Tentative Teaching Syllabus from Class VI to XII. It can also be helpful for the preparation of written examination

ANNEXURE 'A' Syllabus Class VI

UNIT-I: Introduction to Computer Fundamentals. (5 Hours)

IT Concepts: -Definition of Computers, Characteristics of computer - Speed, Diligence, Accuracy, Versatility, Storage, Basic Applications of Computers, Concept of Hardware and Software, Components of computer, Computer Memory.

UNIT-2: EduBOSS, Text Editor, TuxPaint/Kolorpaint, Calculator (30 Hours)

<u>Introduction to EduBOSS:</u>-What is EduBOSS, Starting & Exiting EduBOSS, Parts of EduBOSS screen, Icons , Types of icons, Taskbar, Activating Windows, Moving & Scrolling Windows, title bar, Minimize, Maximize & close Buttons

<u>Running applications:</u>- How to run Application, Running a Application from the Applications Button, Running a Application from Computer.

<u>Text Editor/Gedit</u>- Simple word processing, Creating & Saving adocument, Entering Text & Editing Document, Formatting Characters, Searching & Replacing Text, printing your document.

Painting Pictures with TuxPaint/Kolorpaint:-

<u>Introduction to TuxPaint/Kolorpaint:-</u>Opening an existing picture, startinga new picture, basic painting techniques, setting the foreground background colors.

<u>Using Painting Tools:-</u>Toolbox, color palette, Curve tool, Rectangle tool.Brush Tool.

<u>Manipulating areas of pictures...</u>Selecting an area, moving an area, flipping & rotating Selections, Inverting-Colours, Stretching & Shrinking area zooming a picture.

Using Calculator:-Performing functions of Calculator.

UNIT-3: OpenOffice Writer, OpenOffice Impress (40 Hours)

<u>OpenOffice Writer:</u> Introduction to Writer, What is Writer Starting Writer, Getting to know the Writer screen, Creating Documents, Saving Documents, Using help Exiting Writer

<u>Creating & Editing Text</u>- Opening a document, Selecting & Moving Text, Editing with Cut, Copy & Paste, Undo & Redo, Spell check, Using Find, Replace & Go, To.

Formatting Text:-Font Level Formatting.

<u>OpenOffice Impress:</u>-Introduction to Impress, What is Impress, startingImpress, creating and o p ening a presentation, Impress views, moving between slides, saving/ closing a presentation, exiting Impress, Creating a new presentation using the auto content wizard and slide layout.

<u>Formatting Presentation:</u>-changing the text formats, adding bullets, aligning text.

UNIT-4: Introduction to Internet

(5 Hours)

What is Internet, History of Internet, Advantages of Internet.

UNIT-5: Typing Practice

(10 Hours)

Hands on Experience for Typing practice.

Syllabus Class VII

Unit-1: Introduction to Computer Fundamentals.

(10 Hours)

<u>IT Concepts</u>: -Definition of Computers, Characteristics of computer - Speed, Diligence, Accuracy, Versatility, Storage, Basic Applications of Computers, Concept of Hardware and Software, Components of computer.

Hardware and software, Computer Memory - Primary, secondary, RAM & ROM, units of memory, Input/output devices.

Unit-2: <u>Introduction to EduBOSS and its Accessories</u> (15 Hours)

Basic components of EduBOSS, Icons, types of icons, Taskbar, Moving & Scrolling Windows, Using your desktop, title bar, Minimize, Maximize & close Buttons, Running Applications.

<u>Exploring your Computer:-</u> Managing files & folders, creating folders, finding files & folders, opening & renaming files & folders, copying, deleting and moving files & folders.

Painting Pictures With TuxPaint/Kolorpaint:-

<u>Introduction to TuxPaint/Kolorpaint :-</u> Opening an existing picture, starting a new picture, basic painting techniques, Setting the foreground & background colors.

<u>Using Painting Tools:-</u>Tool box, color palette, Curve tool, Rectangle tool, Brush Tool. Manipulating areas of pictures:-Selecting an area, Moving an area, flipping & rotating Selections, Inverting Colors, Stretching & Shrinking area, Zooming a picture.

