

An autonomous organization Regd. under Ministry of Corporate Affaires CIN No. U85499PB2023PTC059506 (By Govt. of India)

Course Syllabus: Advance Diploma in Computer Applications

Batch Name: ADCA Eligibility: 12th Course Start: 1st of Every Month Course Duration: 350 Hours

Courses / Modules Paper

Module 1:

Paper 1

Fundamentals, MS-Office, Internet (Digital Services)

Module 2: Opt any three papers

Paper 1	Paper 2	Paper 3	Paper 4	Paper 5
Photoshop	Corel Draw	Language C	HTML, CSS	Tally ERP9, Accounting Concepts

Module 1: Paper 1:

1:Fundamentals of Computer

- 1.1 Introduction to Computer
- 1.2 Block Diagram of Computer
- 1.3 Classification of Computer
- 1.4 Characteristics of computer
- 1.5 Generations of Computer
- 1.6 Uses of Computer
- 1.7 Input Devices
- 1.8 Output Devices
- 1.9 Computer Memory
- 1.10 Computer Hardware
- 1.11 Computer Software
- 1.12 Operating System

2:Number System

- 2.1 Introduction
- 2.2 types of Number Systems
- 2.3 Conversion of Number system

3 :Windows-7

- 3.1 Introduction to Windows
- 3.2 User Interface of Microsoft Window 2007
- 3.3 Changing Desktop Background

- 1.1 Introduction
- 1.2 Elements of MS Word
- 1.3 Explaining the Ribbons

2: MS Word Insert Tab

- 2.1 Insert
- 2.2 Pages
- 2.3 Tables
- 2.4 Illustrations
- 2.5 Links
- 2.6 Headers and Footers 2.7 Text Group
- 2.8 Symbols

3: MS Word Mailing

- 3.1 Create
- 3.2 Start Mail Merge

4: MS Word References

- 4.1 Table of Contents
- 4.2 Footnotes
- 4.3 Citation and Biblography
- 4.4 Caption
- 4.5 Index
- 4.6 Table of Authorities

- 7.3 Uses of MS Excel
- 7.4 Important Components of Excel
- 7.5 Excel Window Overview
- 7.6 Font
- 7.7 Alignment
- 7.8 Clip Board
- 7.9 Number Formatting
- 7.10 Conditional Formatting
- 7.11 Format as Table
- 7.12 Cell Styles
- 7.13 Cells
- 7.14 Editing

8: MS Excel: Data

- 8.1 Get External Data 8.2 Sort and Filter 8.3 Data Tools
- 8.3 Data Tools

9: MS Excel: Insert

9.1 Tables9.2 Illustrations9.3 Charts9.4 Links9.5 Spark-Lines

3.4 Changing Window Color 3.5 Changing Screen Saver 3.6 Changing Screen Resolution 3.7 Changing Data/Time 3.8 Making Empty Recycle Bin 3.9 Restoring Deleted File 3.10 Hard Drives 3.11 File and Folder Views 3.12 Copying File and Folder 3.13 Opening a File and Folder 3.14 Deleting a File and Folder 3.15 Renaming File and Folder 3.16 Working with Calculator 3.17 Working with Paint 3.18 Working with Notepad 3.19 Windows 7 vs Windows 10

Microsoft Word 1: MS Word Home Tab

5: MS Word Review

- 5.1 Proofing
- 5.2 Comments
- 5.3 Tracking
- 5.4 Changes
- 5.5 Compare
- 5.6 Protect

6: MS Word Views

6.1 Document View6.2 Show/Hide6.3 Zoom Group6.4 Window6.5 Macro

Microsoft Excel

7: Introduction to Excel

7.1 Introduction7.2 History of Excel

9.6 Text Group

10:MS Excel: Page Layout

10.1Themes 10.2 Page Setup 10.3 Scale to Fit 10.4 Sheet Options 10.5 Arrange

11:MS Excel: Review

11.1 Proofing11.2 Comments11.3 Changes

12: MS Excel: View

12.1 Workbook Views 12.2 Show/Hide 12.3 Zoom 12.4 Window Group 12.5 Macros

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Microsoft Power Point

13: Power Point: Home

- 13.1 Starting MS Power Point
- 13.2 Elements of MS Power Point
- 13.3 Clip Board
- 13.4 Slides
- 13.5 Font Group
- 13.6 Paragraph
- 13.7 Drawing Groups
- 13.8 Editing Group

