Padasalai's
Telegram Groups!

(தலைப்பிற்கு கீழே உள்ள லிங்கை கிளிக் செய்து குழுவில் இணையவும்!)

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- TNPSC - Group
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5. WORKING WITH TYPICAL OPERATING SYSTEM
PART – I WORKING WITH WINDOWS
PART – II WORKING WITH LINUX
SECTION – A

Choose the correct answer:

1. From the options given below, choose the operations managed by the operating system.

    a. Memory   b. Processes   c. Disks and I/O devices   d. **All of the above**

2. Which is the default folder for many Windows Applications to save your file?

    a. **My Document**   b. My Pictures   c. Documents and Settings d. My Computer

3. Under which of the following OS, the option Shift + Delete – permanently deletes a file or folder?

    a. Windows 7   b. Windows 8   c.Windows10   d. **All of the OS**

4. What is the meaning of "Hibernate" in Windows XP/Windows 7?

    a. Restart the Computer in safe mode

    b. Restart the Computer in hibernate mode

    c. Shutdown the Computer terminating all the running applications

    d. Shutdown the Computer without closing the running applications

5. Which of the following OS is not based on Linux?

    a. Ubuntu   b. Redhat   c. CentOS   d. **BSD**

6. Which of the following in Ubuntu OS is used to view the options for the devices installed?

    a. **Settings**   b. Files   c. Dash   d. VBox_GAs_5.2.2

7. Identify the default email client in Ubuntu.

    a. **Thunderbird**   b. Firefox   c. Internet Explorer   d. Chrome

8. Which is the default application for spreadsheets in Ubuntu? This is available in the software launcher.

    a. LibreOffice Writer   **b. LibreOffice Calc**

    c. LibreOffice Impress   d. LibreOffice Spreadsheet

9. Which is the default browser for Ubuntu?

    a. **Firefox**   b. Internet Explorer c. Chrome   d. Thunderbird

10. Where will you select the option to log out, suspend, restart, or shut down from the desktop of Ubuntu OS?

    a. **Session Indicator** b. Launcher   c. Files   d. Search

SECTION-B

Short Answers

1. Differentiate cut and copy options.

Cut	Copy
An option that allows the user to move the content from one document to another.	An option that allows the user to make a duplicate of the original content.
The shortcut keys used for moving a text is Ctrl + X	The shortcut keys used for copying a text is Ctrl + C

2. What is the use of a file extension?

A file extension or file name extension helps to identify the type of file. The extension indicates a characteristic of the file contents or its intended use.

Examples: .txt, .doc / .docx, .odt, .ods, .odp

3. Differentiate Files and Folders.

Files	Folders
A file consists of a collection of data.	A folder stores files and folders. It is also called a directory.
Each file has its own extension.	A folder does not have any extension
Folder and sub folder cannot be created in a file	Folder and sub folder can be created in a folder

4. Differentiate Save and Save As option.

Save	Save As
Save" command is use to save a document by only one name	**"Save As"** command we can save a file by two or more than two names.
The shortcut keys used for save a text is Ctrl + S	The shortcut key used for Save As in MS-Word is F12 The shortcut keys used for Save As in Open Office is Ctrl+Shift+S

5. What is Open Source?

Open Source refers to a program or software in which the source code is available in the web to the general public free of cost.

6. What are the advantages of open source?

* Open source is available in the web to the general public free of cost.

* Open-source software is more secured as the code is accessible to everyone.

* Open source code can continuously improve by the programmers in the web.

7. Mention the different server distributions in Linux OS.

The most popular Linux server distributors are:

* Ubuntu Linux

* Linux Mint

* Arch Linux

* Deepin

* Fedora

* Debian

* CentOS

8. How will you log off from Ubuntu OS?

After finishing your work, you can choose Log Out, Suspend or Shut down through the Session

Indicator on the far right side of the top panel to log off your computer.

SECTION-C

Explain in Brief

1. Analyze: Why the drives are segregated?

* Drives are segregated to organize the space on a hard drive.

* It is also used to isolate the operating system or programs from other user.

* You Can Use Multiple Operating Systems On The Same PC in different drives.

* Hard disk drives usually work better on smaller chunks of data rather than one big partition.

2. If you are working on multiple files at a time, sometimes the system may hang. What is the reason behind it. How can you reduce it?

*Each application open on the system takes some internal and hardware resources to keep it running.

*If you are running multiple programs at one time then, much more storage will be in use to run them properly.

* So your PC may run low or hang.

*To avoid this, it is advisable to run one program at a time or upgrade your Pc's Configuration to

run multiple applications at the same time.

3. Are drives such as hard drive and floppy drives represented with drive letters? If so why, if not why?

*Yes hard drives and floppy drives can be identified by drive letters such as "C:", "D:", "E:" etc.

*A drive letter is a single alphabetic character A through Z that has been assigned to a physical computer <u>drive</u>.

*In the above example,

Drive A: is the <u>floppy drive</u>,

C: is the primary <u>hard drive</u>,

D: and E: are <u>partitions</u> of the hard drive, and

Typically, the CD-ROM drive is the last drive letter, so in most situations the hard drive is the C: drive .

4. Write the specific use of Cortana.

* Cortana is a voice-controlled virtual assistant for Microsoft Windows.

* Cortana is used to get weather forecasts, set reminders, Entertainment, send email, Maps/Navigation, Random tips and tricks, find files, search the Internet and so on.

5. List out the major differences between Windows and Ubuntu OS.

Windows	Ubuntu
Windows is a closed-source operating system	Ubuntu is an open-source Linux-based operating system
Majority of Windows OS is developed by Microsoft	Ubuntu is v op Canonical Limited.
Windows supports the office suite called MS Office.	Ubuntu supports the office suite called LibreOffice.
Default web browser for Windows OS is Internet Explorer.	Default web browser for Ubuntu OS is Firefox.

6. Are there any difficulties you face while using Ubuntu? If so, mention it with reasons.

Yes, many difficulties are these while using Ubuntu operating system

* It becomes difficult to configure modem to start work on internet.

* It is not possible to play the modern games in Ubuntu OS. It shows the poor graphics quality

* Though Linux (Ubuntu) has number of free applications and software available on net, but most of the applications are not found for Linux use.

* Ubuntu is not capable of playing MP3 files by default.

* The drivers support is also absent in most of the cases as compared other operating system.

* Different desktop managers lead to a fragmented experience.

7. Differentiate Thunderbird and Firefox in Ubuntu OS.

Thunderbird	Firefox
Ubuntu has in-built email software called Thunderbird	Firefox is a Web Browser, you can directly browse the internet
It gives the user access to email such as Exchange, Gmail, Hotmail, etc.	Firefox is great for new users to the Web as well as long time Web surfers.

8. Differentiate Save, Save As and Save a Copy in Ubuntu OS.

Save	Save As	Save a Copy
In U untu, th "**Save**" option will save the document without requesting for a new location or name.	In Ubuntu, the "**Save As**" option, it will prompt the task of saving with the help of a dialog box.	In Ubuntu, the "**Save A Copy**" you will be prompted to save a copy using the same dialog box as "**Save As**".
It will definitely over-write the original one.	You can easily change the name of file as well as location.	You may change the file name as well as location.

SECTION - D

Explain in detail

1. Explain the versions of Windows Operating System.

Versions	Logo	Year	Specific features
Windows 1.x	MICROSOFT WINDOWS	1985	• Introduction of GUI in 16 - bit. processor • Mouse was introduced as an input device.
Windows 2.x	MICROSOFT WINDOWS	1987	• Supports to minimize or maximize windows. • Control panel feature was introduced with various system settings and customising options.
Windows 3.x	MICROSOFT WINDOWS	1992	• Introduced the concept of multitasking. • Supported 256 colours which brought a more modern colourful look to the interface.
Windows 95	MICROSOFT WINDOWS	1995	• Introduced Start button, the taskbar, Windows Explorer and Start menu. • Introduced 32 - bit processor and focused more on multitasking.
Windows 98	MICROSOFT WINDOWS	1998	• Integration of the Web browser (Internet Explorer) with the Operating System. • DOS gaming began to disappear as Windows based games improved. • Plug and play feature was introduced.
Windows NT	MICROSOFT WINDOWS		• Designed to act as servers in network.

Windows Me		2000	• It introduced automated system diagnostics and recovery tools.
Windows 2000		2000	• Served as an Operating System for business desktop and laptop systems. • Four versions of Windows 2000 were released: Professional (for business desktop and laptop systems), Server (both a Web server and an office server), Advanced Server (for line-of-business applications) and Data Centre Server (for high-traffic computer networks).
Windows XP		2001	• Introduced 64-bit Processor. • Improved Windows appearance with themes and offered a stable version.
Windows Vista		2006	• Updated the look and feel of Windows.
Windows 7		2009	• Booting time was improved, introduced new user interfaces like Aero Peek, pinning programs to taskbar, handwriting recognition etc. and Internet Explorer 8.
Windows 8		2012	• Windows 8 was faster than previous versions of Windows. • Start button was removed. • Windows 8 takes better advantage of multi-core processing, solid state drives (SSD), touch screens and other alternate input methods. • Served as common platform for mobile and computer.
Windows 10		2015	• Start Button was added again. • Multiple desktop. • Central Notification Center for App notification and quick actions. • Cortana voice activated personal assistant.

2. Draw and compare the icon equivalence in Windows and Ubuntu.

Icon	Windows	Icon	Ubuntu
	My Computer		Files
	Recycle Bin		Trash
	Internet Explorer		Fire Fox
	MS-Word		LibreOffice Writer
	MS-Excel		LibreOffice Calc
	MS-PowerPoint		LibreOffice Impress
	Search Programs and Files		Search your computer

Windows

Ubuntu

3. Complete the following matrix

Navigational Me	Located on	Ideally suited for
Start button	Task bar	**The Start menu can be used to quickly start the installed programs as well as other Windows features**
My Computer	Desktop	Exploring your disk drives and using system tools
Windows Explorer	**Task Bar**	Seeing hierarchy of all computer contents and resources in one window.
Quick Launch	**Task Bar**	**Enables a user the ability to launch their programs quickly**

4. Observe the figure and mark all the window elements. Identify the version of the Windows OS.

The version of OS is Windows 7
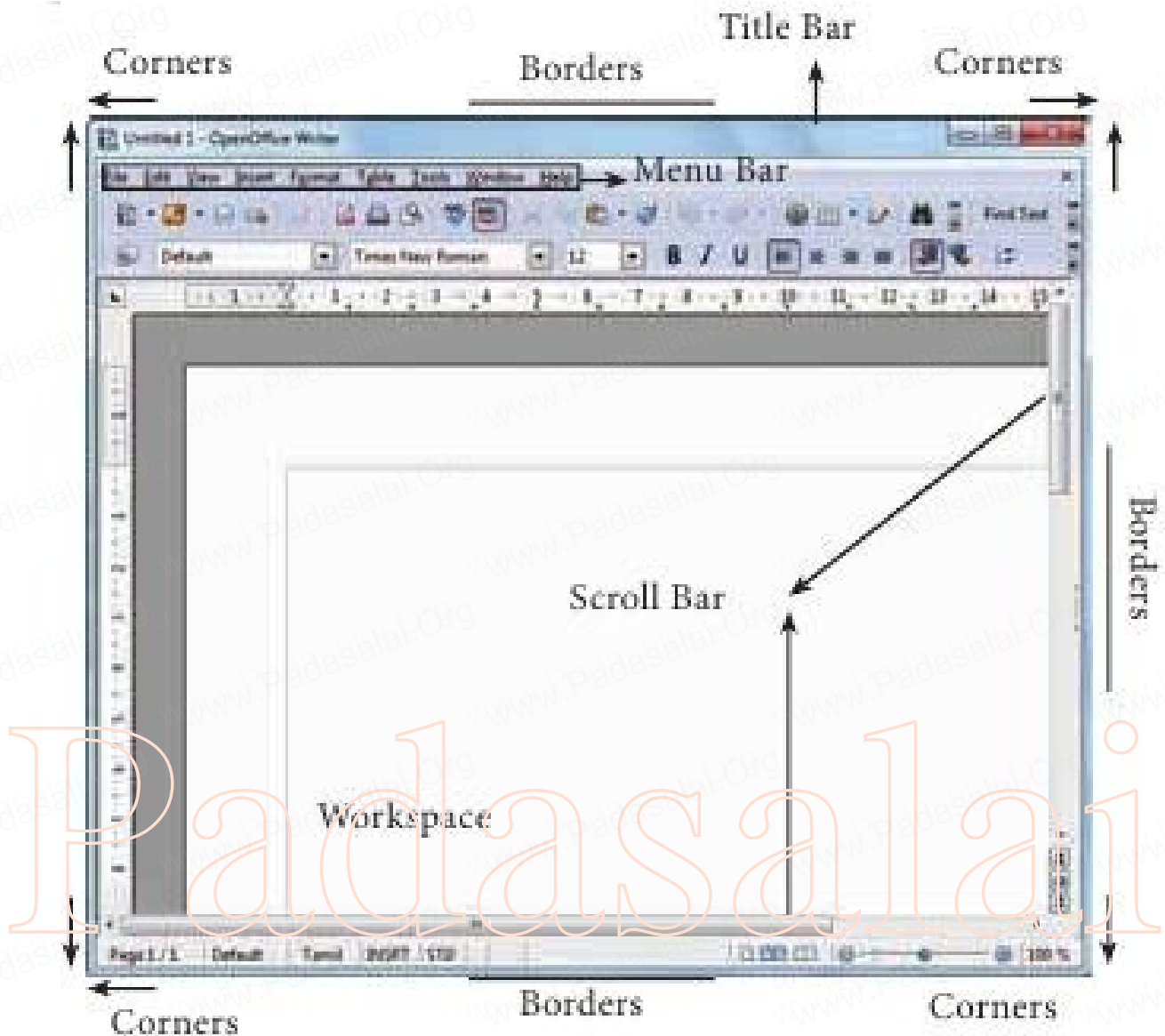
Figure 5.10 The elements of a window.

Title Bar - The title bar will display the name of the application and the name of the document opened.

Menu Bar -The menu bar is seen under the title bar.

The Workspace -The workspace is the area in the document window to enter or type the text of your document.

Scroll bars - The scroll bars are used to scroll the workspace horizontally or vertically.

Corners and borders -The corners and borders of the window helps to drag and resize the windows.

5. Write the procedure to create, rename, delete and save a file in Ubuntu OS. Compare it with Windows OS.

Procedure in Ubuntu OS

Create a file -A new File or new Folder can be created by using File→New menu or right click the mouse button and then select the type of file to create.

Rename a file - Select the file or folder to be renamed, right-click, and select **Rename** from the context menu. Type the new name for the file / folder, and press **Enter**. The file or directory is renamed. Or rename with th "mv comman "

Delete a file - A file / folder created by you can be moved to trash by using right click or by using menu. Or use rmdir. Example: rmdir('myfiles')

Save a file - To save the file and exit at the same time, you can use the **ESC and :X** key and hit [Enter]. Optionally, press [Esc] and type **Shift + Z** to save and exit the file.

Procedure in Windows OS

Create a file – To create a text file on a computer you need a text editor such as wordpad. Choose File→New or **Ctrl+N.**

Rename a file – Select the file/ folder need to renamed and do any one of the following,

* Click **File→Rename** menu, or

* Right click the file or folder and choose rename option, or

* Press F2 then Type the new name and press enter.

Delete a file - Click **File→Delete** or press **Delete** key then the deleted file or folder will move into the Recycle Bin

Save a file - Save the content of the file using **File →Save** or **Ctrl + S.**

6. INTRODUCTION TO WORD PROCESSOR
SECTION – A

Choose the correct answer

1. Which is the opening screen of OpenOffice?

　　a. Star desktop　　　　b. **Star center**　　　c. Star screen　　　　d. Star window

2. Which option allows you to assign text, tables, graphics and other items to a key or key combination

　　a. Auto format　　　　b. Automatic　　　c. **Auto text**　　　d. Auto graphics

3. Which menu contains the Numbering option.

　　a. File　　　　　　b. Edit　　　　c. Tools　　　　d. **Format**

4. Which is displayed at the top most part of the window?

    a. Menu bar   b. Tool bar   c. **Title bar**   d. Format bar

5. Which is changing the default appearance of the text called?

    a. **Text formatting**   b. Page formatting

    c. Special formatting   d. Paragraph formatting

6. The Find & Replace option is available in which menu?

    a. File   b. **Edit**   c. Format   d. Tools

7. Which button selects all instances of the search text in the document?

    a. Find   b. **Find All**   c. Replace   d. Replace All

8. What is the shortcut key to go to the start of the document?

    a. **Ctrl + Home**   b. Ctrl + End   c. Home   d. End

9. What is the shortcut key for finding and replacing text in a document?

    a. Ctrl + F1   b. **Ctrl + F**   c. Ctrl + F5   d. Ctrl +F7

10. What is the short cut key for Undo?

    a. Ctrl +E   b. Ctrl + U   c. **Ctrl + Z**   d. Ctrl + n

SECTION-B

Short Answers

1. How do you insert pictures in to your document?

Open office Writer has the ability to insert and edit images in a more simple way.

Place the insertion pointer where you want the image to appear

* Select Insert → Picture → From file

*The insert picture dialog box appears where the picture gallery opens from which the desired picture can be selected.

* If the picture is not in the gallery, then browse the pictures from the folder, choose the desired one and Click on the Open button

* The selected picture is inserted into the document

2. What are the different packages in OpenOffice?

OpenOffice is a productive office suite with a collection of different software packages such as

OpenOffice Writer	- Word Processor to create text documents
OpenOffice Calc	- Spreadsheet to createworksheets
OpenOffice Base	- Database
OpenOffice Impress	- Presentation software
OpenOffice Draw	- Drawing Software
OpenOffice Formula	- Create formula and equations

3. What is auto text in writer?

AutoText allows you to assign text, tables, graphics and other items to a key or key combination. For example, rather than typing "TamilNadu" every time you use that phrase, you might just type "tn" and press F3.

4. How do you merge cells in a table?

To merge a group of cells:

* Select the cells to merge.

* Right click and choose Cell →Merge   or

*Choose Table →Merge Cells from the menu bar.

5. State the difference between proprietary software and open source software?

Proprietary software		Open source software	
Package	Developer	Package	Developer
Microsoft Word	Microsoft Corporation	OpenOffice Writer	Apache
WPS Word	Kingsoft	LibreOffice Writer	The document foundation
WordPro	Lotus Corporation	Abiword	Abisource

SECTION-C

Explain in Brief

1. What is the difference between moving and copying text?

Moving text	Copying text
To move a text from one location to another	To copy a text from one location to another
Select the text to be moved	select the text to be copied
Click Ctrl + X or Cut Icon ✂ or Edit →Cut	Click Ctrl + C or Copy Icon 📋 or Edit →Copy
The text is removed from the source location and placed in the clipboard	A duplicate copy of the text is made and send to the clipboard
Take the insertion pointer to the new location to be moved	Take the insertion pointer to the new location to be copied

2. What are the different types of orientation?

There are two different orientations:

Landscape – The width of the document is more than the height. This is best suited for displaying professional photos, invitations, albums, tables etc.

