



1 The Versatile Computer



Exercise

- A. 1. Light pen; 2. Touch screen; 3. Printer; 4. Plotter
- B. 1. The CPU is the **brain** of a computer system.
2. Memory chips are one of the important components of computer **hardware**.
3. A joystick is an **input** device.
4. A barcode reader is a device used to **read** barcodes.
5. computer is **an electronic** device.
- C. 1. motherboard; 2. soundcard; 3. SMPS; 4. hard disk; 5. BIOS
- D. 1. T; 2. T; 3. T; 4. T; 5. F
- E. 1. A motherboard is the main board that holds many of the crucial components of a computer system. It allows all the parts to receive power and communicate with one another.

- 2. Input devices : mouse, keyboard
Output devices: printer, monitor

3. Printer

Printer is the most important output device, which is used to print output on paper.

There are two types of printers : Impact printer and Non-Impact printer.

1. Impact Printer

Impact printer prints the characters by striking against the ribbon on to the paper. These are used for bulk printing due to their low costs and their compatibility to print any language characters but are too noisy and slow.

2. Non-impact Printer

Non-impact printer does not strike the print head against the ink ribbon and hence generates less noise. These printers are faster than the impact printers.

4.

Hardware

- 1. All the physical parts of a Computer are called hardware.
- 2. We can see the hardware.
- 3. We can touch these.
- 4. Examples: mouse, keyboard monitor etc.

Software

- 1. These are not physical, but a set of programs.
- 2. We can't see the software.
- 3. We can not touch these.
- 4. Examples: Windows Operating system, MS word etc.

- 5. A light pen is also an input device. It is shaped like a pen. A light pen is connected to the VDU. It allows the user to draw or point to objects on the computer screen or the monitor.

F. 1. MICROPHONE; 2. BARCODE READER; 3. PLOTTER; 4. MOTHERBOARD

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2 Computer Software



Exercise

- A. 1. System software; 2. Windows; 3. Symbian; 4. Utility software; 5. Spreadsheet software
- B. 1. Operating system; 2. Utility software; 3. tool; 4. Disk cleaner; 5. drivers
- C. 1. MS-DOS
2. UNIX
3. LINUX
4. Mac OS
5. Windows
- a. Macintosh
b. Microsoft
c. First operating system for PC
d. Oracle, Sun Microsystems
e. Android
- D. 1. System software is a collection of programs that manages the resources and operations of a computer system. It performs tasks such as processing of data and information, controls hardware components and allows users to use application software.
2. Application software is a set of programs that runs on system software and allow users to perform specific tasks. They can process text, numbers, graphics or a combination of these. Application software are also known as Apps.
3. LINUX is a popular variant of the UNIX operating system. It can be used as a server OS or a desktop OS, in other devices.
4. It allows users to create image, audio, video, etc.
5. An Operating system is a collection of computer programs that manages CPU operations, input/output activities, storage resources, support services, controls various devices.
6. Windows is an operating system developed by Microsoft for personal computers. It is the mostly used OS in personal computers.

E. 1.

Batch Processing

- It is an efficient way of processing high volume of data.
- It requires separate programs for input.
- It is used in payroll system.
- Examples: Billing system

Real time operating system

- It involves a continual input, process and output of data.
- It requires continual input.
- Real time operating system are used in customer service centre.
- Examples: ATM

2. **Operating system** : An operating system is a collection of computer programs that manages CPU operations, input/output activities, storage resources, support services and controls various devices.
Device Drivers : All hardware need software called drivers to communicate with other software. For example, a printer needs a print driver to understand the commands given by another application.
 3. **UNIX** : UNIX is used in server products like Oracle, Sun Microsystems, Silicon Graphics, IBM, HP, Digital and other companies.
LINUX : LINUX is a popular variant of the UNIX operating system. It can be used as a server OS or a desktop OS, in other devices.
 4. **Windows** : Windows is an operating system developed by Microsoft for personal computers. It is the most used OS in personal computers.
Z/OS : Z/OS is an operating system development by IBM for mainframe computers. Operating systems, like Symbian, are found on small devices such as cell phones and PDAs.
 5. **Word Processing Software** : It allows users to create, edit a document. Example : MS Word, WordPad, etc.
Spreadsheet Software : It allows users to create documents and perform calculations. Example : Excel, Lotus 1-2-3, etc.
- F.**
1. Software is a program that enables a computer to perform a specific task such as input, processing or output.
 2. System software, programming software and application software.
 3. **System software** : System software is a collection of programs that manages the resources and operations of a computer system. It performs tasks such as processing of data and information, controls hardware components and allows users to use application software.
Application software : Application software are the set of programs that are run on system software and allow users to perform specific files. They can process text, numbers, graphics or a combination of these. Application software are also known as Apps.
 4. Operating system, system utilities program, device drivers, translator.
 5. (i) It helps to schedule the CPU processing for different applications.
(ii) It helps to run application software such as Paint, MS PowerPoint, etc.
(iii) It manages input and output.
 6. Word processing software, spreadsheet software, database software, multimedia software.