14: Power Point: Insert

- 14.1 Insert: Introduction 14.2 Tables
- 14.3 Illustrations Group
- 14.4 Links
- 14.5 Text Group
- 14.6 Media Group

15: Power Point: Design

15.1 Page Setup15.2 Adding Themes to Presentation15.3 Changing Slide Background15.4 Variants

16: Power Point: Animation

16.1 Animations: Introduction
16.2 Timing Group
16.3 Add Custom Animation to Objects
16.4 Add Animations to Text
16.5 Custom Animation as Exact Effect
16.6 Motion Path under Custom Animation
16.7 Removing Animation
16.8 Transition to This Slide Tab
16.9 Advance slide

17: Power Point: Slide Show

17.1 Slide Show: Introduction17.2 Slide Show Starting from the Beginning17.3 Setup Group

18:Power Point: Review

18.1 Proofing18.2 Comments18.3 Protect Presentation

19:Power Point: View

19.1 View: Introduction
19.2 Presentation View Group
19.3 Show/Hide
19.4 Zoom
19.5 Color Tab
19.6 Window Tab
19.7 Macro

Microsoft Access

20:MS Access-Overview

20.1 What is MS Access?

22:MS Access-Query Data

- 22.1 What is Query in MS Access?
- 22.2 Create Select Query
- 22.3 Query Criteria
- 22.4 Action Queries
- 22.5 Types of Action Queries
 - Append
 - Update
 - Delete
 - Make-Table
- 22.6 Parameter Queries
- 22.7 Alternate Criteria

23:MS Access-Relating Data

- 23.1 Introduction
- 23.2 Normalization
- 23.3 Defining Relationships
- 23.4 Types of Relationships
 - One-to-Many Relationships
 - Many-to-Many Relationships
 - One-to-One Relationships
 - Make-Table
- 23.5 Creating Relationships

24:MS Access-Grouping Data

- 24.1 Aggregate Query
- 24.2 Aggregate Query Functions
 - Sum
 - Avg
 - Min
 - Max
 - Count
 - StDev
 - Var
- 24.3 Concatenation of Data
- 24.4 Summarizing Data
 - Cross Tab Query

25: Joins and Query Wizard

- 25.1 What is Join?
- 25.2 Types of Joins in Access
 - The Inner Join
 - The Outer Join
 - The Left Outer Join
 - The Right Outer Join
 - Self Join
- 25.3 Concatenation of Data
- 25.4 Summarizing Data
 - Cross Tab Query
- 25.5 Query Wizard
 - Duplicated Query wizard
 - Unmatched Query Wizard

26:MS Access- Forms

- 26.1 Creating Forms
- 26.2 Two Basic Types of Forms
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- Unbound Forms
 Solution of Pound Forms
- 26.3 Types of Bound Forms
 - Single Item Form

- 28.1 What are Macros?
- 28.2 Creating a Macro
- 28.3 Formatting Reports
- 28.4 Built-in Functions
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 - DateDiff() Function
 - Format() Function
 - lif() Function

29: Data Import and Export

- 29.1 Import Different Types of Data
 - MS Excel
 - ODBC Database

29.3 Data Export Formats

ODBC Database

1:Internet and Networking

1.8 Computer Security Threats

Paper 2: Data Handling and Internet

1.2 Advantages & Disadvantages of Internet

Paper 1: Photoshop and File Formats

1: Introduction to photoshop cs4

2: Getting started with Photoshop

2.4 Creating and Viewing a new document

2.2 Application Bar and option Bar

2.3 Exploring panels and menus

2.5 Customizing the interface

2.6 Setting Preferences

3: Working with Images

1.3 Search Engines and Web Browsers

- Text Files
- XML Files

MS Excel

XML Files

•Text Files

1.1 Internet

1.4 Website

1.7 Email

Module 2:

1.5 Domain Name

1.6 E-Commerce

1.9 Networking

1.1 Introduction

1.10 Network Topology

1.2 Navigating Photoshop

1.3 Menus and Panels

1.5 Opening existing file

2.1 Exploring the Toolbcx

1.4 Opening new file

MS Access

29.2 Data Export

20.1 What is MS Access? 20.2 Advantages and Features of MS Access 20.3 Difference between Access and Excel 20.4 Architecture of MS Access 20.5 MS Access Objects

- Tables
- Queries
- Forms
- Reports

20.6 Other MS Access Objects

Macro

Module

20.7 Creating MS Access Database

Create Blank Database

20.8 Data Types Used in MS Access

- Short Text
- Long Text
- Number
- Date/Time
- Currency
- AutoNumber
- Yes/No
- Reports

21:MS Access-Creating Tables

21.1 Create Tables 21.2 Storing Data in Tables 21.3 Table Design View

- Multiple Item Form
- Bound Forms
- Split Forms
- 26.4 Creating Forms
- 26.5 Form Design
- 26.6 Modify Form
 - Themes
- 26.7 Navigation Form
- 26.8 Form Controls
 - Combo Box
 - Text Box
 - Label
 - Tab Control
 - Hyperlink
 - Check Box
 - List Box
 - Attachment
 - Image

27:MS Access- Reports

27.1 Creating Report27.2 Create Report by Report Design27.3 Formatting Reports

28:MS Access- Macors & Built-in Functions

3.3 Undoing steps with history

3.1 Zooming and panning Images

3.2 Working with Multiple images

- 3.4 Adjusting Color with new Adjustments Panel
- 3.5 The new Master page
- 3.6 The new note Tool
- 3.7 Auto-Blend and Auto-Align Layers Command
- 3.8 3D commands

4: Resizing and Cropping Images

- 4.1 Understanding Pixels and resolution
- 4.2 The Image size Command
- 4.3 Interpolation Option
- 4.4 Resizing for print and web
- 4.5 Cropping and Straightening an Image
- 4.6 Adjusting Canvas size and canvas rotation

5: Working with basic selection

- 5.1 Selection with Elliptical Marque tool
- 5.2 Using Magic Wand and Free Transform Tool
- 5.3 Selection with Regular and Polygonal
 - Lasso Tool
- 5.4 Combining selection
- 5.5 Using Magnetic Lasso tool
- 5.6 Using Quick Selection tool and Refine Edge 5.7 Modifying Selections
- 6: Getting Started with Layers

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- 6.1 Understanding the Background Layer
- 6.2 Creating, Selecting, Linking and Deleting the Layers
- 6.3 Locking and Merging Lavers
- 6.4 Copying Layers, Using Perspective and Layer Styles
- 6.5 Filling and Grouping Layers
- 6.6 Introduction to Blending Modes
- 6.7 Blending Modes, Opacity and Fill
- 6.8 Creating and Modifying Text

7: Printing in Photoshop

- 7.1 Using the Brush tool
- 7.2 Working with Color and Swatches
- 7.3 Creating and using Gradients
- 7.4 Creating and working with Brushes
- 7.5 Pencil and Eraser Tools
- 7.6 Painting with Selection

8: Photo Retouching

- 8.1 The Red Eye Tool
- 8.2 The Clone Stamp Tool
- 8.3 The Patch Tool & Healing Brush Tool
- 8.4 The Spot Healing Brush Tool
- 8.5 The Color Replacement Tool
- 8.6 The Toning and Focus Tool

9: Color Correction

- 9.1 Color Spaces and Color Modes
- 9.2 The Variation Command
- 9.3 Auto Commands
- 9.4 Adjusting Levels
- 9.5 Adjust Curves, Non Destructively with Adjustment Layers

10: Using Quick Mask Mode

- 10.1 Quick Mask Option
- 10.2 Painting a Selection
- 10.3 Saving and Removing a Selection from Background

11: Working With Pen Tool

- 11.1 Understanding Paths and Pen Tool
- 11.2 Creating Straight and Curve Paths
- 11.3 Creating Combo Paths
- 11.4 Creating Clipping Paths

12: Special Effects

- 11.1 Getting Started With Photoshop Filters
- 11.2 Smart Filters
- 11.3 Creating Text Effects
- 11.4 Applying Gradient to Text

