Computer Science

For Class –10th

Punjab School Education Board

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ਇਹ ਪੁਸਤਕ ਵਿਕਰੀ ਲਈ ਨਹੀਂ ਹੈ।

PREFACE

Punjab School Education Board has been updating the school level syllabi compatible with modern approach and latest research. The board has also launched a special drive to prepare new text books as per latest national policies in this regard. The present book is a part of the prestigious program.

The knowledge in the subject of computer science is the need of the hour because its study is essential for enhancement of efficient usage of science and technology in every field of modern ere. Computerization of every department is done to keep it updated in light of all round development of information technology and communication. The knowledge of computer education is necessary for everyone to avail the latest information about different departments, e-ticketing and usage of internet.

Keeping in view of these requirements Punjab School Education Board has introduced computer science as a compulsory subject at Secondary and Senior Secondary levels as per guidelines of Punjab Government. This subject is already taught by PICTES in Government Schools. Every effort has been made to include each requisite information regarding the subject in this book. I hope it will be useful for students and teachers.

All suggestions for the improvement of the book will be highly appreciated.

Chairman
Punjab School Education Board

'ਸਮਾਜਿਕ ਨਿਆਂ, ਅਧਿਕਾਰਤਾ ਅਤੇ ਘੱਟ ਗਿਣਤੀ ਵਿਭਾਗਾ' ਪੰਜਾਬ।

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OFFICE TOOLS

Introduction:

As we all know that hardware and software work together to accomplish a task. Computer software is classified into two broad categories: system software and application software.

System Software: System software consists of a group of programs that control the operations of a computer equipment including functions like managing memory, managing peripherals, loading, storing, and is an interface between the application programs and the computer. MS DOS (Microsoft Disk Operating System), UNIX are examples of system software.

Application software: Software that can perform a specific task for the user, such as word processing, accounting, budgeting or payroll, fall under the category of application software.

1.1 Introduction to office tools:

Office tools are software programs designed to make computer users more productive and efficient at their workplace. Office productivity tools range from word processing to spreadsheet, presentation and database etc.

Office Productivity tool is a category of application programs that help users produce things such as documents, databases, graphs, worksheets and presentations. Many productivity applications are intended for business use. Examples of office productivity software include word processors, database management systems, graphics softwares and spreadsheet applications.

1.1.1 Types of office tools are:

- **Word processing tool:** The main purpose of this tool is to produce documents. MS-Word, Word Pad, Notepad and some other text editors are some of the examples of word processing tools.

- **Database software tool:** Database is a collection of related data. The purpose of this tool is to organize and manage data. The advantage of this tool is that you can change the way data is stored and displayed. MS access, dBase, FoxPro, Paradox, and Oracle are some of the examples of database software.

- **Spread sheet tool:** The spread sheet tool is used to maintain budget, financial statements, and sales records. The purpose of this tool is organizing numbers. It also allows the users to perform simple or complex calculations on the numbers. MS-Excel is one of the examples of spreadsheet tools.

- **Presentation tool:** This tool is used to display the information in the form of slide show. The three main functions of presentation tool is editing that allows insertion and formatting of text, including graphics in the text and executing the slide shows. The best example for this type of tool is Microsoft PowerPoint.

- **Multimedia software:** Media players and real players are the examples of multimedia tool. This tool allows the user to create audio and videos. The different forms of multimedia tools are audio converters, players, burners, video encoders and decoders.

Note:

Productivity tools are increasingly available for mobile devices also. However, mobile productivity apps are generally for basic tasks like e-mail, note-taking and calendar functions, rather than more substantial tasks, such as word processing.

1.2 Using MS Word:

In previous classes we already have studied about various features of MS word such as creating, editing and formatting a document, inserting tables, pictures and editing them. We have also used the feature of mail merge, spell-check and thesaurus etc.

Microsoft Word can be used for the following purposes:

- To create business documents having various graphics including pictures, charts, and diagrams.

- To store and reuse readymade content and formatted elements such as cover pages and sidebars.

- To create letters and letterheads for personal and business purpose.

- To design different documents such as resumes or invitation cards etc.
- To create a range of correspondence from a simple office memo to legal copies and reference documents.

Formatting in MS – Word:

Here we will learn more about word in different manner. Before using word tool we must define and plan a document design. Planning a document design is vital to ensure the printed output of our document accomplishes our goal or not. Document design determine if the document orientation will be portrait (vertical) or landscape (horizontal), if the document will be formatted in single or multiple columns. A landscape document with two columns is the most readable and popular layout for an event program. It also determines if we will use any images or clip art.

1.2.1 Templates in Microsoft Word:

Word 2010 allows us to apply in-built templates from a wide selection of popular Word templates, including resumes, agendas, business cards, and faxes.
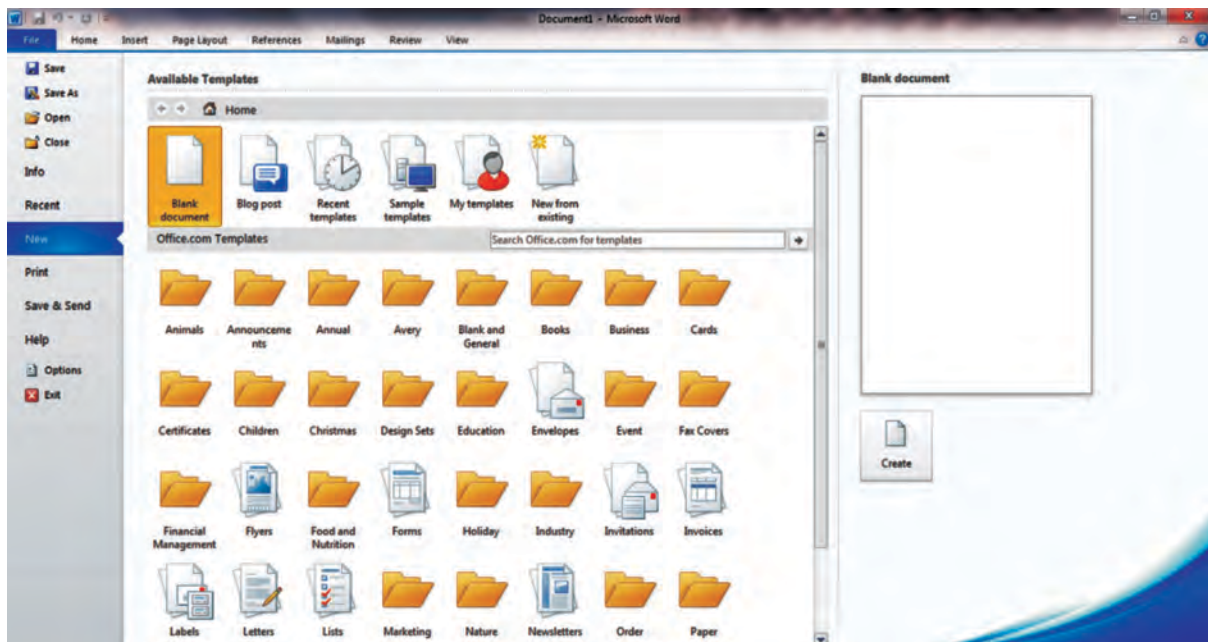

Fig: 1.1

To apply a template in Word, do the following:
1. On the File tab, click New.
2. Under Available Templates, select of the following:
- To use one of the in-built templates: Click Sample Templates click the template that we want, and then click Create.

- To reuse a template that we've recently used: Click Recent Templates, click the template that we want, and then click Create.
- To find a template on Office.com: under Office.com Templates, click the template category that we want, click the template that we want, and click download to download the template from Office.com to our computer.

3. Once we have selected our template we can modify it in any way to create the document we want.

Microsoft Word 2010 allows us to create and edit personal and business documents, such as letters, reports, invoices, emails and books. By default, documents saved in Word 2010 are saved with the .docx extension.

↘ Here are some Quick Tips:
1. Decide what we want to accomplish with our document.
2. Identify our users.
3. Identify the layout and design, file, format, and storage location.

1.2.1.1 Creating a resume with MS – Word templates

So far we have learnt about many features of MS –Word. Here we will create a resume with MS – Word. Follow the steps written below:
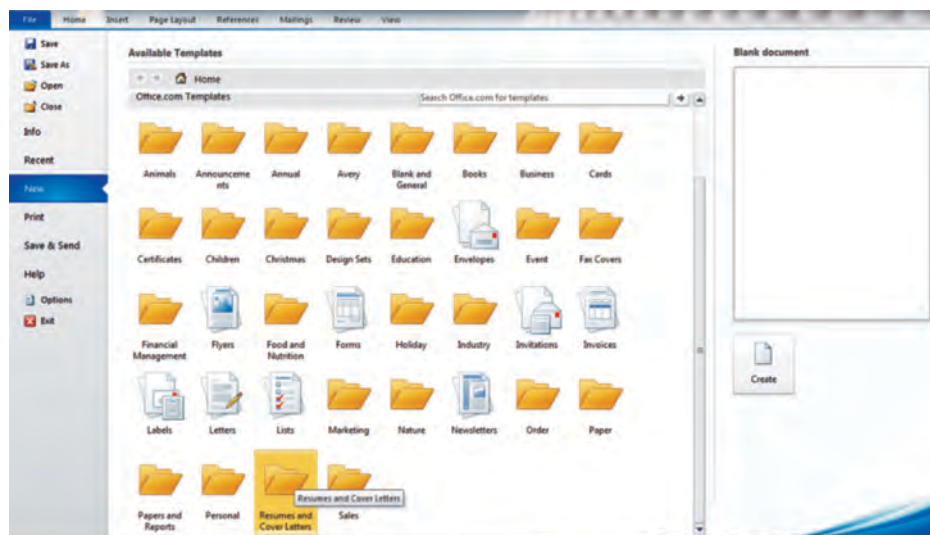1. Click on New option in File tab.

Fig: 1.2

2. In office.com templates, select Resumes and Cover Letters.
3. MS – Word will download the selected template from office.com templates.
4. Here various styles are available for Resumes and Cover Letters. Select any one according to the requirement and click Download.
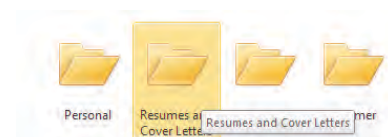5. Resume with selected template will appear.

Fig: 1.3

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Fig: 1.4

Fig: 1.5

6. Now we can edit it and can make the necessary changes in resume.
7. After filling all the required information in the resume, save it.

1.3 MS –Excel:

Like MS – Word we have already learnt so much about MS – Excel. We have used Excel for creating worksheets, tables, results, doing mathematical calculations and representing data in pictorial view with the help of charts. Excel is a spreadsheet program used to create and format workbooks. It helps us in analyzing data and making data more informative in order to take business decisions. Specifically, we can use Excel to track data, analyze data, write formulas to perform calculations on that data, pivot the data in numerous ways, and present data in a variety of professional looking charts.

As in MS – Word we have used templates to create resume, here we will learn about using templates in MS –Excel. Excel allows us to create a new workbook using a template, which is a predesigned spreadsheet. Several templates are preloaded in Excel, while others can be located on Office.com. A spreadsheet template is a predesigned spreadsheet which we can use to create new spreadsheets with the same formatting and predefined formulas. With templates, we don't need to know how to do the maths or even how to write formulas—these are already integrated into the spreadsheet.

1. Click the File tab and Select New. The Available Templates pane appears.
2. In Available templates, click Sample templates to choose a in-built template, or select an Office.com template category to

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download a template

1.3.1 Create a workbook using a template:

User can select the template according to the requirement. Here we will take different examples.

1.3.1.1 Sales invoice

In the similar way can use Sales invoice under Invoices. We can edit this invoice and enter data in this invoice to make calculations according to our requirement.

This invoice can be saved as a new workbook. We can place our company logo and edit date and invoice no. and other details in the invoice also. After entering the required data in this invoice it will calculate the total in Balance due cell.

Fig: 1.6

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1.4 Using mail merge with spreadsheet

As we have learnt many things about Word and Excel, let us try to do something new with these two tools.

1.4.1 Creating Student Annual Report

1. First of all, we should prepare the Annual report Format in Ms word. Here, in this we have mentioned student's detail like admission no, roll no, name, father's name, marks of each subject, overall result and percentage of marks of student.
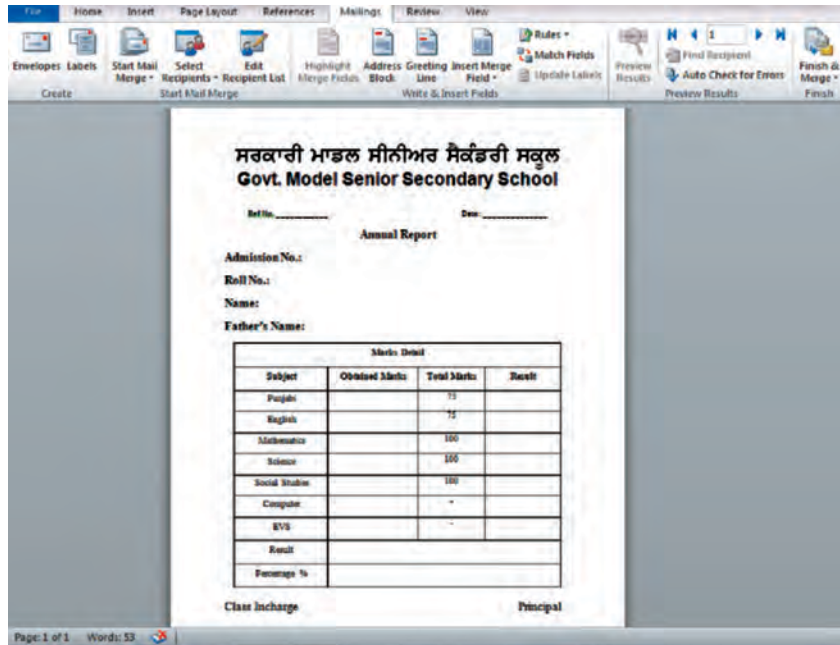

Fig: 1.7

2. On the other side, we have prepared an excel worksheet, in which student's admission no, roll no, name, father's name, subject-wise marks obtained in Punjabi, English, Maths, Science, Sst, and grades of EVS and Computer are filled.

Fig: 1.9

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- Here we calculate the total marks using Autosum function • of MS excel.

Fig: 1.9

- Next we calculate the percentage of marks of each student using a formula (=L3*100/450).

Fig: 1.10

- Next field shows the result of each student.

Fig: 1.11

- Now save this Excel sheet and continue in Ms-Word , where we have prepared the Student Annual Report.

3. Now, click on Mailings Tab, and start mail merge. Then, choose Letter option which we have already prepared.

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Fig: 1.12

4.   Next Click on Select Receipients and select Use Existing List option. Choose excel Sheet1$ from Select Table dialog box and click OK.
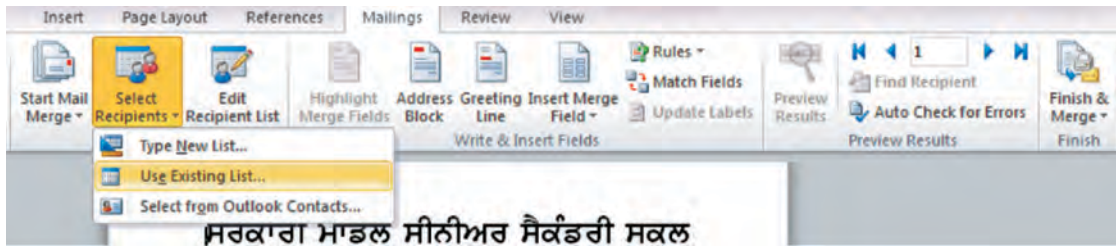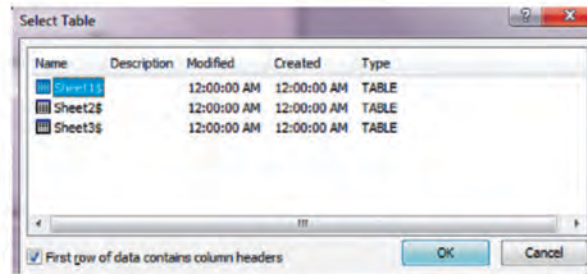

Fig: 1.13

Fig: 1.14

5.   We should place our cursor where we want to insert the value of field from excel sheet. Now go to Insert Merge Field option in Write & Insert Fields group. A drop down menu will be displayed having field names according to excel worksheet we have selected

Fig: 1.15
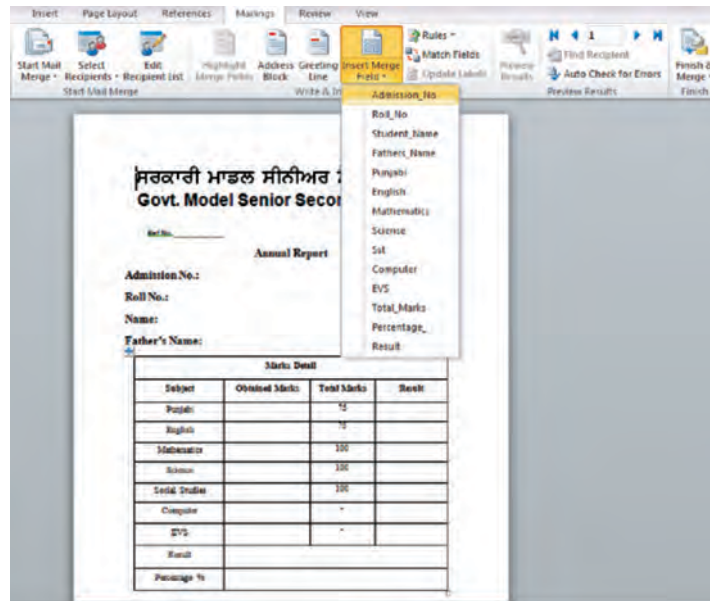
6. Select the field names one by one after placing the cursor in proper place in the student annual report. All fields will be displayed as shown in figure below:
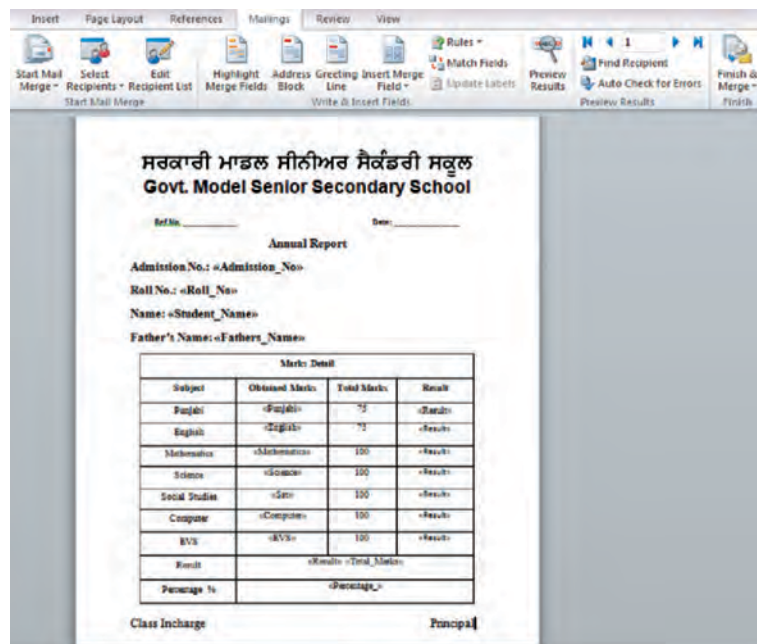

Fig: 1.16

7. After inserting all the fields we can preview the result of students by clicking Preview Results option. We can also preview the result of next and previous student, first and last student using navigation button

Fig: 1.17

8. Now click on Finish & Merge option and select Edit Individual Documents from the menu. A dialog box Merge to New Document will open. Choose option All and click Ok to show the report card of all the students in excel worksheet.

Fig: 1.18

Fig: 1.19

9. Now a new Word document will open having Report card of all the students as shown in figure below. We can save this document and can also take printouts.

Fig: 1.20

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1.5   Page Layouts:
1.5.1 Adjusting Line Spacing:

The default spacing is 1.15 line spacing and 10 points after each paragraph. The easiest way to change the line spacing for an entire document is to select the paragraphs or entire document that we want to change the line spacing on.

1. On the Home tab, in the Paragraph group, click Line Spacing.
2. Do one of the following as shown in fig 1.22:

Click the number of line spaces that we want. For example, click 1.0 to single-space with the spacing that is used in earlier versions of Word. Click 2.0 to double-space the selected paragraph. Click 1.15 to single-space with the spacing that is used in Word 2010.
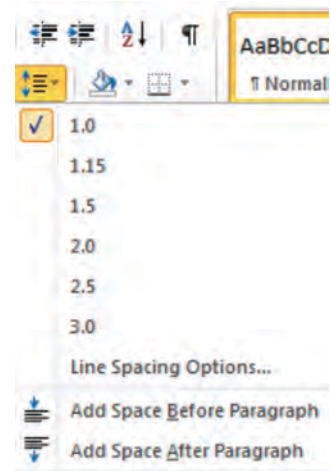
3. Click Remove Space Before Paragraph to remove any additional lines added after each paragraph as a default

Fig: 1.21

Note:

If a line contains a large text character, graphic, or formula, Word increases the spacing for that line. To space all lines evenly within a paragraph, use exact spacing and specify an amount of space that is large enough to fit the largest character or graphic in the line. If items appear cut off, increase the amount of spacing.
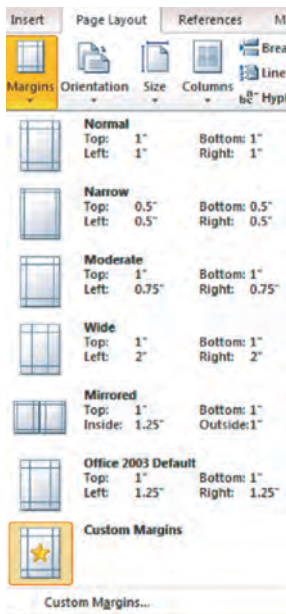
1.5.2 Page Margins:

Page margins are the blank space around the edges of the page. In general, we insert text and graphics in the printable area inside the margins. When we change a document's page margins, we change where text and graphics appear on each page.

1.5.2.1 Setting Predefined Page Margins:
1. On the Page Layout tab, in the Page Setup group, click Margins. The Margins gallery drop down menu will appear.
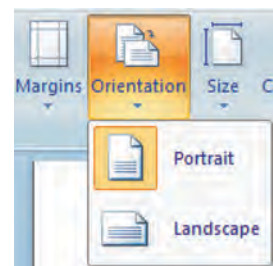2. Click the margin type that we want to apply.

Fig: 1.22

Fig: 1.23

1.5.3 Page Orientation:

We can choose either portrait (vertical) or landscape (horizontal) orientation for all or part of our document.

1.5.3.1 To change Page Orientation:
- On the Page Layout tab, in the Page Setup group, click Orientation.
- Click Portrait or Landscape.

1.5.3.2 Different Page Orientations on Same Document:
1. Select the pages or paragraphs that we want to change to portrait or landscape orientation.
2. On the Page Layout tab, in the Page Setup group, click Margins.
   a. Click Custom Margins at the bottom of the drop down menu.
   b. A Page Setup dialog box will appear.
   c. On the Margins tab, click Portrait or Landscape.
   d. In the Apply to list, click Selected text or This point forward.

Note:

If we select some but not all of the text on a page to change to portrait or landscape orientation, Word places the selected text on its own page, and the surrounding text on separate pages.

1.5.4 Creating Custom Margins:
1. On the Page Layout tab, in the Page Setup group, click Margins.
2. At the bottom of the Margins gallery drop down menu, click Custom Margins.
3. The Page Setup dialog box will appear.
4. Enter new values for the margins in all or some of the Top, Bottom, Left or Right text boxes.
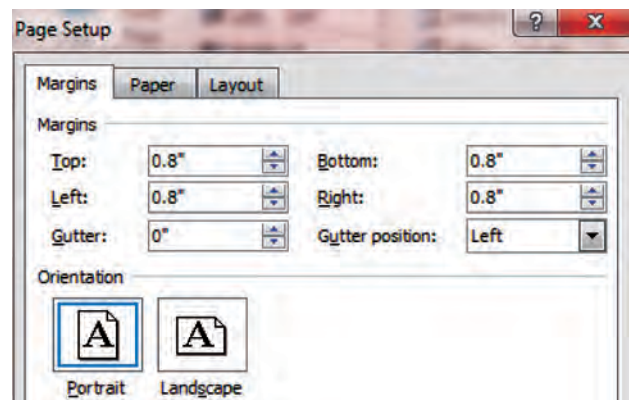5. Click OK.