Portrait – This is the most common and default orientation . Here, the height of the document is more than the width. Normally books, newspapers will be displayed in this format.

3. How do you insert rows and columns?

* Place the insertion pointer in the row or in the column where you would like to add new rows or columns and rightclick.

* Choose Row →Insert – to insert a row or Column → Insert – to insert a column.

A dialog box will appear, from which you can select the number of rows or columns to insert. You can also set the position of the new rows or columns to Before or After

4. What are the different ways to save a document?

* You can save by clicking File→ Save on top left corner and then click File→Save As or Ctrl+Shift+S . After that browse the location where exactly you want to save in your computer.

* You can also save by just pressing Ctrl + S and then browse the location where you want to save.

* All documents in OpenOffice writer will be stored with .odt extension. You can store your OpenOffice document as Microsoft Word document or pdf.

5. Write the steps to change the line spacing of text.

Rightclick→ line spacing, select the type single, 1.5 or double.

Select the entire document by Edit → Select All

* Format → paragraph

* The paragraph dialog box appears, click Indents & Spacing tab

* In the line spacing option, select the type and click OK button.

SECTION - D

Explain in detail

1. What are the different methods to change margin in writer?

Page margins are the white space around the top, bottom, left, and right of your document.

Changing or setting page margins in Openoffice writer can be done in two ways:

* Using the **Rulers** - quick and easy, but does not have precise values.

* Using the **Page Style dialog box** – can specify precise values for the margins.

Changing page margins - using Ruler

* The shaded sections of the rulers are the margins.

* Hold the mouse pointer over the line between the gray and white sections.

* The mouse pointer turns into a double headed arrow.

* Hold down the left mouse button and drag the mouse to move the margin and release it at the required point.

* The new margin is set.

Using the Page Style dialog box

To change margins using the Page Style dialog box

* **Right-click** anywhere on the page and select Page from the popup menu and select **page tab** of **page style dialog box**.

* In the **Margins** boxes, specify the values for left , right , top and bottom margins.

* Click on ok button.

2. What are Header and Footer? How do you insert page numbers?

The **header** is a section of the document that appears in the **top margin**, which displays the title or chapter name , author name of a document.

* Select from the main menu **Insert →Header →Default**

* The header text area is separated from the normal text area.

* In the header area, Enter the text that is to be repeated in all pages or Select **Insert →**

Fields →Title.

The **footer** is a section of the document that appears in the **bottom margin** of the page which displays the page number, date, time etc. which gets displayed on all the pages automatically.

* Select from the main menu **Insert → Footer → Default**

* Place the insertion pointer in the footer part of the page.

* Select **Insert →Fields→Date** to insert date in all the pages.

Inserting and Formatting page numbers

The page numbers can be inserted by performing the following steps:

* Position the insertion pointer where you want to insert the page number

*choose **Insert → Fields →Page Number**

* The page number appears with a gray background

Normally, the page numbers appear as 1,2,3….., To change the numbering style, the following sequence of steps can be performed:

* Position the cursor where the page number has to appear

* Select **Format → page,** which will bring the page style dialog box as on Figure 6.29.

* Select **page** Tab

• In the Layout settings, select the format drop down combo box

• Select the desired style and click **OK** button.

3. Write the steps to Find and Replace a word with another word in OpenOffice writer?

OpenOffice Writer has a Find and Replace feature that helps to locate for a text inside a document and replace it with another word.

• Click **Edit → Find & Replace** (or) **Ctrl + F**

Steps to find & replace a text

* Type the text you want to find in the **Search for** box

For Example : To search a word "Bombay" in a document and replace with "Mumbai", enter the word "Bombay" in the **Search for** box.

* To replace the text with different text, type the new text in the **Replace with** box

Enter the word " Mumbai" in the **Replace with** box and Click **Find** button , to start the search , the found word is highlighted and the first occurrence of "Bombay" is highlighted.

* To replace text, click **Replace** button.

The highlighted word is replaced with the word given in the Replace with box.

* Click **Find All,** Writer selects all instances of the search text in the document .

All occurrences of Bombay are highlighted.

* Click **Replace All** button, Writer replaces all matches.

This will replace all occurrences of

"Bombay" with "Mumbai".

* Enable **Match case** to perform the search case sensitively so that uppercase and lower cases are distinguished separately.

* Enable **Whole Words only** to make the search more specific to words used separately alone.
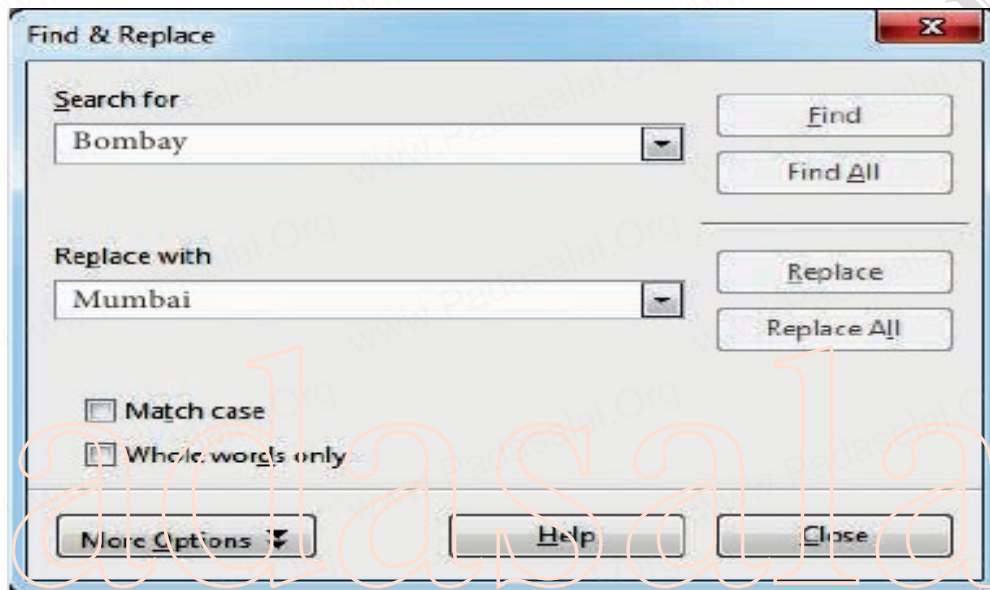
Figure 6.30 Find & Replace dialog box

4. Explain Page formatting in writer. Page formatting

The most important thing in a word processor is how to format the page with elements such as margins, numbering, page layout, headers and footers. Formatting your pages makes them look more attractive and makes them easier to read.

Changing page size

The default page size in writer is 8.5 x 11", the same as that of a standard A4 printing paper. However, for different types of documents, you may need to change the page size. To change the paper size:

• Select the page whose page size is to be changed

• Select **Format → Page**, the page style dialog box

• Select **Page** Tab

• In the **paper format group,** select the format like A4, legal ….

• Or the **width** and **height** option can be used to set the page size.

Page Style: Default

Organizer | Page | Backg

Paper format

Format   A4

Width   21.0

Height   29.7

Orientation   ⊙ P
          ○ L

Margins

Left   2.0

Right   2.0

Top   2.0
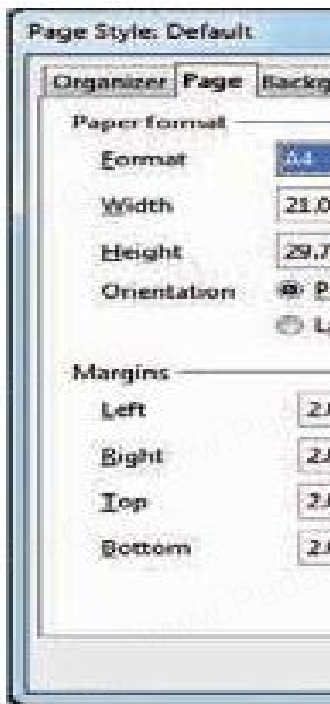
Bottom   2.0

Changing Page margins

*Page margins are the white space around the top, bottom, left, and right of your document.

*Margins let Writer know where to start placing the text at the top of a document, when to move on to the next page at the bottom, where to start typing text on the left side, and where to stop and move to the next line on the right.

Changing or setting page margins in Openoffice writer can be done in two ways:

* Using the **Rulers** -

quick and easy, but does not have precise values.

* Using the **Page Style dialog box** – can specify precise values for the margins.

Orientation

Page orientation refers to how the document will be displayed on screen and printed. There are two different orientations:

Landscape - The width of the document is more than the height. This is best suited for displaying professional photos, invitations, albums, tables etc.

Portrait – This is the most common and default orientation. Here, the height of the document is more than the width. Normally books, newspapers will be displayed in this format.

Page colour

Changing the page color is not quite common. To do so, in the Page style dialog box, select Background tab, In As option click on color and select the "color" from the color palette or select "graphic" to apply an image as a page background.

Page Style: Default

Organizer | Page | Backgr

As   Color

Background color

No Fill

Borders

Borders can be applied to an entire document, an entire page, paragraph, or just to certain sections of the document. From the page style dialog box, select the Border tab, the user defined area helps to define the area of borders, the line style of borders, color of borders can be selected.

Page Style: Default

Organizer | Page | Backgn

Line arrangement

Default

User-defined

Shadow style

Position

Figu

7. WORKING WITH OPEN OFFICE CALC
SECTION – A

Choose the correct answer

1. Which is the first electronic spreadsheet?

(A) Excel   (B) Lotus 1-2-3   (C) **Visicalc**   (D) OpenOffice Calc

2. Which of the following applications was the parent to OpenOffice Calc?

(A) Visicalc   (B) LibreCalc   (C) Lotus 123   (D) **StarOffice Calc**

3. Grid of cells with a programmable calculator:

(A) **Spreadsheet**   (B) Database   (C) Word processor   (D) Linux

4. A column heading in Calc is represented using

(A) Number   (B) Symbol   (C) Date   (D) **Alphabet**

5. Which key is used to move the cell pointer in the forward direction within the worksheet?

(A) Enter   (B) **Tab**   (C) Shift + Tab   (D) Delete

6. A formula in calc may begin with

(A) =   (B) +   (C) -   (D) **All the above**

7. What will be the result from the following formula (Assume A1=5, B2=2)? = A1^B2

(A) 7   (B) **25**   (C) 10   (D) 52

8. What will be the result from the following expression (Assume H1=12, H2=12)? = H1<>H2

(A) True   (B) **False**   (C) 24   (D) 1212

9. Which of the following symbol is used to make a cell address as an absolute reference?

(A) +   (B) %   (C) &   (D) **$**

10. Which of the following key combinations is used to increase the width of the current column?

(A) **Alt + Right arrow**   (B) Ctrl + Right arrow

(C) Alt + Left arrow   (D) Ctrl + Left arrow

SECTION-B

Short Answers

1. What are the types of toolbars available in OpenOffice calc?

There are three toolbars available by default. They are:

* Standard Toolbar   * Formatting Toolbar   * Formula bar

2. What is a Cell pointer?

Cell pointer is a rectangle box which can be moved around the worksheet. The cell in which the cell pointer is currently located is known as "Active cell". When you type any content, it will appear in the active cell.

3. Write about the text operator in OpenOffice Calc.

In Calc, "&" is a text operator which is used to combine two or more text. Joining two different texts is also known as "Text Concatenation" An expression using the text operator has the following syntax: text reference1 & text reference2

4. Write the general syntax of constructing a formula in Calc.

General Syntax of constructing a formula is:

= cell reference1 <operator> cell reference2 <operator> ……………….

5. What are the keyboard shortcuts to cut, copy and paste?

Ctrl + X is used to cut the cell

Ctrl + C is used to copy the cell

Ctrl + V is used to paste the cell

6. Can you edit the contents of a cell? If yes, explain any one of the method of editing the cell content.

Yes, we can edit the contents of a cell.

* Using keyboard, after selecting the cell, Press the F2 key and the cursor is placed at the end of the cell. The use the keyboard arrow keys to move the cursor through the text in the cell.

7. What are the options available in "Insert Cells" dialog box?

There are four options available in Insert cells

* Shift cells down

* Shift cells right

* Entire row

* Entire Column

8. Match the following

Sl.No	A	B
1	Cut, Copy, Paste	Standard Toolbar
2	Cell Pointer	Active Cell
3	Selection Mode	Status Bar

| 4 | A5 | Absolute Cell |

9. Define the following (i) Text Operator (ii) Rows and Columns of spreadsheet

Text Operator

In Calc, "&" is a text operator which is used to combine two or more text. Joining two different texts is also known as "Text Concatenation" An expression using the text operator has the following syntax: text reference1 & text reference2

Rows and Columns of spreadsheet

*A row is a horizontal group of values within a table. It contains values for multiple fields, which are defined by columns. The rows are numbered from 1, 2, 3…. OpenOffice Calc version 4.1.5 contains 10,48,576 rows.

*A column is a vertical group of values within a table. It contains values from a single field in multiple rows. Each column is labelled as A, B, C, D ….. AA, AB, AC …..It contains 1024 columns.

10. Differentiate between Copy -Paste and Cut-Paste

Copy -Paste	Cut-Paste
Select the cell or group of cells you want to copy, then using Select Edit→ Copy or Click "Copy" icon from the standard toolbar or Press Ctrl + C	Select the cell or group of cells you want to cut, then using Edit → Cut or Click "Cut" icon from the standard toolbar or Press Ctrl + X
Copy leaves the cell information in its original location and makes copy of the cell information when pasted it	But in Moving it removes the information and pastes it in another location
Move the cell pointer to the cell in which you want to paste.Edit → Paste or Click "Paste" icon or Press Ctrl + V	Move the cell pointer to the cell in which you want to paste. Edit → Paste or Click "Paste" icon or Press Ctrl + V

SECTION-C

Explain in Brief

1. Write a short note on OpenOffice Calc.

* OpenOffice Calc is a popular open source spreadsheet application maintained by Apache Foundation.

* StarOffice calc was the parent application of OpenOffice Calc which was developed by a German Company namely, Star Division in 1985.

* Calc is the spreadsheet component of OpenOffice. You can enter any kind of data in a spreadsheet

and then manipulate this data to produce certain results.

2. Write about inserting columns and rows in Calc.

Inserting Rows - In Calc, we can insert a new row anywhere in the worksheet.

Step 1: Select the row where a new row to be inserted.

Step 2: Right-click on the row number, a pop-up menu appears

Step 3: click "Insert Rows" option from the menu.

Now, a new row will be inserted to above the current row. Insert →Rows command is used to insert a new row.

Inserting a Column - In Calc, we can insert a new column anywhere in the worksheet.

Step 1: Select the column where a new column should be inserted.

Step 2: Right-click on the selected column name that you selected. A pop-up menu appears.

Step 3: click the "Insert Columns" option from the menu.

Now, a new column will be inserted to the left of the current column.

A new column can also be inserted using Insert → Columns command.

3. Differentiate Deleting data using Backspace and Delete

Backspace	Delete
Backspace key is used to delete the character left of the insertion pointer of the cell	Delete key is used to delete the character right of the insertion pointer of the cell

4. Write any three formatting options.

Formatting Option	Keyboard Shortcut	Description
Bold	Ctrl + B	Used to make the data as **Bold**
Italic	Ctrl + I	Used to *Italicize* data
Underline	Ctrl + U	Used to <u>Underline</u> the data

5. In cell A1=34 A2=65 A3=89 write the formula to find the average.

To find the average, using anyone of the following way:

i) = AVERAGE (A1:A3)   = 62.7%

SECTION - D

1. Explain about changing the column width in Calc.

Resize the width of a column using the mouse

Use the right hand border to increase or decrease the width of a column.

- Position the cursor on the right hand border of the column letter box, until you see a double headed arrow.
- Hold down the left hand mouse button and drag the border to the left or right to make the column narrower or wider as required.

As you carry out this action, the width of the column displays.

Using the mouse to widen a column

Resize one or more columns using Format
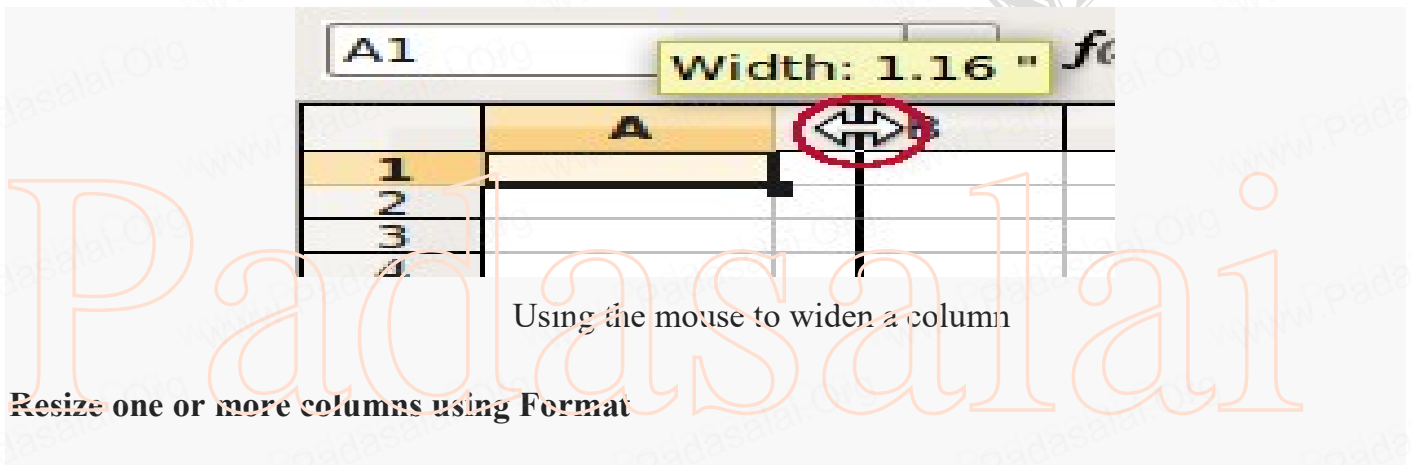
* Select the column(s) whose width you wish to change

* Select **Format → Column → Width...**

* The Column Width dialog displays
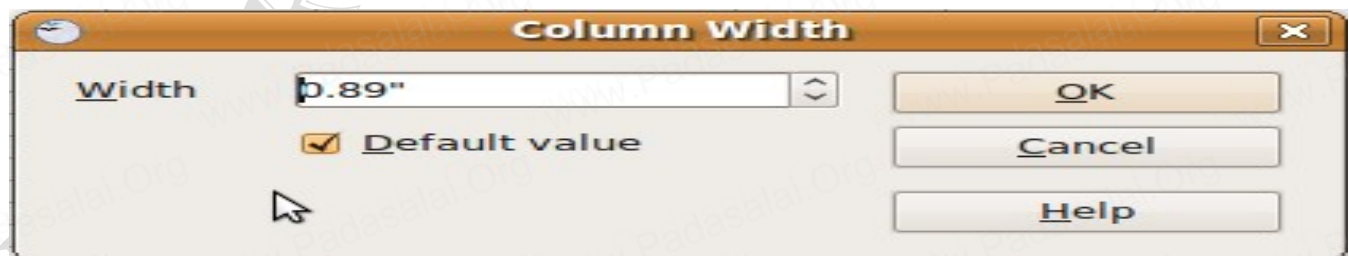
Enter a value in the Width window or check the Default value check box to select the default column width.