Paper 2: Corel Draw

1: Getting Started with Corel Draw

- 1.1 Introduction to Corel Draw
- 1.2 Features of Corel Draw
- 1.3 Corel Draw Interface
- 1.4 Toolbox

- 4.3 Drawing Polygons and Stars
- 4.4 Drawing Spirals
- 4.5 Drawing Grids
- 4.6 Drawing Pre-defiend Shapes
- 4.7 Drawing Using Shape Recognition

5: Working With Objects

- 5.1 Selecting Objects
- 5.2 Copy, Duplicate, and Deleting Objects
- 5.3 Copying Object Properties and Effects
- 5.4 Positioning Objects
- 5.5 Aligning and Distributing Objects
- 5.6 Changing the Order of Objects
- 5.7 Rotating and Mirroring Objects
- 5.8 Grouping Objects
- 5.9 Combining Objects

6: Working With Symbols

- 6.1 Creating, Editing & Deleting Symbols
- 6.2 Using Symbols in Drawings
- 6.3 Managing Collections and Libraries
- 6.4 Sharing Symbols between Drawings

7: Filling Objects

- 7.1 Applying Uniform Fills
- 7.2 Applying Fountain Fills
- 7.3 Applying Pattern Fills
- 7.4 Applying Texture Fills
- 7.5 Applying Mesh Fills

8: Applying Effects

- 8.1 Blends
- 8.2 Distortion
- 8.3 Contour Effects
- 8.4 Lens Effects Transparency 8.5 Power Clips

9: Working with Pages

- 9.1 Specifying the Page Layout
- 9.2 Choosing a Page Background
- 9.3 Adding, Renaming and Deleting Pages
- 9.4 Using Rulers
- 9.5 Setting the Grids
- 9.6 Setting up Guidelines
- 9.7 Setting the Drawing Scale

10: Working with Text

- 10.1 Adding and Selecting Text
- 10.2 Changing the Appearance of Text
- 10.3 Text Tool
- 10.4 Artistic and Paragraph Text
- 10.5 Embedding Objects into Text
- 10.6 Wrapping Text around Object
- 10.7 Linking Text to Objects
- 10.8 Aligning and Spacing Text
- 10.9 Shifting and Rotating Text

11: Working with Bitmaps

11.1 Converting Vector Graphics to Bitmaps

1.5 Common Tasks 1.6 Setting up a Page in Corel Draw 1.7 Creating Drawings/Pages

2: Drawing and Coloring

2.1 Starting and Opening Drawings 2.2 Selecting Objects 2.3 Creating Basic Shapes 2.4 Reshaping Objects 2.5 Applying Color Fills and Outlines 2.6 Saving Drawings 2.7 Backing-up and Recovering Files 2.8 Choosing Colors 2.9 Creating Custom Color Palettes

3: Working with Lines, Outlines and Brush Strokes

3.1 Drawing Lines 3.2 Formatting Lines and Outlines 3.3 Closing Multiple Line Segment 3.4 Applying Brush Strokes 3.5 Spraying Objects along a Line 3.6 Drawing Flow and Dimension Lines

4: Drawing Shapes

4.1 Drawing Rectangles and Squares 4.2 Drawing Ellipses, Circles and Arcs

- 11.2 Adding Bitmaps
- 11.3 Cropping and Editing Bitmaps
- 11.4 Applying Special Effects to Bitmaps
- 11.5 Applying Color and Tone Effects
- 11.6 Removing Dust and Scratch Mark

12: Publishing to Web

12.1Preparing Files & Objects for Web Publishing 12.2 Publishing to HTML

13: Publishing to PDF

- 13.1 Save Document as PDF File
- 13.2 Reducing PDF File Size
- 13.3 Preparing PDF Files for a Service Bureau
- 13.4 Optimizing PDF Files