UNIT-3: Open Office Writer, Impress, Calc (50 Hours) OpenOffice

Writer:

<u>Creating & Editing Text:-</u> Opening a document, Selecting & Moving Text, Editing with Cut, Copy & Paste, Undo & Redo, Spell Check

<u>Formatting Text: -</u> Font Level Formatting, Aligning Text, Working with Tabs, Indents, Change Case, Bullets and Numbering, line spacing.

<u>Working with tables:</u> Creating a table, adding text to tables, adding/ deleting rows and columns, resizing rows and columns, deleting a table. Inserting Fontwork Gallary, Page Setting and Printing.

OpenOffice Impress: -

<u>Creating a Presentation: -</u> creating a new presentation using different layouts, changing the text formats, adding bullets, aligning text.

<u>Customizing Presentation:</u> - Formatting Slides Using Color Schemes, Background Color and Special Effects, Background Styles, Adding Pictures/Graphics on Slide, Adding Header and Footer, Slide show.

OpenOfficeCalc: -

Introduction to Calc, What is Calc, Starting Calc, Opening a Spreadsheet, Getting to know the Calc Screen, moving around the Calc Screen, saving/closing of a Spreadsheet, opening a recently used Spreadsheet, Getting help with the office assistant, Exiting Calc.

Creating & Editing Spreadsheet:- Creating New Spreadsheets, Entering Data, Selecting, Moving & Deleting Cells, Cut ,Copy, Paste, using undo, redo, Find & Replace.

UNIT 4: Introduction to Internet.

(5 Hours)

What is Internet, History of Internet, Advantages of Internet, World Wide Web, Email, web browser, types of Internet Access, basics of net-safety, search information.

UNIT 5:- Typing Practice

(10 Hours)

Hands on Experience for Typing practice.

Syllabus Class VIII

Unit — 1: <u>Introduction to Computer Fundamentals</u>. (12 Hours)

IT Concepts: -Definition of Computers, Characteristics of computer -Speed, Diligence, Accuracy, Versatility, Storage. Basic Applications of Computers, Concept of Hardware and Software, Components of computer.

Hardware and software, Computer Memory - Primary, secondary, RAM & ROM, units of memory, Input/output devices.

Classification of Software, Operating System and its functions, history of computers and its generations.

UNIT 2 <u>Introduction to EduBOSS and its Accessories</u> (15 Hours)

<u>Exploring your Computer:</u> - Managing files & folders, creating folders, finding files & folders, opening & renaming files & folders, copying & moving files & folders. Setting date and time, control centre, display properties:-background, Themes, Fonts. Revision tour of TuxPaint/KolorPaint&Gedit.

UNIT 3: Open Office Writer, Impress, Calc

(50 Hours)

Open Office Writer:Creating & Editing Text:-Opening a document,Selecting & Moving Text, Editing with Cut, Copy & Paste, Undo & Redo, Spell Check

<u>Formatting Text: -</u> Font Level Formatting, Aligning Text, bullets and numbering, border and shading, change case, Working with Tabs, Indents & Spacing, Formatting paragraphs, Format Painter.

<u>Working with tables:</u> Creating a table, adding text to tables, adding/deleting rows and columns, resizing rows and columns, deleting a table, splitting and merging cells.

<u>Inserting elements:</u> page numbers, headers and footers, date and time, pictures and hyperlinks. Font Gallary, Spell check, using help, Page Setting and Printing.

OpenOffice Impress: -

<u>Creating a Presentation: -</u> creating a new presentation, using the auto content wizard, changing the text formats, adding bullets, aligning text.

<u>Customizing Presentation:</u> -Using templates, selecting a slide layout, using undo, redo, changing slide layouts, adding clip art to your presentation, adding charts of different types to slide, organization chart, Background colour/ designs to slides. Using slide transition:-giving timing, sound and adding animations to slides and using preset animations.

OpenOfficeCalc: -

<u>Creating & Editing Spreadsheet:-</u> Creating New Spreadsheet, Saving, Closing and Opening Spreadsheets, Entering Data, Selecting, Moving & Deleting Cells, Cut, Copy, Paste, using undo, redo, Find & Replace, Entering Formulas.

<u>Formatting Spreadsheet:-</u>Adjusting <u>_</u>column and row sizes, changing cell alignments, using number formatting

<u>Viewing, Drawing & Printing:-</u> Viewing the Spreadsheet, Adding headers & footers, working with page setup, setting a print area, using print preview & printing.