* Click OK.

The selected columns display with the new width.

2. Write the steps to generate the following series. 5, 10, 20 2560

STEPS TO GENERATE THE SERIES 5,10,20,…2560

1. Select the required number of cells to generate the series.

2. Click EDIT→ FILL, the Fill Series dialog box appears as shown below,

3. Select the Direction as **Down** in fill series dialog box.

4. Select the Series type **Growth**.

5. Initial value of the series 5 should be typed in Start Value box.

6. Maximum value of the series 2560 should be typed in End Value box.

7. The value 2 should be typed in Increment box .

8. Click OK. Now the series is generated as given below,

3. Read the following table

	A	B	C	D	E
1	Year	Chennai	Madurai	Tiruchi	Coimbatore
2	2012	1500	1250	1000	500
3	2013	1600	1000	950	350
4	2014	1900	1320	750	300
5	2015	1850	1415	820	200
6	2016	1950	1240	920	250

Above table shows the sales figures for "Air Cooler" sold in four major cities of TamilNadu from the year 2012 to 2016. Based on this data, write the formula to calculate the following.

(1) Total sales in the year 2015.

(2) Total sales in Coimbatore from 2012 to 2016.

(3) Total sales in Madurai and Tiruchi during 2015 and 2016.

(4) Average sales in Chennai from 2012 to 2016

(5) In 2016, how many "Air Coolers" are sold in Chennai compared to Coimbatore?

ANSWER:

SL.NO	QUESTION	FORMULA	ANSWER
1	Total sales in the year 2015.	=SUM(B5:E5)	4285
2	Total sales in Coimbatore from 2012 to 2016.	=SUM(E2:E6)	1600
3	Total sales in Madurai and Tiruchi during 2015 and 2016.	=SUM(C5:D6)	4395
4	Average sales in Chennai from 2012 to 2016	=AVERAGE(B2:B6)	1760
5	In 2016, how many "Air Coolers" are sold in Chennai compared to Coimbatore?	=B6–E6	1700

8. PRESENTATION BASICS SECTION – A

Choose the correct answer

1. Which is used to move quickly from one slide to another?

A) Compass   B) **Navigator**   C) Fill color   D) Page border

2. Which is the shortcut key to view the slideshow?

A) F6   B) F9   C) F5   D) **Both (b) or (c)**

3. In Impress, which views shows thumbnail versions of all your slides arranged in horizontal rows.

A) Notes   B) Outline   C) Handout   D) **Slide Sorter**

4. Identify the default view in Impress.

A) **Normal**   B) Slide Sorter   C) Handout   D) Notes

5. Which menu contains the Slide Transition option?

A) **Slide Show**   B) View   C) Tools   D) Format

6. Identify the extension of the Impress presentation.

A) **.odp**   B) .ppt   C) .odb   d. ,ood

7. In presentation tools, the entry effect as one slide replaces another slide in a slide show. Identify the option that suits after reading the statement.

A) Animation   B) **Slide Transition**   C) Custom animation   D) Rehearse Timing

8. Vanya has made a presentation on "Global Warming". She wants to progress her slide show automatically while speaks on the topic in the class. Which features of Impress would she use?

A) Custom Animation   B) **Rehearse Timing**

C) Slide Transition   D) Either (a) or (b).

SECTION-B

Short Answers

1. What is the difference between a slide and a slide show?

Slide	Slide Show
A slide is an editable format that contains different element like text, tables, charts, clip- art etc.	A slide show is a combination of a number of slides that run one after the other.

2. How many in-built slide layouts does impress consist of?

In-built the open office impress consist of 12 different layout of slides.

3. What do you understand by a presentation?

A **presentation** program is a software package used to display information in the form of a slide show. It has three major functions: an editor that allows text to be inserted and formatted, a method for inserting and manipulating graphic images, and a slide-show system to display the content.

4. Define a template in Impress.

A template is a premade design you can use to lend cohesiveness, visual organization and appeal to your presentation. Even though individual slides can have different layouts and graphics, templates help the whole presentation go together as an attractive package.

5. What do you understand by the slide layout?

Slide layouts are pre-packaged layouts which contain formatting, positioning, and placeholders for all of the content that appears on a slide.

Placeholders are the containers in layouts that hold such content as text ,tables, charts, SmartArt graphics, movies, sounds, pictures, and clip art.

SECTION-C

Explain in Brief

1. How many types of views are provided by Impress to its users?

There are 5 types of views are provided by Impress. They are

Normal view - Normal view is the main view for creating individual slides.

Outline view - Outline view shows topic titles, bulleted lists and numbered lists for each slide in outline format.

Notes view- Notes view lets you add notes to each slide that are not seen when the presentation is shown.

Slide Sorter view - Slide Sorter view shows a thumbnail of each slide in order.

Handout view - Handout view lets you print your slides for a handout.

2. Who uses the presentation software and why?

Businesses and professional firms use presentations to inform, educate, motivate and persuade internal and external audiences.

They build presentations into sales, training and internal communication programs, using the power of words and images to engage their audience and retain attention. Presentation software is used to create presentations, quizzes, e-learning packages and multimedia products.

3. Define the Slide Sorter view and its significance.

The Slide Sorter view contains all of the slide thumbnails.

Use Slide Sorter view to work with a group of slides or with only one slide.

Use Slide Sorter view to reorganize, insert, delete and copy the slides, produce a timed slide show or add transitions between selected slides.

4. What is a Normal view? Explain.

*Normal view is the main view for creating individual slides.

*Use this view to format and design slides and to add text, graphics and animation effects.

* There are two ways to place a slide in the Slide Design area of the Normal view: clicking the slide thumbnail in the Slides pane or using the Navigator.

5. How are transition effects helpful in creating an effective presentation in Impress?

Slide transitions are the effects that occur when you move from one slide to the next during a presentation.

You can control the speed, add sound, and customize the properties using the transition effects.

You can also choose between an automatic or manual transition.

SECTION – D

1. Valarmathi's teacher asks her to create a presentation in OpenOffice Impress. As Valarmathi has never worked in Impress before, help her to perform the following tasks:

a. She wants that except for the first slide, all the slides should have the same design. For this, what does she need to do?

*Create the presentation with same design for all slides using master page option, by clicking YES in Page Setting dialog box
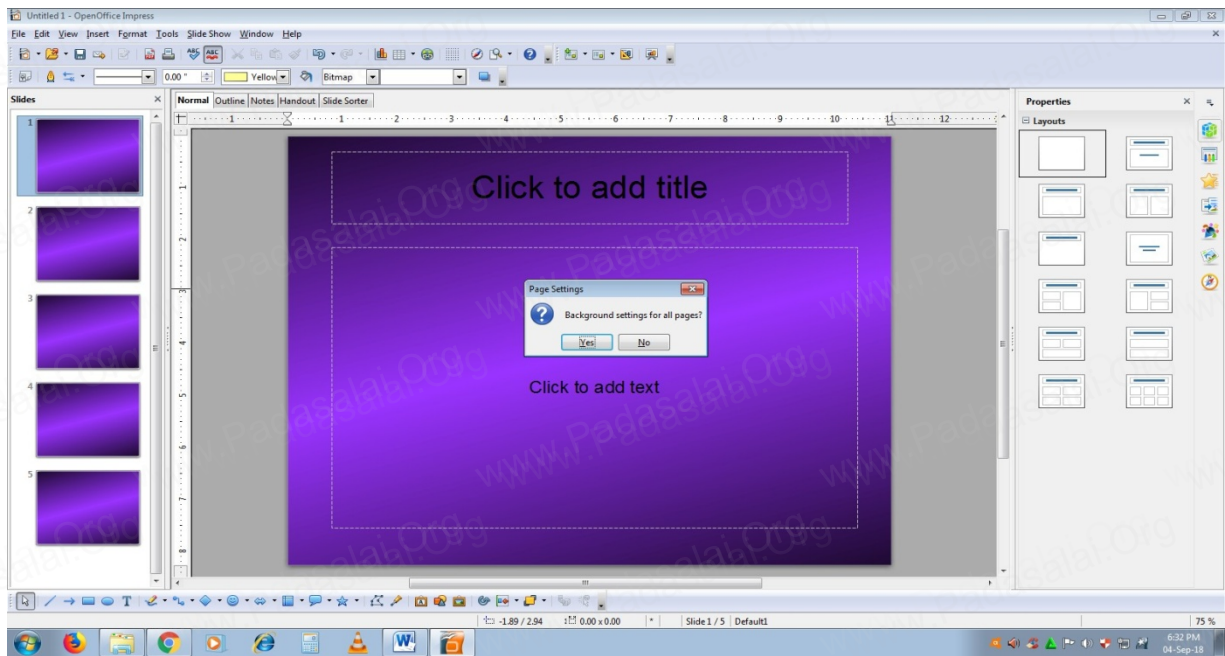
*Click the Master slide and choose Format → Page menu. The Page setup dialog box appears on the screen.
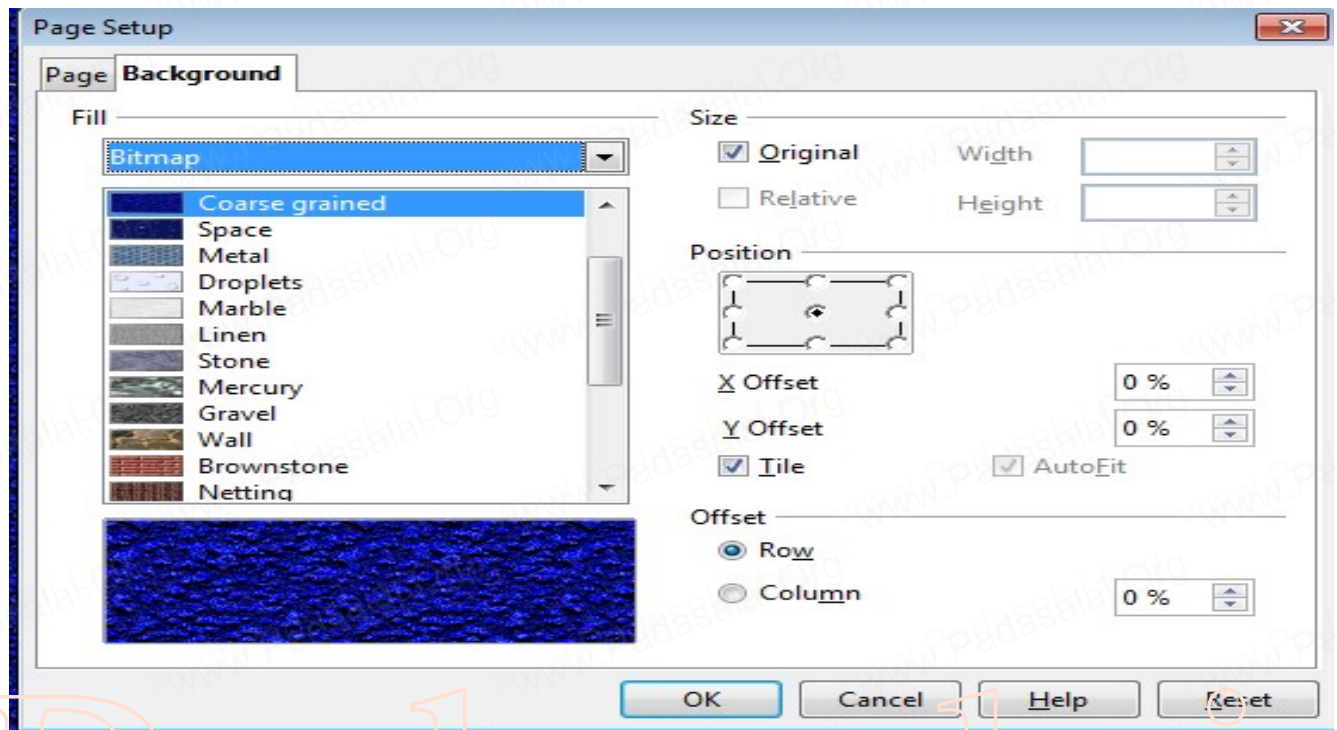
*Click Background and choose any one of the Fill option (Colour, Gradient, Bitmap, Hatching) for changing the background of the master slide.

*The Page Setting dialog box appears on the screen,
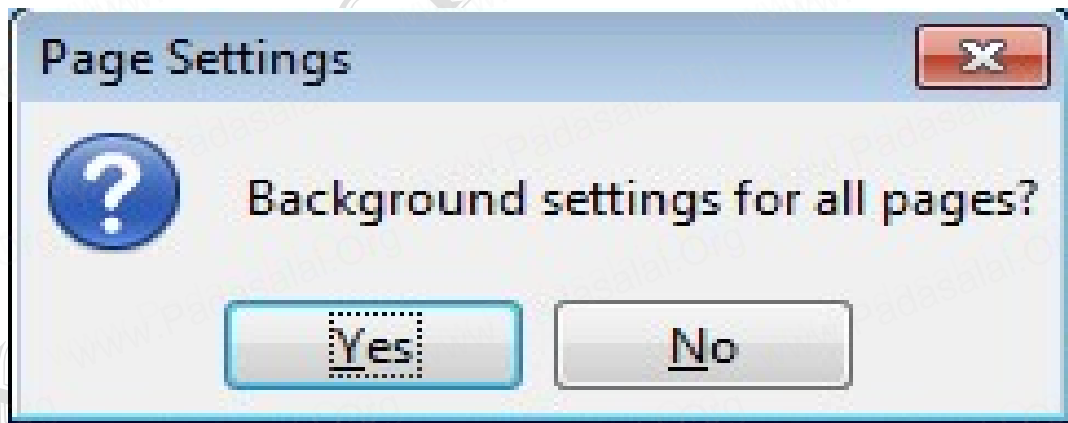
* Click NO in the Page Setting dialog box.

* Now you can see the changes except for the first slide, all the slides will have the same design.
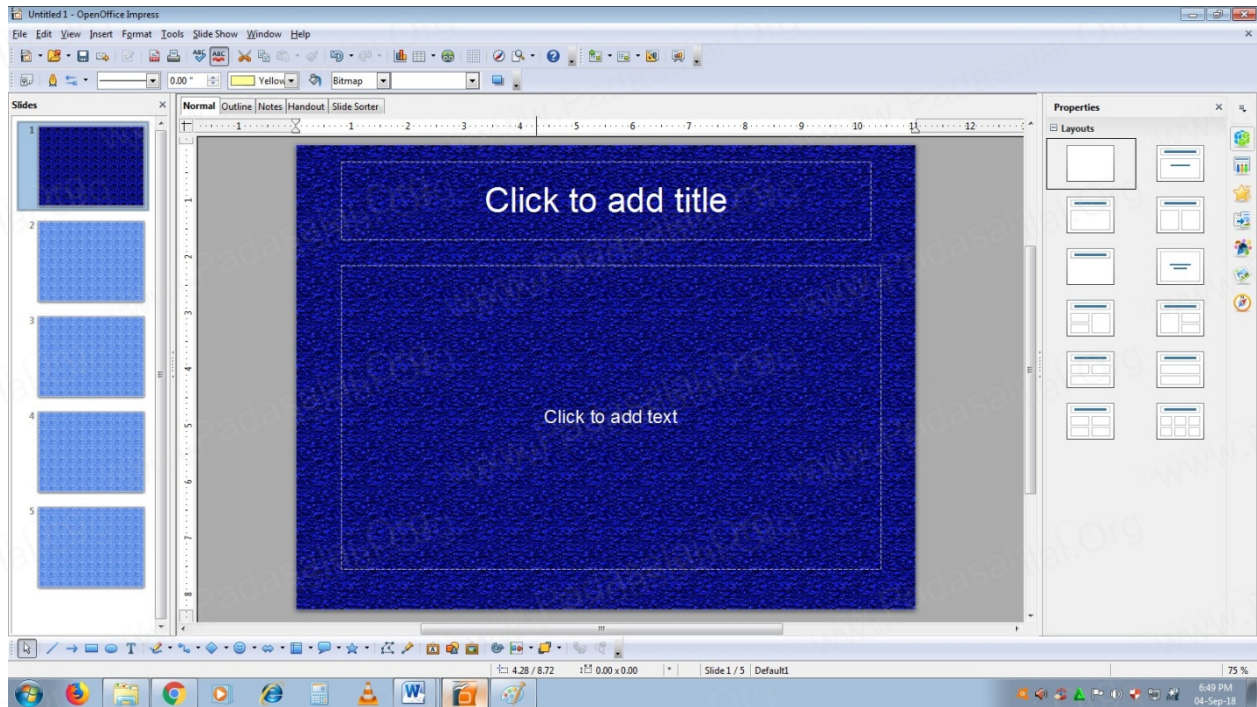
b. To easily communicate with her audience, she wants to provide them with a hard copy of the slides of the presentation. What should she create for it?

* Handout view is used for setting up the layout of your slides for a printed handout.

c. She wants to insert some pictures and movie files in some slides. How can she do that?

* Select the slide to insert the picture.

* Choose Insert→Picture →From File option, and choose the required picture that has to be inserted into the slide.

d. Suggest her the view that would be the most suitable for showing the presentation to the audience.

* Use Slide Show view to deliver your presentation to your audience. Slide Show view occupies the full computer screen, exactly the way your presentation will look on a big screen when your audience sees it.

e. To make her presentation more attractive, she wants to add some effects in it. How can she do it? Suggest.

* To make her presentation attractive, she needs to add animation and transition effects to the slides.

2. Explain how a presentation can help a salesperson to promote his/her products.

* Presentation is helpful for a sales person to promote his/her products effectively.

* Presentation will give visual video, pictures to understand a goodness of the product.

