Course Plan

Duration: 1 Year

SYLLABUS OF

DIPLOMA IN COMPUTER APPLICATIONS (DCA)

Semester-I

DCA 01	Computer Fundamentals
DCA 02	Office Automation (Word, Excel, Power point)
DCA 03	Network Fundamentals
DCA 04	Web Design (HTML,CSS,XML,JavaScript)

Semester-II

DCA 05	Database System
DCA 06	Application Development
DCA 07	PROJECT: Report, Presentation, Viva

SEMESTER-1

DCA 1. Computer Fundamentals

Fundamentals	1	Introduction
	2	Functions of a computer
	3	Applications Of Computers
	4	Generations of Computer.
	5	Classification Of Computer
	6	Components of a computer
	7	CPU
	8	Input devices
	9	Output Devices
	10	Memory Unit
	11	Storage Devices
	12	SMPS
	13	Motherboard
	14	Ports
	15	Hardware
	16	Software
	17	Number System
	18	Number Conversion
	19	Operating System concepts
Windows	1	My Computer
	2	Recycle Bin
	3	Desktop
	4	Drives
	5	How to create a directory/folder
	6	How to change to a directory/folder
	7	Creating a file in a directory/folder
	8	Make the file read only
	9	Make the file hidden
	10	Editing a file in a directory/folder
	11	Renaming a file in a directory/folder
	12	How To Delete a file in a directory/folder
	13	Listing the files in the directory
	14	Copy a file from one directory /folder to the other
	15	Deleting all files from a directory/folder
	16	Deleting a directory/folder
	17	Formatting a hard disk and loading Operating System

DCA 2. Office Automation

MS-Word:

1	Creating a new word document
2	Opening an existing document
3	Editing and Saving a document
4	Typing a text, deleting, inserting, finding, replacing, copying and moving text
5	Justifying texts
6	Bold, Italics, Underline, Strike, Double Strike and Colouring text
7	Selecting Font and Font Sizes
8	Formatting page, margins, page size, portrait and landscape
9	Inserting symbols, pictures
10	Using Bullets
11	Using and manipulating tables, inserting / deleting of rows and columns
12	Sorting tables
13	Using Header and footer, Inserting Page number
14	Changing character width and line spacing
15	Printing of a document, Using print preview
16	Copy / moving text between two different documents
17	Typing More than one language in the same text
18	Shortcuts for various activities in MS Word

MS-EXCEL:
BASICS

1	Creating a new excel workbook
2	Creating an excel worksheet
3	Entering values into worksheet
4	Modifying values in the worksheet
5	Copy and paste values in the worksheet
6	Find and replace values in the worksheet
7	Formulas in worksheet
8	Delete a worksheet
9	Data filtering
10	Data sorting
11	Using ranges
12	Data validation
13	Using styles
14	Using themes
15	Using templates
16	Using macros
17	Adding graphics
18	Cross referencing
19	Printing worksheets
20	Translate worksheet
21	Email workbooks
22	Workbook security
23	Data tables

24	Pivot tables
25	Keyboard shortcuts
26	Zoom in out
27	Special symbols
28	Insert comments
29	Adding textbox
30	Undo changes
31	Setting cell type
32	Setting fonts
33	Text decoration
34	Rotate cells
35	Setting colours
36	Text alignment
37	Merge and wrap
38	Borders and shades

Formatting A Worksheet

39	Applying formatting to a worksheet
40	Adjusting margins in a worksheet
41	Page orientation in a worksheet
42	Page orientation in a worksheet
43	Setting header and footer in a worksheet
44	Inserting page breaks in a worksheet
45	Setting background in a worksheet
46	Freeze panes
47	Conditional formatting

Working with Graphs

48	Creating a chart
49	Manipulating a chart

MS-POWERPOINT:
The Basics

1	What is Power point
2	Working with Slides
3	Working with Textboxes
4	Rearranging slides
5	Working with slide notes
6	Working with sections
7	Working with outlines
8	Sidebars in power point
9	Presentation views
10	Setting presentation background

Editing Presentation

11	Cut And Paste Operations
12	Copy And Paste Operations
13	Find And Replace Operations
14	Edit PowerPoint Presentation
15	Content Translation
16	Set Language Type

17	Duplicating Content
18	Special Characters
19	Slides Zoom in-out

Formatting Presentation

20	Font Management And Text Decoration
21	Paragraph Indentation
22	Set line spacing
23	Borders and Shading
24	Using slide master
25	How to create a design template

Adding Multimedia To The Presentation

26	add,edit,format picture in a slide
27	How to add a screenshot to a slide
28	How to add shapes to a slide
29	How to edit shapes to a slide
30	How to format added shapes to a slide
31	How to add text to shapes in a slide
32	How do I arrange shapes and pictures on a slide
33	How to group and ungroup objects
34	How to Add audio and video to the slide
35	Working with tables in a slide
36	Working with charts on a slide
37	How to Add and format smart art on the slide
38	How to Add and preview animations on the slide
39	How to Add and preview transitions on the slide

