskbar,Start Menu , Working ,With Recycle Bin – Restoring A Delete File ,Emptying The Recycle Bin , Managing Files, Folders And Disk Navigating Between Folders ,Manipulating Files And Folders ,Creating New Folder ,Searching Files And Folder My Computer Exploring Hard Disk ,Copying And Moving Files And Folder from One Drive To Another Formatting Floppy Drive ,Windows Accessories-Calculator ,Notepad ,Paint, Wordpad ,Character Map,Paint

Windows Fundamental :-- Windows is an operating system , XP Home Addition , XP Professional Addition , Active desktop , Multi user account , Data protection features , Playing MP3 Sound and XP , Windows desktop fundamental , Desktop , Taskbar , Icons , My computer , My Document , Recycle bin , Folder

### MS Office (Word , Excel , Power Point)

Office package :-- Word processor Software , Spreadsheet software , Presentation software , Database Management software

MS Office :-- 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

## INTERNET

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

## Programming & Problem Solving Through C Language

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

## Semester-II

# Programming With Visual Basic .Net

Introduction to .NET frame work :- Features of VS.NET , Components of .NET Framework , CLR , MSIL , JIT , Assemblies , .NET framework library system , Common type System , What is new in .Net , Shared ID , Types of project , Working with win Forms

Feature of Visual basic .NET :- Components of Visual studio , Toolbox , Solution Explorer , Properties window , Introduction to V.B .NET , Edition of Visual basic

Working with winforms :- Introduction to class library , Properties and methods of forms

Control of VB.NET :- Label , Textbox , Button , Listbox , Combo box control , Scrollbar control , Slider and Trackbar , Link label , Timer control , Numeric Up Down Control , Panel Control , Graphic display , Rich text control , Date time picker , Month calendar

Data type in V.B NET , Variables V.B NET , Scope and life of the variable , Arrays in V.B NET , Collection in V.B NET , Message box function , Operators , Relational Operator , Decision control Statement , Event in V.B NET , Loops , Object Collection , Built in function V.B NET , MDI(Multiple document interface , Context Menu , Toolbar Strips , Status Strips , Progress bar , Tab control , Common dialog control , Rich text box , Common Dialog classes , File Handling in V.B NET , Some Advance Controls , Procedure and Modules , Object oriented programming in V.B NET

Basic concept of object oriented programming , Data Abstraction and encapsulation , Polymorphism , Benefits of OOPS , Object class and methods V.B .NET , Inheritance in VB.net , Overloading Concept

Operator and function,Constructor in V.B . NET

OLE(Object Linking Embedding) , Win32 API Application

COM(Component object Model) , User control , Database Programming in V.B NET

ADO.NET , Different between ADO and ADO.NET , ADO.NET Architecture , Application connection to the database

The Data base provider , Data sources , Data rider and data view object , Display data into grid control , Data Adapter Object , Accessing data using Server Explorer , .NET Data provider ,Method of command object , Data bound Control,Crystal Report

## Database Management System

Introduction to databases :- Relational Databases , Object Databases , Basic SQL , Data types , Operators

Advanced Queries :- Joins , Built-in Functions , Improving Query Performance , Group by , Stored Procedures

Views, Catalogs and Integrity :- Creating tables , Verifying Integrity , Creating Views , Database Catalog

ER Model and Normalization :- ER Model , Normal forms

Security, Backup and Recovery :- Creating users , Encrypting traffic , Backup of the database , Recovery

Popular Databases and differences :- Oracle , SQL Server

## WEB TECHNOLOGIES

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



### **Admin Office Indore :**

#### **Alma Limited**

18/3, Pardeshipura, Nr. Electronic Complex, Indore (M.P.) INDIA

Ph: +91 731 4055550, 4055551, 4222242, 4222252, 4099909, 4288812

Fax : +91 731 2573779 | Email: [web@alma.in](mailto:web@alma.in), [support@alma.in](mailto:support@alma.in)

### **Admin Office New Delhi:**

#### **Alma Limited**

B-1041, 3rd Floor, Sector 7, Near Palam Extension, Dwarka, New Delhi - 110075

Ph : +91 11 47350202, 47541212 | Help line : 91 999 39 500 00

Fax : +91 11 47350203, Email : [web@alma.in](mailto:web@alma.in), [support@alma.in](mailto:support@alma.in)