* By using presentation, sales person can make audience to understand easier and he can get more

response from the people.

* Presentation help sales person to present prospect challenges easier.

* Sales person can explain with physical demonstration by shocking animations. It helps to increase the sales.

3. Sivabalan created a presentation to be shown at his school's Annual Function. Just 5 minutes before the presentation, he noticed that he has misspelt the name of the school, which is appearing in all the 30 slides of the presentation. How can he rectify this mistake in all the slides in one-shot?

* The slide master will be helpful in this situation. Select the Master slide,

* Choose Edit → Find & Replace option from the menu bar. The Find & Replace Dialog box appears on the screen,
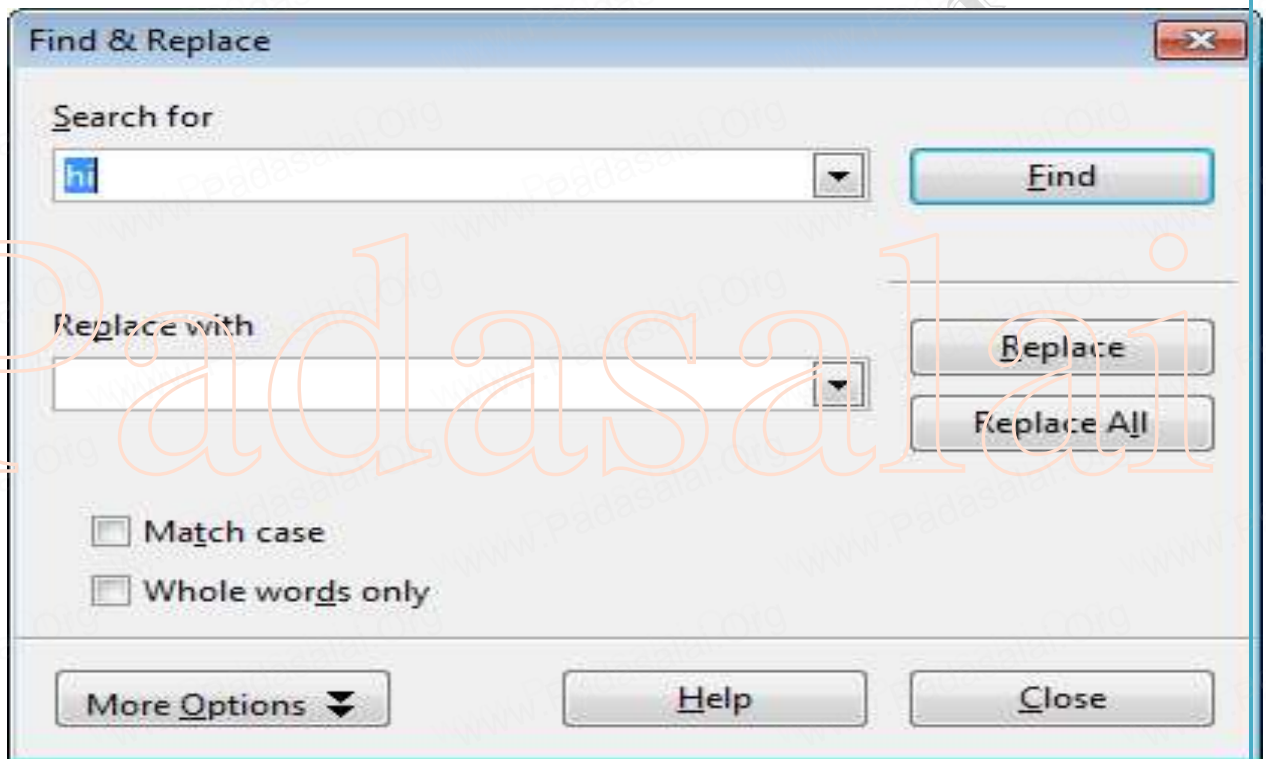
* In the search for box type the misspelt word.

* Type the correct word in the Replace with box.

* Click the Find option to find the misspelt word.

* Click the Replace All option to replace the correct word in all the slides. You can see the replacement in all the slides.

4. List some advantages of using templates.

Professional Graphic Design: Templates will give professional Graphic Design which helps you to create branded PowerPoint presentation.

own logo to the mix.

Speed: With a good starting point in each slide, your presentation is made in a snap.

Quick Customization: It's much easier to edit the template in its original form, not as a copy of a copy.

Consistency: A consistent design scheme will avoid jarring transitions and the sneaking suspicion that the presentation was pasted together as a ransom note.

9. Introduction to Internet and Email
PART –II

Answer to the following questions (2 Marks):

1. List any four types of available networks? Types of networks

Local Area Network (LAN)	Metropolitan Area Network (MAN)
Wide Area Network (WAN)	Personal Area Network(PAN)
Campus Area Network (CAN)	Wireless Local Area Network (W-LAN)

2. Name the two important protocols for internet?

The internet uses TCP/IP(Transmission Control Protocol/ Internet Protocol) to transmit data via various types of media.

3. What is a network?

a network is a collection of interconnected devices (such as computers, printers, etc.).

4. What is the role of ICANN ?

- The responsibility to promote global information exchange through the internet technology.
- Internet Corporation for Assigned Names and Numbers(ICANN) administers the domain name registration.
- It helps to avoid a name which is already registered.

5. What is a search engine?

- A search engine is a software system that is designed to search for information on the World Wide Web.
- Examples of popular search engines are Yahoo, Lycos, Altavista, Hotbot, Google and Askjeeves, DuckDuckGo.
- The list of content returned via a search engine to a user is known as a **search engine results page** (SERP).

6. What is a browser?

A browser is used to access websites and web pages whereas a search engine isused to search for particular information.
Internet Explorer, Chrome, Firefox, Safari, etc.
A browser is used to access the Internet whereas in order to open a search engine you need a browser.

7. What are the components of url addressing ?

URL: Uniform Resource Locator   **ex**: http://www.google.com

1. Protocol:	http://
2. Subdomain:	www.
3. domain:	google
4. top level domain(TLD):	.com

8. What is a website?

- A website is a collection of webpages.
- The first page of the website is called a Home Page.
- All of these pages together make up a Website.

9. What is CC and BCC in an email?

The **CC (Carbon Copy)** field allows you to specify recipients who are not direct addressees

(listed in the "To" field). This field is **optional**.

The **BCC (Blind Carbon Copy)** field is similar to **CC**, except the recipients are secret. Each **BCC** recipient will receive the e-mail, but will not see who else received a copy. The addressees (anyone listed in the "To" field) remain visible to all recipients.

This field is **optional**.

10. What is a Static web Page?

*   The content and layout of a web page is fixed
*   Static Web pages are easy to develop
*   Static Web pages never use databases

11. What is a Dynamic web page?

*   The content and layout may change during run time
*   Dynamic web page development requires programming skills
*   Databases is used to generate dynamic content through queries

12. What are the benefits of e-governance?

*   Reduced corruption
*   High transparency
*   Increased convenience
*   Reduction in overall cost.
*   Expanded reach of government

13. What is Phishing ?

*   Phishing is a type of computer crime used to attack, steal user data, including login name, password and credit card numbers.
*   It occurs when an attacker targets a victim into opening an e-mailor an instant text message.

PART-III

Answer to the following questions (3 Marks):

1. Differentiate PAN and CAN network.

PAN NETWORK	CAN NETWORK
Range- Upto 100 meters	**Range-** Upto 5 Kms
Speed- up to 250 Kbps	**Speed-** 40 KB/s TO 1 MB/s
Location- Used for shorter distance, controlled by a single person within a single building	**Location-** Larger than LAN, but smaller than MAN. University, school or small business, enterprise
Advantages- Efficient, Cost effective.Hotspot may connect upto 8 devices	**Advantages-** Cost effective ,Wired or Wired Network, High Bandwith
Dis-Adv- Shorter distance upto 10 meters only. Data rate is low compared to other network	**Dis-Adv-** Diffi cult to manage

2. What is TCP/IP?

TCP- Transmission Control Protocol.a message to transmit and the means to reliably transmit the message.

The internet protocol (IP) addressing system is used to keep track of the millions of users.

3. Write a note on Hotspot internet service.

Hotspots are sites that offer Internet access over a wireless local area network (WLAN) by way of a router that then connects to an Internet service provider.

Hotspots utilize Wi-Fi technology, which allows electronic devices to connect to the Internet or exchange data wirelessly through radio waves

4. Differentiate Data Card and Dongles.

Dongle	Data Card
Refers to any removable component used for enabling extra security. USB Dongles can be divided into - WiFi Dongles - BlueTooth Dongle - Memory Dongle	It is a removable electronic card which is used for storing for data. Types of data card are - Expansion Card - Memory Card or Flash Card - Identification Card

5. Write a note on two access methods of connecting to internet. Two access

methods there are:

Indirect Access

- This is most common method used in home and office networks.
- The device e.g. computer connects to a network using Ethernet or WiFi and Internet using Asymmetric digital subscriber line ADSL(cable or fibre.)

Direct Access

- This is most common method used when travelling.
- The device e.g. smart phone connects directly to the Internet using 3G/4G mobile networks or public Wi-Fi.

6. Differentiate browser and a search engine with suitable examples.

browser	search engine
A browser is used to access websites and web pages whereas a search engine isused to search for particular information	A search engine is a software system that is designed to search for information on the World Wide Web.
Example:Internet Explorer, Chrome, Firefox, Safari, etc.	Examples of popular search engines are Yahoo, Google, etc.
A browser is used to access the Internet whereas in order to open a search engine you need a browser	The list of content returned via a search engine to a user is known as a **search engine results page** (SERP).

7. Differentiate Website and Webpage.

Webpage	Website
Consists of a Single document displayed by a browser	A collection of multiple documents displayable by a browser
Shares a unique domain name	Has its own unique domain name
Makes up a website	Contains one or more webpages

8. What is the difference between Static and dynamic web page.

Static Web Page	Dynamic Web Page
The content and layout of a web page is fixed	The content and layout may change during run time
Static Web pages never use databases	Databases is used to generate dynamic content through queries
Static web pages directly run on the browser and do not require any server side application program	Dynamic web pages runs on the server side application programs and displays the results
Static Web pages are easy to develop	Dynamic web page development requires programming skills

9. Write a note on W3C?

W3C stands for world wide web consortium.

It sets standards for the www to facilitate better communication ability. It

was established in 1994 by the creator of www, Tim Berners Lee.

10. What are Advantages of email.

The main advantages of email are listed below.

Free delivery - Sending an e-mail is virtually free, outside the cost of Internet service. There is no need to buy a postage stamp to send a letter.

Global delivery - E-mail can be sent to nearly anywhere around the world, to any country.

Instant delivery - An e-mail can be instantly sent and received by the recipient over the Internet.

File attachment - An e-mail can include one or more file attachments, allowing a person to send documents, pictures, or other files with an e-mail.

Long-term storage - E-mails are stored electronically, which allows for storage and archival over long periods of time.

Environmentally friendly - Sending an e-mail does not require paper (Paperless), cardboard, or packing tape, conserving paper resources.

PART IV

Answer to the following questions (5 Marks):

6. Explain the different types of interactions in e-governance.

G2G (Government to Government): When the exchange of information and services is within the periphery of the government, is termed as G2G interaction.
i.e. between national, state and local government entities and within different levels of the entity.
G2C (Government to Citizen): The interaction amidst the government and general public is G2C interaction. Here an interface is set up between government and citizens
G2B (Government to Business): In this case, the e-governance helps the business class to interact with the government seamlessly. It aims at eliminating red-tapism, saving time, cost and establish transparency in the business environment, while interacting with government.

G2E (Government to Employees): The government of any country is the biggest employer and so it also deals with employees on a regular basis, as other employers do.
ICT helps in making the interaction between government and employees fast and efficient, along with raising their level of satisfaction by providing perquisites and add-on benefits.

1. Compare the different geographical types of Network.

Type of Network	Range	Speed	Location	Advantages	Disadv
Local Area Network (LAN)	Upto 10 Km	Upto 10-100 Mbps	Refers to same office, same building, same company and in same schools	Low Cost, Resource Sharing, Security	Area Covered Limited When number of nodes increases, performance Decreases
Metropolitan Area Network (MAN)	10 to 15 Miles	Upto 5 – 10 Mbps	MAN is a network designed to extend over an entire city	Wider than LAN	Data rate is slow compared to LAN Cost higher than LAN
Wide Area Network (WAN)	Above 1000 Kms	It Span entire countries and continents	It Span entire countries and continents	Large geographical Area	Complicated and Complex.High Cost. Requires high Performance.Devices.Low security. Cost higher than LAN
Personal Area Network (PAN)	Upto 100 meters	up to 250 Kbps	Used for shorter distance, controlled by a single person within a single building	Efficient, Cost effective and convenient. Controlled by a single person Hotspot may connect upto 8 devices	Shorter distance upto 10 meters only. Data rate is low compared to other network
Campus Area Network (CAN)	Upto 5 Kms	40 KB/s TO 1 MB/s	Larger than LAN, but smaller than MAN. University, school or small business, enterprise	Cost effective ,Wired or Wired Network, High Bandwith Multi-departmental Network access	Difficult to manage

Wireless Local Area Network (W-LAN)	Upto 50 Kms	1 Mbps to 54 Mbps	Ranges from a single room to an entire campus Uses Wifi or Bluetooth, Radio waves	Portable Installation is quick and easy	Low Bandwidth due to interference

2. Explain any five types of internet services.

<center>**Any Five**</center>

Wireless

Radio frequency bands are used in place of telephone or cable networks. One of the greatest advantages of wireless Internet connections is the "always-on" connection that can be accessed from any location that falls within network coverage.

Mobile

Many cell phone and smartphone providers offer voice plans with Internet access. Mobile Internet connections provide good speeds and allow you to access the Internet.

Hotspots

Hotspots are sites that offer Internet access over a wireless local area network (WLAN) by way of a router that then connects to an Internet service provider.

Hotspots utilize Wi-Fi technology, which allows electronic devices to connect to the Internet or exchange data wirelessly through radio waves.

Broadband

This high-speed Internet connection is provided through either cable or telephone companies. One of the fastest options available, broadband Internet uses multiple data channels to send large quantities of information. Broadband Internet connections such as DSL and cable are considered high-bandwidth connections.

DSL

DSL, which stands for Digital Subscriber Line, uses existing 2-wire copper telephone line connected to one's home so service is. Customers can still place calls while surfing the Internet.

Cable

Cable Internet connection is a form of broadband access. Through use of a cable modem, users can access the Internet over cable TV lines. Cable modems can provide extremely fast access to the Internet.

Satellite

In certain areas where broadband connection is not yet offered, a satellite Internet option may be available. Similar to wireless access, satellite connection utilizes a modem.

ISDN

ISDN (Integrated Services Digital Network) allows users to send data, voice and video content over digital telephone lines or standard telephone wires. The installation of an ISDN adapter is required at both ends of the transmission—on the part of the user as well as the Internet access provider.

3. Explain any five internet applications with suitable examples. a

1. Internet telephony

Internet telephony (e.g. Skype) is another common communications service made possible by the creation of the Internet. VoIP stands for Voice-over-Internet Protocol, referring to the protocol that underlies all Internet communication.

2. Job search

Nowadays, many people search for their jobs online as it is quicker and there is a larger variety of job vacancies present. People can publish resume online for prospective job. Some of the web sites providing this service are naukri.com, monster.com, summerjob.com, recuritmentindia.com etc.

3. Online Shopping

The internet has also facilitated the introduction of a new market concept consisting of virtual shops. They provide information about products or services for sale through www servers. Using the internet services customers can submit specific product queries and request specific sales quotes. For example amazon.com is a www based bookshop on the internet where information on all types of international books can be found and books can be ordered online.

4. Stock market updates

Selling or buying shares sitting on computer through internet. Several websites like ndtvprofit.com, moneypore.com, provide information regarding investment

5. Travel:

One can use internet to gather information about various tourist place .it can be used for booking Holiday tours, hotels, train, bus, flights and cabs. Some of the web sites providing this service are goibibo.com, makemytrip.com, olacabs.com.

6. Research

Research papers are present online which helps in the researcher doing aliterature review

7. Video conferencing

It enables direct face-to-face communication across networks via web cameras, microphones, and other communication tools.

Video conferencing can enable individuals in distant locations to participate in meetings on short notice, with time and money savings.

8. e–commerce

e–commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the Internet.

Largest e-commerce companies in India are Flipkart, Snapdeal, Amazon India, Paytm.

9. Online payments

The rising boom of online payments in India has given way to many new entrants in the industry such as Paytm etc who are majorly wallet driven payment companies.

This growth has been driven by rapid adoption led by the increasing use of smartphones, tablets and speedy access to internet through broadband, 4G etc

10. Social Networking

Social networking is the use of internet-based social media programs to make connections with friends, family, classmates, customers and clients.

Social networking can be done for social purposes, business purposes or both.

Examples of social networking includes Facebook

11. Voicemail

Voicemail is a system of sending messages over the phone. Calls are answered by a machine which connects you to the person you want to leave a message for, and they can listen to their messages later.

12. Chatting

On the Internet, chatting is talking to other people who are using the Internet at the same time you are.

Transcripts of a chat can be archived for later reference.

13. e-banking

e-banking (Online banking) , also known as internet banking, it is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website.

14. e-learning

e-Learning are courses that are specifically delivered via the internet to somewhere other than the classroom where the professor is teaching. It is not a course delivered via a DVD or CD-ROM, video tape or over a television channel

4. Write a note on any five Internet browsers other than that given in the book.an

	Opera is smaller and faster than most other browsers, yet it is full- featured. Fast, user-friendly, with keyboard interface, multiple windows, zoom functions, and more. Java and non Java-enabled versions available. Ideal for newcomers to the Internet, school children, handicap and as a front-end for CD-Rom and kiosks.
	Lynx is a fully-featured World Wide Web browser for users on Unix, VMS, and other platforms running cursor-addressable, character-cell terminals or emulators.
	Chromium is an open-source Web browser project started by Google, to provide the source code for the proprietary Google Chrome browser [5] The two

	UC Browser is a web browser developed by the Chinese mobile Internet company UCWeb, which is in turn owned by the Alibaba Group. As of August 2018 it is the third most popular mobile browser in the world by market share, after Google Chrome and Safari.
	Netscape Navigator was a proprietary web browser, and the original browser of the Netscape line, from versions 1 to 4.08, and 9.x. It was the flagship product of the Netscape Communications Corp and was the dominant web browser in terms of usage share in the 1990s, but by 2002 its use had almost disappeared.