Fig: 1.24

Note:

Most printers require a minimum width for margin settings, because they can't print all the way to the edge of the page. If we try to set margins that are too narrow, Microsoft Word displays the message One or more margins are set outside the printable area of the page.

1.5.5 Page Breaks:

Word automatically inserts a page break when we reach the end of a page. If we want the page to break in a different place, we can insert a manual page break.
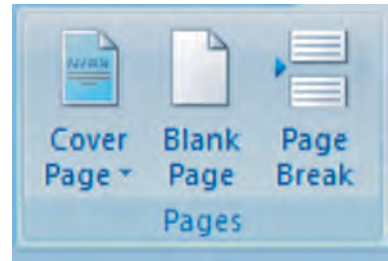

Fig: 1.25

1.5.5.1 Inserting a Page Break:
1. Click where we want to start a new page.
2. On the Insert tab, in the Pages group, click Page Break.

> **Note:**
>
> We can also insert breaks into our document by going to the Insert tab, Pages group and clicking on the Page Breaks command to view a variety of page and section breaks you can insert into your document.

One another formatting option is setting Tab stops.

1.5.6 Tab Stops:

Creating tab stops can be helpful when creating a large number of documents such as flyers, table of contents or even when creating a resume. They help us to display and line up information correctly.

1.5.6.1 Setting Manual Tab Stops:
1. Click the tab selector at the left end of the ruler ⌊L⌋ until it displays the type of tab that you want.
2. Then click in the ruler at the top of our page, where we want to set the tab stop.

    The different types of tab stops are
    - ⌊L⌋ A Left Tab stop sets the start position of text that will then run to the right as we type.
    - ⊥ A Center Tab stop sets the position of the middle of the text. The text centers on this position as we type.
    - ⌉ A Right Tab stop sets the right end of the text. As we type, the text moves to the left.
    - ⊥ A Decimal Tab stop aligns numbers around a decimal point. Independent of the number of digits, the decimal point will be in the same position. (We can align numbers around a decimal character only)
    - | A Bar Tab stop doesn't position text. It inserts a vertical bar at the tab position.

> **Note:**
>
> We can drag existing tab stops left or right along the ruler to a different position. Just Click and hold on the tab stop on the ruler then drag it to where ever we would like it to be.

1.5.7 Clear Tab Stops

1. We can clear tab stops in a variety of ways, the simplest is going to the ruler, click and hold on the tab stop and drag in down towards the document. The tab stop will disappear. To quickly clear multiple tab stops and start fresh:
    a. Click the Home tab; click the Paragraph Dialog Box Launcher.
    b. A Paragraph box will appear, click on the Tabs button at the bottom left of the dialog box.
    c. A Tabs dialog box will appear.
    d. In the list under Tab stop position, click the tab stop position that we want to clear, and then click Clear. To remove the spacing from all manual tab stops, click Clear All.
    e. Click OK.

1.6 Finalizing a Document:

After completing our work, we need to finalize our document using some features of MS-word.

1.6.1 Using the "Spell Check" Feature:

As we type our document, red wavy lines will appear under any word that is spelled incorrectly. The fastest way to fix spelling errors is to:

1. Put our cursor over the misspelled word and right click.
2. A drop down box will appear with correct spellings of the word.
3. Highlight and left click the word we want to replace the incorrect word with.

To complete a more comprehensive Spelling and Grammar check, we can use the Spelling and Grammar feature.

1. Click on the Review tab.
2. Click on the Spelling & Grammar command
3. A Spelling and Grammar box will appear.
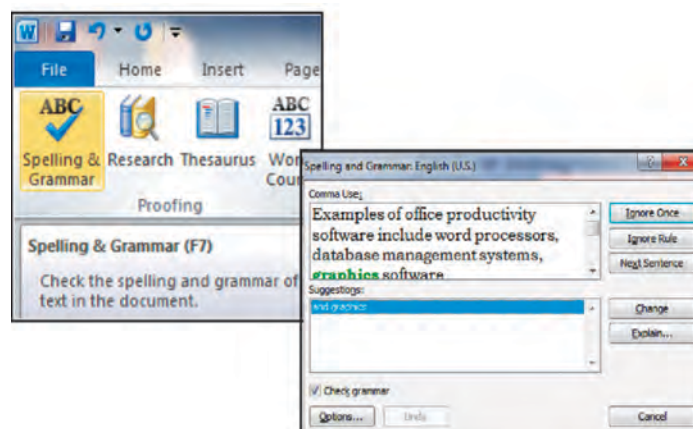4. We can correct any Spelling or Grammar issue within the box.

Fig: 1.26

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1.7   Print Preview:

Print Preview automatically displays when we click on the Print tab. When we make a change to a print-related setting, the preview is automatically updated.

To print preview of our document follow these steps:

1. Click the File tab, and then click Print. To go back to our document, click the File tab.
2. A preview of our document automatically appears. To view each page, click the arrows below the preview.

1.8   Print Command:

The Print tab is the place to go to make sure we are printing what we want.

1. Click the File tab.
2. Click the Print command to print a document.
3. Click the Print button to print our document.
4. This dropdown shows the currently selected printer. Clicking the dropdown will display other available printers.
5. These dropdown menus show currently selected Settings. Rather than just showing us the name of a feature, these dropdown menus show us what the status of a feature is and describes it. This can help us figure out if we want to change the setting from what we have.
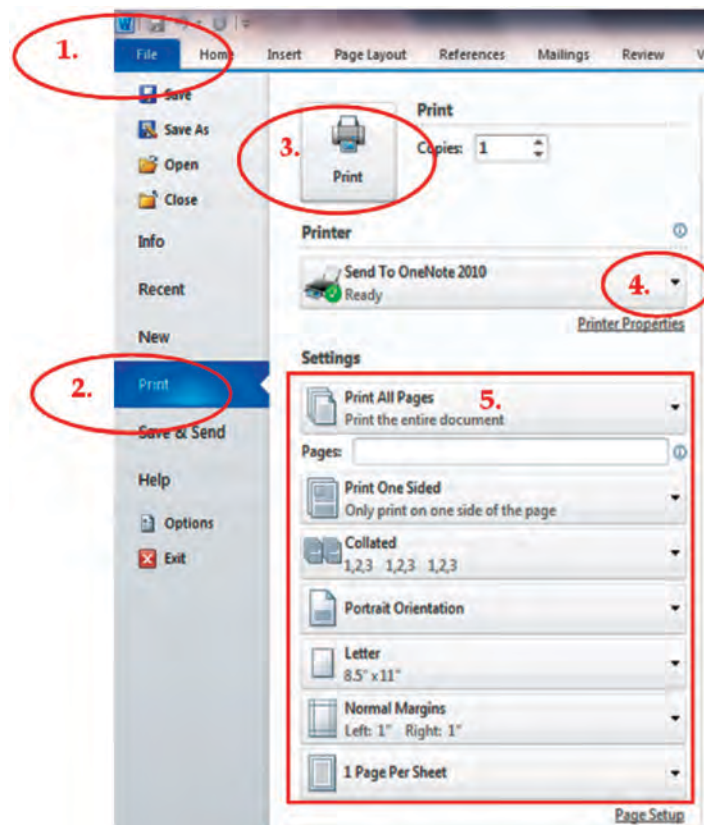

Fig: 1.27

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1.6 MS - Power Point:

Microsoft PowerPoint is a presentation tool that supports text, shapes, graphics, pictures and multimedia along with integration with other Microsoft Office tools like Excel. By default, documents saved in PowerPoint 2010 are saved with the .pptx extension whereas; the file extension of the prior PowerPoint versions is .ppt. PowerPoint enables us to present information in office meetings, lectures and seminars to create maximum impact in a minimal amount of time.

1.6.1 Background in MS - Power Point:

We all know that PowerPoint is a design-based program. Backgrounds in Power point are effective ways of improving the readability of the slides. The Themes in PowerPoint help us to select the backgrounds by default, so every time we change the theme, the default background is set automatically. Theme includes more than just backgrounds.

Fig. 1.28

A theme is a set of colors, fonts, effects, and more that can be applied to our entire presentation to give it a consistent, professional look. We can apply any theme by clicking it in the Design ribbon.

Here are the steps to apply backgrounds in PowerPoint.

1. In the Design ribbon, under the Background group, click the Background Styles command.
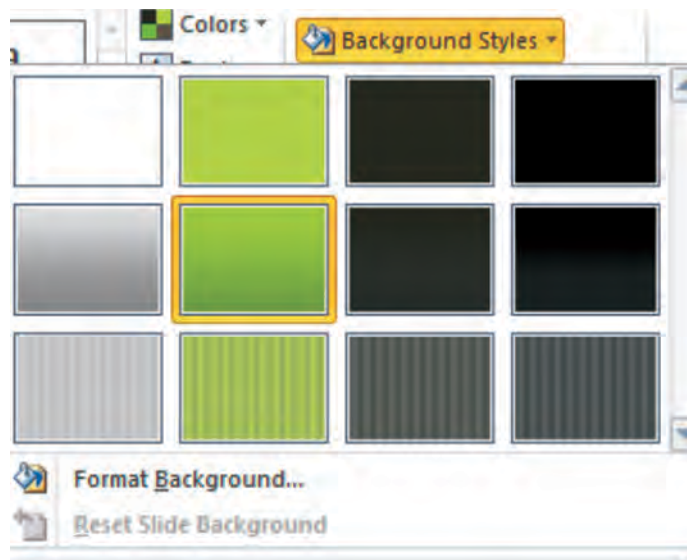2. Select one of the background styles that suit our requirements.

Fig: 1.29

1. To edit the background for a specific slide, right-click on the desired background slide and select "Apply to Selected Slides".
2. Selected slide(s) now have the new background.

Note:

The graphics in the slide background can distract us from the actual content, in such cases we can hide the graphics and retain a plain background till we finish working on the content. To do this, select the slide and check the "Hide Background Graphics" checkbox.
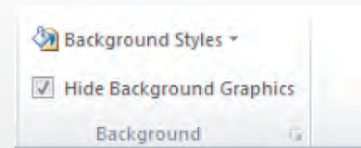
Fig. 1.30

1.9.2 Transitions in MS - Power Point:

PowerPoint supports slide transition feature which allows us to specify how the slides should transition during the slide show.

PowerPoint presentation that had special effects between each slide, are slide transitions. A transition can be as simple as fading to the next slide or as complex as a flashy effect. This means we can choose transitions to fit the style of any presentation. There are three categories of unique transitions to choose from, all of which can be found on the Transitions tab:
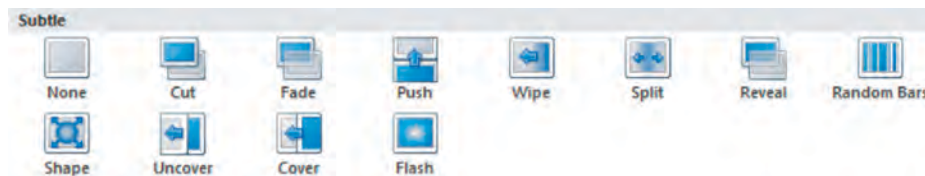
● **Subtle (slight transitions)**
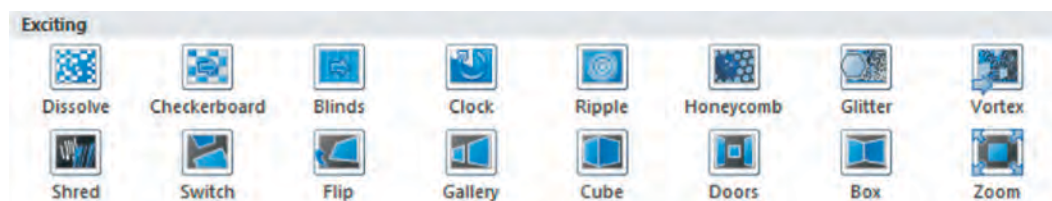
Fig: 1.31

● **Exciting (strong transitions)**

Fig: 1.32

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● · **Dynamic Content** (strong transitions that affect only the content, such as text or images)
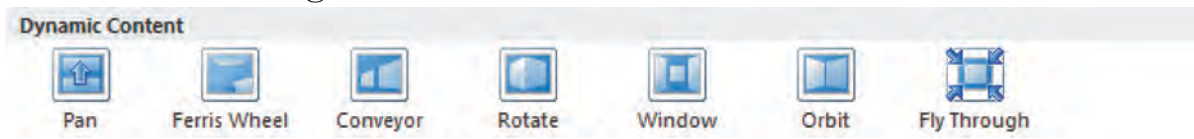

Fig: 1.33

The steps to add and preview slide transitions are:
1. Select the slide to which we want to apply the transition.
2. Go to the Transition Scheme under the Transitions ribbon.
3. Select one of the transition schemes from the list available. PowerPoint will instantly show us a preview of the scheme. If we are not satisfied, we can pick an alternate scheme. The last selected scheme will apply to the slide.
4. We can change the effects on the selected transition scheme from the Effect Options menu. Every scheme has a unique set of effect options.

Fig. 1.34

5. We can also modify the transition timing settings from the Timing section.
6. To preview the slide transition, click on Preview.

1.9.3 Animation in MS - Power Point:

Animation can help us to make PowerPoint presentation more dynamic, and information more memorable. The most common types of animation effects include entrances and exits. We can also add sound to increase the intensity of our animation effects. To add animation to text or an object apply following steps:

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1. Select the text or object that we want to animate.
2. On the Animations tab, in the Animation group, click an animation effect from the gallery or click the more arrows to see more options.

Fig: 1.35

3. To alter how our selected text animates, click Effect Options and then click what we want the animation to do

4. To specify the timing of the effects, on the Animations tab, use the commands in the Timing group.

Fig: 1.36

1.10 Saving Presentation:

Save option allows us to save a new file or an existing file in standard format (.pptx format). If we are working on a previously saved file this will save the new changes in the same file format. If we are working on a new file, this command would be similar to the Save As command.

1.10.1 Saving Presentation as pdf file:

As we know PowerPoint is used to create presentations, it supports various file types when it comes to saving the content. Using a pdf file type can be a great way of saving the slides.

Steps to save a presentation as a pdf file are:
1. Go to File tab.
2. Click on Save As to open the Save As dialog.
3. Add a proper name to the file.
4. Select the file type as .pdf from the list of supported file types and click save.
5. The .pdf file is created in the specified location.

1.10.2 Saving Presentation as video file:

PowerPoint allows presentations to be saved as files that can be posted on video sharing platform like YouTube or just played on any other media.

Steps to save a presentation as a video file are:
1. Go to File tab.
2. Click on Save As to open the Save As dialog.
3. Add a proper name to the file.
4. Select the file type as .wmv from the list of supported file types and click Save.
5. The video creation is not an instant process like other file types as PowerPoint needs to create the video file. We can track the progress of video creation at the bottom of our presentation window.
6. Once the creation is complete, the video file is created in the specified location.

1.10.3 Image File:

Among the many file types that PowerPoint supports Image File is also supported by it. There are a set of extensions for image files. The image file extensions supported by PowerPoint include JPEG (.jpg), GIF (.gif), TIFF (.tiff) and Bitmap (.bmp).

1.10.4 PPT • Printing Presentation:

It is sometimes necessary that we share our slides with our audience in printed format before we begin presenting them so they can take notes.

1.10.5 PPT • Broadcast Slideshow:

PowerPoint 2010 offers users to broadcast their presentations on the internet to worldwide audience. Microsoft offers the free broadcast Slide Show service; all we need to do is share the link with our audience and they can watch the presentation from anywhere. There is no special setup or charges required to do this; all we need is a Windows Live account.

1.10.6 PPT • Packaging Presentation:

Certain presentations are better suited for distribution as a CD to audience. In such cases, we can create a CD packaging which can be burned into a CD and distributed.

1. Computer software is classified into two categories: system software and application software.
2. System software is software that consists of a group of programs.
3. Application software is software that can perform a specific task for the user.
4. The main purpose of Word processing tool is to produce documents.
5. Database software is a collection of related data. The purpose of this tool is to organize and manage data.
6. The spread sheet tool is used to maintain budget, financial statements, and sales records.
7. Presentation tool is used to display the information in the form of slide show.
8. Multimedia software is tool that allows the user to create audio and videos with the help of Media players and real players.
9. We can choose either portrait (vertical) or landscape (horizontal) orientation for all or part of our document.
10. Word automatically inserts a page break when we reach the end of a page.
11. We can drag existing tab stops left or right along the ruler to a different position.
12. As we type our document, red wavy lines will appear under any word that is spelled incorrectly.
13. Print Preview automatically displays when we click on the Print tab.
14. Microsoft PowerPoint is a presentation tool that supports text, shapes, graphics, pictures and multimedia.
15. The Themes in PowerPoint helps us to select the backgrounds by default.
16. A transition can be as simple as fading to the next slide or as complex as a flashy, eye-catching effect.
17. There are three categories of unique transitions to choose from, all of which can be found on the Transitions tab: Subtle (slight transitions), Exciting (strong transitions), Dynamic Content.
18. The most common types of animation effects include entrances and exits.
19. We can also add sound to increase the intensity of our animation effects.
20. In the power point gallery, entrance effects icons are colored green, emphasis effects icons are colored yellow, and exit effects icons are colored red.
21. We can press the Esc key at the top left of our keyboard to stop or end the slide show in power point.
22. PowerPoint allows presentations to be saved as files that can be posted on video sharing platform like YouTube or just played on any other media.

Exercise

1. Multiple Choice Questions:

1. Which tool is used to maintain budget, financial statements, and sales records?
   a) Multimedia   b) Spread sheet
   c) Presentation   d) Database
2. Word automatically inserts a page break when we reach the _____ of a page.
   a) Starting   b) End
   c) Mid of page   d) None of these
3. As we type our document, _____ wavy lines will appear under any word that is spelled incorrectly.
   a) Blue   b) White
   c) Red   d) Black
4. The most common types of _____ effects include entrances and exits.
   a) Animation   b) Sound Effect
   c) Design   d) Transition
5. Page _____ are the blank space around the edges of the page.
   a) Graphics   b) Design
   c) Margin   d) None of these

2. Fill in the Blanks:

1. Computer software is classified into two categories: ....and ....
2. Database software is a collection of related data. The purpose of this tool is to .... and .... data.
3. We can choose either .... (vertical) or .... (horizontal) orientation for all or part of our document.
4. The image file extensions supported by PowerPoint include .... a., ... , TIFF (.tiff) and Bitmap (.bmp)
5. Multimedia software is tool that allows the user to create...............and .... with the help of Media players and real players.

3. True or False:

1. The main purpose of Spread sheet software is to produce documents.

2. Application software is software that can perform a specific task for the user.
3. We can drag existing tab stops left or right along the ruler to a different position.
4. Print Preview automatically displays when we click on the Print tab.

4. Very Short Answer type Questions:

1. Write extension of Word document in Ms Office 2010.
2. Write extension of Spread Sheet in Ms Office 2010.
3. Write extension of Power Point Presentation Ms Office 2010.
4. Write the full form of bmp (Image file)
5. Write the full form of PDF.

5. Short Answer type Questions:

1. Define System Software?
2. Explain Database software?
3. Explain Multimedia software
4. What is Page Break? How to Insert a Page Break?

6. Long Answer type Questions:

1. What is office tool? Explain any five types of office tools?
2. Write steps to create Student Annual Report using mail merge with spreadsheet?
3. What is Tab Stops? Explain Setting Manual Tab Stops
4. Explain Print Preview and Print Command?

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Very Short Answer
1.	Spread sheet	System software and application software	FALSE	.docx
2.	End	Organize and manage	TRUE	.xlsx
3.	Red	Portrait or landscape	TRUE	.pptx
4.	Animation	JPEG (.jpg), GIF (.gif)	TRUE	Bitmap
5.	Margin	Audio and videos	-	Portable Document Format

Chapter 2

HTML FUNDAMENTALS

HTML
</>

2.1 Introduction

The Internet is rapidly becoming a key resource for locating information relevant to a particular field. The Internet has been called the "network of networks." Simply put, it's a way to link millions of people around the world, each of whom is using a computer, smart phone, tab etc. connected to a smaller network through ISP. Nobody owns or controls the Internet or the World Wide Web, although millions of individuals and organizations control their own systems. Some task forces have been constituted for its smooth functioning. WWW is composed of millions of webpages containing text, graphics, sounds, videos and link to other webpages. Have you ever think which basic technology lies in writing these webpages, which we are using daily? We need a computer language to design these web pages. The Basic and frequently used language for designing a webpage is HTML. In this chapter we will discuss the basics of HTML.

2.2 What is HTML?

HTML stands for Hyper Text Markup Language. HTML is a language used for DESIGNING A WEB page in which text, graphics, and other information are organized, formatted, and linked together. HTML is a tag based Language, which specifies the web browser what operation has to be performed on the given text. Hypertext refers to a text which acts as a link in markup language for describing web documents (web pages).A markup language is a set of markup tags, HTML documents are described by HTML

tags, Each HTML tag describes a distinct meaning for which it has been designed.

HTML is extremely simple, Flexible, easy to learn, interactive, widely accepted Markup Language.

2.3 Basic structure of an HTML document

An HTML document has two main parts:

- **Head.** The head section contains title that identifies the heading of the HTML document.

- **Body.** The body element contains the actual contents or information that you want to display on a web page to the end user.

HTML document contains the following syntax:-

```
<html>
<head>
<title>TITLE OF YOUR WEBPAGE </title>
</head>
<body>
Information which user wants to show.
</body>
</html>
```

Fig: 2.1

The tags defined in the above structure basically define or instruct the web browser about the different operation to be performed on the text defined in the given TAGS. We will now explain the above structure.

1.3.1 <HTML> HTML document is started with <html> and ended with</html>with this tag. This TAG informs the web browser from where a web page will start and where it ends. If the commands are not defined in tags then the commands are taken as text by the web browser.

1.3.2 <HEAD Tag> Head tag provides Header information. The document title is written in Head Tag. It always occurs in pair. Head Tag is considered very important for a web page. This is a container tag. It defines the Heading of the HTML document. It starts with<HEAD> TAG and ends with </HEAD> .This Tag is always defined below <HTML> and above <BODY>tag. It

contains information regarding title of the webpage, keywords used by the search engines etc. It contains no text in itself.

Eg. <HEAD> <TITLE> First Web Page </TITLE> </HEAD>

2.3.3 <TITLE> TITLE tag defines the title of the webpage, which is to be displayed on the title bar of the web browser when the web page is loaded in the web browser. It is enclosed in between <TITLE> AND</TITLE>tags. It should be short and meaningful of <TITLE> First Web Page </TITLE>

2.3.4 <BODY> BODY tag contains the actual information to be displayed on the web browser. When the webpage is loaded in the web browser. It may contain any element or contents related to text, images, audio, video etc. These contents are defined with in <BODY> and </BODY> tags. e.g. <BODY>This is my first document in HTML document. </BODY>

Each Body tag has different characteristics. These characteristics (properties) are termed as attributes. We can select Background colour, text colour, font size etc. with these attributes.

2.4 CREATING AN HTML DOCUMENT:-

HTML webpages are plain text files that can be created using any text editor or word processor such as Notepad, WordPad, MS-word. The following steps are to be taken while creating and displaying a webpage.