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3 More About Windows 8



Exercise

- A.** 1. Operating system; 2. simple opaque rectangles or squares; 3. Mail app; 4. Metro-style apps
- B.** 1. live tile; 2. real time; 3. metro-style apps; 4. Mail app; 5. flyout
- C.** 1. T; 2. T; 3. F; 4. F; 5. T
- D.** 1. Windows 8 is an operating system that controls all the operations of a computer. It is the second most recent version of Microsoft Windows. It is one of the most popularly used operating system. It is produced to use on personal computers including home and business desktops, laptops, netbooks, tablets, and media centre PC's. It provides a Graphical User Interface.
2. Live tiles on the Windows 8 are simple opaque rectangles or squares, and they're arranged automatically on the Start screen in a grid-like pattern.
3. The Mail app let us create tiles for individual e-mail folders.
4. Once you've matched this app with one or more accounts, it will begin dynamically displaying upcoming appointments on its tile. Oftentimes, that information is all you need to know, eliminating the need to actually launch the app and view the appointment manually.
5. Deep linking is the use of hyperlink that links to a specific, generally searchable or indexed, piece of web content on a website.
- E.** 1. Windows 8 is an operating system that controls all the operations of a computer.
2. Simply right click or tap and hold the tile that we want to resize, go to Resize option and choose the size that we want.
3. To disable live updating for a single tile, select it (right click, or tap and drag down slightly) and then choose Turn live tile off from the app bar that appears.
4. The Mail tile works similarly, though it you will cycle through up to five of your most recent e-mails and provide a badge, in the lower right corner, that displays the number of unread e-mails.
5. Deep linking is the use of a hyperlink that links to a specific, generally searchable or indexed, piece of web content on a website.
- It provides a way for us to add a new tile for the app, from within the app itself, which causes the app to open with a specific experience displayed.

6. Tiles are designed specifically to display real time information dynamically, even when the underlying app isn't running. The tile can use various kinds of text in different layouts, images, e-mails, perhaps or similar.

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4 More on MS PowerPoint 2010



Exercise

- A.** 1. Tables; 2. Sound; 3. Tables; 4. animation; 5. Autoshapes; 6. transition; 7. Animation; 8. clicking, dragging
- B.** 1. T; 2. T; 3. T; 4. F; 5. T; 6. T; 7. F
- C.**
- | Column A | Column B |
|--------------------|-----------------------------------------------------|
| 1. Tables | a. Clip organizer, CD, Recording |
| 2. Photo album | b. Special effect to determine appearance of slides |
| 3. Inserting sound | c. Organizing information systematically |
| 4. Transition | d. Emphasizes on important information |
| 5. Animation | e. help to draw geometrical figures |
| 6. Autoshapes | f. Easy way to create a slide show |
- D.**
1. Step 1. Click on the Insert tab.
 - Step 2. Choose the Photo Album option from the 'Images' group. Select New Photo Album from the displayed option. A 'Photo Album' window opens. Select Insert Picture from the 'File/Disk'.
 - Step 3. The 'Insert New Pictures' window opens from where we can select pictures. The window also gives options to search for photos from different places like Documents, Desktop and Network Places. Once we have selected the photo, we click on Insert. After selecting the pictures, click on Insert button.
 - Step 4. The photos will be displayed in the preview box of 'Photo Album' window. The list of photos will be shown in 'Picture' in 'Album' box.
 - Step 5. There is an option available on the Photo album window to insert text. On clicking on the New Text box, a text box gets added to the list of photos.
 - Step 6. Click on Create to add the photos and the text box in the presentation.
 2. The various steps to apply a built-in animation effect are listed below :
Step 1 : Select the slide that has to be animated.