Familiar Internet Browser

Google Chrome is a freeware familiar web browser **developed by Google Inc**. It is best for its speed, simplicity, security, privacy and customization features. Google Chrome supports on Android 4.0 or higher, iOS 6.0 or higher, Mac OSX 10.6 or higher and Windows (XP sp2 or higher) and Linux system.

Mozila Firefox is a free and open source web browser **developed by Mozilla Foundationand Mozilla Corporation**. FireFox is **default browser in Ubuntu** . It supports Windows, Mac OS X, Linux and Android system.

Internet Explorer commonly known as Microsoft Internet Explorer or Windows Internet Explorer is the first or default browser for a Windows PC. It is **developed by Microsoft.**

Safari is a web browser **developed by Apple Inc.** and comes with OS X and iOS. Some version of safari browser also supports in Windows Operating System. **Exclusively used in Apple Mac system.**

5. Classify and explain any five e-commerce parties with suitable examples. Business to consumer (B2C) – Transactions happen between businesses and consumers. In B2C ecommerce, businesses are the ones selling products or services to end-users

Business to business (B2B) – As its name states, B2B ecommerce pertains to transactions conducted between two businesses.

Any company whose customers are other businesses operate on a B2B model. **Consumer to business (C2B)** – Consumer to business ecommerce happens when a consumer sells or contributes monetary value to a business.

Many crowd sourcing campaigns fall under C2B ecommerce.

Consumer to consumer (C2C) – As you might have guessed, C2C ecommerce happens when something is bought and sold between two consumers. C2C commonly takes place on online marketplaces such as eBay, in which one individual sells a product or service to another.

5. **Government to business (G2B)**– G2C transactions take place when a company pays for government goods, services, or fees online.

6. **Business to government (B2G)** – When a government entity uses the Internet topurchases goods or services from a business, the transaction may fall under B2G ecommerce. Let's say a city or town hires a web design firm to update its website.

This type of deal may be considered a form of B2G.

7. **Consumer to government (G2C)** – Consumers can also engage in B2C ecommerce.People paying for traffic tickets or paying for their car registration renewals online may fall under this category.

6. Explain the different types of interactions in e-governance.

G2G (Government to Government): When the exchange of information and services is within the periphery of the government, is termed as G2G interaction.

i.e. between national, state and local government entities and within different levels of the entity.

G2C (Government to Citizen): The interaction amidst the government and general public is G2C interaction. Here an interface is set up between government and citizensThe citizens has the freedom to share their views and grievances on government policies anytime, anywhere.

G2B (Government to Business): In this case, the e-governance helps the business class to interact with the government seamlessly. It aims at eliminating red-tapism, saving time, cost and establish transparency in the business environment, while interacting with government. **G2E (Government to Employees):** The government of any country is the biggest employer and so it also deals with employees on a regular basis, as other employers do.

ICT helps in making the interaction between government and employees fast and efficient, along with raising their level of satisfaction by providing perquisites and add-on benefits.

<div align="center">

Book Question
</div>

Define Host?

In Several networks are connected together and each computer on net is called as **host** in network.

Define WWW?

The World Wide Web (WWW) is a network of online content that is formatted in HTML and accessed via HTTP. The term refers to all the interlinked HTML pages that can be accessed over the Internet. The World Wide Web was originally designed in 1991 by Tim Berners-Lee while he was a contractor at CERN.

The World Wide Web is most often referred to simply as "the Web."

Define internet?

In Several networks, small and big all over the world, are connected together to form a Global network called the internet.

Application area of **internet**

Online movies and gaming   Instant messaging   Internet forums
Social networking   Online shopping   Financial
services Data transfer/file-sharing, often through File Transfer Protocol (FTP)
Web-enabled audio/video conferencing services   Email

Define Intranet?

It is a website used by organizations to provide a place where employees can access company related information.

Define Extranet?

It is a private network using internet technology to share part of business information with suppliers' partners and customers.

What is Email?

Electronic mail or email is information stored on a computer that is exchanged between two users over telecommunications. Email is a message that may contain text, files, images or any other attachments sent through a network to a specified individual or group of individuals

The **first mail** was sent by **Ray Tomlinson** in 1971 as a test e-mailmessage containing the text like "QWERTYUIOP"

What is URL?

A URL is an address that shows where a particular page can be found on the World Wide Web. URL is an abbreviation for **'Uniform Resource Locator (URL)'.**

What Domain Name?

It is a name or an identity which become a online identity and can be access by the web browser when connected to internet.

<div align="center">

Generic Domain Name
</div>

Domain Name	Description
.com	Commercial Organisation
.gov	Government institution
.org	Non-profit Organisation
.net	Network Support Group
.edu	Educational Institution

<div align="center">

Country Level Domain Name
</div>

Domain Name	Description
.in	India
.au	Australia
.us	United States of America
.jp	Japan
.ru	Russia
.sg	Singapore

What is the role of E-governance?

E-governance has a great role to play, that improves and supports all tasks performed by the government department andagencies, because it simplifies the task on the one hand and increases the quality of work on the other.

Explain the Structure of email OR How will you a send a Mail

Click the **Compose** button and then writing an e-mail contents

When sending an e-mail message, several fields are required to be filled:

- The **To** field is where you type the e-mail address of the person who is the recipient of your message.
- The **From** field should contain your e-mail address.
- If you are **replying** to a message, the To and From fields are automatically filled out; ifit's a new message, you'll need to enter them manually.
- The **Subject** should consist of a few words describing the e-mail's contents. The Subject lets the recipient see what the e-mail is about, without opening and reading the full e- mail. This field is optional.
- The **CC (Carbon Copy)** field allows you to specify recipients who are not direct addressees (listed in the "To" field). This field is optional.
- The **BCC (Blind Carbon Copy)** field is similar to **CC**, except the recipients are secret. Each **BCC** recipient will receive the e-mail, but will not see who else received a copy.
- Finally, the **Message Body** is the location you type your main message. It often contains your signature at the bottom; similar to a hand-written letter.

Safe Surfing on Internet

As a great reminder that Internet security is something that needs constant vigilance. It's also a great reminder that a lot of things can happen on the Internet if you don't properly take precautions against them. With that in mind, be sure to have a safe and happy Safer Internet Day.

SAFER INTERNET DAY

Safer Internet Day (SID) 2018 is celebrated around the world in **February** of every year with a theme of "Create, connect and share respect. A better internet starts with you".

Following is the do's and don't of safe Surfing on Internet

- Don't give out your personal information
- What goes online, stays
- Check your security and privacy settings
- Password safety
- Always protect your mobile device
- Don't talk to strangers online or offline
- Listen to the adults who know
- Be wary of unsecured or unknown websites
- Be careful what links you click on

10. HTML - Structural Tags
SECTION-B

Answer to the following questions (2 Marks):

1 Sandhiya is creating a webpage. She is entering HTML code on her computer. In between, she keeps pressing "Refersh" / "Reload" button on her browser. What is the purpose?

Reload / Refresh button is used to get the changes from the source file:

- After modify and save the source file, minimize your source file.
- Go to the browser.
- Click **Refresh** (Internet Explorer) / **Reload Current Page** (Firefox) / **Reload this page** (Chrome) icons on the address bar.
- Press **Ctrl + R** or **F5** will be used to refresh / reload the modifications.

2. Explain with the help of an example the difference between container and empty elements of HTML.

Container Elements:

The tags which are required opening and closing is known as container elements or tags. For example: **html** etc.,

Empty Elements:

The tags which are required only opening tag is known as empty elements or tags. For example:
 **
,<hr>**,etc.,

3. What is the wrong in the following coding?

Wrong	Correct
<html> <my web page> <title> Welcome to my web page </head> </title>	<html> <head> <title> my web page </title> </head> <body> Welcome to my web page </body></html>

4. How do you define comments in HTML?

The tag <!> is used to create comments. In HTML, the text what you type within this tag is considered as comments and it is ignored by the browser. Comments never show up onscreen. Comments can be placed anywhere in HTML document.

The general form of comments:

<! comments >

5. How do you include an image as your web page background?

An image or picture can be applied as background to a webpage. When you insert an image as background, the text will be displayed on top of the image. Background images can be a texture or bitmap or even a photo.

The attributes to apply an image as background:

<body **background** = "image_name_with_extenstion">

SECTION-C

Answer to the following questions (3 Marks):

1. Explain the attributes available with <body> tag.

Attributes of <body> tag

(i) Background Colour: bgcolor = color

By default all the browsers display the text on white background. However, the background color of the browser can be changed by using **bgcolor** tag.

The tag to change background colour:

<body bgcolor = color_name/color_code>

(ii) Body text Colour: text = color

The default text colour of body section is "   black", it is often called as automatic color. text attribute within body tag is used to change the text colour.

The tag to change body text colour:

<body **text** = **color_name/ color_code**>

(iii) Background image: background=image

An image or picture can be applied as background to a webpage. When you insert an image as background, the text will be displayed on top of the image. Background images can be a texture or bitmap or even a photo.

The tag to apply an image as background:

<body **background** = "**image_name_with_extenstion**">

If your image file name is long or split as two more words or along with path, should be specify within double quotes.

For example, If the image file is somewhere in a folder (say Images folder in E: drive), you must specify its full path within double quotes as given below.

Exmaple:

<body background = "E:\Images\ flower01.gif">

is no default margin setting in any browser. If you want to leave some space as margin to left or top;
leftmargin or **topmargin** attributes will be used respectively.

The tag to specify the left and top margin:

<body leftmargin = value topmargin = value>

The Value is referred as pixels (72 pixels to an inch)

2. What are the attributes available in <html> tags?

The **<html>** tag has two attributes viz. **dir** and **lang** to specify the **text direction**
and **language setting** respectively.

attribute	Value to be set to attribute	Description
Dir	**ltr** (align left-to-right) **rtl** (align right-to-left)	**dir** attribute specifies the direction of the text to be aligned within the entire document. It is global attribute. **ltr** is the default value **rtl** is used for Arabian languages.
Lang	Predefined language code English – **en** Tamil – **ta** Telugu – **te**	**lang** attribute specify the language used within the document. Predefined language code will be used for this purpose. Malayalam – **ml**; Kannada – **kn**; Hindi – **hi**; French – **fr**; German **– de**;

3. How do you view the source file?

Viewing Source file

Source file is an HTML document, what you actually type in text editor (**Notepad** or
gedit). You can view your original source file in the browser. The following steps are to be followed
to view a source file.

- Right click on the browser
- Select **View Page Source (Firefox and Chrome) / View Source (Internet Explorer)** or
Press **Ctrl + U** (all browser) Source file will be displayed.

In Internet Explorer, **View → Source** is also used to open source file.

Remember that, you cannot edit the source file opened using the methods you learnt above.

4. How do you save a file as HTML file?

To Save the file as HTML

Followed the Steps:

- Click **File → Save** (or) Press **Ctrl + S**
- Save as dialog box appears
- In "**File Name**" text box, type a file name with .**htm** or .**html** extension.
- Select "All Files" from "**Save as type**" list box.
- Click "**Save**" button.

Book Question

How do you open a file in a Browser?

Step 1: Open a Browser (Internet Explorer / Mozilla Firefox or any)

Step 2: Click **File → Open File** (or) Press **Ctrl + O**

• If menu bar is not visible in your browser

Step 3: From the "**Open**" dialog box, browse the folder in which the HTML document is saved.
Choose the File name and click "**Open**" button.

Now, your web page is displayed in the browser.

How do you edit a source file?

**When you edit a source file, no need to close browser in which displaying the HTML
document.** The following steps are to be followed to open a source file.

- Go to the folder in which your source files are located.
- According to you default browser, your source file icon is displayed.
- Right click on the source file that you want to edit
- From the pop-up menu, select Open With → **Notepad**
- Source file will be opened in text editor.

Define Tags?

- Tags are known as elements of HTML.
- You cannot create your own tags to create a new style or feature.
- All HTML tags should be specified within **angle brackets (< >).** Forexample, **<HTML>** is a tag.
- HTML is not case sensitive that means you can write an HTML tag in lower case or in upper case (Small letter or Capital letter).
- Browser treats both of them in the same manner. For example, you can write <HTML> as <html>; both are same.
- Opening and closing tags are the same name, but closing tag name preceded by a slash (/).

Define Attributes?

Attributes are **special words** used inside a tag to specify **additional information** to a tag. Attributes should be placed within the opening tag. Most of the tags support specialized attributes and there are also a few global elements that can be used with any tag. **Global elements** are common to all HTML elements; they can be used on all elements.

What are Structural Tags of HTML:

Opening Tag	Closing Tag	Description
<html>	**</html>**	The <html> tag identified the document as an HTML document. All HTML documents should begins with <html> and end with </html>.
<head>	**</head>**	The <head> tag contains information about the document, including its title, scripts used, style definition and document descriptions.
<title>	**</title>**	The <title> tag contains the title of the document. The title specified between opening and closing tags appears in
		the title bar / page tab of the browser. <title> tag should be placed within <head> tag.
<body>	**</body>**	The <body> tag encloses all the tags, attributes and information to be displayed in the web page. <body> tag should be entered below the </head> tag.

How do you Creating a Webpage?

Creating a Webpage

Step 1: Open a text editor

Windows7 : Start → All Programs →Accessories → **Notepad Linux** :
Applications → Accessories → **Text Editor**

Step 2: In the appearing **Note pad** / **Text Editor**, type the HTML document.

Step 3: Save the file as HTML

- Click **File → Save** (or) Press **Ctrl +S**
- Save as dialog box appears
- In "**File Name**" text box, type a file name with .**htm** or .**html** extension.
- Select "**All Files**" from "Save as type" list box.
- Click "**Save**" button.

How will you change color in HTML Documents?

HTML code, color name has been used to change the background color of the browser's body section.

There are two way to specific color:

Using colour code(RGB)

- RGB colors in HTML are represented as six digit hexadecimal values.
- color code (hexadecimal value) will be more flexible to handle colors.
- The six digit hexadecimal value is the combinations of three, two digit number sequence represent a color.

- Color code should be prefixed with **#.**
- First two digits represent Red, next two digits for Green and last two digits for Blue (**RGB**) in the range of 00 – FF. For example, 000000 is black and **FFFFFF** is white. FF0000 is bright red.

Using colour name

- Colour name can be used for only few colors
- You can use some basic color names directly

Define heading Tags in HTML?

Headings are used to include titles to sections of a web page. HTML has six levels of headings viz. **<h1>** to **<h6>**.

The number with **h** indicates the level of heading. Header tags are display the body text as bolder and larger in size according to its level.

The syntax of heading tags:

<h…> Heading text </h…>

Align attribute is used in heading tags:to set right, center and justify alignment in Heading. **Left** is a default alignment

The tag is to specify the alignment to headings:

<h# align = value>

NOTE: Where # is the level number in heading tag

Rule in browser application for displaying text?

Browser applications are having some special rules for displaying text. They do not recognize **returns**, tabs or even **more than one space** between words.

If you create an HTML document with multiple lines of text, browser will display it as a **single line**.

Define Line Breaks and Paragraphs Tag?

i. The **
** tag is used for line break. The **
** is an empty tag, does not have close tag and attribute. It should be placed at the end of a line.

ii. Paragraphs are created using the **<p>** tag. The content what you type between **<p>** and **</p>** is identified as a paragraph and display as a paragraph by the browser. Because, the browser does not recognize returns (Pressing "**Enter**" Key). Remember that in word processors, pressing "**Enter**" key is identifying a paragraph.

11. HTML - Formatting text, Creating Tables, List and Links
SECTION-B

Answer to the following questions (2 Marks):

1. Write a short note on (i) <strong> (ii) <em>

<strong> Important text

The <**strong**> tag is a **phrase** tag. It is used to define **important** text. This tag displays the text as bold.

<em> - Emphasized text

The <**em**> tag is used to emphasize the text, the text will be in italics.

2. What is the use of <mark> tag?

Highlighting is an important formatting feature is used to call attention to the reader.
The <**mark**> tag is used to highlight the text in HTML. This is also a container tag.

3. Write the following equation as HTML notation: Pd = 25 – Q2

<Html>　<head>　<title>html notation</title>　　</head>

　　<body> Pd = 25　– Q2　</body>

</html>

4. Write about any two attributes of font tag.

- There are three main Attributes for Font tag
- The **face** is an attribute to set different font style. The name of a font has **multiple** words it should be specified within double quote.
- The **size** attribute is used to set size of the text. The size can have an absolute value from 1

- The **color** attribute is used to set the color to the text.

Note: The <font> tag is not supported by **HTML5**.

5. What is thematic break?(Book inside 5 Mark)

The <hr> (Horizontal Rules) tag, which is known as "**Thematic Breaks**" **separate** sections of an HTML document visually.

It produces a horizontal line spread across the width of the browser. This is an **empty** tag

6. What is pixel?

A **pixel** is one of the **tiny** dots that make up the display on computer. **72 pixels** equal to an inch. Pixel is usually referred as points.

For example: The code **<hr size = 72>** display a horizontal line with 1 inch thickness. The default size is **3** pixels.

7. What are the types of list in HTML?

HTML supports three types of lists viz. numbered, unnumbered and definition. These lists are called as Ordered List, Unordered List and Definition List respectively.

8. How will you define numbered list?

Numbered List / Ordered List

- Numbered list is created within the tag pair **<OL> ….. </OL>** tag.
- The tag **<LI>** is used to present the list item in the list.
- Ordered list displays items in a numerical or alphabetical order.
- Both **<OL>** and **<LI>** tags are container tags. closing tag **</LI>** never be used.

Attributes of Ordered List:

There are two attributes can be used to customize ordered list, they are

(1) Type - changing numbering style

(2) Start - changing numbering order.

Type – is used to change the number style. The default number style is standard Arabic numerals (1,2,3,…………).

SECTION-C

Answer to the following questions (3 Marks):

1. Write an HTML code to display the following text in exactly the same way as given below.

<html><head><title> Html</title></head>

<body>

I am studying Computer Science Application.

</body></html>

2. Briefly explain the attributes of <hr> tag. Attributes of <hr> tag (ANY 3)

The **<hr>** tag having four attributes viz. **size, width, noshade** and **color**. These attributes are used to set size, width, 3D appearance and color to the horizontal line respectively.

Size: Thickness of the horizontal line can be changed with size attribute.

The **size** is given in terms of pixels. The default size is **3** pixels.

Width: The width attribute specifies the horizontal width of the rule line.

The default rule is drawn across the full width of the browser.

The value of the width attribute may be the exact width of the rule in **pixel** or a certain percentage.

the value of the width is specified as percentage. **100**% is the default width.

For example:

<hr width = 50%> display an half of a horizontal rule line on the browser window.

Noshade: The default view of a horizontal rule line is 3D. So, no need to specify the term "noshade" as an attribute with <hr> tag. If you specify the attribute "noshade" turn off 3D view, turns on 2D view. Noshade is a **Boolean type** attribute.