1. Open Notepad by clicking Start→All Programs→Accessories→Notepad or by typing Notepad in the run window. Notepad will be opened asshown in fig.2.1
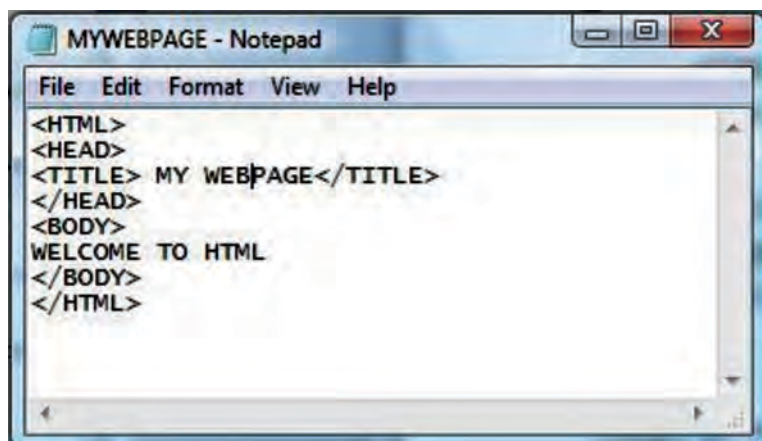

Fig: 2.2

2. Now type the html code in the Notepad as Shown in the Fig. 2.2
   Click on File→ Save menu option. A dialog box will appear as shown fig 2.2
   select where we want to save the file, enter file name with an
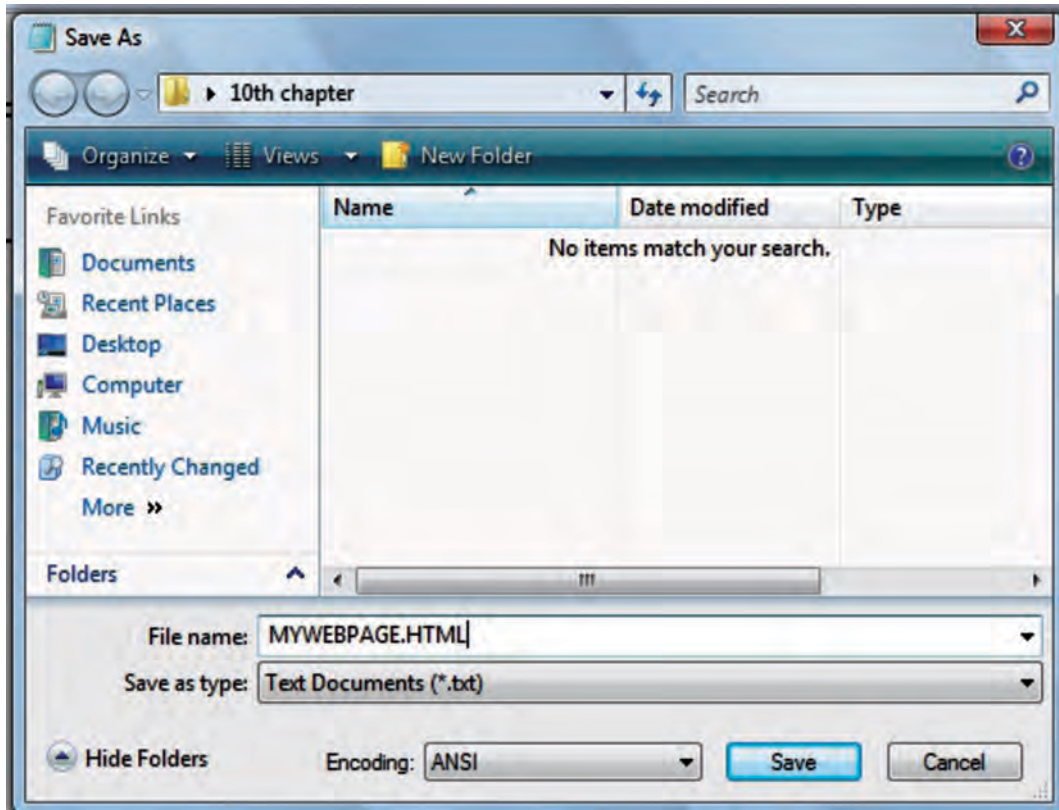   extension .html

Fig: 2.3

2.4.1 VIEWING AN HTML DOCUMENT:-

Any HTML document can be viewed using any web browser like Internet Explorer, Netscape Navigator, Mozilla Firefox, Opera or Google Chrome. Here Internet explorer is used in examples.

To open Internet Explorer follow the underwritten steps:

1. Start→ All Programs → Internet Explorer or start → Run → explore in the text box and click OK.
2. Click File→Open or press Ctrl + O from the keyboard, an open box will appear and select html file as shown in fig 2.3

Fig: 2.4

3. Choose the path where file is stored and open it with open button. The webpage will be displayed in the browser as shown in fig 2.4:-
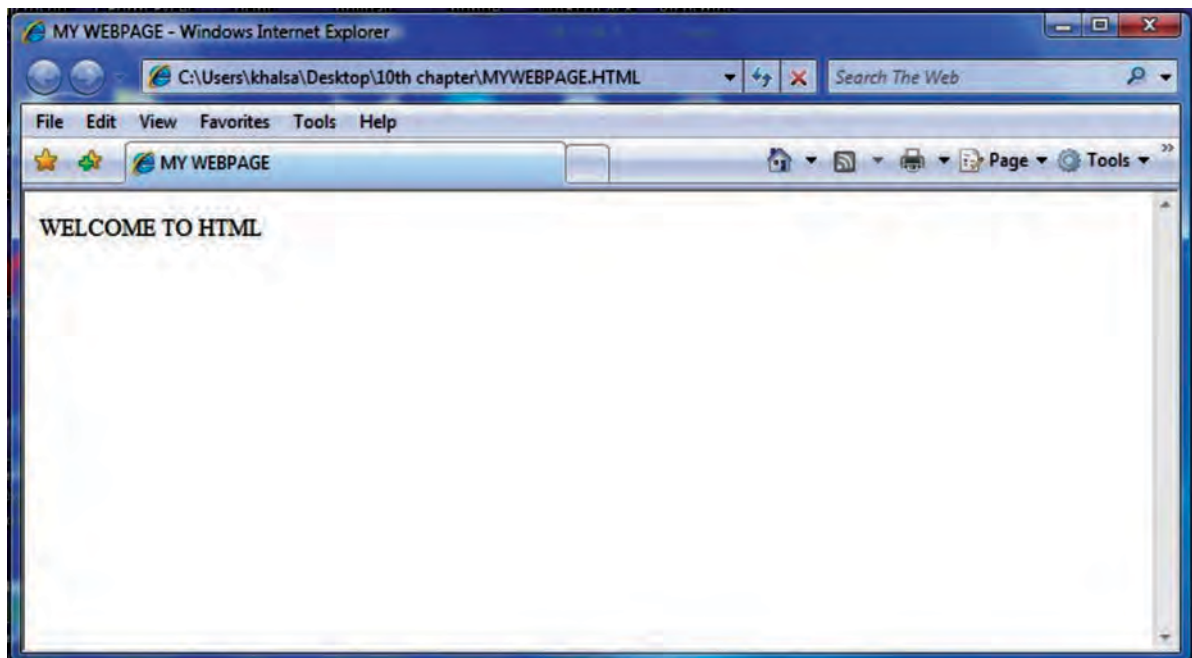

Fig: 2.5

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2.5 Web Browsers:-

Web browser is a software which is used to browse web pages. Some of commonly used web browses are :-

1. Internet Explorer   2. Google Chrome
3. Mozilla Firefox   4. Opera

2.6 HTML TAGS

As to attract end users we have to make our web page attractive, which may include text , graphics, and links. In HTML we can use tags which are defined in angle brackets<>. The use of less-than and greater-than angle brackets surrounding an element creates what is known as a tag. Tags most commonly occur in pairs of opening and closing tags.

These tags are also known as elements. These tags can be defined in two forms these are:-

1.   Container Tags.
2.   Empty Tags.

1 Container Tags:-The **container** is an area enclosed by the Opening and closing **tags**. Container tags come in pairs. Every tag which is opened must be closed. A container tag consists of a **start** tag and **end** tag, with the content inserted in between, for example: <tag name>content goes here...</tag name>

for example, when you want italic text, you will contain the text between opening **<i>**and closing </ **i**>. **Html** encloses the entire document in <html> and </html>.

2 Empty Tags:-These elements are called empty or void and they only have a start tag as they don't have any content. They must not have an ending tag in HTML. For Example <BR> tag is used to break the given line from where it is used.

Note:-

    Attribute of a tag defines the features of a given tag in its starting tag..

2.6.1 Some of the commonly used container tags are defined below:

ELEMENT/TAG	OPERATION PERFORMED	EXAMPLE	OUTPUT
<B>......</B>	Bold the text	<B>hello</B>	**hello**
<I>......</I>	Italic the text	<I>hello</I>	*hello*
<U>......</U>	Underline the text	<U>hello</U>	Hello
^{......}	Superscript the text	a², b²	A^2+b^2
_{......}	Subscript the text	H₂O	H_2O
<STRIKE>......</STRIKE>	Strike through the text	<STRIKE>hello</STRIKE>	~~Hello~~
<TT>......</TT>	Type writer font.	<TT>hello</TT>	hello

Above tags are explained in the example as shown in fig 2.6.

CONTAINER TAGS - Notepad

```
<HTML>
<HEAD>
<TITLE> MY DIFFERENT TAGS WEBPAGE</TITLE>
</HEAD>
<BODY>
WELCOME TO HTML
<B>HELLO </B>
<I>STUDENTS</I>
<U>I WANT TO DRINK </U>
H<SUB>2</SUB>O
<STRIKE>AND WANT TO TELL SOLVE</STRIKE>
a<SUP>2</SUP>+B<SUP>2</SUP>
<TT>TRY IT</TT>
</BODY>
</HTML>
```
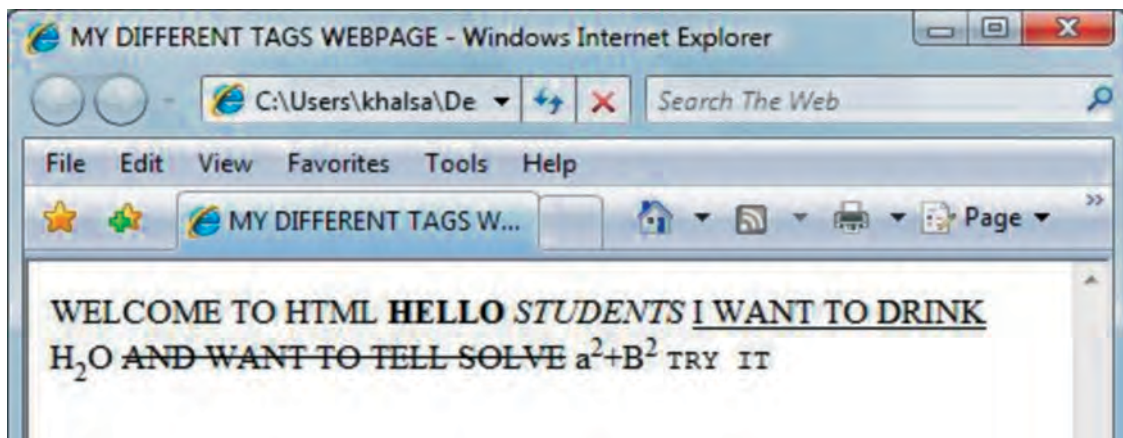
Fig 2.6
The output will be displayed as shown in fig 2.7

MY DIFFERENT TAGS WEBPAGE - Windows Internet Explorer

WELCOME TO HTML **HELLO** *STUDENTS* I WANT TO DRINK H_2O ~~AND WANT TO TELL SOLVE~~ a^2+B^2 TRY IT

Fig. 2.7

2.7 Attributes:
2.71. Difference between Tag and Attribute:-

Tag	Attribute
/. Tags are those instruction which displys information on webpage.	/. An **attribute** defines a property of tags
0. Tags may contain attribute	0. Attribute is a part of opening Tag of an element.
1. These are of two types:-Empty Tag and Container Tag	1. Types of Attribute depend upon the tag used .i.e. each tag has its own number of attributes.

2. Example:-
     <Table >
     Here table is a tag.
	2,Cv_k njc8-
	<Table Border="3" >
	     a. Here a table is the Tag and border is its attribute.

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2.8 Body tag with attributes

Body Tag is the main part of the HTML document in which whole information about the webpage resides. The main attributes of this tag are background, bgcolor and text. Let us discuss these attributes used in Body Tag.

2.8.1 Background attribute is used to define the background of a webpage. This is explained with an example in the figure as shown in html code and output in fig 2.8 and 2.9

<BODY BACKGROUND="lampbg.jpg">

Fig: 2.8

Fig: 2.9

2.8.2 Bgcolor attribute of body tag is used to change the background colour of the webpage.

eg. <BODY BGCOLOR="GREEN">

EXPLAINED as shown with html code and output in fig 2.10 and 2.11

Fig: 2.10

Fig: 2.11

2.8.3 Difference between BACKGROUND and BGCOLOR:

BACKGROUND	BGCOLOR
1. Background attribute is used in body as well as in table tag ,to add background image in the given webpage or a table.	1. Bgcolor attribute is used in body as well as in table tag, to change the background color of the webpage or a table.
2. Syntax <body background="*URL*">	2. Syntax is <table bgcolor="*color_name*">
3. Example <BODY BACKGROUND="IMAGE1.JPEG">	3. Example <BODY BGCOLOR="GREEN">

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2.8.4 **Text attribute** defines the color of the text and is defined with an example as shown with html code and output in fig 2.12and 2.13 <BODY BGCOLOR="RED" TEXT="WHITE">
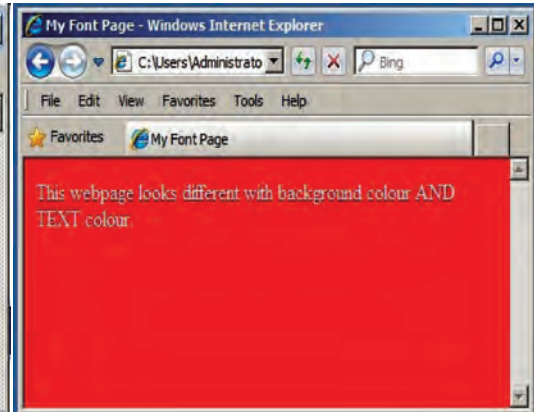

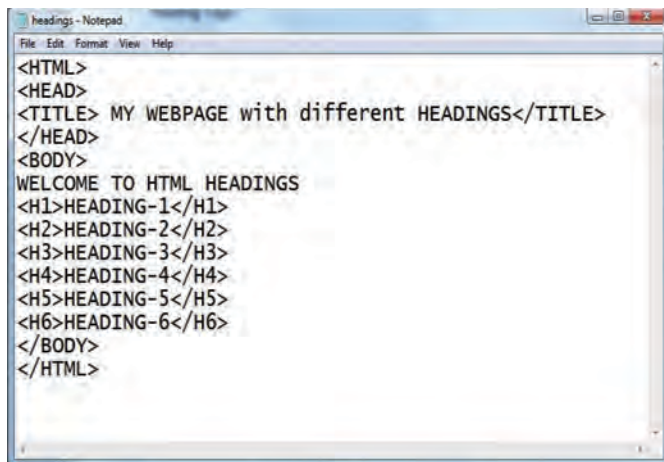| Fig: 2.12 | Fig: 2.13 |

2.9 Formatting in HTML document

2.9.1 Heading Tags:

The heading tag is used to fix the heading. There are 6 levels of heading . The levels are numbered as heading 1 to heading 6. All the letters of the heading in a given level have same font. The font size goes on decreasing as we move from heading 1 to heading 6. The heading in level 1 is expressed by tags <H1> and </H1>. Similarly in the heading in level 2 we use the tags <H2> and </H2>. <H6> is the lowest level. The font size in it is the smallest. Heading tag is used to define heading in a HTML document.HTML supports Six Heading Levels H1 to H6. Heading tags are container tags.

Example: <H1> Computer Education </H1>

The alignment attribute is used in heading tag. This aligns the text. ALIGN attributes are of three types viz. LEFT, RIGHT and CENTER.

These are explained with an example as shown with html code and output in fig 2.13and 2.14with html code and output: -

| Fig: 2.14 | Fig: 2.15 |

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2.9.2 FONT: -

Font is pre-defined style and size of the text. FONT is the style and shape of the text which is used in any document. It allows to format data on a given web page.
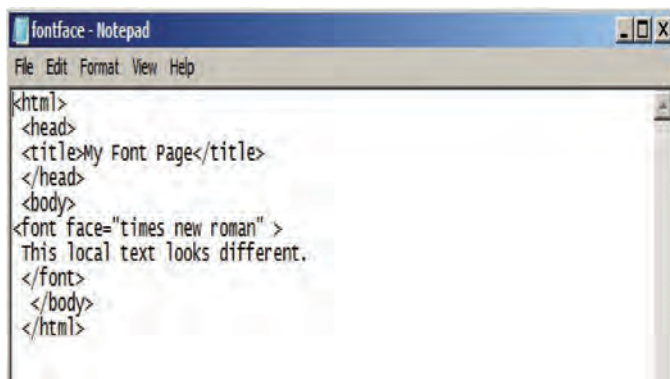
Font has four main properties:
1. Style: Font style can be changed in three ways - Bold, Italic and Underline.
   a. Font face: Face defines the type face to be used like writing.
2. Font colour: Font colour gives different colours to the text.
3. Font size: Font size changes size of text matter.

2.9.2.1. Face defines the type face to be used for the text.eg.

     <FONT FACE="ARIAL">WELCOME TO HTML</FONT>

These are defined with an example as shown with html code and output in fig 2.16 and 2.17
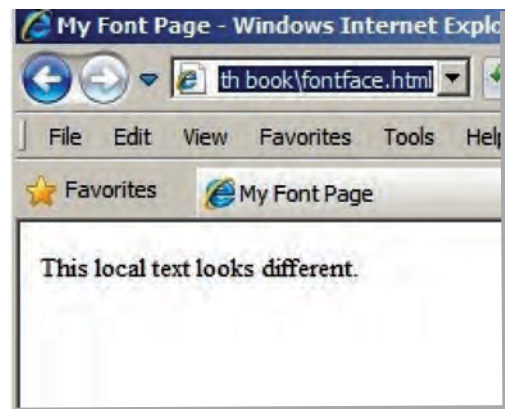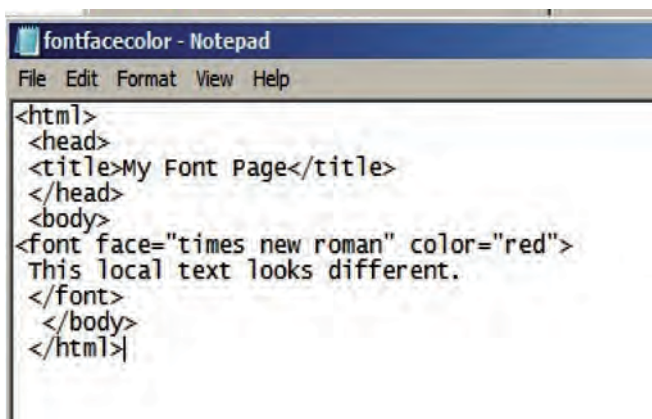

Fig: 2.16   Fig: 2.17

2.9.2.2 COLOR defines the colour of the font to be used. It is defined with an example as shown with html code and output in fig 2.18and 2.19

     <FONT FACE="ARIAL" color="RED">WELCOME TO HTML</FONT>
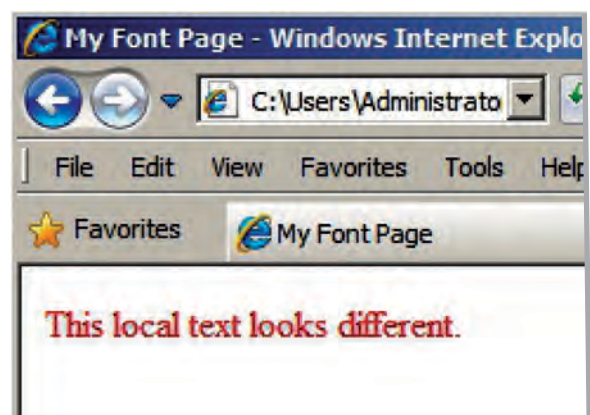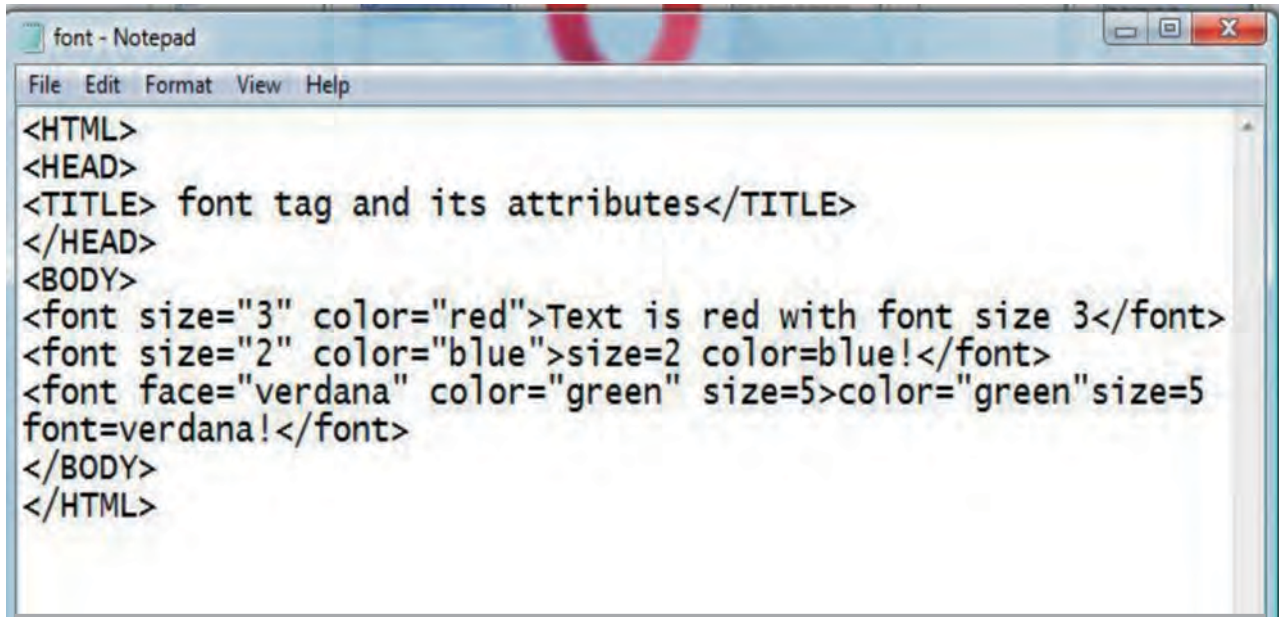

Fig: 2.18   Fig: 2.19

2.9.2.3. SIZE defines the size of the font. It has values from 1 to 7, while 1 is the smallest and 7 is the largest font size. By default font size is 2. font size 1 means 6 points, 2 means 12 points and so on.

Example of font and its attributes are defined as shown with html code and output in fig 2.20and 2.21: -

```
<HTML>
<HEAD>
<TITLE> font tag and its attributes</TITLE>
</HEAD>
<BODY>
<font size="3" color="red">Text is red with font size 3</font>
<font size="2" color="blue">size=2 color=blue!</font>
<font face="verdana" color="green" size=5>color="green"size=5
font=verdana!</font>
</BODY>
</HTML>
```
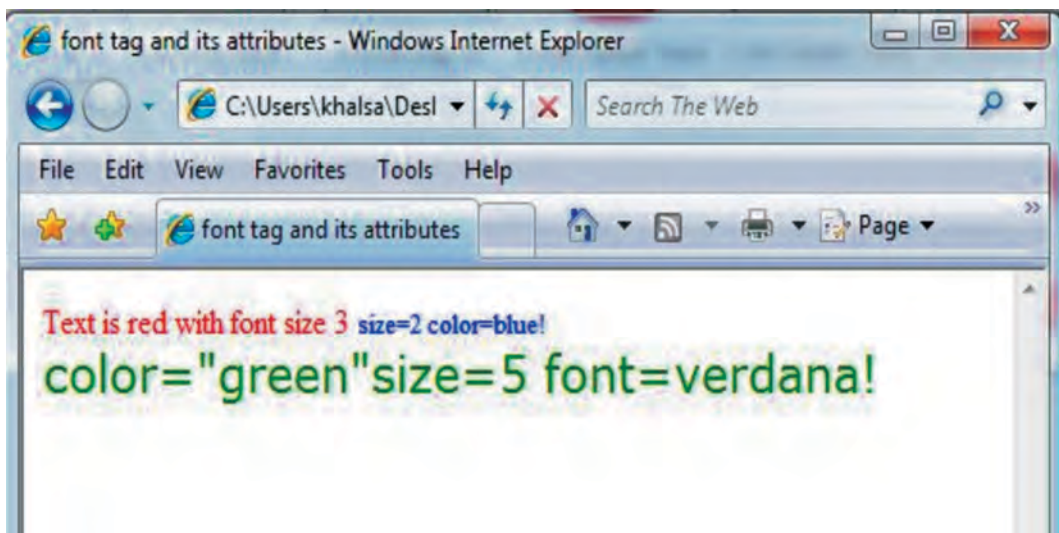
Fig: 2.20

Fig: 2.21

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2.9.3 Paragraph Tag:- It is a container tag which is used in Web page to make paragraph. Single large documents are not recommended in a webpage as it is not edited easily. So, it is highly recommended to divide the text or document in different sections which is possible through paragraph tag<P> When we use this tag a blank line is inserted before and after the paragraph automatically by the browser.

