



**GOVERNMENT OF TAMIL NADU
DIRECTORATE OF TECHNICAL EDUCATION
GOVERNMENT TECHNICAL EXAMINATIONS**

**CERTIFICATE COURSE
IN
COMPUTER ON OFFICE AUTOMATION**

SYLLABUS

**CERTIFICATE COURSE IN COMPUTER ON OFFICE AUTOMATION
SYLLABUS**

- UNIT 1: BASICS OF COMPUTER**
- UNIT 2: OPERATING SYSTEMS
 MS-WINDOWS & LINUX**
- UNIT 3: OFFICE APPLICATIONS – I
 MS OFFICE: MS-WORD
 OPEN OFFICE: WRITER**
- UNIT 4: OFFICE APPLICATIONS - II
 MS OFFICE: MS-EXCEL
 OPEN OFFICE: CALC & MATH**
- UNIT 5: OFFICE APPLICATIONS - III
 MS OFFICE: MS-ACCESS
 OPEN OFFICE: BASE**
- UNIT 6: OFFICE APPLICATIONS - IV
 MS OFFICE: MS-POWER POINT
 OPEN OFFICE: IMPRESS**
- UNIT 7: INTERNET & ADVANCED COMMUNICATION**

Note:

1. A candidate has to complete a minimum of 120 hrs. of training.
2. MS-OFFICE 2007, Linux EduBoss-3.0 and OPEN OFFICE 3.2 to be followed for Theory and Practical Examinations.
3. No Course Material will be prepared and supplied by DOTE
4. The weightage for Theory and Practical Examinations as follows.
 - a. MS WINDOWS and MS OFFICE - 70%
 - b. LINUX and OPEN OFFICE - 30%

* * *

DETAILED SYLLABUS – THEORY

UNIT 1:

BASICS OF COMPUTER

Introduction to Computer: Definition - History & Generation of Computer (From First to 5th) - Applications of Computer – Advantages of Computer – Terms related to Computer - Characteristics of Computer: Speed, Storage, Versatility and Diligence – Hardware & Software. Block Diagram and Working Principle of Computer - Types of Computer: On the Basis of Working - Analog, Digital & Hybrid, On the Basis of Size - Main frame, Mini Computer, Super Computer, Work station, Micro Computer, Desktop Computer, Laptop Computer, Palmtop Computer; On the basis of Processor – XT, AT & Pentium(i3, i5, i7); **Memory:** Units, Representation, Types - Primary memory: RAM, ROM, PROM, EPROM, EEPROM, DDR Secondary memory: Hard disk, CD, DVD, Blue ray Disc, Pen Drive Magnetic tape & Zip disk – **CPU:** Components of CPU - Mother board, Hard disk, RAM, ROM, Processor, SMPS & Connecting wire - Graphics Card, Sound Card, Network Card – Modem; **Input, Output devices:** Keyboard, Mouse, Scanner, Digital Camera, Joystick, Pen drive, Monitor, Printer, Plotter – Connecting port – Serial, parallel – USB port.

Computer Networks: Data Communications –Types of Computer Networks – Local Area Networks & Wide Area Networks.

UNIT 2

OPERATING SYSTEMS

Windows:

Definition of Operating System - Functions of OS - Types of OS: Single user, Multi-User, multi-task, RTOS, Single-user, Multi-tasking – **Windows Desk top** - **GUI:** Definition, Standards, Cursors/Pointers, Icons, GUI Menus, GUI-Share Data – **Desktop icons and their functions:** My computer, My documents, Network neighbourhood, Recycle Bin, Quick launch tool bar, System tray, Start menu, Task bar – **Dialog Boxes:** List Box, Spin Control Box, Slide, Drop-down list, Radio button, Check box, Text box, **Task Bar** - System Tray - Quick launch tool bar - Start button - **Parts of Windows** -Title bar-Menu bar - Scroll bar- Status bar, Maximize, Minimize, close and Resize & Moving a Window – **Windows** - Start Menu –Help Menu- Preview Menu; **Logoff & Shutdown** – **Keyboard Accelerators:** Key board short keys or hotkeys – **Working with Notepad & Wordpad:** Opening & Saving files, Formatting, Printing, Inserting objects, Finding & replacing text, Creating & Editing Images with Microsoft paint, using the Calculator – Personalising Windows.