Color: The horizontal line is displayed in **gray** color by default. The color attribute is used to change is default color to desired color.

The general syntax of **<hr>** tag with attributes:

    <hr size=value width=value noshade, color=color_name/code> Note: All
attributes of <hr> tag is not supported by HTML5

3. What are the core tags used to create table in HTML?

There are five core tags are used to create a table in HTML. They are,

<table> tag is used to create a table.

<tr> tag defines table rows

<th> tag defined table columns

<td> tag is used to specify the data in a cell

<caption> tag defines title for the table

4. Write an HTML code to provide hyperlink to https://www.w3schools.com

<html><head><title> **hyperlink** </title></head>

<body>

 w3schools

</body></html>

5. Difference between <UL> and <OL> tags.

<OL> tag	<UL> tags
Ordered list displays items in a numerical or alphabetical order.	Ordered list displays items in a special bullet symbol
Unordered lists are often referred as numbered lists	Unordered lists are often referred as bulleted lists
To list item in using	To list item in using

6. Write HTML code to produce the following table:

<table **border**=1 **cellspacing**=0 **cellpadding**=12>

<tr **VAlign** =top>

<td **rowspan**=2>A</td><td> B</td>

</tr>

<tr><td> C</td>

</tr>

</table>

SECTION-D

Answer to the following questions (5 Marks):

1. Write an HTML code the show the following text: Program:

<html><head><title>table program</title></head>

<boby>

<center>MODERN ATOMIC THEORY</center>

The findings of modern atomic theory are given as follows:

An atom is the smallest particle which takes part in chemical reaction.

An atom is considered to be a divisible particle.

The atoms of the same element may not be similar in all respects.

<dl>

<dd>eg: Isotopes ($_{17}$Cl^{35}, $_{17}$Cl^{37})

</dl>

The atoms of different elements may be similar in some respects.

<dl>

<dd>eg. Isobars ($_{18}$Ar^{40}, $_{20}$Ca^{40})

</dl>

</body>

</html>

**2. Explain the attributes used with <table> tag in HTML. Attributes of
table (Any 3)**

The <table> is a container tag. There are several attributes to improve the layout of the table.

They are listed below:

1. Cellspacing: It is used to set the space between cells in a table. The value should be in pixels

2. Cellpadding: It is used to set the space between the contents of a cell and its border. the value should be in pixels.

3. Border: Border attribute with <table> tag is used to specify the thickness of the border lines around the table.

The value of the border attribute should be a non zero value in pixels. (displays the table without border). The default value is Zero in most the browsers.

4. Bordercolor: It is used to apply the colour to the border lines.

5. Align: It is used to set the position of the table within the browser window. **Left** is the default position. **Right** or **center** may be the value of align attribute.

6. BGcolor: It is used to apply background colour to the table.

7. Height and Width:

These two attributes are used to specify the height and width of a table in terms of

pixels or **percentage**.

3. Explain the types of list with suitable HTML code.

HTML supports three types of lists viz. numbered, unnumbered and definition. These lists are called as Ordered List, Unordered List and Definition List respectively.

Numbered List / Ordered List

- Numbered list is created within the tag pair **<OL> ….. </OL>** tag.
- The tag **<LI>** is used to present the list item in the list.
- Ordered list displays items in a numerical or alphabetical order.

- Both **<OL>** and **<LI>** tags are container tags. closing tag **</LI>** never be used.

Attributes of Ordered List:

There are two attributes can be used to customize ordered list, they are

(1) Type - changing numbering style

Type value	Numbering style
1	Standard Arabic Numerals 1,2,3,4,…………….
a	Lowercase letters a, b, c, d, …………
A	Uppercase letter A, B, C, D ………..
i	Lowercase Roman numerals i, ii, iii, iv, v ……………
I	Uppercase Roman numerals I, II, III, IV, V ………..

(2) Start - changing numbering order.

Type – is used to change the **number** style. The default number style is standard **Arabic numerals** (1,2,3,…………).

Start – is used to specify the number of letter with which start the list. The default starting point is 1.

Un-numbered List / Unordered List

- Unordered lists are often referred as **bulleted** lists. Instead of numbers,
- each element in the list has prefixed with a special bullet symbol. Using<**LI**> tag
- Unordered list is surrounded within <**UL**> ……… </**UL**> tags

Attribute of Unordered List:

type attribute is used to customize bullet style for the list of elements. By default, a solid circle is used as bullets.

Type value	Numbering style
Disc	• A solid circle
Square	☐ A solid square
Circle	○ An unfilled circle

Definition List

- Definition list is different from other two types of list. No bullet or number is provided for the list items.
- The list element has two parts.
  - (1) A definition term   (2) The definition description
- Definition list is surrounded within <**DL**>…….</**DL**> tags.
- Definition term is presented in between <**DT**>…..</**DT**> tag and
- Definition description should be surrounded within <**DD**>...…</**DD**> tag.

Example:

<html> <head> <title> list in Html</title></head>

<body>

<ol type=A>

 hardware

 software

<ul type= square>

 network

 mail

<dl>

<dt> HTML

<dd> Hypertext markup Lanaguage</dl>

</body></html>

4. What is Link and explain the types of links.

- Link is an important feature of HTML to connect web resources.
- **Link** in HTML is used to create **hyperlinks** to web content.
- Web content may be an HTML document(**internal**) or an **external** webpage or any multimedia content such as an image, video, audio, animation etc., or even a part of the current document.

There are **two** important things needs to create a link in HTML,

(1) The name of the **file** or **URL** to which you want to link

(2) The text that will serve as the **clickable** link.

The anchor tag <A> is used to create links along with **HREF** attribute. **HREF** is abbreviated as "**Hypertext Reference**".

Structure of an anchor tag with href:

<A href = " Web content path / URL "> Text – **Clickable link** </A>

Example: <A href = "http://tnscert.org/index.html">**SCERT** </A>

5. Write HTML code to create the following table:

</table>

<table **border**=1 **cellspacing**=0 **cellpadding**=16>

<tr>

<td **rowspan**=3 **VAlign**=top>A</td>

<th **colspan**=4>B</th>

</tr>

<tr>

<td>C</td>

<td>D</td>

<td>E</td>

<td **rowspan**=2 **VAlign**=top>G</td>

</tr>

<tr>

<th **colspan**=3>F</th>

</table>

Define Tables in HTML

Table is grid of rows and columns.

- The **tables** were officially **introduced** with **HTML 3.2**.
- Tables are useful for the general display of **tabular** data.
- Representing table in HTML is **heavy** on tags.

What other Tags used to create table elements

Apart from these five core tags, **<tbody>, <thead>** and **<tfoot>** tags are also used to define and control whole sections of table.

All the above tags are container tags.

What are the Attributes of <TD>, <TH> and <TR> tags:

1. Align Used to specify the horizontal alignment of content within a cell. **Left** is the default alignment. Possible values are **Right** and **Center**.

2. VAlign Used to specify the vertical alignment of the contents within a cell. **Bottom** is the default alignment. Possible values are **Top** and **Middle**

3. Width Used to specify the width of a cell in terms of pixels or percentage.

4. BGcolor and Background

- **Bgcolor** attribute is used to apply a particular colour to the background of a cell.
- **Background** attribute is used to apply an image or picture as background of a cell.

5. Rowspan and Colspan

- **Rowspan** attribute is used to merge two or more cells in a row as a single cell.
- **Colspan** attribute is used to merge to two or more cells in a column as a single cell.

How to format the text in html

- Format the text such making bold, italic, underline, changing font style, font size, font color and more.
- Formatting text is very important as well as interesting task in creating web pages. Formatting is purely based on your imagination and creativity.

Define Nested Lists:

A list block can be defined inside another list is called as nested list.

What are the Comparison of :

Tag	Usage	Tag	Usage	Final Output
<b>	To show the text in bold	****	To show important text	Bold
<i>	To show the text as italics	****	To Call attention	Italics
<u>	To show the text as underlined	**<ins>**	To insert a text	Underline
<s>	To show the wrong text	**<del>**	To replaced or deleted text	Strike through

TAG	NAME	DESCRIPTION	EXAMPLE	
** **	**Important text**	The tag is a **phrase** tag It is used to define important text.	**Welcome to Tamilnadu**	<str </st
** **	**Emphasized text**	Tag is used to emphasize the text.	*Welcome to Tamilnadu*	<em
<big> </big>	**BIG**	Tag is used to define the text bigger in size than the normal size. It is often used to call attention a text	Computer Computer (normal text)	<big
<small>	**Small**	Tag is used to define the text smaller than	Computer (normal text)	<sm

`<Sub> </Sub>`	**Subscript**	A Subscript is a way to display a character or a number below the normal line of type.	H_2O	H\<sub
				\<Sup>
`<Sup> </Sup>`	**Superscript**	A Superscript is also a way to show a character or a number above the normal line of type.	$(a+b)^2$	(a+b)\<
`<del></del>` or `<s> </s>`	**Deleting Or Strike through**	Text will be displayed as strike through	~~Computer~~	\<s> Co \<del>
`<ins> </ins>`	**Inserting**	Text will be shown as underlined	<u>Computer</u>	\<ins> (
`<Center> </center>`	**Center**	The tag is used to centralize a segment of text.	Thiruvallur	\<cente

12. HTML - Adding multimedia elements and Forms

.Part – II

Answer to the following questions (2 Marks):

1. List out the popular image formats.

Most of the browsers supports, GIF, JPEG and PNG images formats

- GIF (Graphical Interchange Format)
- JPEG (Joint Photographic Experts Group)
- PNG (Portable Network Graphics)

2. Write down the general format of marquee

<u>General format:</u>

    <marquee> Text or image to be scroll </marquee>

3. What is inline sound or movie?

Music can be played in the background to a webpage, while the page is viewed. This is known as 'inline' sound or movie..

4. What is the purpose of <input> tag?

The purpose of <input> tag is to form controls, form controls are created by using <input> tag. The <input> is an empty tag used to create different form elements or controls such as text box, radio buttons so on.

5. Which tag is used to specify the list of items in dropdown list box?

- The <select> tag is used to create dropdown list box in HTML.
- It provides a list of various options as a dropdown list

6. What are the major attributes are available in <textarea> tag? Define <textarea>

The <Textarea> tag used to receive multi line text data as input. It is a container tag.

The main attributes of <Textarea> are

Name – Used to define name to the control

Rows – Specifies the number of rows in the text area control

Cols – Specifies the number of columns in the text area. (number of characters in a line)

Part – III

Answer to the following questions (3 Marks):

1. Write a short note on familiar images format.

i. GIF (Graphical Interchange Format)

- This format is one of the popular format for animated images.
- It was developed by CompuServe.
- This format is suitable for presenting tiny animated images, logos, icons,etc.,
- It is not suitable for photographic work, because it uses maximum of 256 colours.
- Animated GIF do not support sound or playback control.

ii. JPEG (Joint Photographic Experts Group)

- JPEG is the most popular image format supported by all web browsers.
- This format is suitable for photographic images.
- JPEG can include any number of colours.(supported Full color)

iii. PNG (Portable Network Graphics)

- PNG is designed as a replacement for GIF.
- It is also supported by all browsers.

iv. SVG (Scalable Vector Graphics) ------ HTML-5 introduces SVG images.

- SVG is a graphics format that was developed for web.
- It was standardized by World Wide Web Consortium (W3C) in 2001.
- All current web browsers supports basic features of SVG.

2. How will you scroll the text in HTML?

3. The HTML <marquee> tag is used for scrolling piece of text or image image can be moved horizontally or vertically.This feature makes a web page as more attractive.

General format:

<marquee> Text or image to be scroll </marquee>

Attributes of <marquee>

Attribute	Value	Description
behavior	Scroll, slide, alternate	- Used to specify the type of scrolling.
direction	Up, down, left, right (Default is left)	- To specify the direction of the movement of text or image. - The text or image will move towards right to left by default.
Height & Width	pixels or %	- These attributes are used to set height and width of the marquee.
loop	number	- Specifies how many times to loop. The default value is INFINITE, which means that the marquee loops endlessly.
scrolldelay	Seconds(time unit)	- Used to Defines time delay between each jump
scrollamount	number	- Used to Defines the speed of the scroll.
Vspace & Hspace	pixels or %	- Specifies vertical space around the marquee.

4. Explain the main attributes used with <form> tag.

Main Attributes used with <form> tag

The important attributes used with the <form> tag are method and action attributes.

Method

The method attribute of the form tag is used to identify how the form element names and values will be sent to the server.

The get method will append the names of the form elements and their values to the URL. The post method will send the names and values of the form elements as packets.

Action

The action attribute identifies the server side program or script that will process the form. The action will be the name of a Common Gateway Interface (CGI) program written in programming languages like Perl, JavaScript, PHP or Active Server Pages (ASP).

General Format of <form> tag

<Form method=get/post action=
    "back_end_server_script"> Form elements
</Form>

5. Explain the values of <input> tag's type attribute.

Value of type attribute	Description

Text	Create a Text Box. The element used to get all kind of text input such as name, address etc.,
Password	Similar as Text box. But, while entering data, the characters are appearing as coded symbols such as asterisk.
Checkbox Multiselect box	Check box is an element appearing like a small square box. When the user click on the square a tiny tick mark will appear inside the square. This element is used to select multiple options.
Radio Button	Radio button is used to select any one of the multiple options from the list. This element looks like a small circle, when the user select an item, a tiny dot will appear within the circle. If the user selects another option, previously selected option will be deselected. This means, user can select any one of the given option form a group.
Reset	It is a special command button used to clear all the entries made in the form.
Submit	It is also a special command button used to submit all the entries made in the form to the backend server.
Button	This is a standard graphical button on the form used to call functions on click.

6. Explain the attributes of <select> and <option> tags. or
Define select and Option tag? With its attributes
 The <select> tag is used to create dropdown list box in HTML.
 It provides a list of various options as a dropdown list.
 This element is more helpful when a number of options are to be displayed in a limited space.
 The <option> tag is used to specify list items.

Attributes of <Select> tag:	Attributes of <Option> tag:
Name – Provide the name to the control, which is sent to the server. Size – Determine the style of dropdown list box. Size = 1 dropdown list box. Size = 2 List box Multiple – Allows user to select multiple values.	Selected – Indicate default selection Value – Value to be submitted to server

Book Question
How will you Inserting Images with HTML document or Define IMG tag.

The <IMG> tag along with the attribute src (Source) is used to add images in HTML document. Images displayed on the web page should be converted to universally supported format.

General format:

<img src = image_name_with_extension> (OR) <img src = URL>

Note: If the image is not in the current working folder, the image file name should clearly specify with the path of the file or URL, where the file is available.

Example: <img src = "D:\images\animals\cat.jpeg">

Attributes of <img> tag:

Attributes of <img> tag:	Description
Src (Source)	The main attribute used to specify the file name of the image to be inserted
Alt (Alternative Text)	Attribute used to describe the image
Width and Height	Attributes are used to set the width and height of an image. The values pixels or percentage of its actual size.
Vspace (Vertical Space) & Hspace (Horizontal Space)	Attributes are used to set Vertical and Horizontal space between the images.

Align	The align attribute used to aligns the image with respect to the base line of the text. Bottom – Aligns the bottom of the image with the baseline of the text. default setting. Middle – Aligns the middle of the image with the baseline of the text. Top – Aligns the top of the image with the baseline of the text.
Left and Right values of Align attribute	Its displayed the image on the left and right side of the text.

Note: the browser displays the image in its original size. when attributes are not specified

Example:

<img src ="bharathiyar.gif" alt ="National Poet of India" Width=20% Height=25% vpace = 20 Hspace = 20>

How will you add Video and Audio into the Webpage

  Video and Sound are the core part of the modern web pages.

  A video or audio content may be included as Inline or external data.

Inline	External
The inline refers to audio or video files are handled as part of the page.	The External refers linking external audio or video files as url.

  The <embed> tag is used to attach an audio or video file easily within webpage.This<embed> tag includes the controls of the multimedia automatically in the browser.

  The <noembed> tag may be used as an alternate to display some other media file, in the case of the browser does not support <embed> tag.

Attribute of <embed> tag

  Src is the primary attribute used with <embed> tag.

  The src attribute used to specify the name of the media file with its source location.

  Other attributes such as alt, height, width and align are used as it is used with <img>

General Format:

    <embed src = audio / video file name with location> </embed>

How will insert sound or audio file into the html document?

    Music can be played in the background to a webpage, while the page is viewed. This is known as 'inline' sound or movie.

    The <bgsound> tag is used to attach an inline sound file in HTML.

Attributes of < bgsound > tag:

    The src attribute is used to define the location of the media file. The Volume attribute used to adjust volume control.

    The loop attribute defines the duration of play. The 'infinite' value causes the audio play as long as the page is in view.

General Format: <bgsound src= "music file name with location">

How will insert form into the html document?

  The <form> tag is used to create a form.

  An HTML from starts with <form> and ends with </form> tag.

  Forms contain many types of form elements, such as text boxes, radio buttons, check boxes, buttons and drop-down lists.

  The form has a special element, which is submit button, which will submit the entries of a form to a server application to process the entries.

  The values they enter or select are passed with the name of the corresponding form element to the Web server.

Attributes frequently used with <form> tag

The important attributes used with the <form> tag are method and action attributes.

Method

The method attribute of the form tag is used to identify how the form element names   The get method will append the names of the form elements and their values to the URL. The post method will send the names and values of the form elements as packets.

Action

The action attribute identifies the server side program or script that will process the form. The action will be the name of a Common Gateway Interface (CGI)
General Format of <form> tag

```
<Form method=get/post action=
        "back_end_server_script"> Form elements
</Form>
```

Form Controls:

In HTML, there are different types of form controls are used to collect data. They are Text box, Password, Checkbox, Radio buttons, Text area, Select box, Submit and Reset Button.

<Input> Tag

Most of the form controls are created by using <input> tag. The <input> is an empty tag used to create different form elements or controls such as text box, radio buttons so on.

Attributes of <input> tag:

Type: This attribute is used define the type of control to be created by <input> tag. The values of type attribute are Text box, Password, Checkbox, Radio buttons, Text area, Select box, Submit and Reset Button.

Name: This attribute of <input> tag is used to assign a name to the input controls. The data values are passed to the server along with the names of the controls.

Value: This attribute is used to define default value to some controls.

Size: This is used to set the width of the input text in terms of characters. It is applicable only for textbox and password boxes.

Maxlength: This attribute of <input> tag is used to set the length of the input character (number of characters to be inputted) to the textbox and password boxes.

13 CSS - Cascading Style Sheets
Part – II

Answer to the following questions (2 Marks):

1. What is the use of <style> tag?

A **style** tag is used to change the default characteristics of a particular tag in the entire web document wherever that tag is used.