14: Web Resources

14.1 Importing Files 14.2 Exporting Files

Paper 3: Language C

1: Introduction of C

1.1 History 1.2 Why C language 6.1 Introduction

6: Array in C

Declaration of Array

1.3 Getting g started with C

1.5 Algorithm and flowchart

1.7 C programming style

2: Fundamentals of C

2.8 Declaring a keyword

3.2 Arithmetic operator

3.4 Assignment operator

3.5 Relational operator

3.7 Conditional operator

4: Control Statements

4.2 Branching statements

3.6 Logical operator

3.8 Bitwise operator

4.1 Introduction

•Nested if

•For loop

•Goto

Break

•Continue

5: Function in C

5.1 Introduction

5.2 Types of functions

5.4 Need of functions

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•Call by reference

5.5 Scope rules

5.6 Recursion

5.3 Types of user define functions

•No return type with no arguments

•Return type with no arguments

•No return type with arguments

•Return type with arguments

5.7 Function using arguments

•While loop

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4.3 Looping statement

•Do while loop

4.4 Jumping statement

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3.9 Special operators

2.9 Reading data from keyboard

3: Operators and expressions

3.3 Increment and Decrement operator

2.1 Introduction

2.3 Keywords

2.4 Identifiers

2.5 Variables

2.6 Data types

2.7 Constants

3.1 Introduction

2.2 Character set

1.4 Writing first program: hello world

1.6 Understanding the structure and syntax of C

- Initializing an array
- Accessing an Array
- 6.2 One-dimensional array
- 6.3 Two-dimensional array Nesting of loops
- 6.4 Multi-dimensional array 6.5 Dynamic Array

7: Pointers in C

- 7.1 Introduction
- 7.2 Declaration of pointers
- 7.3 Initialization of pointers
- 7.4 Accessing variable through pointer
- 7.5 Pointer to a pointer
 - •Declaring a double pointer
- 7.6 Operation on pointer
 - Increment and decrement operator
 - Addition and subtractions of constant value
 - Subtracting two pointers
 - Comparison between two pointers
- 7.7 Pointer to array
- 7.8 Array to pointer
- 7.9 Passing pointer as a function
- 7.10 Pointer to structure
 - Pointer pointing to a function



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8: Structures in C

- 8.1 Introduction
- 8.2 Defining a structure
- 8.3 Declaring a structure member Declaring structure variable separately
 - •Declaring structure variable along with definition
- 8.4 Accessing structure member •With Dot operator With arrow operator
- 8.5 Structure initialization
- 8.6 Array of structure
- 8.7 Using structure as a function argument •Passing structure member as an argument •Passing structure variable as an argument •Passing structures pointer as an argument
- 8.8 Array within structure
- 8.9 Nested structure
- 8.10 typedef keyword
 - •Typedef vs #define

9: Union in C

- 9.1 Introduction
- 9.2 Declaration of union
- 9.3 Accessing union member
- 9.4 Bit field

10: Input and output

- 10.1 Introduction
- 10.2 Standard files
- 10.3 Formatted input output •scanf()
 - •printf()
- 10.4 Unformatted input output •getchar()

 - •Getch()
 - •gets()
 - •putchar() •puts()
- 10.5 Error Handling
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11: File I/O

11.1 Introduction 11.2 Needs of files 11.3 Types of files •Text files •Binary files 11.4 Files operations •File creation •Opening a file •Reading data from file •Writing data to file •Closing a file 11.5 Reading writing text files •getc() •putc() •getw()

- 2.5 Images as a Floating
- 2.6 HTML Images as a Link
- 2.7 Background Images
- 2.8 The <picture> Element
- 2.9 HTML Images vs Title Attribute

3: Links in HTML

- 3.1 Link
- 3.2 HTML Links
- 3.3 The Target Attribute
- 3.4 Images as Link
- 3.5 HTML Links Titles
- 3.6 External Paths
- 3.7 HTML Link Colors

4: HTML Lists

- 4.1 List
- 4.2 Types of Lists in HTML
 - Unordered List
 - Ordered List
 - Definition List

5: HTML Tables

- 5.1 Table Introduction 5.2 HTML Table-Adding Borders 5.3 HTML Table-Collapsed Borders 5.4 The Empty-cells Property 5.5 Table Heading Alignment 5.6 Cell Padding and Border Spacing 5.7 Cells that Span many Columns 5.8 Cells that Span many Rows 5.9 Adding a Caption
- 5.10 Table Styling