Ex. <BODY> Computer is an electronic Machine. It is a data processing machine. <P> and has memory </P> <BODY>

This is a container tag.

The text will automatically go to the new line after tag <P>
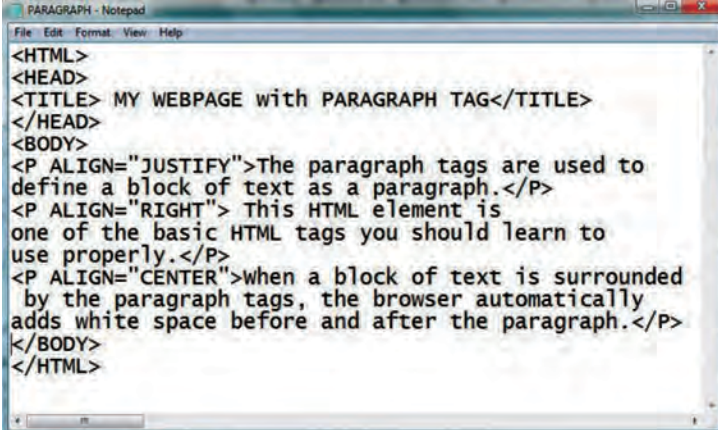
<P ALIGN="RIGHT">

<P ALIGN="LEFT">

<P ALIGN="JUSTIFY">

<P ALIGN="CENTER">

EXAMPLE OF <P> TAG.WITH OUTPUT:-

This tag is defined with an example as shown with html code and output in fig 2.22and 2.23
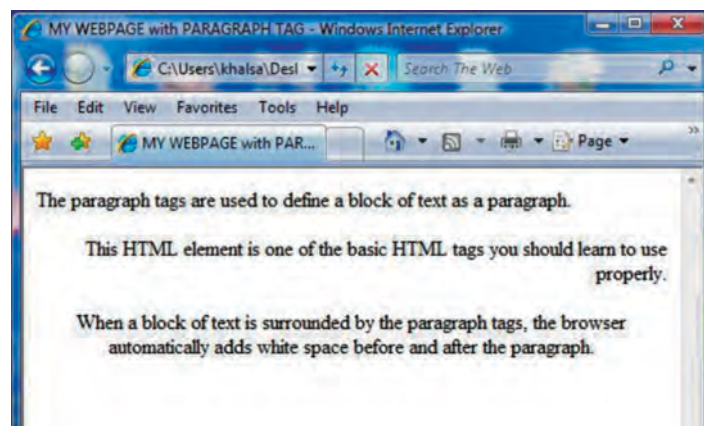

Fig: 2.22

Fig: 2.23

2.9.4 Empty TAG

2.9.4.1 BREAK TAG

The line Break tag is used to start the text from the new line. This tag does not leave a blank line space as the paragraph tag does. The text jumps to the new line on using break tag. The tag <BR> is a symbol for line break.**T**he
tag inserts a single line break. The
tag is an empty tag which means that it has no ending tag.This is defined with an example as shown with html code and output in fig 2.24 and 2.25

<div align="center">Fig: 2.24</div>

<div align="center">Fig: 2.25</div>
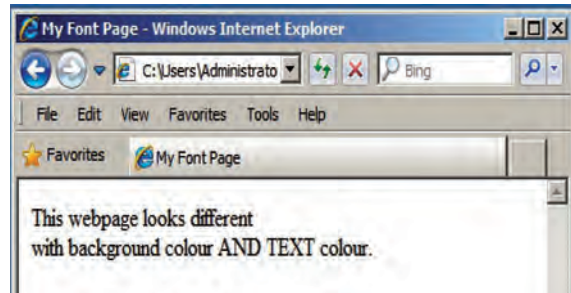
2.9.5 Difference between Paragraph Tag and Break Tag.

Paragraph <P> Tag	Break Tag
<p> tag Tag is a container element which marks a block of text as a paragraph in a webpage and the web browser leaves a line between two paragraphs. This tag has an attribute ALIGN, which can take three values - left, right and center .The <p> tag denotes a paragraph and ends with a </p> and is a container tag.	1. < BR> tag is an empty element that is used to break a line and display the proceeding text from the next line, without giving any space between two lines. It has no attribute. The is a line break and is an empty tag.
This tag is used to define paragraphs with in your text.	This tag is simply a line break. It just jumps to the next line without any spacing or formatting options.
Example:- hello world	Example :- Hello world!

2.9.6 HR Tag

The <HR> tag is used to insert horizontal line across the page. Its attributes are:

- Size : It is used to set the thickness of line.
- Width : It is used to set the length of line.
- Align : It is used to set the alignment of line.
- Color : It is used to set the color of line.

These are explained in Fig 2.26 and 2.27

Fig: 2.26   Fig: 2.27

2.10 Lists

While accessing some information from the web, user prefers to read only the required information from the website. So, lists play an important role in defining important information in the form of few lines. For example. As the user wants to differentiate between two distinct objects, then it will be better to represent it in the form of lists. In HTML there are three types of lists available.

These are as follow:-
1.   Numbered Lists (Ordered List)
2.   Bulleted Lists (Unordered List)
3.   Definition Lists

2.10.1 ORDERED LIST :-

Also known as numbered list ,it is used to define a list in a specific or sequential order in which numbers are used. The basic tag used for Ordered list is <OL> tag at the starting and</OL> at the end of the list. Each item is marked with an<LI> (List Item)tag. By default the list is started with 1. But user can change the starting number.

ATTRIBUTES USED:- In an Ordered List the attributes used are "TYPE" which have   values as 1(Arabic),A(upper case letter),a(Lower case letters),I(Upper case Romans),i (Lower case Romans).

Eg.<OL type="I">

Second attribute used is START in which user can define his own starting value in the list.

Eg.<OL Start="5" Type="i" >

Ordered List example is shown as follows inexample as shown with html code and output in fig 2.28and 2.29

Fig: 2.28   Fig: 2.29

2.10.2   Unordered List (Bulleted List) :-

The lists which have information related to each other but their sequence is not important are called Bulleted Lists. It has a starting tag as <UL> and ending tag as </UL>tag. Each item is marked with <LI>tag which stands for List Item.   Any number of elements can be added in it. This is defined with an example as shown with html code and output in fig 2.30 and 2.31

Fig: 2.30   Fig: 2.31

By default attribute used for bullet list are used as disc. But these bulletscan be changed by using an attribute as TYPE .It can be used in <UL> as well as in <LI> tag as per the requirement. the values support by this attribute is defined as

        Disc (●)
        CIRCLE(○)
        SQUARE(■)

These are explained and defined with an example as shown with html code and output in fig 2.32 and 2.33

Fig: 2.32   Fig: 2.33

2.10.3 Difference between Ordered List and Unordered List

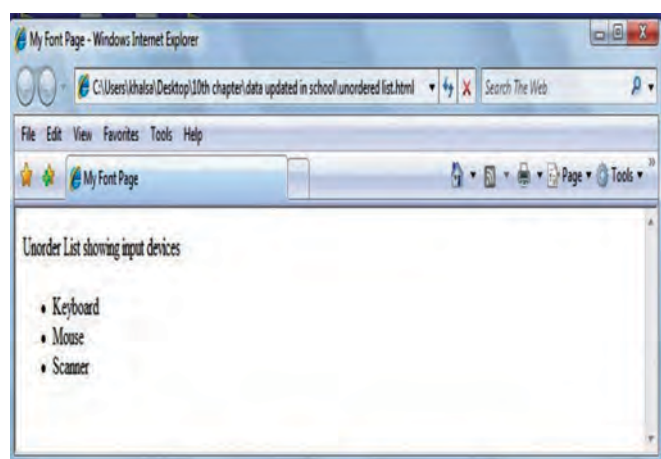| Ordered List	Unordered List
1. In an Ordered List, the order of the list item is important. If we change the order, the meaning of the whole list changes.	1. In an unordered list the order of the items is not significant .We can swap two items or reverse the whole list, and it still remains the same list.
2. Ordered List starts with <OL> and ends with</OL> tag.	2. Unordered List starts with <UL> and ends with</UL> tag.
3. OL is a container tags	3. UL is container tags.
4. OL has an <LI> (List Item) tag which defines the list elements defined in the list.	4. UL has an <LI> (List Item) tag which defines the list elements defined in the list.
5. In an Ordered List the attribute used is TYPE Which has values as 1(Arabic), A(upper case letter), a(Lower case letters), I(Upper case Romans),i(Lower case Romans). Eg.<OL type="I">	5. In an Ordered List the attribute used is TYPE Which has values as "Disc(•)", "CIRCLE(O)", and "SQUARE(■)". Eg.<UL type="disc">
6. Default value of TYPE ATTRIBUTE is 1.	6. Default value of TYPE ATTRIBUTE is "Disc(•)"

2.10.4 Definition List:-

Definition list generally contains the definitions of different terms and their meaning. It starts with <DL> tag and ends with</DL>tag. It has two main tags definition Term <DT> and Definition Description <DD> tags. These are explained in the following example as shown in figure 2.34 and 2.35 with html code and output.

```
definition lists - Notepad
File  Edit  Format  View  Help
<html>
 <head>
 <title>DEFINITION LISTS</title>
 </head>
 <body>
DEFINITIONS
<DL>
    <DT>Center

    <DD> A point equidistant from all points
              on the surface of a sphere.
    <DT>Centre
    <DD> In some field sports, the player who
     holds the middle position on the field, court,
     | or forward line.
</DL>
    </body>
    </html>
```

Fig: 2.34

DEFINITIONS

Center
    A point equidistant from all points on the surface of a sphere.
Centre
    In some field sports, the player who holds the middle position on the field, court, or forward line.

Fig: 2.35

2.10.5 Nested Lists:-

When a List is inserted in other list it is known as Nested List. We can explain the nested list with the following example as shown with html code and output in fig 2.36 and 2.37

Fig: 2.36

Fig: 2.37

2.11 IMAGES:-

By now you know enough to write a very nice, text-based home page in HTML, but it is the ability of the Web to provide pictures, technically called images, graphics, or sometimes icons, that has made it so popular. In this following section we 'll learn how to place an image in our web page and attributes related to it. Various graphics formats used are .jpeg,.jpg,.gif, png etc.

To add an image to a webpage, the tag used is <img SRC=""FILENAME">.Here SRC defines the source of the image and file name defines the filename with extension of the image chosen.

NOTE:-The location of the image file must be defined properly. i.e. either the file is in the same folder in which web page is stored or User has to define the complete path of the file.

Eg If file is in the same folder then it can be defined as
<Img SRC="green.jpeg">
      OR
<img SRC="C:\html\10class\green.jpeg">
The attributes of image tag are defined below:-

1. **ALT** stands for "alternate text". This tells the browser that if it can't find the image, then just display this text. For example a disabled

user using a screen reader,visit the webpage, When the mouse over the image, the alternate text pops up.

Example for this is as follows:

<Img SRC="green.jpeg" Alt="green color image is shown"> and are explained with an example as shown with html code and output in fig 2.38 and 2.39:-

Fig: 2.38

Fig: 2.39

2. **WIDTH** stands for the image in pixels as well as percentage of the web browser window. It can range from 1 pixel to any number, but generally will be less than the width of the web browser.

3. **HEIGHT** stands for the height of the image in pixels or percentage of the web browser windows. Again, the height can be just about anything, but generally will be less than the height of the web browser.

Ex**ample<img src="images2.jpeg" height=50% width=30%>**

These are explained with an example as shown with html code and output in fig 2.40 and 2.41:-

Fig: 2.40

Fig: 2.41

4.   **Align** defines the alignment of the attached image **in contrast to the other contents of the webpage**. It has different values left, right, top and bottom.
     Example for this is as follows
     <img src="images2.jpeg" align="Right" >

These are explained with an example as shown with html code and output in fig 2.42 and 2.43:-
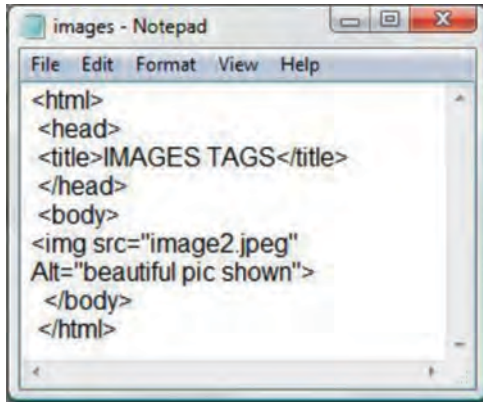

Fig: 2.42   Fig: 2.43

Similarly other alignments can be performed by changing align attribute values.

2.12 Tables:
2.12.1 Creating Tables in HTML: -

In previous topics we have explained the various aspects in which information is defined in the form of sentences and paragraphs. However, the information can be defined in the form of columns and rows or tabular form. It allows to manage the information in to multiple rows and columns. The HTML tables allow web authors to arrange data like text, images, links, other tables, etc. into rows and columns of cells. It makes the webpage attractive. Table begins with <Table> tag and ends with</Table>. Table has various attributes which will be discussed later. Table tag has various other tags which are explained below ;-

1.   Table Heading<TH>.It defines the table headings of a given table. It starts with <TH> tag and ends with</TH>tags. It should be defined with in the Table Row<TR>.
2.   Table Row<TR>.It defines the row in a table. Table heading and table data are defined with in the row which starts with <TR> Tag and ends

with </TR>

3. Table Data <TD>It defines the data of the table. Table data defines the information stored in the table. It starts with<TD> data and ends with</TD>.

Let us explain all these tags as shown with html code and output in fig 2.43and 2.44.

Fig: 2.44

Fig: 2.45

2.12.2 Attributes of Table Tag:-

Border:- The border attribute defines the width of the table border. It has 0 value for no border and by default value is 1.
Example for this is as follows.
<Table Border="1">

ALIGN:- Align attribute defines the alignment of the table in the browser window. It has left, right and center values.
Example for this is as follows.
<Table align="Right" Border="1">

BORDERCOLOR: - It defines the color of the border.
Example for this is as follows.
<Table BORDER=2 BORDERCOLOR="RED">

WIDTH:-Width defines the width of the table. It can be defined in pixel or as a percentage of the web browser window.
Example for this is as follows.
<Table WIDTH="35 %">
It defines the 35% space of the browser.
<Table WIDTH=500>
It defines the 500 pixels space of the browser. All the above tags are explained with an example shown in fig 2.46 and 2.47

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Fig: 2.46

Fig: 2.47

2.12.3 CELLSPACING is the pixel width between the individual data cells in the TABLE. (The thickness of the lines making the TABLE grid). The default value is zero. If the BORDER is set at 0, the CELLSPACING lines will be invisible.

     Example for this is as follows.

<Table Border="2" cellspacing=12> and is explained with an example as shown with html code and output in fig 2.48and 2.49

Fig: 2.48

Fig: 2.49

2.12.4   CELLPADDING is the pixel space between the cell contents and the cell border. The default for this property is also zero. This feature is not used often, but sometimes comes in handy when you have your borders turned on and you want the contents to be "away" from the border a bit for easy viewing. CELLPADDING is invisible, even with the BORDER property turned on.

Example for this is as follows.
<Table   Border="3" cellpadding=10>These are explained below with html code and its output as shown in fig 2.50 & 2.50

Fig: 2.50

Fig: 2.51

2.12.5   COLSPAN and ROWSPAN. Table cells can span across more than one column or row. The attributes COLSPAN ("how many across")defines the combination of one or more columns together while ROWSPAN ("how many down") indicates how many rows to be combined together.

     Syntax for this is as follows.

     <Table Border="1" colspan=2>

     <Table Border="1" rowspan=2>

      These are explained with an example as shown with html code and output in fig 2.51 and 2.52:-

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Fig: 2.52

Fig: 2.53

2.12.6 Difference between Colspan and Rowspan

COLSPAN	ROWSPAN
1. Sometimes it makes sense for a cell to span multiple columns . This might be used for a header cell that titles a group of columns of entries.	1. Sometimes it makes sense for a cell to span multiple rows. This might be used for a side-bar that groups rows of entries.
2. Allows a single table cell to span the width of more than one cell or column.	2. Allows a single table cell to span the height of more than one row.
3. COLSPAN is attribute that is used in i.e. <th> and <td> tag.	3. ROWSPAN is attribute that is used in i.e. <th> and <td> tag.
4. It provides the same functionality as "merge cell" in spreadsheet programs like Excel.	4. It provide the same functionality as "merge cell" in spreadsheet programs like Excel.
5. Example:- <th colspan="2">	5. Example:- <th rowspan="2">

2.12 Table Background:-

BACKGROUND attribute is used to set the background image in the given table.

The example for this is as follows:-

<table background="up.jpeg" border=2> This is explained below with an example.

These are explained with an example as shown with html code and output in fig 2.54 and 2.55:-

BGCOLOR:-BGCOLOR is used to set background colour of the table. The example used for this attribute is as follows:-
<table bgcolor="yellow" border=2>This is explained below with an example.(Fig. 2.56 and 2.57)

Fig: 2.56   Fig: 2.57

1. HTML is a Hypertext markup Language which is used to design webpage.
2. HTML codes are defined in Tags.
3. There are two types of element tags: Container and empty tags.
4. Container has both opening and closing tags while empty tags have single tag.
5. Web browser is used to see the output of html Program example Google chrome, Internet explorer, Firefox, Opera etc..
6. Heading tags can be defined between <H1> to<H6> Tags.
7. User can format his/her text using various tags example. <B>, <U>, <I> etc.
8. .html or .htm is the extension of HTML program.
9. Each tag has some attributes which are used to define the properties of that tag.
10. There are three types of lists these are ordered, unordered and definition lists.
11. Nested Lists are used to represent list with in list.
12. User can connect multiple webpages together with linking.
13. Linking of pages can be done using Anchor<A> tag.
14. Information can be defined in the tabular form, the tag used for this is <table>.
15. <IMG> Tag is used to define images in a web page.

Exercise

1. Multiple Choice Questions:

1. **What should be the first tag in any HTML document?**
   a. <head> b. <title>
   c. <html> d. <document>

2. **What is the correct HTML tag for inserting a line break?**
   a.
  b. <lb>
   c. <break> d. <newline>

3. **A webpage displays a picture. What tag was used to display that picture?**
   a. picture b.mage
   c.img d. src

4. **Page designed in HTML is called a**
   a. Yellow Page b. Web Page
   c. Server Page d. Front Page

5. **HTML document is saved using ____ extension.**
   a. .htl b. .html
   c. .hml d. .htnl

6. **Table tag has various other tags, these are**
   a. <TR>. b. <TD>.
   c. <TH> d. All of the above.

2 Fills in the Blanks: -

1. HTML stands for_____.
2. _____ list to represent an unorganized list.
3. _____ Tag is used to define the elements of a list.
4. ALT stands for_____.
5. _____ is the main part of the HTML document in which whole information about the webpage resides.
6. The _____ contains title that identifies the heading of the html document.

3 True Or False:-

1. HTML is a structured Language.
2. Table heading starts with <TH> tag and ends with</TH>tags
3. Align does not defines the alignment of the attached image in contrast to the other contents of the webpage
4. CELLPADDING is the pixel space between the cell contents and the cell border.
5. Definition list generally contains the definitons of different terms and their meaning.

4 FULL FORMS:-

1.HTML   2. <B>   3.<I>   4.<U>
5.<OL>   6.<UL>   7. <P>   8.

9. SRC   10.<IMG> 11. <TR>
12.<TH> 13<TD> 14. LI

15. URL.

5 Very Short Questions

1. Name the tag which is by the beginning and ending tags.
2. Name the tag of the HTML document in which whole information about the webpage resides.
3. Name a tag which is an empty element that is used to break a line and display the proceeding text from the next line, without giving any space between two lines.
4. Name the list which have information related to each other but their sequence is not important

6 Short questions:-

1. What is HTML?
2. What is a Tag?
3. What is <Img> tag. Explain.
4. Name different tags used to create a table.
5. Explain Font tag with its attributes.

7 Differentiate Between:-

1. Ordered and Unordered List.
2. Background and BGCOLOR.
3. Colspan and Rowspan.
4. Tag and attribute.

8. Long questions:-

1. Describe the basic structure of HTML in Details.
2. What are the various tags used in table?Explain with an example.
3. Explain ordered list with an example.
4. Explain Nesting List with an example.

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Full Form	Very Short Answer
1	c	Hypertext Markup Language	TRUE	Hypertext markup language	1. Container Tag
2	a	Unordered List	TRUE	Bold	2. Body tag
3	c	<LI>	FALSE	Italic	3.
4	b	Alternate	TRUE	Underline	4. Bulleted Lists
5	b	<Body>	TRUE	Ordered list	
6	d	heading	-	Unordered list	
7			-	Paragraph	-
8			-	Break	-
9			-	Source	-
10			-	Image	-
11				Table row	
12				Table heading	
13				Table data	
14				List item	
15				Uniform resource locator	

HTML- II

Objectives of this chapter:

Introduction
- 3.1 Hyperlink.

- 3.2 Forms.

- 3.3 Buttons.

- 3.4 Multimedia in HTML.

Introduction:

In the last chapter we have already discussed the different aspects of HTML which includes how to create a simple webpage, lists, tables etc. Now in this chapter Marquee ,Hyperlink,adding external audio and video to a web page in HTML will be discussed.

1.1 Hyperlink :

Link is an important property of HTML. With the help of hyperlink, any text or image available in Web page can be link to any other document. Link is also named as Hypertextlink or Hyperlink. Browser shows the Hyperlink in blue colour and also underlines it. LINKING means connecting multiple webpages with each other.Each website has multiple webpages related to its different information stored.In HTML linking is defined with HYPERLINK .It provides links between different webpages of the website .Usually links are defined into two types internal links (which are defined with in the same website) and External Links(which are defined to the links defined outside the website). Hyperlinks can be defined on text or images on the given webpage.

Fig: 3.1

Fig: 3.2

3.1.2 LINKING IMAGE AS A HYPERLINK

As we have defined earlier the hyperlink can be defined on text as well as other elements of a webpage. We can define hyperlink on an image also.

Eg.<A HREF="bodybackground.html"><image src="lampbg.jpeg" HEIGHT=70% WIDTH=60%">

Here in the above example a hyperlink is created on the image "lampbg.jpeg".In this user has to define anchor tag and img src tag to create a link on the given image.

Create html program "Link.html" with an image, then create another program with hyperlinking.html as shown in the in Fig 3.3 (a) & Fig. 3.3 (b) and output in Fig. 3.4 (a) & Fig 3.4 (b) And see the results

Fig: 3.3 (a)

Fig: 3.3 (b)

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<center>Fig: 3.4 (a)   Fig: 3.4 (b)</center>

3.1.3   Linking to email address

We can link an e-mail address by using an Anchor Tag. With this a user can send e-mail by clicking on the link.

The code used for linking to an e-mail address is as follows:

      <A HREF = mail to: abc@rediffmail.com> mailme </A>.

      Here abc@rediffmail.com is e-mail address and mailme is the hyperlink.

3.2 Forms

An html form is part of a web page that includes areas where readers can enter information to be sent back to WEBSITE or   the publishers of the web page It is a container that consists of other form elements such as text box, radio buttons ,list box etc.

Every form include the action and method attributes to complete the purpose of entering information in a form. These are explained below:-

Action:

The action attribute specifies where to send the form-data when a form is submitted.   FORM is useless unless some kind of processing takes place after the form is submitted. The action attribute is used to inform the browser what page (or script) has to be   called, once the SUBMIT button is pressed. It Specifies a URL to which the form's data is sent when submitted.

<center>55</center>

Exp. <FORM ACTION="welcome.php">

Method:

The method attribute defines the way through which user's information, which is entered in the form, can be sent and stored to the website server. There are basically two methods through which information can be sent.

