IE HUB OF

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Course Syllabus: Management Diploma in Computer Applications

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

Courses / Modules Paper

Module 1:

Paper 1	Paper 2
Fundamentals, MS-Office, Internet	Accounting, Tally

Module 2:

Paper 1	Paper 2
DTP	Language C, HTML

Module 1:

Paper 1: Fundamentals, MS-Office, Internet

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
- 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

- 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

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 View
- 6.2 Show/Hide 6.3 Zoom Group
- 6.4 Window
- 6.5 Macro

Microsoft Excel

7: Introduction to Excel

- 7.1 Introduction
- 7.2 History of Excel
- 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

9: MS Excel: Insert

- 9.1 Tables
- 9.2 Illustrations
- 9.3 Charts
- 9.4 Links
- 9.5 Spark-Lines
- 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 Proofing
- 11.2 Comments
- 11.3 Changes

12: MS Excel: View

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

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

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- 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 Setup
- 15.2 Adding Themes to Presentation
- 15.3 Changing Slide Background
- 15.4 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: Introduction
- 17.2 Slide Show Starting from the Beginning
- 17.3 Setup Group

18:Power Point: Review

- 18.1 Proofing
- 18.2 Comments
- 18.3 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

20: Internet and Networking

- 20.2 Advantages & Disadvantages of Internet
- 20.3 Search Engines and Web Browsers
- 20.4 Website
- 20.5 Domain Name
- 20.6 E-Commerce
- 20.7 Email
- 20.8 Computer Security Threats
- 20.9 Networking
- 20.10 Network Topology

Paper 2: Accounting, Tally

1: Accounting Info: Functioning of Software

- 1.1 Introduction
- 1.2 Book Keeping
- 1.3 Objectives of Book keeping
- 1.4 What is accounting?
- 1.5 Accounting Process
- 1.6 Advantages of Accounting
- 1.7 Limitations of Accounting

2: Basic Accounting Terms

2.1 Accounting Terms

3: Accounting Principles & Assumptions 16: Course Centres and Budgets

- 3.1 Introduction
- 3.2 Generally Accepted Accounting Principles
- 3.3 Basis of Accounting
- 3.4 Accounting standards
- 3.5 Benefits of accounting standards

4: Accounting Equations

- 4.1 What is Accounting Equations?
- 4.2 Breaking down Accounting
- 4.3 Illustrations

5: Accounting Vouchers

- 5.1 Introduction
- 5.2 Vouchers
- 5.3 Cash Memo
- 5.4 Cash Receipt
- 5.5 Payment Receipt
- 5.6 Purchase Voucher
- 5.7 Sales Vouchers
- 5.8 Debit Note
- 5.9 Credit Note
- 5.10 Difference between Debit & Credit note

6: Accounting Rules

- 6.1 Introduction
- 6.2 Account
- 6.3 Meaning of Debit & Credit
- 6.4 Types of Credit
- 6.5 Golden Rule of Accounting

7: Journal

- 7.1 Definition
- 7.2 Practical Questions

8: Ledger

8.1 What is Ledger?

9: Cash Book

- 9.1 Introduction
- 9.2 Features
- 9.3 Kind of Cash Book
- 9.4 Practical Questions

10: Trial Balance

10.1 Trial Balance

11: Final Accounts

- 11.1 Introduction
- 11.2 Trading Account
- 11.3 Profit & Loss Account

12: Introduction to Tally ERP9

- 12.1 How to install Tally ERP9
- 12.2 Activate License
- 12.3 Work on Education Mode

13: Company Formation

- 13.1 Creating a Company
- 13.2 Tally vault Password
- 13.3 Select Company 13.4 Alter & Modify Company
- 13.5 Shut a Company
- 13.6 Gateway of Tally

14: Ledger Creation

- 14.1 Introduction
- 14.2 Main Functions
- 14.3 Groups by Defaults
- 14.4 Creating Groups
- 14.5 Creating Ledgers

15: Voucher Entries

- 15.1 Introduction
- 15.2 Accounting Vouchers
- 15.3 Contra Vouchers 15.4 Payment Vouchers
- 15.5 Receipt Vouchers 15.6 Journal
- 15.7 Purchase
- 15.8 Sales
- 15.9 Debit note and Credit note

16.1 Introduction to Cost Centres

16.2 Budgets

17: Inventory Info 17.1 Introduction

- 17.2 Inventory Information
- To Create Stock Group Create Stock Items

Displaying and Altering Stock

- 6.8 Creating and Modifying Text

 - 7.2 Working with Color and Swatches

 - 7.4 Creating and working with Brushes 7.5 Pencil and Eraser Tools

20.1 Introduction

19.1 Sales Order

- 20.2 Payroll Info
- 20.4 Employee Creation
- 20.5 Payroll Unit

Module 2:

Paper 1: DTP (Photoshop, Corel Draw, Page Maker)

- 1.1 Introduction
- 1.3 Menus and Panels
- 1.4 Opening new file
- 1.5 Opening existing file

2: Getting started with Photoshop

- 2.1 Exploring the Toolbcx
- 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

- 3.2 Working with Multiple images
- 3.5 The new Master page
- 3.7 Auto-Blend and Auto-Align Layers Command

- 4: Resizing and Cropping Images
 - 4.2 The Image size Command

 - 4.5 Cropping and Straightening an Image

- 5.2 Using Magic Wand and Free Transform
- 5.3 Selection with Regular and Polygonal
- 5.4 Combining selection
- 5.5 Using Magnetic Lasso tool
- 5.6 Using Quick Selection tool and Refine Edge