Linux:

Linux Programming & Administration: Introduction to Linux – Features of Linux – Components of Linux – Linux process and Thread Management – File Management System; **Linux Commands and Utilities** – cat, tail, cmp, diff, wc, sort, mkdir, cd, rmdir, pwd, cp, more, passwd, who, whoami, mv, chmod, kill, write, wall, merge, mail, news – pipes, filters and redirection utilities; **System Administration:** Installing Linux – Booting the system – Maintaining user accounts – File systems and special files – Backups and restoration.

UNIT 3

OFFICE APPLICATIONS - I

Introduction to MS Office - MS Word and Open Office – Writer:

MS Word - Working with Documents -Opening & Saving files, Editing text documents, Inserting, Deleting, Cut, Copy, Paste, Undo, Redo, Find, Search, Replace, Formatting page & setting Margins, Converting files to different formats, Importing & Exporting documents, Sending files to others, Using Tool bars, Ruler, Using Icons, using help, **Formatting Documents** - Setting Font styles, Font selection- style, size, colour etc, Type face - Bold, Italic, Underline, Case settings, Highlighting, Special symbols, Setting Paragraph style, Alignments, Indents, Line Space, Margins, Bullets & Numbering. **Setting Page style** - Formatting Page, Page tab, Margins, Layout settings, Paper tray, Border & Shading, Columns, Header & footer, Setting Footnotes & end notes – Shortcut Keys; Inserting manual page break, Column break and line break, Creating sections & frames, Anchoring & Wrapping, Setting Document styles, Table of Contents, Index, Page Numbering, date & Time, Author etc., Creating Master Documents, Web page. **Creating Tables**- Table settings, Borders, Alignments, Insertion, deletion, Merging, Splitting, Sorting, and Formula, **Drawing** - Inserting ClipArts, Pictures/Files etc., **Tools** – Word Completion, Spell Checks, Mail merge, Templates, Creating contents for books, Creating Letter/Faxes, Creating Web pages, Using Wizards, Tracking Changes, Security, Digital Signature. **Printing Documents** – Shortcut keys.

Free Open Source Software:

OPEN OFFICE - WRITER: Introduction to Open Office Suite - Selecting the application package, Working with Documents- Formatting Documents - Setting Page style- Creating Tables - Drawing- Tools - Printing Documents - Operating with MS Word documents.

UNIT 4

OFFICE APPLICATIONS - II

Introduction to MS Office – MS Excel and Open Office – Calc:

MS Excel: Spread Sheet & its Applications, Opening Spreadsheet, Menus - main menu, Formula Editing, Formatting, Toolbars, Using Icons, Using help, Shortcuts, Spreadsheet types. Working with Spreadsheets- opening, Saving files, setting Margins, Converting files to different formats (importing, exporting, sending files to others), Spread sheet addressing - Rows, Columns & Cells, Referring Cells & Selecting Cells – Shortcut Keys. **Entering & Deleting Data-** Entering data, Cut, Copy, Paste, Undo, Redo, Filling Continuous rows, columns, Highlighting values, Find, Search & replace, Inserting Data, Insert Cells, Column, rows & sheets, Symbols, Data from external files, Frames, Clipart, Pictures, Files etc, Inserting Functions, Manual breaks, **Setting Formula** - finding total in a column or row, Mathematical operations (Addition, Subtraction, Multiplication, Division, Exponentiation), Using other Formulae. **Formatting Spreadsheets-** Labelling columns & rows, Formatting- Cell, row, column & Sheet, Category - Alignment, Font, Border & Shading, Hiding/ Locking Cells, Anchoring objects, Formatting layout for Graphics, Clipart etc., Worksheet Row & Column Headers, Sheet Name, Row height & Column width, Visibility - Row, Column, Sheet, Security, Sheet Formatting & style, Sheet background, Colour etc, Borders & Shading – Shortcut keys. **Working with sheets** – Sorting, Filtering, Validation, Consolidation, and Subtotal. **Creating Charts** - Drawing. **Printing, Using Tools** – Error checking, Spell Checks, Formula Auditing, Creating & Using Templates, Pivot Tables, Tracking Changes, Security, Customization.