The **<style>** tag controls the presentation styles of a particular HTML document. If you want to use a particular tag with the same style applied in one HTML document to another is not possible.

Thus, the <style> tags are called as **"Page-Level Styles"** or "**Internal Style sheets".**

2. What is CSS? Cascading Style Sheets (CSS)

☐ CSS is a style sheet language used for describing the formatting of a document written in HTML.

☐ You can control the font colour, font style, spacing between pages, columns size, border colour, background image or colour and various other effects in a web page.

3. Write the general format of linking CSS with HTML.

General format of <Link> tag

<Link rel = "stylesheet" type = "text/css" href = CSS_File_Name_with_Extension>

Attribute	Value	Description

href	URL	Specifies the location of the linked document
rel	stylesheet	Specifies the relationship between the current document and the linked document
type	*media_type*	Specifies the media type of the linked document

The "sizes" attribute is new in HTML5

4. What is Inline Style?

☐ Inline style is used to define style for a particular tag anywhere in an HTML doc.
☐ You can define styles for any tag within an HTML document.
☐ But it is applicable only on that line where it is defined

5. Write down general format of CSS declaration.

CSS – Style definition rules

The body of the style sheet consists of a series of rules.

Selector   **Declaration**
HTML Tag   **{ Properties : Values; }**

Part – III

Answer to the following questions (3 Marks):
1. What are the advantages of using CSS? Advantages of CSS

1. Maintainability -CSS are also defined and stored as separate files. So, the style and appearance of a web page can be dynamically changed and maintain with less effort.
2. Reusability - The styles defined in CSS can be reused in multiple HTML pages.
3. Easy to understand - The tags in web pages are well organized with style specifications and therefore it is easy to understand

2. Write a short note on rule of CSS.

CSS style declaration consists of two major parts; Selector and Declaration.
☐ The Selector refers an HTML tag in which you want to apply styles.
☐ The Declaration is a block of code contains style definition.
☐ It should be surrounded by curly braces.
☐ You can include any number of properties for each selector,
☐ The property name and its value should be separated by a colon.
☐ Each declaration should be terminated by a semicolon (;).

3. Write a CSS file to define text color and alignment to <p> tag.

Mystyle.css   -   CSS file

P

{

color:pink; Text-align : center;

}   NOTE: Save the css file with extension .css

4. Write a CSS file to define font type, style and size to <h1> tag.

Mystyle.css   -   CSS file

H1

{

Font-family : "Times New Roman"; Font-style : Italic; Font-size : 14px;

}   NOTE: Save the css file with extension .css

Part – IV

Answer to the following questions (5 Marks):
1. Write an HTML document to display the following paragraph as per the given description Using CSS: • Font Name : Cooper Black • Style : Bold Italics • Color : Blue "The State Institute of Education (SIE) was established in 1965 to provide for systematic study of problems relating to School Education under the administration of Directorate of School Education."

<html>
<head><title> CSS DOCUMENT</title>
<style>
P
{

Font-family: "**Cooper Black**"; Font-style: **Bold** ; Font-weight: **Italics**; Color: **Blue**;

}

</style>

<body>

<p>

The State Institute of Education (SIE) was established in 1965 to provide for systematic study of problems relating to School Education under the administration of Directorate of School Education.

</p>

</body>

</html>

2. List and explain the Font and text element properties and values used CSS

Formatting	Properties	Values	Example

Text Colour	Color	Predefined_Color_Name	P
			{
			color:pink;
			}
			H1
			{
			color : MediumSeaGreen;
			}

Text Alignment	Text-align	Center / Left / Right / Justify	P
			{
			Text-align : center;
			}

Font type	Font-family	Font_name	P { Font-family : "Times New Roman";

Font Style	Font-style	Normal / Italic	P
			{
			Font-family : "Times New Roman";
			Font-style : Italic;
			}

Formatting	Properties	Values	Example

Font Style (Bold)	Font-weight	Normal / Bold	P
			{
			Font-family : "Times New Roman";
			Font-style : Italic;
			Font-weight : bold;
			}

Font size	Font-size	Size in pixels	P
			{
			Font-family : "Times New Roman";
			Font-style : Italic;
			Font-size : 14px;
			}

Background Colour	Background Colour	Predefined_Color_Name	Body
			{
			background-color : violet;
			}

Border Colour	Border	Border thickness <space> border style <space>Predefined_borderColor_Name	H2 { border : 2px solid red; }

Background Image	Background-image	URL ("image name with extension")	Body
			{
			background-image : url ("Flower.gif");
			}

	Background-repeat	norepeat	Body
			{
			background-image : url ("Flower.gif");
			background-repeat : norepeat;
			}

	Background-position	Direction	Body
			{
			background-image : url ("Flower.gif");
			background-repeat : norepeat;
			background-position : right top;
			}

Paragraph Margin	Margin-top
	Margin-bottom
	Margin-left
	Margin-right
		Margin size in pixels	P
			{
			Margin-top : 50px;
			Margin-left : 50px;
			}

BOOK Question

Define internal and external style sheets?

Internal Style sheet or Page-Level Styles	External Style Sheets or Sitewide Style sheets
Its use the style to single page	Its use the same style to multiple pages
Define within the html doc	Separate style file (extension with .css)
Professional web developers do not use internal styles.	Professional web developers use external styles.
Separate tag is used - <style> tag	No Separate tag is used

Method of creating CSS style sheets Creating CSS style sheets:

- Open an empty notepad.
- Type the style properties and their values as given in the table given above.
- Save the file with extension .css

Define CSS Comments

you may need to put additional comments in your style sheet blocks. So, it is very easy to comment any part in style sheet.

You can simply put your comments inside /*.....this is a comment in style sheet.....*/.

14 Introduction to Javascript
Part-II

Answer to the following questions (2 Marks):

1. Write a syntax of <script> tag

The syntax of JavaScript segment in Hyper Text Markup Language (HTML) or Dynamic Hyper Text Markup Language (DHTML) is as follows:

<script language="javascript" type="text/javascript"> JavaScript code
</script>

2. What is scope of variables and types of scope variable?

The scope of a variable is the life time of a variable of source code in which it is defined.

Global: A global variable has global scope; it can be defined everywhere in the JavaScript code.

Local: Variables declared within a function are defined only within the body of the function. They are local variables and have local scope.{ }

3. Write a notes to type casting in JavaScript

Type conversion is the act of converting one data type into a different data type which is also called as casting. In JavaScript there are two type of **casting,**

Implicit casting and **Explicit** casting

Implicit casting occurs automatically in JavaScript when you change the data stored in a variable

4. How many Literals in JavaScript and mention its types. Literals

- A literal is a fixed value given to a variable in source code.
- Literals are often used to initialize variables.
- Values may be Integer, Floating point, Character, String and Boolean. For Example,
    - var int_const=250; //**Integer constant**//
    - var float_const=250.85; //**Floating point constant**//
    - var char_const='A'; //**Character constant**//
    - var string_const="Raman"; //**String constant**//
    - var boolean_const=true; //**Boolean constant**// **write**

statement: Display Statement

General Syntax: Document.write ("string " + var);

5. What is conditional operator give suitable example.

The ?: is the conditional operator in JavaScript, which requires three operands, hence it is called the ternary operator.

The syntax is   **var   variablename=(condition) ? value1 : value2;**

For example,   var result=(10>15) ?100 :150;

6. What are the comments in Java Script?

There are two types of comments, **Single line** and **Multiple lines** comments.

Single-line comments begin with a double slash (//), causing the interpreter to ignore everything from that point to the end of the line.

Multiple line comments begins with /* and ends with */.

7. Write note on typesof Operator. returns the data type

- ☐ The **typeof** operator is used to get the data type (returns a string) of its operand.
- ☐ The operand can be either a literal or a data structure such as a variable, a function, or an object.
- ☐ The operator returns the data type.
        Syntax: **typeof operand   or   typeof(operand)**
- ☐ typeof returns: boolean, function, number, string, and undefined

8. Write the role of variable in JavaScript.

- The first character must be a letter or an underscore (_). Number cannot be as the first character.
- The rest of the variable name can include any letter, any number, or the underscore. JavaScript variable names are case sensitive. That is,

    a variable named **RegNum** is different variable than named **regnum.**
- There is no limit to the length of the variable name.
- JavaScript's reserved words cannot be used as a variable name.

9. What is the uses of prompt dialog box?

The prompt dialog box is very useful when the user want to pop-up a text box to get user input. It enables you to interact with the user.

The user needs to fill in the text box field and then click OK.

Part-III Answer to

the following question (3 Marks):

1. What are the advantages of programming language?

- To develop such **interactive** pages (Dynamic Web page) JavaScript programming language is used.
- User entered data in the Dynamic Web page can be **validated** before sending it to the server.
- This **saves** server traffic, which means **less load** on your server.
- JavaScript includes such items as Textboxes, Buttons, drag-and-drop etc, to give a Rich Interface to site visitors.

2. Brief the basic data types in Java Scripts.

The basic data types in JavaScript are Strings, Numbers, and Booleans.

String:

- string is a list of characters

- a string literal is indicated by enclosing the characters in single(single character) or double quotes (multiple characters).
- including whitespace and special characters such as **\n** (the newline).

Numbers:

- **Number** can be integer or floating-point numerical value and numeric literals are specified in the natural way.

Boolean

- **Boolean** can be any one of two values: **true** or **false**.
- Boolean literals are indicated by using true or false directly in the source code.

3. Write note on string Operator.

- One of the built-in features of JavaScript is the ability to concatenate strings.
- The + operator performs addition on numbers but also serves as the concatenation operator for strings.
- + operator which is also called as the string concatenation operator

4. Write about <script> tag

☐ JavaScript can be implemented using <script>... </script> tags.

☐ The <script> tag containing JavaScript can be placed anywhere within in the web page, but it is normally recommended that should be kept it within the <head> tags.

☐ The <script> tag alerts the browser program to start interpreting all the text between these tags as a script commands

The syntax of JavaScript segment in Hyper Text Markup Language (**HTML**) or Dynamic Hyper Text Markup Language (**DHTML**) is as follows:

<script language="javascript" type="text/javascript"> JavaScript code

</script>

The <SCRIPT> tag takes **two** important attributes −

Language − This attribute specifies that the scripting language. Typically, its value will be **javascript**. Although recent versions of HTML (EXtensible HyperText Markup Language - XHTML, its successor) have phased out the use of this attribute is optional.

Type − This attribute is used to indicate the scripting language and its value should be set to "text/javascript".

5. What are the uses of Logical Operators?

- Logical operators combine or invert boolean values.
- Once comparisons are made, the logical operators && (AND), || (OR) and ! (NOT) can be used to create more complex conditions.Use logical operators on boolean operands for good practice.

6. Difference between the increment and Decrement operator.

Increment operator	Decrement operator
The ++ operator increments its single operand.	The -- operator decrements its single operand
Its converts its operand to a number, adds 1 to that number, and assigns the incremented value back into the Operand	Its converts its operand to a number, subtracts 1 to that number, and assigns the decremented value back into the operand
Post increment: var m=3, n=m++; Pre increment: var m=3, n=++;	Post decrement: var m=3, n=m--; Pre decrement: var m=3, n=m--;

Part –IV Answer

to the following questions (5 Marks):

1. Explain about the popup dialog boxes in JavaScript.

JavaScript supports three kind of popup boxes: 1. Alert box 2. Confirm box 3.Prompt box. These dialog boxes can be used to raise an alert, or to get confirmation on any input or to have a kind of input from the users.

1. Alert Dialog Box:

An **alert dialog box** is mostly used to give a warning message to the users.

For example, Some fields are incomplete in form, then as a part of validation, you can use an alert box to give a warning message.

Alert box gives only one button **"OK"** to select and proceed.

The syntax of alert box is

Alert("Message"); (or)   Window.alert("Message");

Example:

alert("Name is compulsory entry"); (or) window.alert("Name is compulsory entry");

2. Confirm Dialog Box:

A confirmation dialog box is mostly used to take user's consent on any

option. It displays a dialog box with two buttons: **OK** and **Cancel**.

If the user clicks on the **OK** button, the confirm() will return **true**.

If the user clicks on the **Cancel** button, then confirm() returns **false**.

The syntax of confirm dialog box is confirm("message"); (or)

window.confirm("message"); **Example**:

confirm("Do you want to continue:"); (or)   window.confirm("Do you want to continue:");

3. Prompt Dialog Box:

The prompt dialog box is very useful when the user want to pop-up a text box to get user

input. Thus, it enables you to **interact** with the user.

The user needs to fill in the text box field and then click OK.

The prompt dialog box is displayed using a method called prompt() which takes two

parameters:

(i) a **label** which you want to display in the text box and

(ii) a **default** string to display in the text box.

This dialog box has **two** buttons:

OK and Cancel.

If the user clicks the **OK** button, it will return the entered value from the text

box. If the user clicks the **Cancel** button, it returns null.

The Syntax of prompt dialog box is,

Prompt("Message","defaultValue"); (or) window.prompt("sometext","defaultText"); Example:

prompt("Enter Your Name:","Name"); **(or)** window.prompt("Enter Your Name:","Name");

2. Explain about the Arithmetic operator with suitable example.

JavaScript supports all the basic arithmetic operators like addition (+), subtraction (−), multiplication (*), division (/), and modulus (%, also known as the remainder operator).

Arithmetic Operator	Meaning	Example	Result
+	Addition	var sum = 20 + 120	Variable sum = 140

-	Subtraction	var diff = 20 – 120	Variable diff = 100
*	Multiplication	var prod = 10 * 100	Variable prod = 1000
/	Division	var res = 100/522	Variable res = 5.22
%	Modulus operator	var rem = 100 % 522	Variable rem = 22 (remainder)

Example:

<Html>

<Head>

<Title>Demo Program – To test Arithmetic Operators in JavaScript </Title>

</Head>

<Body>

<script language="javascript" type="text/javascript">

var value1 = 522, value2=10;

document.write("
Data1 : "+value1);

document.write("
Data2 : "+value2);

document.write("

The Sum of Data1 and Data2 : " var sum = value1+value2);

document.write("
The Difference of Data1 and Data2 : " var diff = value1-value2);

document.write("
The Product of Data1 and Data2 : " var prod = value1*value2);

document.write("
The Result after Division of Data1 and Data2 : "var res =

value1/value2);

```
document.write("<br>The Remainder after Division of Data1 and Data2 : "var rem =
value1%value2);
</script>
</Body>
</Html>
```

Book Question

Define JavaScript?

☐ It provides a common scripting language for Web developers to design, test and deploy Internet Applications.

☐ On December 4, 1995, Netscape and Sun Inc.

☐ jointly introduced JavaScript **1.0**. JavaScript had truly bridged the gap between the simple world of HTML and the more complex Common Gateway Interface (**CGI**) programs on the Server.

☐ The JavaScript **client-side** technology provides many advantages over traditional CGI **Server-side** scripts.

List out the types of Operator.

Arithmetic Operators   Assignment

Operator Relational or Comparison Operators   Logical

Operators

String Operators (string concatenation)   Increment and Decrement

Operators Unary + and – Operator   typeof Operator

Conditional Operator(?:)

Define Interpreter in JavaScript?

- In JavaScript the source code are understand by a program name interpreter
- Its used to convert the code into understandable

form **Write down the Steps to create JavaScript**

Language Enter HTML and JavaScript code using any

text editor.

- Save the latest version of this code.
- Use any browser to see the result. For example : Internet Explorer, Google Crome, etc.,
- Open the file via browser's Open Menu.
- If the document is already loaded in the Memory, to reload the file into the browser use "Refresh" or press F5 button.

Define Variable.

- Variable is a memory location where value can be stored.
- Variable is a symbolic name for a value.
- Variables are declared with the var keyword in JavaScript.

- Every variable has a name, called identifier.
- multiple variables can be declared with one var statement, if the variables are separated by commas
- JavaScript allows the implicit declaration of variables by using them on the left-hand side of an assignment

Define Operators And Expression

Operator: An operator combines the values of its operands in some way and evaluates to a new value. Operators are used for JavaScript's arithmetic expressions, comparison expressions, logical expressions, assignment expressions.

Expression: An expression is a code fragment that can be evaluated to some data type the language supports. An expression is simply one or more variables and/or constants joined by operators.

There are three types of expressions

1. Arithmetic expressions   2.Relational expressions   3.Logical expressions

Explain assignment operator(=)

An assignment operator is the operator used to assign a new value to a variable.   Page

Assignment operator can also be used for logical operations such as bitwise logical

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operations or operations on integral operands and Boolean operands.

In JavaScript = is an assignment operator, Assign value from "right to left"

Example: var number1=10;

The assignment operator is used to assign a value to a single variable, but it is possible to perform multiple assignments at once by stringing them together with the = operator **Example**: var b=c=8; value 8 is assign to c and value of c is assign to b

JavaScript supports some shorthand arithmetic operators like +=, -=, *=, /= and %= to evaluate arithmetic calculations. (**Compound Assignment Operator**)

Shorthand Arithmetic Operator	Meaning	Example	Result
+=	Add and assign	var sum = 120; sum += 20;	Variable sum = 140
-=	Subtract and assign	var diff = 120; diff –= 20;	Variable diff = 100
*=	Multiply and assign	var prod = 100; prod *=10;	Variable prod = 1000
/=	Division	Var res = 522; Res/=100	Variable res = 5.22
%=	Modulus operator	Var rem = 522; rem %= 100	Variable rem = 22 (remainder)

Explain Relational or Comparison Operators?

Relational operators are also called as Comparison operators, they compares two values and the result is true or false.

JavaScript provides a rich set of relational operators.

Using a relational operator in an expression causes the expression to evaluate as true if the condition holds or false if otherwise.

Relational Operator	Meaning	Example	Result
Assume x=10 and y=20			
==	Equality	x==y	False
!=	In-equality	x!=y	True
<	Less-than	x<y	True
>	Greater-than	x>y	False
<=	Less-than or equal to	x<=y	True
>=	Greater-than or equal to	x>=y	False

Explain Logical Operators?

Logical operators perform logical (boolean) operations. Logical operators combine or invert boolean values.

used to create more complex conditions.

Logical Operator	Example & Syantax	Meaning	Result
&&	((4>5(&&)10<5)) ((expr1) && (expr2))	(**Logical AND**) Returns true if expr1 and expr2 both true.	True
||	((4>5(||)10<5)) ((expr1) || (expr2))	(**Logical OR**) Returns true if either expr1 or expr2 is true, or both are true.	True
!	!(10<5) !(expr1)	(**Logical NOT**) Returns true if expr1 is false; otherwise, returns false.	False

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Usage :

Best practice is to use logical operators on **boolean** operands. However, operands of

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any type can be combined. The strict rules are as follows:

☐ For && (AND) the result is false if the first operand is false; otherwise, the result is the Boolean value of the second operand.