Get Method:

This method is used to send the entered data by the user by using URL path and is sent to the server. Limited data can be sent to the server. Its parameters remain in the browser history.

<FORM method= "get" action="welcome.php">

Post Method:

This method is used to store the data to the server without interfering URL and is more secure to send information than GET method There is no restriction on sending data. Its parameters don't remain in the browser history.

<FORM method="post" action="welcome.php">

3.2.1 CREATING A FORM:

Every form must begin with a <form>tag, which can be located anywhere in the body of the html document and ends with </form>.Different controls are available which can be used in a form. These are explained below:-

3.2.2 Text Box: <Input>tag

This is a simple type of form control available and is used to ask the user to enter specific piece of information within a form, It uses the <input > element.Type is the attribute which can be used in the input element to determine the type of control which user wants to use with in the form. This tag must fall between the <form> and </form> tags, but it can be anywhere on the page in relation to text, images, and other html tags. For example, If user asks for someone's name you could type the following :

 What's your first name ?<input type="text" name="fullname" size="20" >

Here type defines the type of input needed, name defines the name of the field , that is used to retrieve the information from the form, size defines the size of the text. If web designer wants the user to enter text without it being displayed on the screen, he can use <input type="password" > instead of <input type="text">. Asterisks (***) are then displayed in place of the text.

Below html program shows the text input and its related output

<div align="center">Fig: . 3.5   Fig: . 3.6</div>

3.2.3 TEX AREAS:-

This is a container tag and is used to allow multiple lines of text in a single input item. It has two attributes these are ROWS and COLS .Row defines the number of rows defined in the text area and cols defines the number of columns used in the text area. If user wants to define some default text then he can define in-between the opening closing tags of text area element. All this is explained in the given example.

<textarea name="comments" rows="4" cols="20">
Please send more information.
</textarea>

The rows and cols attributes control the number of rows and columns of text that fit in the input box. Textarea boxes do have a scrollbar,   so that user can enter more text than fits in the display area.

3.2.4 CHECK BOXES:

The simplest input type is a checkbox, which appears as a small square the user can select or deselect by clicking on it. It is generally used where a group is used for sharing a common name from where information can be selected. It is used in <input> html element. We must give each checkbox a name attribute the value defined in the type attribute is checkbox. These are explained below with an example.

<input type="checkbox" name="baby" value="baby" > baby grand piano
<input type="checkbox" name="mini" value="my mini"> mini piano stool

You can check any option or both by clicking on it. It also supports some additional attributes

<div align="center">57</div>

3.2.5 RADIO BUTTONS:

Radio buttons, are those buttons where only one option can be selected at a time and are almost as simple to implement as check boxes. It is used in <input> html element. User must give each radio button a name attribute and the value defined in the type attribute is radio. Just use type="radio" and give each of the options its own input tag, but use the same name for all of the radio buttons in a group These are explained below with an example.

Ex. **<input type="radio" name="card" value = "visacard"> visa**
<input type="radio" name="card" value="mastercard"> master card

Below in Figure 3.7 and 3.8 html program shows the text input and its related output.

Fig 3.7   Fig. 3.8

3.2.6 SELECTION LISTS:

In this option user can select single or multiple options from a range of options. In this option multiple inputs are available but some options can be displayed at a time. Scrolling Lists and Pull-Down pick lists are created with the **<select>**tag. You can use this tag together with the **<option>**tag :

Exp. <select>
<option value ="ewin"> electric windows</option>
<option value ='amfm"> am/fm radio</option>
<option value ="tocharges">turbocharger</option>
</select>
No html tags other than <option> and </option> should appear between the <select> and </select> tags.

Attribute of select tag:-

Size: Size attribute here it determines how many items are to be shown at once on the selection list. If size="2" were used in the preceding code, only the first two options would be visible, and a scrollbar would appear next to the list so the user could scroll down to see the third option.

Ex.:   <Select name ="Month" size="3">

        name:-It is used to define name to the drop down menu.

        <Select name ="Month" size="3" multiple>

        Multiple:-This is used to select multiple options from the given option.

Value:-This is the value which has to be given back to the website and defined in the option tag.

Ex.:   <option Value="jan">January

Selected:-When this option is used one option will be preselected.

Let us discuss an example related to this topic as shown in figure 3.10 and 3.14

Fig. 3.9   Fig. 3.10

3.3 BUTTONS

Buttons are used to perform some action on the given webpage.Some important buttons are discussed below.

3.3. 1   SUBMIT:-

Every form must include a button that submits the form data to the server. You can put any label you like on this button. It has two attributes these are type, which has submit value and value attribute defines the name of the submit button which can be displayed on the button.   These are explained below with an example

        Ex: **<input type="submit" value="OK" or**

        <button type="submit"value ="sumbit">

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A button will appear on screen. When the user clicks it, all data items on the form are submitted

3.3. 2   RESET Button:

you can also include a button that clears all entries on the form so users can start over if they change their minds or make mistakes. It has two attributes these are "type", which has reset value and value attribute defines the name of the reset button which can be displayed on the button.   These are explained below with an example

Ex. : **<input type="reset" value="CLEAR ALL">**
 or **<button type="rest" value ="reset">**

All parts of a form must fall between the <form> and </form> tags Button are explained with an example as shown in figure 3.11 and 3.12

Fig. 3.11

Fig. 3.12

3.4 Multimedia in html:-

3.4.1<MARQUEE> :-This tag is used to move the text in the webpage. This is a container tag. This tag has some attributes which are generally used. These are defined in the following table

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Attribute name	Purpose	Syntax	Example
BGCOLOR	This attribute defines the background color of the text.	<Marquee BGCOLOR="COLOR NAMEGREEN">	<Marquee BGCOLOR="GREEN">
DIRECTION	This attribute defines the direction of the text i.e. right,left,up,down.	<Marquee direction="side">	<Marquee direction="Left">
HEIGHT	Defines the height of the text in pixel.	<Marquee height="pix.">	<Marquee height="50">
WIDTH	Defines the WIDTH of the text in pixel.	<Marquee WIDTH="pix.">	<Marquee Width="20">
BEHVIOUR	It defines the scrolling if the Text with three values 1. Scroll : infinitely scrolls the text 2. alternate: moves text left then right. 3. slide: brings the text from left or right of the webpage.	<Marquee behavior="value">	<Marquee behavior="scroll"> <Marquee behavior="alternate"> <Marquee behavior="slide">

Marquee tag is explained with code and output as shown in Fig. 3.13 and Fig 3.14 Following example all the above attributes:-

Fig. 3.13

Fig. 3.14

3.4.2 Adding audio/video files to HTML programs

      User can link audio/video file to html program by using Anchor tag .As we have used this tag to link files with html webpage. We have to define the path of the audio/video file in HREF attribute. Whenever user clicks on the given link the file will be downloaded on the user's system and can be played with supported software.

This is explained with an example in fig. 3.15 and 3.16

Fig. 3.15

Fig. 3.16

Points to Remember

1.   <A> ......</A>anchor tag is used to define hyperlink.
2.   Form is a part of a webpage that includes areas where readers feed information which can be forwarded to the webserver.
3.   Text input and textarea tag is used to define text format in the webpage.
4.   Checkbox is a small square that user can select from given options.
5.   Radio Buttons can be used to select single option from the given set of options.
6.   Buttons are used to perform a specific job or task.
7.   Marquee Tag is used to move the text in the webpage.
8.   Anchor Tag can used to link audio or video files to the webpage.

Exercise

1. Multiple Choice Questions:

1. **What is the use of Forms in HTML?**
   a. to display contents of email.
   b. to display animation effect.
   c. to collect user's input.
   d. None of the Above.

2. **Which of the following is most commonly used HTTP methods?**
   a. PRE and POST.
   b. GET and SET.
   c. ASK and REPLY.
   d. GET and POST.

3. **Is it possible to link within the current page ?**

   a. Yes.

   b. No.

   c. Only In frames

   d. Null.

4. **An html form is part of a web page that includes areas where**
   a. Information is fed by the user.
   b. And sent to the website server.
   c. Both a and b.
   d. None of the above.

5. **A container tag is used to allow multiple lines of text in a single input item is known as**
   a. Textarea.
   b. Checkbox.
   c. Radio Button.
   d. None of the above.

2. Fill in the Blanks:

1. _____tag is used to create a link on a webpage.

2. _____ is used to send information into the webserver.

3. If you want to allow multiple lines of text _____is used in the form(Textarea)

4. To select multiple options in a form we can use_____.(Checkbox)

5. To clear all options from a form we can use _____button.(reset)

3. True or False:

1. An unvisited Link is underlined and blue.
2. <input type="password"> will show asterisks in the text box.
3. Selection lists are used to define the dropdown lists.

4. Full forms:-
   1. <A> 2. HREF 3. URL
   4. BGCOLOR 5. SRC

5. Short Answer type Questions:

1. Which tag is used to link a webpage.
2. Which attribute is defined to specify where to send the form-data when a form is submitted.
3. This method is used to encode the feeded data by the user by using URL path and is sent to the server.
4. What are used to perform some action on the given webpage.

6. Long Answer type Questions:

1. What is hyperlink?
2. What is Anchor tag? Explain with example.
3. What is a form?
4. Name different types of buttons used in html form.
5. What is checkbox?

Long Questions:

1. Discuss different types of buttons with example.

2. What is selection list in form?

3. Explain TextArea with an example.

4. What is the purpose of action and method in forms?

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Full Form	Very Short Answer
1	c	<a>	TRUE	Anchor tag	<A>
2	d	form	TRUE	Hypertext References	Action attribute
3	a	Text area	TRUE	Uniform resource locator	Get method
4	c	Checkbox		Background color	Button
5	a	Reset button	–	Source	

WEB DEVELOPMENT

Introduction

We will learn to make small projects and we will also know that how a website is planned and launched on internet. There are four stages of planning a website viz: goal of site, designing for viewers, work strategy, development of subject matter. Similarly there are many stages to put website in use for, example, selection of name of Domain, Registration of Domain Name, selection of Server, testing the website off-line as well as on-line etc.

4.1 Planning for website.

The website developed by proper planning is always effective. To build a website we should first make its planning. If done with proper planning, the objective of site would be fulfilled. We communicate through websites. Hence we have to decide while planning that what we wish to communicate and by which technique. First & foremost purpose of designing a website is to keep in mind the goal and target of website. The website should always be built to achieve its goal.

4.1.1 The goal of the Site

Every site has some specific purpose. This purpose guides us what to include in the site. User can prepare a detailed and decorative site. But the condition is that it must support the purpose of the site. The following facts are to be kept in mind while building a site:

- Purpose of organization.

- important purposes of your site.
- Method to develop the site
- Fulfilling these requirements.
- Working strategy of site to achieve the goal.
- Time of developing the site.
- Time of updating the site.

4.1.2 Designing for the Audience

After fixing the aim of website, we have to know about nature of viewers of the site, which type of people will be hitting it: children, students, advocates, doctors or housewives. We have to keep in mind about their expectation from your site.

For example if the designer is building the site for a publisher then the viewer's certainly would be students, children, teachers, professors and other intellectuals. In such a case the site will be designed according to their interest and expectations.

4.1.3 Strategy

When the designer has decided to build a particular site, we will have to think about its work-strategy. The mode of works to carry out for achieving the goal is called work-strategy. Many kinds of information can be included in the website.

- Text information
- Audio or Voice information
- Video information

A simple website is good and impressive. In other words it should not be complicated.

4.1.4 Contents

After finalizing above jobs we now need the contents of site to enter. The contents of the site supplies all the important information to the viewer, hence the contents should be at proper place and arranged systematically. If there are links in a sequence, then it is easier to search the required information.

4.2 Web Implementation Guidelines

After making complete and proper planning and deciding about information (contents) and links we have to work for its implementation part. We probably know that the content of the website is its most important aspect, but it's also very important that its intended audience are able to find it, and that **visitors** to our site can quickly locate the information they are seeking. It's also a good idea to check that it's thoroughly optimized to attract new visitors and track their activities.

Selection of Domain Name, Registration of Domain, Selection of server

and managing the site etc. are under the Web Implementation Plan.

4.2.1 Choosing Domain Name

Domain name is the address of your site .Choose a domain name that is brief, easy to remember, and suited to the content of your website. Some common top-level domains include .com, .edu, .org, and .net, which stand for commercial, education, organization, and network respectively. It should not include hyphens. Maximum numbers of letters included in it can be 63.

4.2.2 Registering Domain Name

After deciding about the Domain Name, we have to register it. Designer can register the site through the service provider. Service provider **asks** to fill a form and also charges fee for its registration. After filling the form it is verified whether the Domain name provided by the designer is free and is not already registered by anyone else. If the name is available then designer gets the confirmation message about registration through email.

4.2.3 Choosing a Server

To put the site in practice we have to choose the server or host. It is very important task Designer can buy or hire the server where the site is to remain permanent. In the **web world** the role of server is very important. Such a specific server is named Web server. Whenever designer opens any site on the browser, it connects to the concerned server. Securing the bandwidth necessary to keep the website running smoothly. Bandwidth is the amount of data transferred within a given time period.

Designer may need to buy more bandwidth as the **website grows** or else the visitors may experience lag, which could drive them away from the website. Many hosts also provide software aid in building the website.

4.2.4 Organizing Web page

If a person cannot find what they are looking for on the website within 30 seconds, there is a good chance they will leave and never return. Organizing the website into specific sections and then providing links to those sections at the top of each page is an effective and simple way to make the website easy to navigate**.** The Webpage should be beautifully organized. So that it gives a balanced look. The size of the page is an important point in organizing webpage. The following points must be kept in mind while designing a webpage.

1. Size of a web page should not be more than two screens. If we have to use a longer page, the establish internet link through bookmark.
2. If the document is longer than one screen then show only a part of it to

the viewers and remaining part maybe shown only on their demand/requirement.

4.2.5 Look

Webpage should have a fine look so that one is attracted to read it. In a webpage with a good look designer should insert links graphics, animation, sound and video clips. The various contents in the webpage should give an impression of diversity and a beautiful view. Usage of proper font size/colour, background colour, table, graph etc. gives a good look to the site.

4.2.6 Validate the code.

Validate the HTML, CSS, XHTML, JavaScript, and XML codes to ensure that the website has clean code and function as intended for visitors. There are several programs available online that validate each type of code.

4.2.7 Offline Testing

After designing all the webpages it is tested on the browser. No internet connection is required for this test that is why it is named as offline test. In offline test first of all home page is opened in different browser. Then we check all the linked pages one by one. Designer should ascertain it here that all pages have a good appearance. The website should be thoroughly tested to confirm that the design and page structure are displayed as **intended.** Specifically, view the website with the most popular browsers, including Chrome, Firefox, Internet Explorer, Opera, and Safari, as those browsers are used by the majority of people who are browsing the Internet.

4.2.8 Uploading the Site

To make the site available to all the viewers on the internet is called Upload.

To transfer the webpages to the **"Host"** we need File Transfer Protocol (FTP) client. For this purpose first of all we set FTP programmer as Cute FTP. Then upload the file after coming online. The copy of the website on computer is called the *local* version, and the copy on the web host is called the *production* version.

4.2.9 Online Testing

When the site is uploaded online, next step is to test it online. Make the internet connection, open the browser, and type URL of the site. Check that all the links of the site are working property.

4.2.10 Using SEO-friendly code.

Utilize both Meta and ALT tags to ensure that the website not only appears in user searches but that pertinent keywords from the content of the website are displayed. Doing so will more likely attract searchers' interests and will facilitate more visits to the website. ALT tags are merely a written description to go along with the pictures on the website, and so they are

necessary to tell search engines and searchers what kind of pictures are there on the website.

4.2.11 Installing website analytics

The statistics will enable to monitor the number of visits website receives, the amount of time visitors stay, the average number of page views for each visitor, and many other useful statistics. Making use of such software will enable to make adjustments to the website to increase its effectiveness.

4.3 Some important aspects related in publishing website

4.3.1 SEO

*SEO means search **e**ngine **o**ptimization.* Search engine optimization is a methodology of strategies, techniques and tactics used to increase the amount of visitors to a website by obtaining a high-ranking placement in the search results page of a search engine including Google, Bing, Yahoo and other search engines.

SEO helps to ensure that a site is accessible to a search engine and improves the chances that the site will be found by the search engine. SEO is typically a set of practices that webmasters and Web content producers follow to help them achieve a better ranking in search engine results.

4.3.2 Social media marketing (SMM)

SMM is a form of Internet marketing that utilizes social networking websites as a marketing tool. The goal of SMM is to produce content that users will share with their social network to help a company increase brand exposure and broaden customer reach.

One of the key components of SMM is social media optimization (SMO). Like search engine optimization (SEO), SMO is a strategy for drawing new and unique visitors to a website. SMO can be done in two ways: adding social media links to content, sharing buttons or promoting activity through social media by updating statuses or tweets, or blog posts.

SMM helps a company get direct feedback from customers (and potential customers) while making the company seem more personable. SMM became more common with the increased popularity of websites such as Twitter,Facebook, Myspace, LinkedIn, and YouTube.

4.4 Some important guidelines or checklist which must be noted while publishing website.

4.4.1 Page Content

1. Spelling and grammar, paragraphs, headers, lists, and other formatting should be correct.

2. Company contact details are accurate throughout the website.

3.   Images and audio and videos are in the correct places, formatted and working on all devices.

4.4.2 Design

Take the necessary steps to ensure that the site design is pixel perfect. If designer has a responsive website. It needs to check the design across all devices. The site should be looking good not just on an office desktop, but also on laptops, tablets, and mobile phones.

4.4.3 Functionality

Take some time to test and validate all of the different features on the website. Lead generation forms, social sharing, should work flawlessly across the website such as:-

1.   Thank-you message or page displays after form is submitted.
2.   Company logo is linked to the homepage.
3.   Load time for site pages is optimized.

4.4.4 SEO

Take some time to ensure that the website has been given a solid foundation for SEO success. From site architecture and content to metadata sitemaps, do not leave any stone unturned such as:

1.   Pages have **unique page titles** (fewer than 70 characters, includes keywords).
2.   Pages have keywords (fewer than 10, all words appear in page copy).
3.   Spelling and grammar are correct in all information.
4.   Alt tags have been added to every image.

4.4.5 Security & Backups

Designer can prevent loss of data and protect against malware and other damages by properly setting up site security and regular backups.

1.   24 x 7 monitoring scripts are installed.
2.   A copy of the final website has been made for backup purposes.
3.   Ongoing copies of the website are being created and stored on a regular basis.
4.   Passwords and other website **credentials** are stored in a secure database.

4.4.6 Compliance

Finally, make sure the website complies with any applicable laws and regulations. Internet law can be hard, and each industry has its own set of rules to follow. Following are a few rules one needs to know about:

1. Web pages offer accessibility for users with disabilities.
2. Terms and privacy policies are visible to website visitors.

4.3 Project

Project: School Website

We have learnt in details, about planning uploading and online testing etc of a website. Let us now build a project on the subject of **"School Website"**.

For building a project first of all a source file is created in notepad. It is saved as: with ..html extension. Finally it is run on internet explorer.

There are common tags used in building this project, which we have studied in previous chapters. This project contains one homepage and eight web pages. All the eight webpages are linked to **home page.**

Home page is always the first page of the website. This page contains all the information available on **the site.**

Now we are able to make a project in html related to a school ,So that we can able to implement all the concepts which we have discussed in this and previous chapters. Let us make a website of a school.

This is the home page of our website. As shown in fig.4.1

Fig 4.1

Code for this page is as follows in fig 4.2

Fig 4.2

The first Link available in the website is facilities available and the code and output for this is shown in fig 4.3 and 4.4

Fig. 4.3

Fig 4.4

The second link is admission form which has following output and code as shown in Fig. 4.5 and 4.6(a) and 4.6 (b)

Fig. 4.5

And the code for this form is as follows. Fig 4.6

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Fig 4.6 (a)

Fig 4.6(b)

The next link is for faculty details the output and its code is defined below in fig 4.7 and 4.8:-

Fig 4.7

The code for this is as follows

Fig 4.8

The next link is for house details the output in figure 4.9 and its code is defined below inn fig. 4.10 (a), 4.10 (b) and 4.11, 4,12.

Fig 4.9

Fig 4.10(a)

Fig 4.10(b)

```
<html>
<head>
 <title>OUR SCHOOL HOUSES</title>
<style>
body
{
background-color:lightgreen;
}
h1,H2{color:maroon;
margin-left:40px;
}
</style>
</head>
<body>
<h1>HOUSE BHAGAT SINGH</h1>
<B>HOUSE INCHARGE:-PARAMJIT SINGH(ECONOMICS LECTURER)
<h2>scheduled days:-11-20th date of every month.</h2>
</body>
</html>
```

Fig 4.11

```
<html>
<frameset cols="*,*">
<frameset rows="*,*">
<frame src="house1.html">
<frame src="house2.html">
<frame src="house3.html">
  </frameset>
<frame src="house3.html">

</frameset>
</html>
```

Fig. 4.12

The next available link is photo gallery as shown in figure 4.13 and the output and code for this webpage as shown in fig 4.14.

Fig 4.13

```
<html>
<head>
<title>IMAGES TAGS</title>
</head>
<body>
<A HREF="homepage.html">Home Page</A><br><br>
<image src="computerlab.jpg"  width=500 height=300><br>Computer Lab<br>
<image src="science lab.jpg"  width=500 height=300><br>science Lab<br>
<image src="library.jpg"  width=500 height=300><br>Library<br>
<image src="44.jpg" width=500 height=300><br>Ground<br>
<image src="avlab.jpg"  width=500 height=300><br>audio-visual Lab<br>
<image src="can.jpg" width=500 height=300><br>Canteen<br>
<image src="mdm.jpeg" width=500 height=300><br>Mid day Meal<br>
</body>
</html>
```

Fig 4.14

The next available link is Other helpful websites the output as shown in figure 4.15 and code for this webpage is as shown in fig.4.16

Fig 4.15   Fig 4.16

The next available link is query/suggestion form the output and code for this webpage is as shown in fig. 4.17, 4.18.