Unit 4: Internet (8 Hours)

Internet, History of Internet, Advantages of Internet, Requirements of Internet, World Wide Web, web browser, types of Internet Access, basics of net-safety, search information, Services on the web- E-mail, Newsgroups, FTP, Search Engines.

Unit 5:- Typing Practice

(5 Hours)

Hands on Experience for Typing practice.

Syllabus Class IX

Unit -1: Introduction to Computer Fundamentals. (12 Hours)

IT Concepts: -Definition of Computers, Characteristics of computer - Speed, Diligence, Accuracy, Versatility, Storage, Basic Applications of Computers, Concept of Hardware and Software, Components of computer.

Hardware and software, Computer Memory - Primary, secondary, RAM & ROM, units of memory, Input/output devices.

Classification of Software, Operating System and its functions, history of computers and its generations

Classification of computers, Computer Languages- Machine Language, Assembly Language and High Level Language, Role of Assembler and Compiler.

<u>UNIT 2 :-OpenOfficeWriter,Impress,Calc, Base</u> (60 Hours) <u>OpenOffice</u>

Writer:

<u>Formatting Text:</u> -Font Level Formatting, Aligning Text, bullet andnumbering, border and shading, change case, Working with Tabs, Indents & Spacing, Formatting paragraphs.

Working with tables: Creating a table, adding text to tables, adding/deleting rows and columns, resizing rows and columns, deleting a table, splitting and merging cells.

<u>Inserting elements:</u>-page numbers, headers and footers, date and time, pictures and hyperlinks. Mail merge, Envelopes and Labels.

OpenOffice Impress: -

<u>Creating a Presentation:</u> creating a new presentation, using the auto content wizard, changing the text formats, adding bullets, aligning text, Using different Layouts, Using Drawing Toolbar, Inserting Graphs and Organization Charts.

<u>Customizing Presentation:</u>-Using templates, selecting a slidelayout, using undo, redo, changing slide layouts, adding clip art to your presentation, Background color/designs to slides, Slide Master View.

<u>Using slide transition:</u>-giving timing, sound and adding animationsto slides and using preset animations.

<u>Custom Animation</u>-Animating pictures and Text with Sound effects.

OpenOfficeCalc: -

<u>Creating & Editing Spreadsheets:- Creating New Spreadsheet, Entering Data, Selecting, Moving & Deleting Cells, Cut ,Copy, Paste, using undo, redo, Find & Replace, Using Formulas, Inserting and Deleting rows and columns, Cell referencing, Sorting of Data.</u>

<u>Formatting Spreadsheet:-</u>Formatting Rows and Columns, changing cell alignments, using number formatting

<u>Viewing</u>, <u>Drawing</u> & <u>Printing:-</u>Viewing the Spreadsheet, Addingheaders & footers, working with page setup, setting a print area, using print preview & printing. Working with graphs.

Openoffice Base:-

Introduction to Base, What is data, Starting Base, opening a database file, Introduction to the database Window, getting to know_the Base screen, Saving & Closing a database file, Using the help menu, Exiting Access.

Unit 3: Networking and Internet

(8 Hours)

What is a network, Advantages of network, Differentiate between LAN, WAN and MAN, Internet and its History, Advantages of Internet, Requirements of Internet, World Wide Web, web browser, types of Internet Access, basics of net-safety, search information, Services on the web- E-mail, Newsgroups, FTP, Search Engines, Chat, E- Commerce.

Unit 4:- Project Work

Syllabus Class X

Unit -1: Introduction to Computer Fundamentals.

(8 Hours)

IT Concepts: -Definition of Computers, Characteristics of computer - Speed, Diligence, Accuracy, Versatility, Storage. Basic Applications of Computers, Concept of Hardware and Software, Components of computer.

Hardware and software, Computer Memory - Primary, secondary, RAM & ROM, units of memory, Input/output devices.

Classification of Software, Operating System and its functions, history of computers and its generations

Classification of computers, Computer Languages- Machine Language, Assembly Language and High Level Language, Role of Assembler and Compiler.

Unit 2:-OpenOfficeWriter, Impress, Calc, Base

(55 Hours)

OpenOffice Writer:-

Formatting Text: -Font Level Formatting, Aligning Text, bullet andnumbering, border and shading, change case, Working with Tabs, Indents & Spacing, Formatting paragraphs.