☐ For || (OR) the result is true if the first operand is true; otherwise, the result is the Boolean value of the second operand.

☐ For ! (NOT) the result is true if the operand is false; otherwise, the result is true.

Define Unary + and – Operator?

+ has no effect on numbers but causes non-numbers to be converted into numbers

Note: if the value is in string convert it into number

– **Negation** (changes the **sign** of the number or **converts** the expression to a number and then changes its sign)

Note: if the value is opposite change to negative and if value is in string convert it into integer and change the sign

Define Lexical Structure?

☐ The lexical structure of a programming language is the **set of elementary** rules that specifies how to write programs in that language.

☐ It is the lowest-level syntax of a language.

☐ Lexical structure specifies variable names, the **delimiter** characters for comments, and how one program statement is separated from the next.

There are

☐ Though JavaScript is a **case-sensitive** language. It is **good** programming practice to type the command in lowercase.

☐ JavaScript ignores **spaces** that appear between tokens (identifiers, operators, punctuator, constants and keywords) in programs.

• JavaScript supports **two** styles of comments. Any text follow a "//" and the end of a line is treated as a single line comment and is ignored by JavaScript. Any text between the characters " /* */" is also treated as a multiline comment.

☐ JavaScript uses the **semicolon** (;) to separate statements. Many JavaScript programmers use semicolons to **explicitly** mark the ends of statements.

☐ A **literal** is a data value for variable that appears directly in a program.

☐ An identifier is simply a **name**. In JavaScript, identifiers are used to name variables, functions and to provide labels for certain loops in JavaScript code.

☐ In JavaScript certain **keywords** are used as reserved words, These words cannot used as identifiers in the programs

15 Control Structure in JavaScript

P

art - II Answer to the following questions

(2 Marks):

1. What are the different types of control statement used in JavaScript?

There are **two** types of controls,

1. Branching / Selection   2. Looping / repetitive

2. What is meant by conditional statements in JavaScript?

Statements are executed in the order they are found in a script.

Conditional statements execute or skip one or set of statements depending on the value of a specified conditional expression.

3. List out the various branching statements in JavaScript?

There are different branching statements. They are,

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if statement   (Single way branch)   **if … else** statement (Two way branch)

switch statement (Multi way branch)   **else if** statement (Two way branch)

4. Write the general syntax for switch statement

switch(expression)

{

case label1:	statements1;	break;
case label2:	statements2;	break;
case labeln;	statements - N;	break; default: (optional)

statements;

}

5. Differentiate the break and continue statement.

break statement	continue statement
The break statement will terminate the loop Early	The continue statement will skip back to the loop condition check.
JavaScript also supports statements used to modify flow control	

Part

- III Answer to the following questions (3 Marks):

1. What is if statement and write its types.

The if statement is the fundamental control statement that allows JavaScript to make decisions to execute statements conditionally.

This statement has two forms. The form is for only true condition.

The syntax is   Types of if statement

if (condition)   if else statement

{   else if statement

True block;   nested if statement

}

2. Write the syntax for else-if statement.

if (Condition 1)

{   block

1;   } else

if

(condition

2)

{   block

2;   } else

if

(condition

3)

{   Page

    blo

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ck 3;   } else
{   block 4;   }

3. What is called a loop and what are its types?

In JavaScript there are times when the same portion of code needs to be executed many times with slightly different values is called Loops. . JavaScript supports three kinds of looping statements. Main three types
They are **for** loop ,**while** loop and **do..while** loop
Two categories are entry check and exit check

4. Differentiate between while and do while statements

while statements	do while statements
first condition will be evaluated and then only based on the result of the condition the body of the loop will be executed or not	do..while loop body of the loop always executed at least once before the condition can be executed
Entry check loop	Exit check loop
Checking and execution time of loop is differ in while loop	Checking and execution time of loop is same in do while loop

5. What message will be displayed, if the input for age is given as 20, for the following snippet.

Message will be display like
you are eligible to get Driving licence

Part - IV Answer to the following questions (5 Marks):

1. Explain for loop with example

* The **for** loop is a very rigid structure that loops for a pre-set number of times.
* In JavaScript **for** structure is very flexible, which makes this type is very useful!.

The syntax.

for(initialization; condition; increment/decrement)
{
Body of the loop;
}

The for structure within parenthesis there are **three** parts each separated by **semicolon ;**. They are,

* The **first** part of the loop initialize a variable which is also called as **control** variable.
* The **second** part is the conditional statement that determines how many times the loop will be iterated (executed).
* The **third** and final part determines how the value of control variable is changed (Incremented/Decremented)

Example:

```
for (var x=0;x<3;x++)
{   document.write(x+  "<br>");   }
```

2. Explain switch case statement with example

* JavaScripts offers the **switch** statement as an alternate to using **if...else** structure.
* The switch statement is especially useful when testing all the possible results of an expression.

The syntax of a switch structure as the following:

switch(expression)
{

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```
case label1:        statements1;              break;
case label2:        statements2;              break;
case labeln;        statements - N;           break; default: (optional)
statements;
}
```

The **default** structure is can be at the end of a switch structure if the result of the expression that do not match any of the case labels.

**Ex
am
ple
:**
var
ch
=2
;
sw
itc
h(c
h)
{
```
case 1:      document.write("Your  Grade  is  Outstanding..");
break; case 2:                                    document.write("Your Grade is l
default:     document.write("Your Grade Poor and have to re-appear  Exam..");
}
```

**3. Write the output for the following
program Output:**
Multiplication for your need
5x0=0
5x1=5
5x2=10
5x3=15
5x4=20
5x5=25
5x6=30
5x7=35
5x8=40
5x9=45
5x10=50
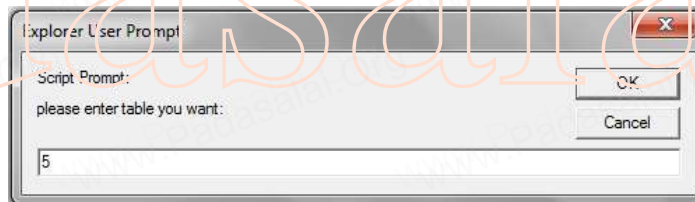
4. Write a Java Script program using while statement to display 10 numbers.
```
<Html>
<Head>      <Title>Program - To test while statement in JavaScript </Title> </Head>
<Body>
<script language="javascript"
type="text/javascript">
document.write("<h2>Using while Statement
</h2>"); var no2=0;
while(no2<10)                           OUTPUT:
```

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```
{  0 1 2 3 4 5 6 7 8 9
document.write(n
o2+" ");
no2=no2+1;
}
</script>
</Body>
</Html>
```

Explain Branching Statements with types
JavaScript supports branching statements which are used to perform different actions based on different conditions.
Branching is a transfer of control from the current statement to another statement or construct in the program unit.
A branch alters the execution sequence

16 JavaScript Functions

Part-II Answer to the following questions (2 Marks):

1. What is a function in JavaScript?
A function is a block of JavaScript code that is defined once but may be executed or invoked any number of times. Functions are used to encapsulate code that performs a specific task.

2. What is the use of function?
Function is used to keep code that performs a particular job in one place in order to enhance **reusability** and **program clarity**.

3. Write a note on Library functions.
Pre-defined functions are already defined in the JavaScript library which are also called Library functions. For example toUpperCase(), toLowerCase() etc., are pre-defined functions.

4. Write a note on user defined functions.
User-defined functions allow the programmer to modularize a program. This eliminates the need of writing the same code again and again.

5. Write the syntax of functions.
Function function-name(parameters list)

{
Function Body ;
}   **Note**: Function body include Declaration of variable and Executable statements.

Part III

Answer to the following questions (3 Marks):

1. Write a program in JavaScript to find the cube of a number using function

```
<html>
<body>
<script language="javascript"
type="text/javascript"> var n=prompt("enter
```

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```
value:","0");
var c=cube(n);
document.writeln("the value is "+n+" the cube of given value is
"+c); function cube(x)
{
var c=x*x*x; return c;
}
</script>
</body>
</html>
```

2. Write a program in JavaScript to find the sum of 10 numbers using function.

```
<html>
<head>
<title>Javascript</title>
<script language="javascript"
type="text/javascript"> var
n=9,sum=0,tot=add(n);
function add(j)
{
        for (var i = 0; i <= j; i++)
        {   sum +=
        i;  } return
        sum;
} document.write("result"+sum);
</script>
</head>
<body>
</body>
</html>
```

Function	Description	Example	Result
toUpperCase()	Used to convert given string into uppercase	x="java" x.toUpperCase();	JAVA
toLowerCase()	Used to convert given string into lowercase	x="JAVA" x.toLowerCase();	java
Note: If first character of the string is not a Number then it returns **NaN**			
Length()	Used to find length of the given string	x="JAVA" x.length();	4
parseInt()	Used to convert the given float value into an integer	parseInt(34.234);	34
parseFloat()	the string and convert it into a floating point	parseFloat("34.23");	34.23
getElementById()	Method returns the element that has the ID attribute with the specified value.	getElementById("my Quiz")	Page
Note: **elements[0]** indicates the first option given in the question			

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Define isNan()? means (is Not A Number)

The isNaN() function is used to check whether the given value or variable is valid number. This function returns true if the given value is not a number.

For example isNaN("12"), isNaN("A").

17 COMPUTER ETHICS AND CYBER SECURITY

Part II

Answer to the following questions (2 Marks):

1. What is harvesting?

A person or program collects login and password information from a legitimate user to illegally gain access to others' account(s).

2. What are Warez?

Commercial programs that are made available to the public illegally are often called warez.

3. Write a short note on cracking.

Cracking is where someone edits a program source so that the code can be exploited or modified. A cracker (also called a black hat or dark side hacker) is a malicious or criminal hacker.

4. Write two types of cyber attacks.

Malware is a type of software designed through which the criminals gain illegal access to software and cause damage.
Types: 1. Virus, 2.Worms, 3.Spyware, 4. Ransomware

5. What is a Cookie?

A cookie is a small piece of data sent from a website and stored on the user's computer memory (Hard drive) by the user's web browser while the user is browsing internet.

Type of cookies: HTTP cookie, web cookie, Internet cookie, browser cookie, or simply cookie

Part III

Answer to the following questions (3 Marks):

1. What is the role of firewalls?(layered security)

Firewalls also vary in type depending on where communication originates, where it is intercepted, and the state of communication being traced.

2. Write about encryption and decryption.

Encryption and decryption are processes that ensure confidentiality that only authorized persons can access the information.

Encryption is the process of translating the plain text data (plaintext) into random and mangled data (called cipher-text).

Decryption reverse process of converting the cipher-text back to plaintext.
Encryption and decryption are done by cryptography

3. Explain symmetric key encryption.

Symmetric encryption is a technique to use the same key for both encryption and decryption.

(Secret key)To exchange the key used to encrypt the data before they can decrypt it

4. What are the guidelines to be followed by any computer user?

- **Honesty**: Users should be truthful while using the internet.
- **Confidentiality**: Users should not share any important information with unauthorized people.
- **Respect**: Each user should respect the privacy of other users.
- **Professionalism:** Each user should maintain professional conduct.
- **Obey The Law:** Users should strictly obey the cyber law in computer usage.
- **Responsibility:** Each user should take ownership and responsibility for their actions

5. What are ethical issues? Name some.

An Ethical issue is a problem or issue that requires a person or organization to choose between alternatives that must be evaluated as right (ethical) or wrong (unethical).

These issues must be addressed and resolved to have a positive influence in society.

Some of the common ethical issues are listed below:

Cyber crime	Use of computers to commit fraud
Software Piracy	Sabotage in the form of viruses
Unauthorized Access	Making false claims using computers
Hacking	

Part IV

Answer to the following questions (5 Marks):

1. What are the various crimes happening using computer?

Crime	Function
Crime Function	Hacking, threats, and blackmailing towards a business or a person.
Cyber stalking	Harassing through online.
Malware	Malicious programs that can perform a variety of functions including stealing, encrypting or deleting sensitive data, monitoring user's computer activity without their permission.
Denial of service attack	Overloading a system with fake requests so that it cannot serve normal legitimate requests.

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Fraud	Manipulating data, for example changing the banking records to transfer money to an unauthorized account.
Harvesting	A person or program collects login and password information from a legitimate user to illegally gain access to others' account(s).
Identity theft	It is a crime where the criminals impersonate individuals, usually for financial gain.
Intellectual property theft	Stealing practical or conceptual information developed by another person or company.
Salami slicing	Stealing tiny amounts of money from each transaction.
Scam	Tricking people into believing something that is not true.
Spam	Distribute unwanted e-mail to a large number of internet users.
Spoofing	It is a malicious practice in which communication is send from unknown source disguised as a source known to the receiver.

It may look like a legitimate e-mail from bank or other official institution.

Chat(**IRC**) or by Instant messenger. e-mail can also be a source for them.

They may send official e-mail requesting some sensitive information

2. What is piracy? Mention the types of piracy?

How can it be prevented

Software Piracy is about the copyright violation of software created originally by an individual or an institution.

Software Piracy is "unauthorized copying of software"

S No	Type of Piracy	Function
1	Unauthorized access	Unauthorized access is when someone gains access to a website, program, server, service, or other system by breaking into a legitimate user account.
2	Hacking	Hacking is gaining unauthorized access to s computer system without the owner's permission.
3	Cracking	Cracking is gaining unauthorized access to computer systems to commit a crime, such as stealing the code to make a copy-protected program run thus denying service to legitimate users.

Prevented Action:

To pretend being your friend and talk to you on Internet Relay

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3. Write the different types of cyber attacks

S. No	Cyber Attack	Function
1.	Virus	A virus is a small piece of computer code that can repeat itself and spreads from one computer to another by attaching itself to another computer file. **Trojan:** A Trojan virus is a program that appears to perform one function (for example, virus removal) but actually performs malicious activity when executed.
2.	Worms	Worms are **self- repeating** and do not require a computer program to attach themselves. Worms continually look for vulnerabilities and report back to the author of the worm when weaknesses are discovered.
3.	Spyware	Spyware can be installed on the computer automatically when the attachments are open, by clicking on links or by downloading infected software.
4.	Ransom ware	Ransomware is a type of malicious program that demands payment after launching a cyber-attack on a computer system. This type of malware has become increasingly popular among criminals and costs the organizations millions each year.

Book Inside Question

What is Cryptography?

Cryptography a key is a piece of information (parameter) that determines the functional output of a cryptographic algorithm. Encryption and decryption are done by cryptography

Write TYPES OF ENCRYPTION

There are two types of encryption schemes as listed below:
1. Symmetric Key encryption   2. Public Key encryption

PUBLIC KEY ENCRYPTION Or ASYMMETRIC ENCRYPTION

Public key encryption is also called Asymmetric encryption. It uses the concept of a key value pair, a different key is used for the encryption and decryption process. One of the keys is typically known as the private key and the other is known as the public key.

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Define Asymmetric Encryption in Digital Certificates:

- A digital certificate in a client-server model of communication is one of the example of Asymmetric Encryption.
- A certificate is a package of information that identifies a user and a server.
- It contains information such as an organization's name, the organization that issued the certificate, the users' email address and country, and user's public key.

What is Digital Signature

Digital signatures are based on asymmetric cryptography and can provide assurances of evidence to origin, identity and status of an electronic document, transaction or message, as well as acknowledging informed by the signer

Define Ethics

Ethics is a set of moral principles that govern the behavior of an individual in a society, and Computer ethics is set of moral principles that regulate the use of computers by users.

Define CYBER CRIME

Cybercrime is an intellectual, white-collar crime. Those who commit such crimes generally manipulate the computer system in an intelligent manner.

Explain some Computer crimes and their functions

Cyber crime	Function
Hacking	Hacking is gaining unauthorized access to s computer system without the owner's permission.
Cracking	Cracking is gaining unauthorized access to computer systems to commit a crime, such as stealing the code to make a copy-protected program run thus denying service to legitimate users.
Malicious	Intentionally doing harm.
Freeware	Freeware is a software available free of charge.
Shareware	Shareware is a software that is distributed free of charge on a trial basis for a limited time.
Phishing	Phishing is a term used to describe a malicious individual or group of individuals who scam users by sending e-mails or creating web pages that are designed to collect an individual's online bank, credit card, or other login information.

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What is SOFTWARE PIRACY

Software Piracy is about the copyright violation of software created originally by an individual or an institution.

Software Piracy is the copyright violation of software created originally by one person and illegally used by someone else.

Software Piracy is "unauthorized copying of software"

Explain MITM(Man In The Middle)

Man-in-the-middle attack (MITM; also Janus attack) is an attack where the attacker secretly relays and possibly alters the communication between two parties who believe they are directly communicating with each other.

Explain Firewall?

- A firewall is a computer network security based system that monitors and controls incoming and outgoing network traffic based on predefined security rules.
- A firewall commonly establishes a block between a trusted internal computer network and entrusted computer outside the network.
- They are generally categorized as network-based or host-based.
- **Network based firewalls** are positioned on the gateway computers of LANs [**local area Network**], WANs [**Wide Area Network**] and intranets. Host-based firewalls are positioned on the network node itself.
- **The host-based firewall** may be a service as a part of the operating system or an agent application such as endpoint **security** or **protection**.
- Each has a role in **layered security**. Firewalls also vary in type depending on where communication originates, where it is intercepted, and the state of communication being traced.

Define proxy server

A proxy server is a gateway between a local network and a larger-scale network such as the Internet. Proxy servers provide increased performance and security.

What is use cookies?

•To collect demographic information about who has visited the Web site.
• Sites often use this information to track how often visitors come to the site and how long they remain on the site.
• It helps to personalize the user's experience on the Web site.
• Cookies can help store personal information about users so that

when a user subsequently returns to the site, a more personalized
experience is provided.

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How to PREVENTION

25% of cyber crime remains unsolved. To protect the information the following points to be noted:

- Complex password setting can make your surfing secured.
- When the internet is not in use, disconnect it.
- Do NOT open spam mail or emails that have an unfamiliar sender.
- When using anti-virus software, keep it up-to-date.

India Cyber law and IT Act 2000

- IT Act 2000 is an act to provide legal recognition for transactions carried out by means of ElectronicData Interchange(EDI) and other means of electronic communication.
- It is the primary law in India dealing with cybercrime and electronic commerce(e-Commerce). e-Commerce is electronic data exchange or electronic filing of information.
- "Cyber law or Internet law" is a term that encapsulates the legal issues related to use of the Internet.
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What are called Fraudulent

Dishonest, cheating. swindling, corrupt, criminal, illegal, unlawful.

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