Fig.4.17

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Fig 4.18

The next and last available link is locate us the output as shown in figure 4.19 and code for this webpage is as fig. 4.20:-

Fig. 4.19

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```
LOCATEUS - Notepad
File   Edit   Format   View   Help
<html>
  <head>
<title>LOCATE US</title>
  </head>
  <body  font align="left">
<A HREF="homepage.html">Home Page</A><br><br>

  <center><font size=12><b>Contact Us</b></font></center>
<font size=5><b>
ADDRESS:-<br><br>
GOVERNMENT SENIOR SECONDARY SCHOOL,<br>
DISTT.MOHALI<br><br>
Email:-gsssmohali@gmail.com<br>
Phone No.<br>
01722680001
</font></b>
</body>
  </html>
```

Fig 4.20

Points to Remember

1.   Before deciding about the server we should register the domain name.
2.   The needs of viewers should be kept in mind while designing a website.
3.   You can establish your own server or can hire a space for it from any company or organization.
4.   After designing all pages they are tested off line.
5.   Site is uploaded with the help of FTP (File Transfer Protocol).
6.   After successful uploading, site in tested online.
7.   First page of a site is the home page, all other pages of site are linked with home
8.   Bandwidth is the amount of data transfer you are allowed within a given time period.
9.   Test your website in a variety of web browsers.
10. Search engine optimization is a methodology of strategies, techniques and tactics used to increase the amount of visitors to a website

Exercise

1. Multiple Choice Questions:

1. There are four stages of planning a website.
   a. Goal of a site.
   b. Designing for viewers.
   c. Work strategy. And development of subject matter.
   d. All of the above.
2. A good look of a webpage depends upon
   a. Font size/colour.
   b. background colour
   c. Table and graphics.
   d. All of the above.
3. No internet connection is needed in
   a. Offline testing.
   b. Online testing.
   c. Both of the above.
   d. None of these.
4. **SEO** *means*
   a. **Search engine optimization.**
   b. System engine optimization.
   c. Syncronized engine optimization.
   d. None of the above.
5. SMM Stands for
   a. Social media marketing.
   b. Science media marketing.
   c. System macro media.
   d. None of the above.

2. Fill in the Blanks:

1. While planning to build a site, decision about....... site is taken at the end.
2. ....is the address of your site.
3. After deciding about domain name next step is ....the domain name.
4. ....test can be done without the internet.
5. The very first page of any website is called as...................

3. True or False:

1. There is no link of other pages with the home page
2. Address of site ends with .com, .org, .net etc.
3. Off line testing of a site should be done on a single browser only.
4. To send the webpages to host, we need FTP client.
5. During online testing of a site your computer should be connected to the internet.

Give the full names of

1. IP   2.   FTP   3.   URL

4. Very Short Answer type Questions:

1. Which is the address of your site .
2. The copy of the website on computer is called the _____ version, and the copy on the web host is called the _____version.
3. What helps a company get direct feedback from customers.
4. What is necessary to check all of the different features on the website.
5. How can Designer prevent loss of data and protect against malware and other damages.

5. Short Answer type Questions:

1. Describe the important points to fix the purpose of a site.
2. What do you mean by Domain Name?
3. What is role of server in world of internet?
4. What points are to be taken care of while designing a webpage?
5. What do you mean by offline testing?

6. Long Answer type Questions:

1. Write the different steps for planning a website?

2. Describe the necessary direction for implementing a website.

3. What is difference between offline and online testing.

4. What is SEO?

5. What is SMM?

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Very Short Answer
1	d	1. Publishing.	FALSE.	Domain Name.
2	d	2. Domain Name.	TRUE.	Local ,productionExternal Link.
3	a	3. Registration	FALSE.	SMM.
4	a	4. Offline.	TRUE.	Test and Validate.
5	a	5. Homepage.	TRUE.	By taking regular backup and preventive security measures.

Chapter 5

Desktop Publishing

Introduction

When documents and images are printed, these are "published." Before computers became common place, the publishing process required large print presses that copied and duplicated pages. In order to print images and words on the same page, the text and graphics would have to be printed separately, cut out, placed on a single sheet, taped in place, then copied and printed. Fortunately, computers with graphical user interfaces have enabled desktop publishing, which allows this process to be done electronically.

5.1 Desktop publishing:

Any time we use a computer to create a printable document, it can be considered desktop publishing. Desktop publishing programs can be used to

create books, magazines, newspapers, flyers, pamphlets, and many other kinds of printed documents. Word processing programs like Microsoft Word can be used for basic desktop publishing purposes.

Complete desktop publishing involves the combination of typesetting (choosing fonts and the text layout), graphic design, page layout (how it all fits on the page), and printing the document. However desktop publishing can also be as simple as typing and printing a school paper. In order to desktop publish, all we need is a computer, monitor, printer, and software that can create a printable document. While that might cost more than a pen and paper, it certainly is cheaper than a printing press.

5.1.1 Definition:

Desktop publishing is the process of using a computer and specific types of software to combine text, images and artwork to produce documents properly formatted for print or visual consumption.

5.1.2 Desktop Publishing Opened Visual Communication To All

Desktop publishing isn't limited to professionals. With the advent of desktop publishing software and affordable desktop computers, a wide range of people, including non-designers and others without graphic design experience, suddenly had the tools to become desktop publishers.

Freelance and in-house graphic designers, small business owners, secretaries, teachers, students and individual consumers do desktop publishing.

Non-designers can create visual communications for commercial digital printing, printing on a printing press, and for desktop printing at home or in the office.

Although desktop publishing encompasses everything from the initial design to printing and delivery of the finished product, the core parts of desktop publishing are the page layout, text composition and the prepress or digital file preparation tasks.

5.2 Desktop-publishing softwares

The primary software used in desktop publishing is page layout software and web design software. Graphics software, including drawing software, a photo editor and word processing software, are also important tools of the graphic designer or desktop publisher. The list of available software is lengthy, but some softwares are seen on just about everyone's must-have list depending on what they are trying to accomplish.

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5.2.1 Page Layout Software for Printing
- Adobe InDesign
- PagePlus Series from Serif
- QuarkXpress

5.2.2 Page Layout Software for Office
- Microsoft Office Suite
- Apple iWork Suite

5.2.3 Graphics Software
- Adobe Illustrator
- Corel Draw
- Inkscape

5.2.4 Photo Editing Software
- Adobe Photoshop
- Corel PaintShop Pro

5.2.5 Web Design Software
- Adobe Dreamweaver CC
- Adobe Muse

5.3 Word Processing vs. Desktop Publishing

Both word processing and desktop publishing are similar in many ways but different in areas that cover the publication of documents.

The similarities between the two are:
- Both deal with text that can be formatted.
- Both can work with tables and pictures.
- Both have many similar features like WordArt, Clip Art, and text styles.

The differences between the two are:

· Word processing involves creation, editing, and printing of text while desktop publishing involves production of documents that combine text with graphics.

· Word processing is difficult to layout and design as compared to desktop publishing. Thus, desktop publishing is used to work on things like newsletters, magazines, adverts, and brochures where layout is important. Word processing documents are common for simple memos, letters, manuscripts, and resumes.

5.4 WYSIWYG Feature:

Pronounced *WIZ-zee-wig.* Short for **w**hat **you** **s**ee **is** **w**hat **you** **g**et. A WYSIWYG application is one that enables us to see on the display screen exactly what will appear when the document is printed. A WYSIWYG is a

system in which content (text and graphics) can be edited in a form closely resembling its appearance when printed or displayed as a finished product, such as a printed document, web page, or slide presentation. WYSIWYG is especially popular for desktop publishing

With desktop publishing, we can increase productivity, minimize production cost, enhance the appearance of our documents, improve the level of creativity, reduce the time taken for printing and produce customized documents. The best part about DTP is that we can create professional-looking documents, without the need for graphic designer.

5.5 Graphics

A graphic is an image or visual representation of an object. Therefore, computer graphics are simply images displayed on a computer screen. Graphics are often contrasted with text, which is comprised of characters, such as numbers and letters, rather than images.

Computer graphics can be either two or three-dimensional. Early computers only supported 2D monochrome graphics, meaning they were black and white (or black and green, depending on the monitor). Eventually, computers began to support color images. While the first machines only supported 16 or 256 colors, most computers can now display graphics in millions of colors.

There are two main types of 2D graphic:

- Bitmap or Raster graphics
- Vector graphics

5.5.1 Bitmap or raster graphics

Bitmap graphics consist of many tiny dots called **pixels**. It is possible to edit each individual pixel using **bitmap graphics software** like Adobe Photoshop .

Examples of **bitmap graphics** are a digital photograph or a scanned image.

The amount of detail we can draw depends on the number of **pixels per square inch (PSI)**. Since the computer has to store information about every single pixel in the image, the file size of a bitmap graphic is often quite large. When we resize a bitmap graphic, it tends to lose its quality.

5.5.2 Vector graphics

Vector graphics are based on control points which are connected by lines and curves called **vector paths** or **vectors**. Vector paths can be used to make shape **objects**. It is possible to edit each shape object separately, for example, to change the shape, outline type (stroke), fill, size or position.

Vector graphics software includes Adobe Illustrator and CorelDRAW. When a vector graphic is resized, it doesn't lose quality. This is because the software works out the new relationships between control points and redraws the image at the new size. Vector graphics do not store information about each pixel so file size does not depend on image size. Instead it depends on how much detail is in the image.

Fig. 5.1

3D graphics started to become popular in the 1990s, along with 3D rendering software such as CAD and 3D animation programs. By the year 2000, many video games had begun incorporating 3D graphics, since computers had enough processing power to support them. Now most computers now come with a 3D video card that handles all the 3D processing. This allows even basic home systems to support advanced 3D games and applications.

5.6 Margins

A margin is the area between the main content of a page and the page edges. The margin helps to define where a line of text begins and ends. A page to include top, Bottom, Left and Right margin as shown in fig 5.2.

Fig. 5.2

The default margins are usually defined as one inch on all sides. However, depending on the requirement, the margins may vary. These margins create a frame around the content of the page so that the text does not run all the way to the edges. The white space along the edges of the document makes the page look cleaner and the text is easier to read.

Fig. 5.3

Fig. 5.4

5.6.1 Gutter position

A **gutter margin** setting adds extra space to the side **margin** or top **margin** of a document that we plan to bind. A **gutter margin** helps ensure that text isn't hidden by the binding.

5.7 Fonts

A font is a set of printable or displayable text character s in a specific style and size or we can say that a font is a specific typeface of a certain size and style. A typeface is a set of characters of the same design. These characters include letters, numbers, punctuation marks, and symbols. Some popular typefaces include Arial, Helvetica, Times, and Verdana. While most computers come with a few dozen typefaces installed, there are thousands of typefaces available. Because they are vector-based (not bitmaps), typefaces can be scaled very large and still look sharp. The term "typeface" is often confused with "font," which is a specific size and style of a typeface. For example, Verdana is a typeface, while Verdana 10 pt bold is a font. It's a small difference, but is good to know.

Arial

Arial Regular	Arial Narrow Regular
Arial Italic	*Arial Narrow Italic*
Arial Bold	**Arial Narrow Bold**
Arial Bold Italic	***Arial Narrow Bold Italic***
Arial Black	**Arial Rounded MT Bold**

Fig. 5.5

5.8 Printer

A printer is an external output device that takes data from a computer and generates output on a paper in the form of graphics / text.

There are two types of printers.

· Impact Printers
· Non-Impact Printers

5.8.1 Impact printers

An impact printer has a head that contains pins to make contact with the paper. It usually forms the print image by striking its pins on a inked ribbon against the paper . Following are some examples of impact printers.

5.8.1.1 Dot-Matrix Printers

The dot-matrix printer uses print heads containing from 9 to 24 pins. These pins produce patterns of dots on the paper to form the individual characters. The 24 pin dot-matrix printer produces more dots that a 9 pin dot-matrix printer, which results in much better quality and clearer characters. The general rule is: the more pins, the clearer the letters on the paper. The pins strike the ribbon individually as the print mechanism moves across the entire print line in both directions, i-e, from left to right, then right to left, and so on. The user can produce a color output with a dot-matrix printer (the user will change the black ribbon with a ribbon that has color stripes). Dot-matrix printers are inexpensive and typically print at speeds of 100-600 characters per second.

Fig 5.6 Dot Matrix Printer

5.8.1.2 Daisy-wheel Printers

In order to get the quality of type found on typewriters, a daisy-wheel impact printer can be used. It is called daisy-wheel printer because the print mechanism looks like a daisy; at the end of each "Petal" is a fully formed character which produces solid-line print. A hammer strikes a "petal" containing a character against the ribbon, and the character prints on the paper. Its speed is slow typically 25-55 characters per second.

Fig 5.7 Daisy Wheel Printer

Note:

dot marix printer and daisy wheel printer comes in the category of character- at- a- time printer.

5.8.1.3 Line Printers

In business where enormous amount of material are printed, the character-at-a-time printers are too slow; therefore, these users need line-at-a-time printers. Line printers, or line-at-a-time printers, use special mechanism that can print a whole line at once; it can typically print the range of 1,200 to 6,000 lines per minute. Drum, chain, and band printers are line-at-a-time printers.

Fig 5.8

5.8.2 Non-Impact Printers

Non-impact printers do not use a striking device to produce characters on the paper; and because these printers do not strike hammer against the paper its much quieter. Following are some non-impacted printers.

5.8.2.1 Ink-jet printers

Ink-jet printers work in the same fashion as dot-matrix printers in the form images or characters with little dots. However, the dots are formed by tiny droplets of ink. Ink-jet printers form characters on paper by spraying ink from tiny nozzles through an electrical field that arranges the charged ink particles into characters at the rate of approximately 250 characters per second. The ink is absorbed into the paper and dries instantly. Various colors of ink can also be used.

Fig 5.9

One or more nozzles in the print head emit a steady stream of ink drops. Droplets of ink are electrically charged after leaving the nozzle. The droplets are then guided to the paper by electrically charged deflecting plates [one plate has positive charge (upper plate) and the other has negative charge (lower plate)]. A nozzle for black ink may be all that's needed to print text, but full-color printing is also possible with the addition of needed to print text, three

extra nozzles for the cyan, magenta, and yellow primary colors. If a droplet isn't needed for the character or image being formed, it is recycled back to its input nozzle.

Several manufacturers produce color ink-jet printer. Some of these printers come with all their color inks in a cartridge; if we want to replace on color, we must replace all the colors. Other color ink-jet printers allow us to replace ink individually. These printers are a better choice if user uses one color more than other colors. These printers produce less noise and print in better quality with greater speed.

5.8.2.2 Laser printers

A laser printer works like a photocopy machine. Laser printers produce images on paper by directing a laser beam at a mirror which again directs the beam onto a drum. The drum has a special coating on it to which toner (an ink powder) sticks. Using patterns of small dots, a laser beam conveys information from the computer to a positively charged drum to become neutralized. From all those areas of drum which become neutralized, the toner detaches. As the paper rolls by the drum, the toner is transferred to the paper printing the letters or other graphics on the paper. A hot roller bonds the toner to the paper.

Fig 5.10

Laser printers use buffers that store an entire page at a time. When a whole page is loaded, it will be printed. The speed of laser printers is high and it prints quietly without producing much noise. Many home-use laser printers can print eight pages per minute, but faster printer can print approximately 21,000 lines per minute, or 437 pages per minute (if each page contains 48 lines). When high speed laser printers were introduced they were expensive. Developments in the last few years have provided relatively low-cost laser printers for use in small businesses.

1. In order to desktop publish; all we need is a computer, monitor, printer, and software that can create a printable document.
2. Desktop publishing hardware and software are also used to design and produce web pages.
3. The primary software used in desktop publishing is page_layout software and web design software.
4. Both word processing and desktop publishing are similar in many ways but different in areas that cover the publication of documents.
5. A graphic is an image or visual representation of an object.
6. A margin is the area between the main content of a page and the page edges.
7. *A printer is an external output device that takes data from a computer and generates output in the form of graphics / text on a paper*

Exercise

1. Multiple Choice Questions:

1) Programs that can be used to create books, magazines, newspapers, flyers, pamphlets, and many other kinds of printed documents.
   a. Desk Publishing
   b. Desk Top Publishing
   c. Top Publishing
   d. Publishing

2) That enables us to see on the display screen exactly what will appear when the document is printed.
   a. WYSWJKI
   b. WKSWUG
   c. WUSIWUG
   d. WYSIWYG

3) A printer that works like a photocopy machine
   a. Laser
   b. InkJet
   c. Line
   d. Drum

4) _____ is a visual representation of objects
   a. Charts
   b. Graphics
   c. Frames
   d. Fonts

5) Printer that print image by pressing an inked ribbon against the paper using a hammer or pins.
   a. Ink-jet
   b. Impact
   c. Non impact
   d. Laser

Fill in the banks

1) Arial, Helvetica, Times, and Verdana etc. are examples of_____ and they have same _____.
2) A **Gutter margin** setting adds extra space to the ____ **margin** or _____ **margin** of a document that we plan to bind.

3) In web pages the content is _____, not designed for ____.
4) Laser printers use _____ that stores an _____ at a time.

True/False

1) DTP stands for Desk Top Publishing.
2) Desktop publishing hardware and software is also used to design and produce web pages.
3) In Ink-Jet Printer, the ink can be absorbed into the paper and dries instantly.
4) The dot-matrix printer uses print heads containing from 19 to 124 pins.

Very short Answers Type Questions

1) Which printer can typically print the range of 1,200 to 6,000 lines per minute?
2) Which image can be either two or three-dimensional.
3) Which printer has a special coating on it to which toner (an ink powder) sticks?
4) A set of characters of the same design is called as .....?

5) The area between the main content of a page and the page edges is called as ....?

Short Answer type Questions

1) What is Desktop Publishing?
2) What are the various types of printers?
3) What is margin?
4) What do you mean by Gutter Position?
5) What are Graphics?
6) Explain WYSIWYG feature.

Long Answer type questions

1) What is the difference between Vector Graphics and Bitmap Graphics?
2) Describe Desktop Publishing & List any five software used for Desktop Publishing.
3) What is the difference between Impact and Non-Impact printers?
4) What are non-impact printers explain laser & inkjet printers.

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Very Short Answer
1	Desk Top Publishing	Typeface, design	.True	Line Printers
2	WYSIWYG	Side, top	.True	Computer Graphics
3	Laser	Viewable, print	.True	Laser Printers
4	Graphics	Buffers, entire page	False	Typeface
5	Impact	-	-	Margins

Chapter
6
OPERATING SYSTEM

Introduction:

An Operating System (OS) is an interface between computer user and computer hardware. An operating system is software which performs all the basic tasks like file management, memory management, process management, handling input and output, and controlling peripheral devices such as disk drives and printers.

Some popular Operating Systems include Linux, Windows, OS X, VMS, OS/400, AIX, z/OS, etc.

6.1 Definition of operating system

An operating system is a program that acts as an interface between the user and the computer hardware and controls the execution of all kinds of programs.

Fig 6.1 Operating System

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6.1.1 Services provided by operating System

An Operating System provides services to both the users and to the programs.

- It provides programs an environment to execute program.
- It provides to users the services to execute the programs in a convenient manner.

Following are a few common services provided by an operating system

- Program execution
- I/O operations
- File System manipulation
- Communication
- Error Detection
- Resource Allocation
- Protection

6.1.1.1 Program execution

Operating systems handle many kinds of activities from user programs to system programs like printer spooler, name servers, file server, etc. Each of these activities is encapsulated as a process.

A process includes the complete execution context (code to execute, data to manipulate, registers, OS resources in use). Following are the major activities of an operating system with respect to program management

- Loads a program into memory.
- Executes the program.
- Handles program's execution.
- Provides a mechanism for process synchronization.
- Provides a mechanism for process communication.
- Provides a mechanism for deadlock handling.

6.1.1.2 I/O Operation

An I/O subsystem comprises of I/O devices and their corresponding driver software. Drivers hide the peculiarities of specific hardware devices from the users.

An Operating System manages the communication between user and device drivers.

- I/O operation means read or write operation with any file or any specific I/O device.

- Operating system provides the access to the required I/O device when required.

6.1.1.3   File system manipulation

File manipulation refers to wide variety of operations which are available and allow us to delete ,copy, move. As we know a file represents a collection of related information. Computers can store files on the disk (secondary storage), for long-term storage purpose. Examples of storage media include magnetic tape, magnetic disk and optical disk drives like CD, DVD. Each of these media has its own properties like speed, capacity, data transfer rate and data access methods.

A file system is normally organized into directories for easy navigation and usage. These directories may contain files and other directions. Following are the major activities of an operating system with respect to file management

- Program needs to read a file or write a file.
- The operating system gives the permission to the program for operation on file.
- Permission varies from read-only, read-write, denied and so on.
- Operating System provides an interface to the user to create/delete files.
- Operating System provides an interface to the user to create/delete directories.
- Operating System provides an interface to create the backup of file system.

6.1.1.4   Communication

In case of distributed systems which are a collection of processors that do not share memory, peripheral devices, or a clock, the operating system manages communications between all the processes. Multiple processes communicate with one another through communication lines in the network.

The OS handles routing and connection strategies, and the problems of contention and security. Following are the major activities of an operating system with respect to communication

- Two processes often require data to be transferred between them
- Both the processes can be on one computer or on different computers, but are connected through a computer network.
- Communication may be implemented by two methods, either by Shared Memory or by Message Passing.

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6.1.1.5   Error Detection

Errors can occur anytime and anywhere. An error may occur in CPU, in I/O devices or in the memory hardware. Following are the major activities of an operating system with respect to error Detection

- The OS constantly checks for possible errors.
- The OS takes an appropriate action to ensure correct and consistent computing.

6.1.1.6   Resource Management

In case of multi-user or multi-tasking environment, resources such as main memory, CPU cycles and files storage are to be allocated to each user or job. Following are the major activities of an operating system with respect to resource management

- It acts like a resource manager. The OS manages all kinds of resources using schedulers.
- CPU scheduling algorithms are used for better utilization of CPU.

6.1.1.7   Protection

Considering a computer system having multiple users and concurrent execution of multiple processes, the various processes must be protected from each other's activities.

Protection refers to a mechanism or a way to control the access of programs, processes, or users to the resources defined by a computer system. Following are the major activities of an operating system with respect to protection

- The OS ensures that all access to system resources is controlled.
- The OS ensures that external I/O devices are protected from invalid access attempts.
- The OS provides authentication features for each user by means of passwords.

6.2   Types of Operating Systems

Operating systems are there from the very first computer generation and it keep evolving with time. In this chapter, we will discuss some of the important types of operating systems which are most commonly used.

6.2.1   Batch operating system

The users of a batch operating system do not interact with the computer directly. Each user prepares his job on an off-line device like punch cards and submits it to the computer operator. To speed up processing, jobs with similar

needs are batched together and run as a group. The programmers leave their programs with the operator and the operator then sorts the programs with similar requirements into batches.

The problems with Batch Systems are as follows

- Lack of interaction between the user and the job.
- CPU is often idle, because the speed of the mechanical I/O devices is slower than the CPU.
- Difficult to provide the desired priority.

6.2.2 Time-sharing operating systems

Time-sharing is a technique which enables many people, located at various terminals, to use a particular computer system at the same time. Time-sharing or multitasking is a logical extension of multiprogramming. Multiple jobs are executed by the CPU by switching between them, but the switches occur so frequently. Thus, the user can receive an immediate response. Computer systems that were designed primarily as batch systems have been modified to time-sharing systems. Advantages of Timesharing operating systems are as follows

- Provides the advantage of quick response.
- Avoids duplication of software.
- Reduces CPU idle time.

Disadvantages of Time-sharing operating systems are as follows ?

- Problem of reliability.
- Question of security and integrity of user programs and data.