Working with tables:Creating a table, adding text to tables, adding/deleting rows and columns, resizing rows and columns, deleting a table, splitting and merging cells.

<u>Inserting elements:</u>-page numbers, headers and footers, date and time, pictures and hyperlinks.

Mail merge, printing labels and envelopes

OpenOffice Impress:-

customizing Presentation:Using templates, selecting a slide layout, using undo, redo, changing slide layouts, adding clip art to your presentation, Background colour/designs to slides.

<u>Using slide transition:</u>-giving timing, sound and adding animations inslides and using preset animations, custom animations.

OpenOfficeCalc: -

<u>Creating & Editing spreadsheet:-</u>Working with spreadsheet, Enteringnumbers, text, Date/Time, Series Using Autofill, Editing the worksheet, Inserting/Deleting rows, columns and cells.

Formatting Workbooks:-Formatting spreadsheet including change color, size, font, Formatting of rows, columns and cells.

Viewing, Drawing & Printing:-Viewing the spreadsheet, Addingheaders & footers, working with page setup, setting a print area, using print preview & printing. Using Formulas and Functions such as Sum(), Averaged(), Max(), Min(), If(). Embedded charts of various types-Line, Pie, Scatter, Bar and Area in spreadsheet.

<u>OpenOffice Base:</u>-Starting Base, opening a database file, Introduction to the database Window, getting to know the Base screen, Saving & Closing a database file, Using the help menu, Exiting Access.

<u>Working with databases</u>:-Using the Database Wizard, working with datasheets, moving between record & files, using go to, updating records, Selecting Rows & Columns, changing Column Width, Saving a data sheet, Exiting datasheet.

Working with tables: - Creating a new database, Adding tables todatabase, adding fields to tables, inserting a field, setting a primary key, saving a table, adding & sorting Records, Setting Relationships.

Unit 3: - Introduction to HTML and Internet

(17 Hours)

<u>HTML:-</u> Terms and Concepts, web browser, document tags, formatting tags, lists, Linking web pages, working with images.

<u>Internet:</u> - What is Internet, Advantages of internet, Network Architecture, History of Internet, E-Mail, Word wide web, File transfer Protocol, Utilities.

Unit 4: Project Work

Syllabus Class XI

Unit-1: Overview of Fundamentals, OpenOffice Writer, Impress, Calc. (26 Hours)

Unit — 2: Introduction to programming logic and techniques.

(10 Hours)

Constants, variables, data types, keywords, identifiers, relational and logical operators, arithmetic operators, do case and endcase, IF and NESTED IF, Introduction to loop - FOR Loop, while loop, do while loop, until loop, Flowcharts, pseudocodes, algorithms

Unit -3: Number System & Boolean Algebra

(6 Hours)

Introduction to binary, octal, decimal & hexadecimal no. system, Conversions of one no. system to another no. System, binary addition, subtraction, multiplication & division. I's complement & 2's complement.

UNIT 4:-Fundamentals of C

(30 Hours)

History of C language, keywords, identifiers, variables and data types in C Simple C Program, compiling C Program. Decision making in C.

Loops- Do-While 0, While 0 and For 0

UNIT 5: Networking Concepts and Internet

(8 Hours)

Types of networks, need of networks, Internet and its use, LAN, WAN and MAN, Internet, History of Internet, Advantages of Internet, E-mail, Terms used in Internet www, URL, Web Page and browser, Addressing Systems, Hyperlinks, Hypertext, Home Page, Using Search Engine.

Unit 6: Project Work

Syllabus Class XII

Unit -1: Overview of Fundamentals, OpenOffice Writer, Impress, Calc.

(20 Hours)

Unit -2: Overview of networking concepts and Internet.

(10 Hours)

Unit-3: Programming in C

(40 Hours)

History of C language, keywords, identifiers, variables and data types in C Simple C Program, compiling C Program. Decision making in C

Loops- Do-While (), While () and For

() If... Else

Arrays and Functions

Introduction to pointers

Structures and unions.

File management in C

Unit 4: Introduction to Software Engineering

(10 Hours)

System development life cycle Phases of system development Initiation, analysis, development, testing, maintenance

Unit 5: Project in C Language