Sharing A Presentation

40	How To Convert PowerPoint to PDF
41	How To Convert PowerPoint to Video
42	How To Create an Image From PowerPoint
43	How To Print a PowerPoint
44	How To Broadcast PowerPoint presentation

DCA 3. Network Fundamentals

1	**Introduction**	
2	Network Devices	1. Hub 2. Switch 3. Router 4. Ethernet 5. Cat5 6. Modem 7. Repeater
3	Types Of Network	1. LAN 2. MAN 3. WAN
4	Internet and its Services	1. Telnet 2. FTP 3. Email

		4. www
5	Intranet	
6	Network Security and Firewall	
7	Network Protocols	1. HTTP 2. TCP/IP 3. SMTP 4. POP 5. FTP
8	Applications Of Network	
9	Anti-virus	

DCA 4. Web Design

HTML:	
Sl.No	**Contents**
1	what is HTML
2	Writing my first HTML Page
3	Basic tags used in HTML
4	Elements In HTML
5	Attributes In HTML
6	Formatting In HTML
7	Phrase tags and their use
8	Meta Tags and their use
9	Commenting a HTML Code
10	Images and incorporating images
11	working with Tables
12	Working with Lists
13	Working with hyperlinks
14	Frames and frame management
15	Working with Iframes
16	Working with Block elements
17	Working with Inline elements
	Background images
18	How to get a coloured text and coloured background
19	working with fonts
20	Form designing and Form Management
21	Using Multimedia inside HTML
22	Marquee Tag
23	Headers
24	Working with Layouts
25	Role of Tags in Html
26	Attributes in Html
27	Event Handling
28	Various fonts in Html
29	Mime Media Types

CSS:

Sl.No	Content
1	What is CSS
2	CSS Syntax
3	CSS Selectors
4	Ways To Insert CSS
5	Background image handling
6	Background colour management using CSS
7	Text management using CSS
8	Font management using CSS
9	Managing Hyperlinks using CSS
10	Managing Lists using CSS
11	Designing Tables using CSS
12	Working with the BOX Model
13	Designing Borders using CSS
14	Designing Outline using CSS
15	Setting Page Margin using CSS
16	Padding using CSS
17	setting Page Margin using CSS
18	Setting Display Using CSS
19	Setting Width And Max Width using CSS
20	Setting Position using CSS
21	Setting the Float Property using CSS
22	Inline Block property
23	Horizontal Alignment in CSS
24	Working With Combinators
25	Working with Pseudo-class
26	working with Pseudo-Alignment
27	Creating a navigation bar
28	Working with images
29	Working with Attribute selectors

JAVASCRIPT:

Sl.No	Content
1	What is JavaScript
2	JavaScript Syntax
3	Enabling JavaScript in Browsers
4	Placing JavaScript
5	Cookies
6	Page Redirection
7	Dialog Box
8	Printing webpage using JavaScript
9	XML Fundamentals

SEMESTER-2

DCA 5. Database System

RDBMS	1	Introduction		
	2	Data Models		
	3	RDBMS		
	4	Table Design		
	5	Key		
	6	Constraints		
	6	Normalization	a	1ST NF
			b	2ND NF
			c	3RD NF
SQL	1	DDL(Data Definition Language)		
	2	DML(Data Manipulation Language)		
	3	DCL(Data Control Language)		
	4	Sql Queries	a	Create, Alter, Drop
			b	Select, Update, Insert, Delete
			C	Commit, Rollback

DCA 6. Application Development

	Sl.No	Content
Introduction To Programming		
	1	Algorithm
	2	Flowchart
	3	Generation Of Programming Languages
	4	OOP Concept
PHP BASICS	1	PHP Basics
	2	Advantages Of PHP
	3	Where To Use PHP
	4	How To Install PHP
	5	How to run my first PHP
	6	Syntax used in PHP
	7	Variables Used In PHP
	8	Echo and Print
	9	Data Types Used In PHP
	10	Constants in PHP

	11	Operators In PHP
	12	IF Statement
	13	Switch statement
	14	loops in PHP
	15	Functions In PHP
	16	Arrays In PHP
	17	Super Globals
	18	Cookies In PHP
PHP ADVANCED	1	How To Design A Form
	2	validation in forms
	3	Navigate from a form to the other
	4	Object Oriented Programming in PHP
	5	Design Patterns In PHP
PHP Database Connectivity	1	MYSQL Connectivity
	2	MYSQLI Connectivity
	3	PDO Connectivity
PHP Advanced Database Management	1	Working with SQL queries

DCA 7. Project Work

Sl.No	Contents
1	Project should be related to web designing using PHP , MySQL
2	Format(Report) will be supplied