- Problem of data communication.

6.2.3 Distributed operating System

Distributed systems use multiple central processors to serve multiple real-time applications and multiple users. Data processing jobs are distributed among the processors accordingly.

The processors communicate with one another through various communication lines (such as high-speed buses or telephone lines). These are referred as loosely coupled systems or distributed systems. Processors in a distributed system may vary in size and function. These processors are referred as sites, nodes, computers, and so on.

The advantages of distributed systems are as follows

- With resource sharing facility, a user at one site may be able to use the resources available at another.
- Speedup the exchange of data with one another via electronic

mail.

- If one site fails in a distributed system, the remaining sites can potentially continue operating.
- Better service to the customers.
- Reduction of the load on the host computer.
- Reduction of delays in data processing.

6.2.4   Network operating System

A Network Operating System runs on a server and provides the server the capability to manage data, users, groups, security, applications, and other networking functions. The primary purpose of the network operating system is to allow shared file and printer access among multiple computers in a network, typically a local area network (LAN), a private network or to other networks.

Examples of network operating systems include Microsoft Windows Server 2003, Microsoft Windows Server 2008, UNIX, Linux, Mac OS X, Novell NetWare, and BSD.

The advantages of network operating systems are as follows
- Centralized servers are highly stable.
- Security is server managed.
- Upgrades to new technologies and hardware can be easily integrated into the system.
- Remote access to servers is possible from different locations and types of systems.

The disadvantages of network operating systems are as follows
- High cost of buying and running a server.
- Dependency on a central location(server) for most operations.
- Regular maintenance and updates are required.

6.2.5   Real Time operating System

A real-time system is defined as a data processing system in which the time interval required to process and respond to inputs is so small that it controls the environment. The time taken by the system to respond to an input and display of required updated information is termed as the response time. So in this method, the response time is very less as compared to online processing.

Real-time systems are used when there are rigid time requirements on the operation of a processor or the flow of data. A real-time operating system must have well-defined, fixed time constraints, otherwise the system will fail.

For example, Scientific experiments, medical imaging systems, industrial control systems, weapon systems, robots, air traffic control systems, etc.

6.3   Difference between DOS And Windows Operating System

Disk Operating System abbreviated as DOS is a product of Microsoft Corporation released in 1981 and it comes as part-and-parcel with Microsoft Windows operating system.To get to DOS prompt and give commands for performing tasks on files and directories,

Click Start > Run… and type command or cmd and press ENTER.

Windows is a series of most popular operating systems developed by Microsoft for use on personal computers. First edition of Windows that runs on MS-DOS 5.0 was released in 1985, as a 16-bit OS. Of all the editions of Windows OS released by Microsoft Corporation from 1985 till date, the popular ones include Windows 98, Windows 2000 Professional, Windows XP, Windows Vista and Windows 7,Windows8,Windows10 Coming to differences, here are 5 basic ones that differentiate DOS and Windows:

DOS	Windows
Single user	Multi User
Single tasking	Multi tasking
Not time Sharing	Time sharing
Input device keyboard	Standard Input devices are keyboard and mouse
Character User Interface (CUI)	Graphical User Interface (GUI)

6.4 Linux

Linux is one of popular version of UNIX operating System. It is open source as its source code is freely available. It is free to use. Linux was designed considering UNIX compatibility. Its functionality list is quite similar to that of UNIX.

6.4.1   Basic Features

Following are some of the important features of Linux Operating System.

- **Portable :** Portability means software can works on different types of hardware in same way. Linux kernel and application programs supports their installation on any kind of hardware platform.

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- **Open Source :** Linux source code is freely available and it is community based development project. Multiple teams work in collaboration to enhance the capability of Linux operating system and it is continuously evolving.
- **Multi-User :** Linux is a multiuser system means multiple users can access system resources like memory/ ram/ application programs at same time.
- **Multiprogramming :** Linux is a multiprogramming system means multiple applications can run at same time.
- **Hierarchical File System :** Linux provides a standard file structure in which system files/ user files are arranged. Files and directories are arranged in tree structure form
- **Shell :** Linux provides a special interpreter program which can be used to execute commands of the operating system. It can be used to do various types of operations, call application programs. etc.
- **Security :** Linux provides user security using authentication features like password protection/ controlled access to specific files/ encryption of data.

6.5   Computer Security

Computer security is the process of preventing and detecting unauthorized use of our computer. Prevention measures help us to stop unauthorized users (hackers) from accessing any part of our computer system. Detection helps us to determine whether or not someone attempted to break into our system, if they were successful, and what they may have done.

Our computers have become an extension of everything we do from banking and investing to shopping and communicating with others through email or chat. We may not consider our communications "top secret," most likely we do not want strangers reading our email, using our computer to attack other systems, sending forged email from our computer, or examining personal information stored on our computer.

Hackers do not care about our identity. Often they want to gain control of our computer so they can use it to launch attacks on other computer systems. Having control of our computer gives the hackers the ability to hide their actual location as they launch attacks, often against high-profile computer systems such as government or financial systems.

Hackers have the ability to watch all our actions on the computer, or cause damage to our computer by reformatting our hard drive or changing our data.

Internet Security is the most important aspect that everyone using the internet should understand. Here we are describing a few important tips to keep ourself secure and protect our Information from Security threats.

6.5.1 Latest Anti-virus software:

New viruses and threats are being discovered everyday and to cope with that we need to have a latest version of the Anti-virus software. Even to make our Version of Anti- Virus software effective, we need to update it with latest updates available. There are many Anti- Virus Software available, both free and paid.

6.5.2 Anti-Spyware Software:

Anti-virus software alone is not enough. To be secure from Internet Security threats we also need Anti-spyware software. Spyware programs are different from viruses in a way that unlike virus it does not alter the way in which our machines works or corrupt any data but it installs itself on our machine to send important data like passwords, Credit card numbers stored on your machine to its server. So in order to detect spyware programs & prevent one from getting into our machine we need latest Anti-spyware software.

6.5.3 Password protection :

Passwords are the most important aspect of various online accounts. They provide access to online accounts and enable us to perform various activities linked with account like shopping, emailing, online transactions etc. Keeping our password secure is like keeping money secure. Never keep same passwords for different accounts. Never keep password's that can be guessed or password relating to our personal's like telephone number, date of birth etc. Use long Password's consisting of both letters and digits and may be some special characters. Always Access Websites Related to our password directly by opening a new webpage and never through a link in email or provided otherwise.

6.5.4 Apply Latest Updates & Patches:

No software installed on our system is perfect for life. Apply the latest updates & patches to the software. These updates and patches are made available from time to time by the software manufacturer.

6.5.5 Firewall:

If possible try to Use a firewall to prevent hackers from attacking our system. Firewall blocks traffic not authorized to access our PC. Firewall enables us to access internet securely and prevent unauthorized applications and people from accessing our PC.

Exercise

1. Multiple Choice Questions:

1) An operating system is a
   - a. Terminal
   - b. Software
   - c. Storage system
   - d. Processor

2) The process of running multiple applications at the same time is known as
   - a. Multi application
   - b. Multi processing
   - c. Multi programming
   - d. Multi timing

3) It enables us to access internet securely and prevent unauthorized applications and people from accessing our PC.
   - a. Anti-Virus
   - b. Security
   - c. Firewall
   - d. None of these

4) The time taken by the system to respond to an input and display of required updated information is
   - a. Response time
   - b. Access time
   - c. Output time
   - d. Total time

5) Remote access to servers is possible from different locations in .
   - a. Batch Processing System
   - b. Time Sharing System
   - c. Network Operating System
   - d. Distributed system

2. Fill in the Blanks.

1) A _____ represents a collection of related _____.
2) _____System use multiple _____ processors to serve multiple real-time applications and multiple users.
3) _____ is the process of preventing and detecting _____ use of our computer.
4) _____provide access to _____ accounts and enable us to perform

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various activities linked with account like shopping, emailing, online transactions etc.

5) _____ are used when there are _____ time requirements on the operation of a processor or the flow of data.

3. True/False

1) The time taken by the system to respond to an input and display of required updated information is termed as the **response time**.

2) Anti-virus software alone is enough to be secure from Internet Security threats.

3) An Operating System cannot manage the communication between user and device drivers.

4) Linux source code is freely available and it is community based development project.

5) The OS manages all kinds of resources using schedulers.

4. Very short Answers type questions:

1) An interface between computer user and computer hardware is call as......

2) What hides the peculiarities of specific hardware devices from the users.

3) A mechanism or a way to control the access of programs, processes, or users to the resources defined by a computer system is called as......

4) The process of preventing and detecting unauthorized use of our computer is called as......

5. Short answer type Questions:

1) What is an operating System?
2) List type of operating systems.
3) Explain real time operating system.
4) What are the functions of operating system? Make a list.
5) What do you mean by computer security?

6. Long Answer Type Questions:

1) Explain functions of operating system.
2) What are the basic features of Linux?

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Very Short Answer
1	Software	File, Information	True	Operating System
2	Multi programming	Distributed, Central	False	Drivers
3	Firewall	Computer Security,Unauthorized	False	Protection
4	Response Time	Passwords, Online	True	Computer Security
5	Network Operating System	Real Time Systems, Rigid	True	

Microsoft Publisher - I

Objectives of this chapter:

7.1   What is Publisher?

Publisher is an application used to design and produce attractive advertising and promotional material like pamphlets, letter heads, banners, posters, calendars, invitations, and newsletters and so on. This advertising and promotional material is called a publication.

Publisher enables us to produce quick publications by using wizards and a design gallery. A template is the predefined model of publication. We can view the publication on the monitor exactly the way it would appear when printed. Publisher also helps us keep track of the colors used in publications to produce high-quality color output. With the help of publisher, we can create quick web sites at a minimum cost with ease.

7.2   Microsoft Publisher 2010:

Publisher 2010 is a program that helps us design professional publications such as newsletters, websites, brochures, catalogs, flyers, signs, postcards, invitations, greeting and business cards, letterheads, envelopes, business forms, banners, calendars, certificates, and more. Microsoft Publisher 2010 helps us to create professional-looking publications quickly and easily. With Publisher, we can create, design, and publish professional

marketing and communication materials for print, and for e mail. Publisher 2010 allows us to apply built-in templates, to apply our own custom templates, and to search from a variety of templates available on Office.com. Office.com provides a wide selection of popular Publisher templates, including newsletters and flyers.

7.3 How to start publisher?

Follow the given steps to start Publisher:
On the Start menu, point to All Programs, point to Microsoft office, and then click Microsoft office publisher 2010.

Fig 7.1

1. Click on the start button.
2. The search bar is shown in start menu for searching the programs and files.

Fig 7.2

3. Type "Publisher" or "Pub" in search bar and press enter button.

Fig 7.3 Search Bar

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Fig 7.4 Publisher opening window

7.4 Creating a Publication

We can create new Publication by following methods:
1. By using Blank Layout.
2. By using Installed templates.
3. By using online templates.

7.4.1 Creating a publication using blank Layout:

Following are the steps to start with a blank publication.
1. Click the File Menu, and then click New.
2. Under Available Templates, click a blank publication template, and then click Create.

Note:

We can choose the desired size of blank template by clicking More Blank Page Sizes from the New Publication screen or even we can also customize the size as per our requirement. Here we have selected Blank 8.5 x 11 (either Landscape or Portrait).

Fig 7.5

3.   Now, we can create a publication with our own specifications in Publication. We can also add the objects to the blank Layout like text, picture, word art, and auto shapes etc. The blank layout window is shown as below:

Fig 7.6 Blank Publication window

4.   After creating publication, save the publication by clicking on save option in File Menu. The Save As dialog box appears. type a name for our publication, select the folder in which we want to save it, and then click save button. The publication is saved with a .pub extension.

5.   Close the publication by clicking close button in File menu. A dialog box appears, if we want to save the changes, then click yes button, otherwise click no.

Before exiting Publisher, we should close all the publications, then Click Exit in File Menu or click cross button on title bar.

7.4.2 Components of publisher window

There are three most important components that we should remember as we work within Publisher 2010. These are:

7.4.2.1   The Quick Access Toolbar
7.4.2.2   The Ribbon
7.4.2.3   The File Window.

7.4.2.1   Quick Access Toolbar

The quick access toolbar is a customizable toolbar that contains commands that we may want to use. We can place the quick access toolbar above or below the ribbon. To change the location of the quick access toolbar,

click on the arrow at the end of the toolbar and click Show below the Ribbon. We can also add items to the quick access toolbar, simply click on any item and it will be added to our toolbar.

Fig. 7.7 Customize Quick Access Toolbar

7.4.2.2 Ribbon

The ribbon is the panel at the top portion of the document it has six tabs: Home, Insert, Page Design, Mailings, Review, and View. Each tab is divided into groups

Fig 7.8 Ribbon of Publisher

7.4.2.3 File Window

When we click on the File Menu, we are brought to the Info screen. It looks like that our document is gone, but it is not. As we click on the options in the File Menu, the screen will change accordingly.

● Save: Save the file as a 2010 file
● Save As: Allows you to choose a different file type (i.e. PDF, Word)
● Open: used to open a publisher file
● Close: Closes the file but keeps Publisher running
● Info: Edit Business Information, use Design Checker, and set Commercial Print Information

- Recent: List of our recently used Publisher files
- New: New Publication Screen
- Print: Print Options
- Save & Send: Options for saving and e-mailing the file
- Help: Microsoft Help
- Options: Set default options
- Exit: Closes Publisher (file and program)

Fig 7.9 File Window

7.4.3 Working in publication:

7.4.3.1   Adding Text:

1. From the Home or Insert Tab, select Draw Text Box.
2. Place the cursor on the page where we want to draw a text box.
3. Click and drag the cursor across the page to the desired size. The size of the text box can be changed after we have drawn it.
4. When we let go of the left click on the mouse, we are brought to the format tab which gives us more options for the text box.
5. Type the text in text box.

Fig. 7.10

7.4.3.2   Editing Text:
1. Highlight the text we want to edit.
2. If we are not brought to the Text Box Tools Format Tab, then select it.
3. Text Group Options:
   a. **Text Fit -** Defines how the text will fit in the text box: Best Fit, Shrink Text on Overflow, Grow Text Box to Fit, Do Not Auto-Fit
   b. **Text Direction -** Changes direction to horizontal or vertical
   c. **Hyphenation -** Changes hyphenation behavior of selected text.
4. **Font Group Options:** Style, Font Size, Bold, Italics, Underline, Text Spacing, & Color
5. **Alignment Group Options:** Text Box Alignment, Columns, Margins
6. **Effects Group Options:** Shadow, Outline, Engrave, Emboss

Fig. 7.11

7.4.3.1 Changing the Text Box Style: To change the text box style follow the steps:

1. Click on the text box.
2. Click on the Drawing Tools Format Tab.
3. Shape Styles Group Options: Style, Shape Fill, Shape Outline, Change Shape
4. Arrange Group Options: Wrap Text, Bring Forward or Backward, Rotate

Fig. 7.12

7.4.3.4   Inserting Clip Art: To insert the clip Art follow the steps:
1. Click on the Insert Tab.
2. Click Clip Art. The Clip Art window appears on the right side of the screen.

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3. Type in a keyword.
4. Click Go.
5. Browse through the results.
6. When we find clip Art, click on the thumbnail from the Clip Art
    Window.
7. The Clip Art image will then appear on our page.

Fig. 7.13

7.4.3.5 Inserting a Picture: To insert a picture follow the steps:

1. Click on the Home or Insert tab.

2.   Click on Picture.

3. Browse to the location of the picture we have saved on our
    computer.

4. Select the picture and click Insert.

Fig. 7.14

7.4.3.6 Inserting Shapes: To insert a shape follow the steps:
1. Click on the Home or Insert tab.
2. Click on Shapes.
3. Select a shape from the drop down menu.
4. On the page, click and drag to create the shape.
5. The shape appears on the page, and we are brought to the Drawing
    Tools
6. Format tab. From this tab, we can edit the style, fill, outline, and more.

Fig. 7.15

7.4.3.7 **Text Wrapping:** Text wrapping is the way our object is set on the page in reference to the text. To do text wrapping following are the steps:

1. Select the Object.
2. Click on the Format tab (Text Box, Drawing, or Picture Format).
3. In the Arrange group, click on Wrap Text. This will determine how text will be arranged around the object.

Here are the Options: None, Top & Bottom, Square, Through, Tight, More Layout Options

Fig. 7.16

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7.4.3.8   Resizing Objects: Resizing enables us to resize our objects.
1.   Click on the **object.**
2.   Click and drag the **handles** to resize.
      a. The corner handles will resize the object proportionally.
      b. The handles centered on the lines of the box will stretch the object vertically and horizontally.
The green handle allows us to rotate the object.

Fig 7.17

7.4.3.9   Moving Objects:
1.   Click on the object.

2.   Place our cursor over the solid line so that we see the crosshairs.

3.   Click and drag the object to the desired location.

Fig 7.18

7.4.3.10   Deleting Objects: We can also delete any object, if do not require it in our publication.
1.   Click on the object.
2.   Press Delete button on the keyboard.

7.5   Frame -
Most publications are divided into several different areas called frames. A frame can contain a variety of objects such as graphics, tables, or text boxes. Frames can be resized, moved and manipulated to suit your needs.

7.5.1 Working with Frames
Each publication is composed of different frames, such as text frames, picture frames, table frames, and shape/object frames. Click on different areas of the publication to identify the different frames. Handles, little circles on the corners and sides of the frame will appear. The handles help us to show which frame we have selected. These are also used in resizing frames.

Handles - When we click on a frame, small circles appear around the edge of the frame. These are called handles. We can click and drag on the handles to resize our frame.

7.5.2   Moving Frames:

7.5.2.1   To move a picture frame,
1.   Click on the picture.
2.   When our cursor turns into a four directional arrow, click and drag the picture frame to the desired location.

7.5.2.2   To move a text frame:
1.   Click on the text frame.
2.   Rest our cursor near the border of the text frame. When our cursor turns into a four directional arrow, click and drag the text frame to the desired location.

Fig. 7.19

7.5.3 Resizing Frames:

7.5.3.1   To resize a picture frame:
1.   Click on the picture.
2.   Rest our cursor on a corner handle. When our cursor turns into a diagonal line with arrows on the ends, click and drag inwards at a diagonal to make it smaller or outwards at a diagonal to make it larger. Using corner handles to resize pictures allows us to keep the picture in proportion.

7.5.3.1   To resize a text frame:
1.   Click on the text frame.
2.   Rest your cursor on one of the handles. When your cursor turns into a line with arrows on the ends, click and drag inwards or outwards to resize the text area.

Resizing Arrows
Fig. 7.20

7.5.4   Deleting Frames:
1.   Right click on the frame that we would like to delete.
2.   Select **Delete Object** from the list of choices.

7.5.5   Inserting Additional Text Frames :
1.   Click on **Text box** from the **Insert** Tab
2.   Click and drag over an area of the publication.
3.   Type the text we want to appear.

7.6 Viewing Pages in our Publication : There are three ways to view pages in a publication:

- Click on the thumbnails of the pages in the publication from the Page Navigation Window on the left hand side of the screen.

Fig 7.21 Page navigation view

- From the View tab, we can switch from single page to two-page spread view as well as choose other viewing options.

Fig 7.22

- On the bottom right corner of Publisher, we can change our view as well as zoom in and out using the slider.

Fig 7.23 Zoom in Zoom out slider

7.7 Template : A Template is a tool used in Publisher to help us to easily create basic publications. The template has a set of pre designed styles that we can use as it is or customize as we see fit.

7.7.1 Customizing the Template: Here we will learn how to customize a Template. Choose the publication type that we would like to use. The next screen will show us templates for the publication we have chosen.

Fig 7.24 Templates

Each template is customizable. Click on a template from the center. On the right side of the screen, we can change the template colors, fonts, and more. Once we have found a template and customized it, click **Create**. After we click create, we can edit the text boxes, images, and shapes that have been set up by the template as needed.

7.7.1.1   Changing the Design of a Template: To change the design template follow steps:
1.   Click on the Page Design tab.
2.   To change the entire template, click Change Template.
   ●   Choose a template from the pop up window. If we are currently working in a template and changing to a different template, the information we have entered will conform to the new template.
3.   To change the color scheme, browse through the color schemes available in the Schemes group.
   ●   Move the mouse over the color scheme to preview.
   ●   To select a color scheme, click on it.
4.   To change the font scheme, click on Fonts in the Schemes group.
   ●   Browse through the available font schemes.
   ●   Move the mouse over the font scheme to preview.

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- To select a font scheme, click on it.
- If we want to create our own font scheme, click on "New Print Scheme."

Fig. 7.25

7.7.1 Page Design:

- Click the tab Page Design if needed, to change templates, adjust page margins, apply ruler guides, or apply built-in color schemes to the chosen template.
- We can use the Built-in Ruler Guide templates to help in aligning text boxes, pictures, or other objects. To apply a Built-in Ruler Guide template click on the command Guides in the group Layout, and then choose a template.
- To add a vertical or horizontal ruler guide repeat the above step, then click on Add Vertical or Horizontal Ruler Guide.
- To add additional guides, move the mouse pointer over the vertical or horizontal ruler; drag the guide in the desired direction when the pointer changes to a two headed arrow.

7.7.2 Creating a Publication with Templates:

We can create a publication in Publisher by using template.

Available Publication Types: Publisher 2010 allows us:

- To apply built-in templates,
- To apply our own custom templates, and
- To search from a variety of templates available on Office.com.
  Office.com provides a wide selection of popular Publisher templates, including newsletters and flyers. To find and apply a template in Publisher 2010, do the following:
  1. On the File tab, click New.
  2. Under Available Templates, do one of the following:
- To use a template that we already have installed, click My Templates, click the template that we want, and then click Create.
- To use one of the pre-built templates installed in Publisher, under Most Popular or More Templates, click the category that we want, click the template that we want, and then click Create.
- To find and apply a template on Office.com, under Most Popular or More Templates, click the category that we want, click the template that we want, and then click Download.

Note:

We can also search for templates on Office.com from within Publisher. In the Search for templates box, type one or more search terms, and then click the arrow button to search

7.5.2.1   Creating publication with Installed templates:

We can create any publication easily with the help of the installed templates available in Publisher. We can use pre designed templates in publisher and create so many publications like Brochures, Business Cards, Calendars, Greeting Cards, Labels, Newsletters, Postcards, Advertisements, Award Certificates, Banners, Business Forms, Catalogues, E-mail, Envelops, Flyers, Gift certificates, Invitation cards, Letterhead, Menus, Resumes and so many quick publications.

Fig. 7.26

7.7.2.2   Creating publication with online templates:

We can create any publication easily with the help of the internet, because we have also a option to create publication using online templates. For online templates, internet facility should be available in our system.

Fig. 7.27

To find and apply a template on online Templates, click the category that we want, click the template that we want, and then click Download, and then apply that template.

7.8 Saving Your Publication: There are two basic ways to save our publication.

First one is to Point and click on the save icon on our toolbar.

<div align="center">OR</div>

Follow these steps:
1. Click on the File Menu and Save As.
2. When the Save As Dialogue Box appears Click Browse and find the location on computer where you want to save the file saved.
3. Type the name of our publication in the File Name field.
4. Click on the Save button.

7.9 Printing Your Publication: There are two basic ways to print your publication.

First one is to click on the print icon on toolbar. This will print one copy of our publication with the default print options.

<div align="center">OR</div>

1. Click on the **File Menu** and click **Print**.
2. When the print window appears, select the desired **number of copies**.
3. Choose any other **Print Settings**:
    - All Pages, Selection, Current Page, or Custom Range
    - Manually enter page numbers we want to print
    - How many pages print per sheet of paper
    - Paper Size
    - 1-sided or 2-sided printing
4. Click **Print**.

Points to Remember

1. Publisher is an application used to design and produce attractive advertising and promotional material