6: HTML Forms

6.1 The <form> Element 6.2 Text 6.3 Radio Button Input 6.4 The Submit Button 6.5 Attributes 6.6 Grouping Form Data with <fieldset> 6.7 The <select> Element 6.8 The <option> Element 6.9 Visible Values 6,10 Allow Multiple Selection 6.11 The <textarea> Element 6.12 The <datalist> Element 6.13 The Output Element 6.14 Input Type Password 6.15 Input Type Reset 6.16 Checkboxes 6.17 Input Type Color 6.18 Input Type Date 6.19 Input Type Email 6.20 Input Type Number6.21 Input Type Range 6.22 Input Type Search

9: CSS Colors

- 9.1 CSS Colors
- 9.2 Background Color
- 9.3 Text Color
- 9.4 Border color
- 9.5 Color Values
- 9.6 RGB Values
- 9.7 HEX Value
- 9.8 HSL Value
- 9.9 Saturation
- 9.10 Lightness
- 9.11 RGBA Value
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10: CSS Background

- 10.1 CSS Backgrounds
 - Background Color
 - Background Image
 - Background-Shorthand Property

11: CSS Borders

- 11.1 CSS Borders
 - Border Style Property
 - Border width Property
 - Border Color Property
 - Border-Individual Sides
 - Border -Shorthand Property
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12: CSS Margins

- 12.1 CSS Margins
- 12.2 Margin Properties
- 12.3 Margin-Shorthand Property
- 12.4 the Auto Value
- 12.5 The Inherit Value

13: CSS Padding

- 13.1 CSS Box Model
- 13.2 CSS Padding Properties
 - Padding-Top
 - Padding-Bottom
 - Padding-Left
 - Padding-Right

14.1 CSS Text Properties

Color Property

Text-Align Property

- Padding
- 13.3 Giving only one value to Padding

14.2 Types of CSS Text Properties

Text-Decoration Property

Letter-Spacing Property

Word-Spacing Property

Text-Indent Property

• White-Space Property

Text-Shadow Property

Text-Transform Property

Line-Height Property

Direction Property

14: CSS Text

•putw() •getchar() •putchar() •fprintf() •fscanf() 11.6 Reading writing binary files •fread() Fwrite()

Paper 4: HTML and CSS

HTML

1: Starting with HTML

1.1 Introduction to HTML 1.2 What is HTML 1.3 HTML Versions 1.4 Web Browsers 1.5 HTML Editors 1.6 HTML Tags

2: HTML Images

2.1 HTML Images 2.2 alt attribute with images 2.3 style Attribute 2.4 Change the Height and Width of Image 6.23 Input Type Tel 6.24 Input Type Time 6.25 Input type URL 6.26 Input Type Week 6.27 Input Attributes

7: HTML Blocks and Classes

7.1 HTML Blocks Introduction 7.2 The <div> Element 7.3 The Element 7.4 Using the Class Attribute 7.5 Using the id Attribute 7.6 HTML Iframes

CSS

8: Starting with CSS

8.1 What is CSS? 8.2 CSS Syntax 8.3 CSS Selectors The id Selector The class Selector 8.4 Grouping Selectors 8.5 CSS Comments 8.6 CSS File Inclusion 8.7 Multiple Style sheets 8.8 Cascading Order

15: CSS Font

15.1 CSS Font Properties 15.2 Types of CSS Font Properties

- Font-Family Property
- Font-Style Property
- Font-Size Property
- Font-Weight Property
- Font-Variant Property
- Font Property

16: CSS Lists

16.1 CSS List Properties

- 16.2 Types of CSS List Properties
 - List-Style-Type Property
 - List-Style-Image Property
 - List-Style-Position Property
 - Marker -Offset Property
 - List-Style Property
- 16.3 Styling with Colors

17: CSS Scrollbars

- 17.1 CSS Overflow/Scrollbar Properties
- 17.2 Types of Overflow Properties
 - Values
 - Visible



- Hidden
- Scroll
- Auto

17.3 Overflow-x and Overflow-y

18: CSS Tables

- 18.1 CSS Tables Properties
- 18.2 Types of CSS Table Properties
 - Border Property
 - Border-Collapse Property
 - Width and Height Property
 - Vertical Align Property
 - Border-Spacing Property
 - Caption-Side Property
 - Empty-Cells Property
 - Table-Layout Property
 - Border-Bottom Property
 - Zebra-Striped Property
- 18.3 :hover Selector