- Step 2: In the Transitions tab, select an animation (slide transition) effect from the Transition To This Slide group.
- Adding movement to graphics creates a dynamic and visual guide to the information being delivered.
Animated presentations with motion effects can help us pace the delivery of information and enhance visual interest.
 - Step 1. Select the text of object that has to be animated.
Step 2. Click on Add Animation in 'Advanced Animation' group of 'Animations' tab.
Step 3. Click on the desired animation effect from the various groups.
 - Step 1. Click on the Insert tab and choose Audio from 'Media'. A drop-down box appears. Select Audio from 'File' from the options available.
Step 2. In the dialog box that opens, select the file and click on OK.
 - AutoShapes are drawing features that help us to draw different geometrical figures such as rectangle, triangle and ellipse. These shapes can be resized, rotated, flipped and coloured.
Follow the given steps to insert shapes in a slide :
Step 1: Click on the Insert tab.
Step 2: Choose the Shapes option from the Images group.
Step 3: Choose a shape from the options available, and move the mouse to the slide.
Step 4: Click the mouse to place the shape.

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5

More on MS Excel 2010



Exercise

1. undo; 2. Ctrl+A; 3. Paste; 4. Auto Format; 5. F2
 1. border button; 2. reverse the last action; 3. border; 4. tables
 1. T; 2. F; 3. T; 4. T; 5. T
 1. Workbook; 2. Cell; 3. An active cell; 4. Editing; 5. Redo
- E.
- | | | |
|----|--|---------------------|
| 1. | | a. Merge and Centre |
| 2. | | b. Fill Color |
| 3. | | c. Cut |
| 4. | | d. Border |
| 5. | | e. Auto Format |
- F.
- Follow the steps given below to cut the data from a cell or a range of cells :
Step 1. Select the cell or the range of the cells to be cut.

- Step 2. Click on the Home tab.
- Step 3. In the Clipboard group, click on the Cut command.
- Follow the steps given below to copy the data in a cell or a range of cells :
- Step 1. Select the cell or the range of cells to be copied.
- Step 2. Click on the Home tab.
- Step 3. In the Clipboard group, click on the Copy command.
- Follow the steps given below to paste the data in a cell or a range of cells :
- Step 1. Select the cell or the range of cells where you want to paste the cut or copied data.
- Step 2. Click on the Home tab.
- Step 3. In the Clipboard group, click on the Paste command.
2. The Undo feature allows you to cancel the last steps you performed in the Worksheet.
The opposite of Undo is Redo. To redo the last action, click on the Redo command on the Quick Access Toolbar.
 3. Formatting implies changing the appearance of text. For example, changing the font, font size and colour.
 - (i) Step 1. Select the cell or the range of cells where you want to change the font and its size.
Step 2. Click on the Home tab.
Step 3. In the Font group, click on Font. A drop down list of fonts appears. Select a font from the list displayed.
Step 4. Click on the Font size arrow in the Font group. A drop down list of font sizes appears. Select the font size from the list displayed.
 - (ii) Step 1. Select the cell or the range of cells where you wish to change the style.
Step 2. Click on the Bold, Italic or Underline option in the Font group on the Home tab.
 - (iii) Step 1. Select the cell.
Step 2. Click on the Home tab.
Step 3. In the Cells group, click on the Delete arrow and then select Delete Cells.
The Delete dialog box appears showing four options.
Step 4. Click on Delete Sheet Rows.
Step 5. Click on OK to delete rows.
 4. Step 1. Select the first cell in the required range of cells.
Step 2. Press Ctrl key on the keyboard and click on the other cells that are to be selected.
 5. If the value that we enter in one or two adjacent cells match an existing entry or follow a pattern, excel will automatically enter the remaining characters of the series for us.