OpenOffice-Calc - Introduction – Introduction to Spreadsheets, Overview of a Worksheet, Creating Worksheet & Workbooks, Organizing files, Managing files & workbooks, Functions & Formulas, Working with Multiple sheets, Creating Charts & Printing Charts – Operating with MS Excel documents, which are already created and saved in MS Excel.

UNIT 5

OFFICE APPLICATIONS - III

Introduction to MS Office-MS Access and Open Office-Base:

MS Access: Introduction, Planning a Database, Starting Access, Access Screen, Creating a New Database, Creating Tables, Working with Forms, Creating queries, Finding Information in Databases, Creating Reports, Types of Reports, Printing & Print Preview – Importing data from other databases viz. MS Excel etc.

OpenOffice-Base – Introduction- Database Concepts – Creating a New Database, Creating Tables, Working with Forms, Creating queries, Finding Information in Databases, Creating Reports, Types of Reports, Printing and Printing preview – Operating with other databases i.e. MS Access etc.

UNIT 6

OFFICE APPLICATIONS - IV

Introduction to MS Office-MS Power Point and Open Office-Impress:

MS Power point: Introduction to presentation – Opening new presentation, Different presentation templates, Setting backgrounds, Selecting presentation layouts. **Creating a presentation** - Setting Presentation style, Adding text to the Presentation. **Formatting a Presentation** - Adding style, Colour, gradient fills, Arranging objects, Adding Header & Footer, Slide Background, Slide layout. Adding Graphics to the Presentation- Inserting pictures, movies, tables etc into presentation, Drawing Pictures using Draw. **Adding Effects to the Presentation-** Setting Animation & transition effect. **Printing Handouts,** Generating Standalone Presentation viewer.

OpenOffice-Impress - Introduction – Creating Presentation, Saving Presentation Files, Master Templates & Re-usability, Slide Transition, Making Presentation CDs, Printing Handouts – Operating with MS Power Point files / slides.

UNIT 7

INTERNET & ADVANCED COMMUNICATION

Internet and Web Browsers: Definition & History of Internet - Uses of Internet - Definition of Web-Addressing-URL-Different types of Internet Connections; Dial up connection, Broad band (ISDN, DSL, Cable), Wireless (Wi-Fi, WiMax, Satellite, Mobile) naming convention, browsers and its types, internet browsing, searching - Search Engines - Portals - Social Networking sites- Blogs - viewing a webpage, downloading and uploading the website; Creating an email-ID, e-mail reading, saving, printing, forwarding and deleting the mails, checking the mails, viewing and running file attachments, addressing with cc and bcc.

Introduction to various devices & Applications: Other than the computers, (electronic gadgets), which are widely using by executives in the Offices – Tablet, Smart Phone – concept of mobile phone and Tablet and their uses – Various applications using by Tablets and Smart Phones such as UC browser, WhatsApp, Maps, Skype.

* * *

SCHEME OF VALUATION AND PATTERN OF QUESTION PAPER

THEORY EXAMINATION

Time: 2 Hrs.

Max. Marks: 100

Min. Marks to pass: 40

Sl. No.	Type of the Questions	No of Questions	Marks per Question	Total marks for this division
1.	Fill in the blanks	10	1	10
2.	Matching the pairs	10	1	10
3	Multiple choice questions	10	1	10
4	True or False	10	1	10
5	One or Two line descriptive type questions	15	2	30
6	Short answer descriptive type questions (Each question will have two subdivisions out of which one has to be answered)	6	5	30
			Total	100

PRACTICAL EXAMINATION

Time: 2 Hrs.

Max. Marks: 100

Min. Marks to pass: 50

Distribution of Marks: In the Practical Examination, Question Paper should be in two Parts
i.e. Part A comprising 3 questions and
Part B comprising 2 questions.

i.	Part A	:	30 Marks
ii.	Part B	:	60 Marks
iii.	Viva-voce	:	05 Marks
iv.	Record Note	:	05 Marks
Total			100 Marks

Note: Record Note should be hand written. Each exercise should state clearly the aim of the exercise, Procedure followed (how to do the exercise, sequence of steps) and its Output.

* * *