2. A template is the predefined model of publication

3. Publisher enables us to produce quick publications by using wizards and a design gallery

4. To open the Microsoft publisher by keyboard, Type "Publisher" in search bar and press enter button

5. We can also add the objects to the blank Layout like text, picture, word art, and auto shapes etc.

6. After creating publication, save the publication by clicking on save option in File Tab

7. Close the publication by clicking close button in File menu

8. Before exiting Publisher, we should close all the publications

9. We can place the quick access toolbar above or below the ribbon

10. We can also add items to the quick access toolbar, simply click on any item

11. The ribbon is the panel at the top portion of the document it has six tabs

12. Each tab is divided into groups

13. To view additional features within each group, click the dialog box launcher (arrow) at the bottom right corner of each group.

14. Click and drag the handles to resize

15. The corner handles will resize the object proportionally

16. The handles centered on the lines of the box will stretch the object vertically and horizontally

17. The green handle allows you to rotate the object

18. Place our cursor over the solid line so that we see the crosshairs.

19. Click and drag the object to the desired location

20. Most publications are divided into several different areas called frames

21. When we click on a frame, small circles appear around the edge of the frame. These are called handles

22. We can click and drag on the handles to resize our frame.

23. A Template is a tool used in Publisher to help us easily create basic publications

24. In arrange group, the text will be arranged around the object by using Wrap Text

25. If we want to delete any objects which are not required in publication, click on the object and press Delete button from the keyboard.

Exercise

1. Multiple Choice Questions:

1. Choose an application used to design and produce attractive advertising and promotional material.

a) Document   b) Spreadsheet
c) Publication   d) Presentation

2. Publisher enables us to produce quick publications by using _____.

a) Manual   b) Wizards
c) Customize   d) All of these

3. To open the Microsoft publisher by keyboard, what we need to type in search bar?

a) WordPad   b) Notepad
c) Access   d) Publisher

4. Each tab is divided into _____.

a) Groups   b) Blocks
c) Menus   d) Parts

5. After creating publication, save the publication by clicking on save option in _____.

a) File   b) Home
c) Insert   d) View

6. Close the publication by clicking _____ button in File menu.

a) Open   b) New
c) Print   d) Close

2. Fill in the Blanks:

1. We can also add the objects to the blank Layout like _____, _____, word art, and auto shapes etc.
2. The handles centered on the lines of the box will stretch the object _____ and _____

3. We can _____ and _____ on the handles to resize our frame.
4. To view additional features within each group, click the dialog box launcher (arrow) at the bottom _____of each_____.
5. When we click on a_____, small circles appear around the edge of the frame. These are called_____.

3. True or False:

1. A Template is a tool used in Publisher to help us easily create basic publication.
2. Most publications are divided into several different areas called frames.
3. The corner handles will resize the object proportionally.
4. Before exiting Publisher, we should not close all the publications.
5. We cannot add items to the quick access toolbar by click on any item.

4. Very Short Answer type Questions:

1. Extension used to save a publication is?
2. To move objects which cursor is used?
3. Online Templates are available in?
4. List of our recently used Publisher files are in?
5. The text is arranged around the object by using which option?

5. Short Answer type Questions:

1. What is Publisher?
2. Write the steps for Moving Objects in publisher.
3. Define Templates?

6. Long Answer type Questions:

1. How to create a publication using blank Layout in publisher?

2. How to add text using text box and write the steps for editing

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Very Short Answer
1	Publication	Text and Picture	True	.pub
2	Wizards	Vertically and horizontally	True	crosshairs
3	Publisher	Click and drag	True	Office.com
4	Groups	Right corner, group	False	Recent
5	File	Frame, handles	False	Wrap Text
6	Close	-	-	-

Chapter 8

Microsoft Publisher - II

8.1   Advertisements:

Advertising means how a company encourages people to buy their products, services or ideas. An advertisement or "ad" for short is anything that draws good attention towards these things. It is usually designed by an advertising agency. Ads appear on television, as well as radio, newspapers, magazines etc. Advertising is an audio or visual form of marketing communication that employs an openly sponsored, non-personal message to promote or sell a product, service or idea. Sponsors of advertising are often businesses who wish to promote their products or services.

Advertising is communicated through various mass media, including old media such as newspapers, magazines, Television, Radio, outdoor advertising or direct mail; or new media such as search results, blogs, websites or text messages. The actual presentation of the message in a media is referred to as an advertisement or "ad". Non-commercial advertisers include political parties, interest groups, religious organizations and governmental agencies. The following figure shows an example of an advertisement.

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Fig 8.1

MS – Publisher offers templates and other tools to help us to create a variety of publications, including **brochures**, **newsletters**, **business cards**, and **menus**. Various print media used for advertisement are:

      8.1.1 Brochures

      8.1.2 News letters

      8.1.3 Banners

      8.1.4 Catalogues

      8.1.5 Flyers

8.1.1 Brochure:

A **brochure** is an informative paper document often used for advertising that can be folded into a template, pamphlet or leaflet. Brochures are promotional documents, primarily used to introduce a company, organization, products or services to the public. Brochures are distributed inside newspapers, handed out personally or placed in brochure racks in high traffic locations. They may be considered as grey literature.

Now day's brochures are also available in electronic format and are called e-brochures. They have the added benefit of having unlimited distribution and cost savings when compared to traditional paper brochures.

The most common types of single-sheet brochures are the bi-fold (a single sheet printed on both sides and folded into halves) and the tri-fold (the same, but folded into thirds). A bi-fold brochure results in four panels (two panels on each side), while a tri-fold results in six panels (three panels on each side).

Other brochure fold arrangements are also possible: the accordion or "z-fold" method, the "c-fold" method, etc. Larger sheets, such as those with detailed maps or expansive photo spreads, are folded into four, five, or six panels.

1: letter/C tri-fold, 2: gate tri-fold, 3: roll/double gate fold, 4: accordion z-fold, 5: double (parallel) fold, 6: double right-angle / French fold

Fig 8.2

Booklet brochures are made of multiple sheets most often saddle stitched stapled on the creased edge, or perfect bound like a paperback book, and result in eight or more panels.

8.1.1.1 Creating Brochures using MS-Publisher:

Steps to create Brochures in Publisher:

1.   Click on File Tab, then New, and then Brochures.

There are many Templates related with brochures, which are already available in Install Templates. Select any one according to our choice. Now, we can see at right side of window, many options are available for customizing this selected brochure.

Fig 8.3

2. Now, customize your brochure with the help of color scheme, font scheme, page size options and forms.

Fig 8.4

Color Scheme   **Font Scheme**   **Page Size**
Form

3. **After changing of color, fonts, size and forms of brochure, click on Create option.**

Fig 8.5

4. We will see the brochure as shown in figure below.

Fig 8.6

Now we can edit our brochure's details and save it as publication.

8.1.2 Newsletters:

A newsletter is a printed report containing news or information of the activities of a business or an organization that is sent by mail regularly to all its members, customers, employees or people, who are interested in. Newsletters generally contain one main topic of interest to its recipients. A newsletter may be considered grey literature.

E-newsletters are delivered electronically via e-mail and can be viewed as spamming if sent unsolicited.

8.1.2.1 Creating Newsletters using MS-Publisher:

Steps to create Newsletters in Publisher:

1. Click on File Tab, then New, and then Newsletters.

Fig 8.7

2. Select newsletter design from available Templates as per requirement and click on Create.

Fig 8.8

Now we can edit our newsletter's details and save it as a publication.

8.1.3 Banners:

A long strip of cloth bearing a slogan or design carried in a demonstration, procession or hung in a public place. Depending on how it is used, a banner can be a flag or other piece of cloth bearing a symbol, logo, slogan or other marketing message.

An online banner is either a graphic image that announces the name or identity of a site. An online banner is a typically rectangular advertisement placed on a Web site's main content and is linked to the advertiser's own Web site.

8.1.3.1 Creating Banners using MS-Publisher:

Steps to create Newsletters in Publisher:

1. Click on File Tab, then New, and then Banners.

Fig 8.9

2. Select a newsletter design from Available Templates as per requirement, here we have three categories: Congratulations, Event and Get well.
3. Click on Create button.

Banner will be shown as in figure below:

Fig 8.10

Now we can edit the banner and save it.

8.1.4 Flyers:

A flyer is a form of paper advertisement used for wide distribution, posted or distributed in a public place, handed out to individuals or sent through the mail. Flyers range from inexpensive photocopied leaflets to expensive, glossy, full-color circulars. Flyers may be used by anyone including individuals, businesses, not-for-profit organizations or governments for:

a) Advertising an event such as a live concert, nightclub appearance, festival, or a rally

b) Promotion of a business, discount store or a service business such as a restaurant or a gym.

c) Persuading people about a social, religious, or political message, campaign activities on behalf of a political party or candidate during an election.

d) Recruiting members for organizations or companies.

In Installed Templates, various flyers for different events and marketing are available in MS publisher. We can choose the flyers as per our requirement. After that we can edit the basic information to be displayed on it and save it as a publication. Example of a flyer is shown in the figure below:

Fig 8.11

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8.2   Business Cards: A small card printed with one's name, occupation, business address, etc. is called a business card.

Business cards are cards bearing business information about a company or individual. They are shared during formal introductions. A business card typically includes the giver's name, company or business affiliation (usually with a logo) and contact information such as street addresses, telephone number (s), fax number, e-mail addresses and website. In these days, business cards may also include social media addresses such as Facebook and Twitter. Traditionally many cards were simple black text on white stock; today a professional business card will sometimes include one or more visual design.

8.2.1 Creating Business Card in Publisher:

1. Click on File Tab, then New, and then Business Card.
   There are so many Templates available in Install Templates related with Business Card. Select any one according to your choice. On right side of window, we can customize the selected Business Card with the help of color scheme, font scheme, business information, page size options and logo.

2. After changing of color, fonts scheme, business information and page size, click on Create button.

Fig 8.12

3. Now, we will see the Business Card as shown as below figure. The Business Card is designed successfully. Now we can change Business Name or Individual name also, Address, Contacts etc.

Fig 8.13

8.3 Greeting Card/ Invitation card/ compliment card:

A greeting card/ Invitation card/ compliment card is a piece of card of high quality paper expressing friendship or any other sentiment. Although these cards are usually given on special occasions such as Birthdays, Anniversary, Christmas, Diwali or other holidays, they are also sent to convey thanks or express other feelings. These cards are usually packaged with an envelope and come in a variety of styles. There are both mass-produced as well as handmade versions that are distributed by hundreds of companies.

Fig 8.14   Greeting Card

Fig 8.15 Invitation Cards

Fig 8.16 Compliment Cards

These can also be designed with the help of MS Publisher.

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8.2   Award Certificates:

An award is something given to a person, a group of people, or an organization in **recognition** of their **excellence** in a certain field. An award may be accompanied by **trophy**, **title**, **certificate**, **medal**, **badge**, **pin**, or **ribbon**.

Certification refers to the confirmation of certain characteristics of an object, person, or organization. This confirmation is often, but not always, provided by some form of external review, education, assessment, or **audit**.

Certificates of achievement, merit, and honor can be powerful tools when used at the right time and presented in the right way. Receiving an award certificate gives a person the warm glow of knowing someone took the time to acknowledge them. And being the person who motivates others can be rewarding, too.

Award certificates may include: Community Service Award, Great Job, Good Behavior or Course Completion. MS Publisher provides many templates for creating Award Certificates. Figure shown below is an example of certificate of Appreciation created using MS publisher.

Fig 8.17

Various Templates in MS publisher as shown in figure below can be used to create this certificate.

Fig 8.18

After selecting the required certificate design, edit the color scheme and click on Create button. Now we can edit the certificate information and save it as a publication.

8.5 Envelops:

An envelope is a common packaging item, usually made of thin flat material. It is a flat paper container with a sealable flap designed to enclose a flat object, such as a letter, card or document. Traditional envelopes are made from sheets of paper. They are most commonly used for enclosing and sending mail (letters) through a prepaid-postage postal system.

Envelop with mailer's address and recipient's address may look like the figure shown below.

Technology
Consulting
5432 Any Street West, Townsville, State 54321

Address line 01
Address line 02
Address line 03
Address line 04

consulting   sales   staffing   support   www.companyname.com
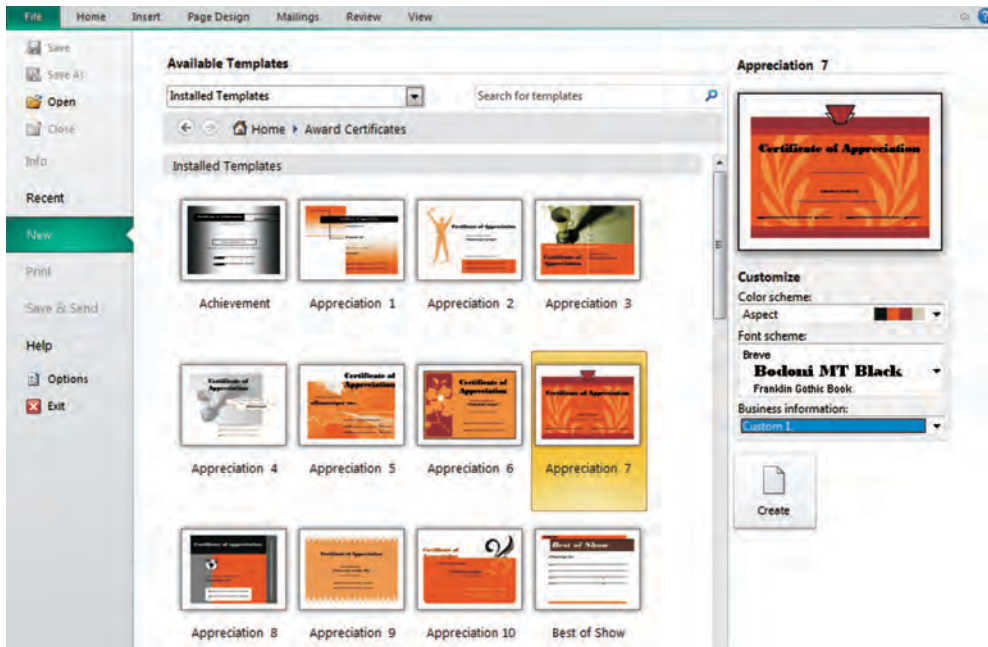
Fig 8.19

We can create envelop with Various Templates in MS publisher. After selecting the required envelop design, edit the color scheme and click on Create button. Now we can edit the envelop information and save it as a publication.

8.6   Labels:

A label is a piece of paper, polymer, cloth, metal, or other material affixed to a container or product. Information printed directly on a container or item can also be considered labeling. Labels have many uses, including providing information on a product's origin, manufacturer (e.g., brand name), use, shelf-life and disposal etc. Many hazardous products such as poisons or flammable liquids must have a warning label.

Labels can be used for:

- **Products:** Permanent product labels need to remain secure throughout the life of the product. For example, a food label must be secure until the food has been used.
- **Packaging:** Packaging may have labeling attached to or integral with the package. These may carry pricing, barcodes, UPC (Universal Product Code) identification, usage guidance, addresses, advertising, recipes, and so on.
- **Assets:** In industrial or military environments, asset labeling is used to clearly identify assets for maintenance and operational purposes. Such labels are frequently made of engraved Trifoliate or a similar material.
- **Textiles:** Garments normally carry separate care/treatment labels which typically indicate how the item should be washed for e.g. machine washed or dry cleaned. Textile labels may be woven into the garment or attached, and may be heat resistant, colorfast, washable. Printed labels are an alternative to woven labels.
- Mailing: Mailing labels identify the addressee, the sender and any other information which may be useful in transit.
- Security labels: They are used for authentication, theft reduction, and protection against counterfeit and are commonly used on ID cards, credit cards, packaging, and products from CDs to electronics to clothing.

Labels may be used for any combination of identification, information, and warning, instructions for use, environmental advice or advertising. They may be stickers, permanent or temporary labels or printed packaging.

8.6.1 Creating Labels in Publisher:

Here we are designing a label for a CD/DVD with the help of MS publisher. Follow the steps written below:

1. Click on File Tab, then New, and then Labels.
2. In category Media, select All Media. Here select the CD/DVD Labels. Select required template, edit the color scheme and click on Create button.
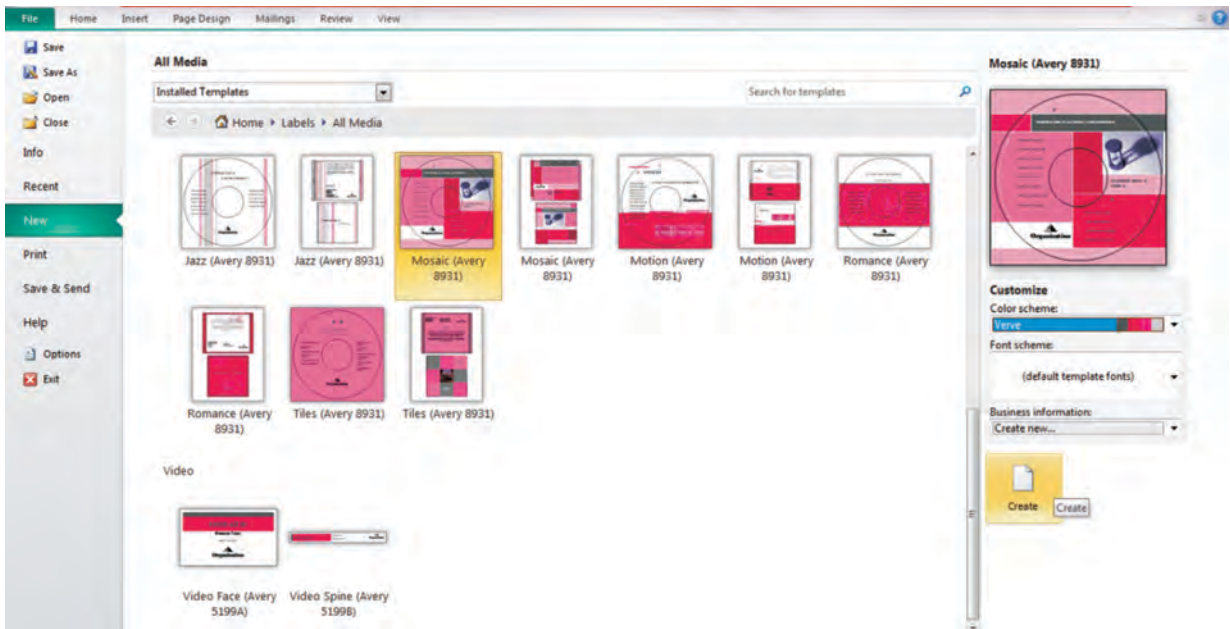
Fig 8.20

3.   Here we can edit the information related CD/DVD which is to be shown on the label

Fig 8.21

4.   Save the label as a publication for future use. We can print these labels as per our requirement.

8.7 Letterhead:

It is stationery with a printed heading. The heading usually consists of a name and an address, a logo or corporate design, and sometimes a background pattern. The term "letterhead" is often used to refer to the whole sheet imprinted with such a heading. Many companies and individuals prefer to create a letterhead template in a word processor or other software application. This generally includes the same information as pre-printed stationery, but at lower cost. Letterhead can then be printed on stationery or plain paper as needed or sent electronically.

8.7.1 Creating Letterhead in Publisher:

Here we are creating a Letterhead for an organization using MS publisher. Follow the steps written below:

1.   Click on File Tab, then New, and then Letterhead.

There are many Templates are available in Install Templates related with Letterhead. Select any one according to our choice. On right side of window, we can customize color scheme, font scheme, business information and logo.

Fig 8.22

1.   After changing of color, fonts, size and other information, click on **Create** option. The letterhead will be shown.
2.   Now edit the necessary information as we can see in the figure below and save the changes.

Fig 8.23

8.8 Calendar:

A calendar is a system of organizing days for social, religious, commercial or administrative purposes. This is done by giving names to periods of time, typically days, weeks, months and years. Calendars are also used to help people manage their personal schedules, time and activities.

Calendars are also used as part of a complete timekeeping system: date and time of day together to specify a moment in time.

8.8.1 Creating Calendars in MS Publisher:

To create Calendar in Publisher, follow these steps:

1.   Click on File Tab, then New, and then Calendars.

From the Templates related to Calendars, available in install Templates, select any one according to our choice. Now, we can see at right side of window, there are many options available for customizing this selected Calendars.

Fig 8.24

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2. Now, customize our calendar with the help of color scheme, font scheme, Business information, page size options and specially Timeframe (One month per page or One year per page).
3. After customizing Calendars, click on Create option.
4. Now, we will see the Calendar as shown in figure below. If we want, we can edit the picture also and can save this calender in publisher.

Fig 8.25

8.9   Resumes:

A resume provides a summary of our education, work history, credentials, and other accomplishments and skills. There are also optional sections, including a resume objective and career summary statement. Resumes are the most common document requested of applicants in job applications. A resume should be as concise as possible. Typically, a resume is one page long, although sometimes it can be as long as two pages. Often resumes include bulleted lists to keep information concise.

8.9.1 Creating Resumes in MS Publisher:

To create Resumes in Publisher, follow these steps:
1. Click on File Tab, then New, and then Resumes.
    From the Templates related to Resumes, available in install Templates, select any one according to our choice. After customizing the selected Resume click on Create button.

Fig 8.26

2.   Now edit the necessary information in our resume and save the changes. The resume will be as figure shown below.

Fig 8.27

8.9.2 Curriculum vitae(CV):

Like resume, a curriculum vitaE (CV) provides a summary of one's experience and skills. Typically, CVs are longer than resumes - at least two or three pages. CVs include information on one's academic background, including teaching experience, degrees, research, awards, publications, presentations, and other achievements. CVs are thus much longer than resumes, and include more information, particularly related to academic background.

We can create CVs with the help of MS Publisher in same way we have created Resumes above.

8.10 Menus:

In a restaurant, there is a menu of food and beverage offerings. A menu may be a list from which guests use to choose options available. Basically Menu is the main way to give or take order from guest. Guest may order properly to see the menu and be aware about our food and price. MS Publisher provides many templates for creating a Menu. Below figure shows the example Menu designed in MS Publisher.

Fig 8.28

8.11 Signs:

A sign is a piece of paper, clothe, wood or any other material which is painted with pictures or words and which gives some information about a particular place, product, or event. MS Publisher provides us with many of these signs as shown in figure below. We can create any of these sign using publisher.

Fig 8.29

8.12 Paper Folding Projects:

The paper folding templates include patterns for paper airplanes and origami projects alike. They include pages (that may require trimming) with "fold-lines" and others with instructions to create our paper masterpieces. We can enjoy these Paper Folding Projects in our leisure time and can make some creative things.

Microsoft Publisher offers templates for kids. These templates consist of different paper folding projects like airplanes, boats, cups, and more.

Points to Remember

1. Advertising means how a company encourages people to buy their products, services or ideas.
2. MS - Publisher offers templates and other tools to help us create a variety of publications, including brochures, newsletters, business cards, and menus.
3. Brochures are promotional documents, primarily used to introduce a company, organization, products or services to the public.
4. Now day's brochures are also available in electronic format and are called e-brochures
5. A newsletter is a printed report containing news or information of the activities of a business or an organization.
6. A long strip of cloth bearing a slogan or design carried in a demonstration, procession or hung in a public place.
7. A flyer is a form of paper advertisement used for wide distribution, posted or distributed in a public place, handed out to individuals or sent through the mail.
8. Business Cards: A small card printed with one's name, occupation, business address, etc. is called a business card.
9. Business cards are cards bearing business information about a company or individual
10. A greeting card/ Invitation card/ compliment card is a piece of card or high quality paper expressing friendship or any other sentiment.
11. An award is something given to a person, a group of people, or an organization in recognition of their excellence in a certain field. An award may be accompanied by trophy, title, certificate, medal, badge, pin, or ribbon.
12. Certificates of achievement, merit, and honor can be powerful tools when used at the right time and presented in the right way.
13. An envelope is a common packaging item, usually made of thin flat material. It is a flat paper container with a sealable flap designed to enclose a flat object, such as a letter, card or

document. Traditional envelopes are made from sheets of paper. They are most commonly used for enclosing and sending mail (letters) through a prepaid-postage postal system

14. A label is a piece of paper, polymer, cloth, metal, or other material affixed to a container or product.

15. It is stationery with a printed heading. The heading usually consists of a name and an address, a logo or corporate design, and sometimes a background pattern.

16. A calendar is a system of organizing days for social, religious, commercial or administrative purposes. This is done by giving names to periods of time, typically days, weeks, months and years.

17. A resume provides a summary of our education, work history, credentials, and other accomplishments and skills. There are also optional sections, including a resume objective and career summary statement.

18. Resumes are the most common document requested of applicants in job applications. A resume should be as concise as possible.

19. A curriculum vita (CV) provides a summary of one's experience and skills. Typically, CVs are longer than resumes - at least two or three pages. CVs include information on one's academic background, including teaching experience, degrees, research, awards, publications, presentations, and other achievements.

20. Menu is the main way to give or take order from guest. Guest may order properly to see the menu and be aware about our food and price.

21. A sign is a piece of paper, cloth, wood or any other material which is painted with pictures or words and which gives some information about a particular place, product, or event.

22. We can enjoy these Paper Folding Projects in our leisure time and can make some creative things.

23. Microsoft Publisher offers templates for kids. These templates consist of different paper folding projects like airplanes, boats, cups, and more.

Exercise

1. Multiple Choice Questions:

1. Now day's brochures are also available in electronic format and are called..........
   a) e-brochures b) m-brochures
   c) t-brochures d) k-brochures

2. A small card printed with one's name, occupation, business address, etc. is called ....
   a) Brochures b) Newsletters
   c) Business cards d) Menus

3. What is the most common document requested of applicants in job applications?
   a) Banner b) Resume
   c) Calendar d) Flyer

4. What are longer than resumes - at least two or three pages?
   a) Curriculum vita (CV)
   b) Banner
   c) Invitation
   d) Catalogue

2. Fill in the Blanks:

1. Advertising means how a company encourages people to buy their..........or ideas.

2. MS - Publisher offers templates and other tools to help us create a variety of publications, including brochures, newsletters, ..., and ....

3. Business cards are cards bearing business information about a .... or................

4. A resume provides a summary of our ...., ...credentials, and other accomplishments and skills.

3. True or False:

1. A compliment card is a piece of card or high quality paper expressing friendship or any other sentiment.

2. Certificates of achievement, merit, and honor can be powerful tools.

3. Brochures are promotional documents, primarily never used to introduce a company, organization,

4. Very Short Answer type Questions:

1. What is a piece of paper, cloth, wood or any other material which is painted with pictures or words and which gives some information about a particular place, product, or event

2. What is a common packaging item, usually made of thin flat material?

3. What is something given to a person, a group of people, or an organization in recognition of their excellence in a certain field?

4. What is a form of paper advertisement used for wide distribution, posted or distributed in a public place, handed out to individuals or sent through the mail?

5. What is a printed report containing news or information of the activities of a business or an organization

5. Short Answer type Questions:

1. Explain Signs?
2. Explain Resumes?
3. What is Banner?
4. Explain Newsletters?
5. What are Menus?

6. Long Answer type Questions:

1. What are Advertisements? Explain various print media used for advertisements?
2. What are Business Cards? Write steps for creating Business Card in Publisher?
3. What is Label? Where labels can be used for?
4. What is Letterhead? How to create Letterhead in Publisher?

Answers Key

Questions	Multiple Choice	Fill in the Blanks	True or False	Very Short Answer
1	e-brochures	Products and services	True	Sign
2	Business cards	Business cards and menus	True	Envelope
3	Resume	Company and Individual	False	Award
4	Curriculum vita (CV)	Education and work History		Flyer
5				Newsletter