# Course Syllabus: Management Diploma in Computer Applications 

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

Courses / Modules Paper
Module 1:

| Paper 1 | Paper 2 |
| :---: | :---: |
| Fundamentals, MS-Office, <br> 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 Exce
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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3.5 Font Group
13.6 Paragraph
13.7 Drawing Groups
3.8 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

20.1 Internet
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

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: Course Centres and Budgets

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

18: Purchase Order
18.1 Purchase Order

## 19: Sales Order

19.1 Sales Order

## 20: Payroll in Tally ERP9

20.1 Introduction
20.2 Payroll Info
20.3 Employee Group
20.4 Employee Creation
20.5 Payroll Unit

## Module 2: <br> Paper 1: DTP (Photoshop, Corel Draw, Page Maker)

1: Introduction to photoshop cs4
1.1 Introduction
1.2 Navigating Photoshop
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
2.4 Creating and Viewing a new document
2.5 Customizing the interface
2.6 Setting Preferences

3: Working with Images
3.1 Zooming and panning Images
3.2 Working with Multiple images
3.3 Undoing steps with history
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

6.1 Understanding the Background Layer
6.2 Creating, Selecting, Linking and Deleting the
6.3 Locking and Merging Layers
6.4 Copying Layers, Using Perspective and Layer
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
8.5-7ker 'Color Replacement Tool
8.6 The Toning and Focus Tool

9: Coitylps 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 Cepyingulbjeat pabjeptientianalturects
5.4 Positioning Objects
5.5 Aligning and Distributing Objects
5.6 Changing the Order of Objects

5:8 Gpoatipiqgabdjeditroring 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
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

## 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
1.4 Writing first program: hello world
1.5 Algorithm and flowchart
1.6 Understanding the structure and syntax of C
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
3.2 Arithmetic operator
3.3 Increment and Decrement operator
3.4 Assignment operator
3.5 Relational 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
-If

- Nested if
-If else
- Nested if else
4.3 Looping statement
-For loop
-While loop
4.4 ORphinitestapement
-Goto
-Break
-Continue


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5: Function in C<br>5.1 Introduction<br>5.2 Types of functions<br>5.3 Types of user define functions<br>-No return type with no arguments<br>-Return type with no arguments<br>- No return type with arguments<br>-Return type with arguments<br>5.4 Need of functions<br>5.5 Scope rules<br>5.6 Recursion<br>5.7 Function using arguments<br>-Call by value<br>-Call by reference<br>\section*{6: Array in C}<br>6.1 Introduction<br>-Declaration of Array<br>- Initializing an array<br>- Accessing an Array<br>6.2 One-dimensional array<br>6.3 Two-dimensional array<br>- Nesting of loops<br>6.4 Multi-dimensional array<br>6.5 Dynamic Array<br>\section*{7: Pointers in C}<br>7.1 Introduction<br>7.2 Declaration of pointers<br>7.3 Initialization of pointers<br>7.4 Accessing variable through pointer<br>7.5 Pointer to a pointer<br>-Declaring a double pointer<br>7.6 Operation on pointer<br>-Increment and decrement operator<br>-Addition and subtractions of constant value<br>- Subtracting two pointers<br>-Comparison between two pointers<br>7.7 Pointer to array<br>7.8 Array to pointer<br>7.9 Passing pointer as a function<br>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
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()
-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
6.6 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
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 <span> Element
7.4 Using the Class Attribute
7.5 Using the id Attribute
7.6 HTML Iframes