6: Getting Started with Layers

- 6.2 Creating, Selecting, Linking and Deleting the
- 6.5 Filling and Grouping Layers 6.6 Introduction to Blending Modes

7: Printing in Photoshop

- 8: Photo Retouching

- 19: Sales Order
- 20: Payroll in Tally ERP9

18: Purchase Order

18.1 Purchase Order

- 20.3 Employee Group

- 1: Introduction to photoshop cs4
 - 1.2 Navigating Photoshop

- 2.4 Creating and Viewing a new document

 - 3.1 Zooming and panning Images
 - 3.3 Undoing steps with history 3.4 Adjusting Color with new Adjustments Panel
 - 3.6 The new note Tool

3.8 3D commands

- 4.1 Understanding Pixels and resolution
- 4.3 Interpolation Option 4.4 Resizing for print and web

4.6 Adjusting Canvas size and canvas rotation

- 5: Working with basic selection
 - 5.1 Selection with Elliptical Marque tool
 - Lasso Tool
- 5.7 Modifying Selections
 - 6.1 Understanding the Background Layer
 - 6.3 Locking and Merging Layers 6.4 Copying Layers, Using Perspective and Layer
 - 6.7 Blending Modes, Opacity and Fill
 - 7.1 Using the Brush tool
 - 7.3 Creating and using Gradients
 - 7.6 Painting with Selection

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- 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

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
- 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
- 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
- 5.3 Copying up lifete prodendeting Ottiects
- 5.4 Positioning Objects
- 5.5 Aligning and Distributing Objects
- 5.6 Changing the Order of Objects
- 5.7 Rotating and Mirroring Objects
- 5.9 Combining Objects

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**
- 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

- 12.1 Preparing 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

Page Maker

1: Introduction to publishing

- 1.1 Overview of traditional Publishing
- 1.2 Overview of Desktop Publishing
- 1.3 Overview of PageMaker
- 1.4 Starting PageMaker

2: Introduction to PageMaker

- 2.1 Starting a new Publication
- 2.2 Page Setup
- 2.3 Target Printer
- 2.4 Saving a Publication
- 2.5 Using a story editor to create and place text
- 2.6 Working with Text Blocks 2.7 Enhancing the Publication
- 2.8 Printing a Publication 3: Placing and Manipulating
 - 3.1 Assembling one page publication by importing

3.2 Assembling multi page publication by importing

- 3.3 Processor
- 3.4 Text flow option

3.5 Manual

- 3.6 Automatic
- 3.7 Semi-Automatic
- 3.8 Placing text in columns

4: Importing and Manipulating Graphics

- 4.1 Importing Graphics
- 4.2 Placing Graphics within a document
- 4.3 Working with graphics on the pasteboard
- 4.4 Cropping a graphic
- 4.5 Resizing a graphic

5: Text and Graphic

- 5.1 Additional Story Editor features
- 5.2 Find/Change
- 5.3 Spell Check
- 5.4 Combining graphics with text
- 5.5 Text Wrap and Standoff
- 5.6 Customizing the Graphics boundary

6: Selection

- 6.1 Using pagemaker template to create new **Publications**
- 6.2 Master Pages
- 6.3 Locking and Merging Layers
- 6.4 Copying Layers, Using Perspective and Layer
- 6.5 Header
- 6.6 Footer
- 6.7 Page number

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

Paper 2: Language C, HTML 1: Introduction of C

- 1.1 History 1.2 Why C language
 - 1.3 Getting g started with C

1.6 Understanding the structure and syntax of C

- 1.4 Writing first program: hello world 1.5 Algorithm and flowchart
- 1.7 C programming style

2: Fundamentals of C

- 2.1 Introduction
- 2.2 Character set 2.3 Keywords
- 2.4 Identifiers
- 2.5 Variables
- 2.6 Data types 2.7 Constants
- 2.8 Declaring a keyword

2.9 Reading data from keyboard

- 3: Operators and expressions
 - 3.1 Introduction
 - 3.3 Increment and Decrement operator
 - 3.4 Assignment operator 3.5 Relational operator

3.2 Arithmetic operator

- 3.6 Logical operator
- 3.7 Conditional operator 3.8 Bitwise operator
- 3.9 Special operators
- 4: Control Statements 4.1 Introduction
 - 4.2 Branching statements
 - •lf Nested if
 - If else Nested if else
 - 4.3 Looping statement
 - While loop 4.4 Jumping statement

For loop

- Goto Break
- Continue

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5: Function in C

- 5.1 Introduction
- 5.2 Types of functions
- 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
- 5.4 Need of functions
- 5.5 Scope rules
- 5.6 Recursion
- 5.7 Function using arguments
 - Call by value
 - Call by reference

6: Array in C

- 6.1 Introduction
 - Declaration of Array
 - 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

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
 - •errorno
 - strerror
 - Perror

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
 - •qetc()
 - •putc()
 - •getw() •putw()
 - •getchar()
 - •putchar()
 - •fprintf()
- •fscanf() 11.6 Reading writing binary files
 - •fread()
 - •Fwrite()

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
- 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

6.9 Visible Values

- 6.6 Grouping Form Data with <fieldset>
- 6.7 The <select> Element 6.8 The <option> Element
- 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 Number 6.21 Input Type Range
- 6.22 Input Type Search
- 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