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6 Internet



Exercise

- A.** 1. Tim Berners-Lee; 2. All are correct; 3. ISP; 4. Web browser; 5. Modem; 6. All are correct; 7. URL; 8. Compose mail
- B.** 1. Mozilla Firefox, Opera
2. Airtel, Reliance
3. Yahoo.com, Gmail.com
4. Google.com, Altavista.com
- C.** 1. Net; 2. web browser; 3. home page; 4. Electronic Mail; 5. Inbox; 6. Create; 7. Tim Berners-Lee
- D.** 1. T; 2. F; 3. T; 4. F; 5. T
- E.** 1. Internet Service Provider
2. Modulator Demodulator
3. Mahanagar Telephone
4. Advance Research Projects Agency Network
- F.** 1. Inbox; 2. Compose mail; 3. Forward; 4. Sent mail; 5. Reply
- G.** 1. It accepts and sends messages through telephone wire.
2. An act of browsing the internet by going from one webpage to another.
3. It contains a lot of information in the form of pages.
4. It is a program that is used to surf the net.
- H.** 1. Internet is the largest network of computers. Internet is commonly called as the Net or Cyberspace.
2. It is called as an Electronic Mail. It is the most commonly used feature of any website for sending and receiving messages.
3. (i) Internet is used for sending and receiving messages, through E-mail.
(ii) Search engines on the net, helps you in searching information on any topic.
(iii) We can play online games, participate in quizzes, crosswords.
4. Step 1. Open the site for example www.gmail.com.
Step 2. Click on Create an Account.
Step 3. Fill in the form.
5. a. WWW is a part of Internet, which is the largest collection of special sites related to various fields.
b. A website contains a lot of information in the form of pages about an organisation, or an individual.
c. Each website is allotted a unique identification name called Uniform Resource Locator (URL).
d. A web page contains information in the form of text, picture, video, audio and animation.

- e. It contains the address or URL of the website which you want to visit.
6. A Search engine is a software program which helps in finding websites, web pages, and Internet files. Search engines are particularly helpful in locating web pages on certain topics or in locating specific pages for which you do not know the exact URL. Some search engines look through web pages for all types of information. Others can restrict their searches to a specific type of information, such as images, videos, audios, news, maps, people or businesses, and blogs.

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7 Computer Malware



Exercise

- A. 1. Worm; 2. Trojan Horse; 3. Antivirus; 4. E-mail
- B. 1. Antivirus; 2. Computer virus; 3. Virus; 4. e-mail; 5. e-mail
- C. 1. T; 2. T; 3. T; 4. T; 5. T
- D. 1. A Computer Virus is a software program that spreads from one computer to another computer without the permission or knowledge of the user and interferes with computer operations.
2. A computer can get injected by a computer virus as in following ways :
- The computer runs slower than usual.
 - The computer stops responding or it locks up frequently.
 - The computer crashes, and gets restarted after every few minutes.
 - Applications on the computer do not work properly.
 - Disks or disk drives are inaccessible.
 - Unusual error messages are displayed again and again.
 - Distorted menus and dialog boxes are displayed.
 - There is double extension on an attachment that you recently opened, such as jpg, vbs, gif or exe execution.
 - Antivirus programs get disabled for no reason.
3. Antivirus software is used to prevent, detect and remove malware and other computer viruses. You should install an antivirus program to safeguard your computer from virus attacks and update it regularly. An antivirus program protects a computer against the viruses by identifying and removing any computer viruses found in memory, on storage media or on incoming files.
4. Malware (a portmanteau for malicious software) is any software intentionally designed to cause damage to a computer server or computer network. The code is described as computer viruses, worms, trojan horses, ransomware, spyware, adware, and scareware, among other terms.

5.
 - a. A Computer Virus is a software program that spreads from one computer to another computer without the permission or knowledge of the user and interferes with computer operations.
 - b. It is a quite harmless virus that simply replicates itself. But in the long run, it takes overall resources of the system and the PC becomes useless. Worms have the capacity to travel from system to system very easily.
 - c. This virus comes as a friendly program (as a game, etc.). But it is very dangerous as it destroys all data. Trojan horses do not replicate themselves but they can be very destructive.
6. Some symptoms of a computer virus in a computer system are given below :
 - The computer runs slower than usual.
 - The computer stops responding or it locks up frequently.
 - The computer crashes, and gets restarted after every few minutes.
 - Applications on the computer do not work properly.
 - Disks or disk drives are inaccessible.
 - Unusual error messages are displayed again and again.
 - Distorted menus and dialog boxes are displayed.
 - There is double extension on an attachment that you recently opened, such as jpg, vbs, gif or exe execution.
 - Antivirus programs get disabled for no reason.

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