



1 About a Computer

Exercise

A. Tick (3) the correct option :

1. b. 2. a. 3. a.

B. State 'True' or 'False':

1. True 2. True 3. True 4. True 5. False

C. Define the following terms :

1. Graphic tablet is a computer input device that allows you to draw images by hand, similar to the way one draws images with pencil and paper. A graphic tablet is a flat, rectangular, electronic, plastic board upon which the user may draw or trace the image using an attached stylus, a pen like drawing apparatus. These tablets can also be used to capture data or handwritten signatures.
2. A photo printer is a colour printer that can produce both high quality pictures as well as print everyday documents. Some photo printers print just one or two sizes of photos, for example, 3×5 inches and 4×6 inches.
3. Cache is a temporary storage area for instructions and data that is closer to the CPU's speed. Most of today's computers improve their processing time with cache. Memory cache helps to speed up the processes of the computer because it stores frequently used instructions and data. Cache is built directly in the processor chip. When the processor needs an instruction or data, it first searches the cache. If it cannot locate the item in the cache, then it searches the RAM. Most modern computers give three types or layers of memory cache: Level 1, Level 2 and Level 3.
4. OMR is a scanner that reads marks on specific areas of the page. The scanner is able to detect a marked area by shining a beam of light on the document because it is more reflective than an unmarked surface. OMR can read hand-drawn marks such as small circles or rectangles. A person places these marks on a form such as a test, survey, questionnaire and answer sheet.
5. A data projector is a device that takes the text and images displayed on a computer screen and projects them on a larger screen so that the audience can see the image clearly. Some data projectors are large devices that are attached to a ceiling or wall in an auditorium, some are small portable devices that can be transported easily.
6. A display device is an output device that visually conveys text, graphics and video information. Information on display device exists electronically and is displayed for a temporary period of time. For this reason, information on display device is also referred to as soft copy.

Display devices include CRT monitors, LCD monitors and Plasma monitors.

D. Match the following :

- | | | |
|----------------|-------|---|
| 1. Flash Drive | _____ | a. Bank use this to process cheques |
| 2. LCD Monitor | _____ | b. The news forms of computer storage |
| 3. MICR | _____ | c. To display information on the screen |

E. Answer the following questions :

1. RFID (Radio Frequency Identification) is a technology that uses radio signals to communicate with a tag placed in or attached to an object, an animal, or a person. RFID tags, which contain a memory chip and an antenna, are available in many shapes and sizes. A RFID reader reads information on the tag via radio waves.
2. Plotters are sophisticated printers used to produce high-quality drawings such as blueprints, maps and circuit diagrams. It is used to print CAD (Computer Aided Design) created by engineers, for banners, advertisements, and other large promotional materials. The plotters are of the following four types :
 - a. Drum Plotter
 - b. Flatbed Plotter
 - c. Electrostatic Plotter
 - d. Inkjet Plotter
3. Iris recognition system is used in high security areas. The camera in an iris recognition system that uses iris recognition technology to read patterns in the iris of the eye. These patterns are as unique as a fingerprint. This technology is quite expensive and is used by government security organisations, the military and financial institutions that deal with highly sensitive data.
4. Bits mean binary digits which are in the form of 0 and 1. A bit is the smallest unit of information which a computer can process. The combination of eight bits is called a byte. A computer stores a character as a byte. Thus, a byte is the basic storage unit in memory. Each bit and byte resides temporarily in a location in memory that has an address.



2 Learning MS Access 2010



Exercise

A. Tick (3) the correct option :

Ans. 1. a. 2. a. 3. a.

B. State 'True' or 'False':

Ans. 1. True 2. False 3. True 4. False 5. True 6. True

C. Define the following terms :

Ans. 1. A Database Management System (DBMS) does exactly that. It arranges all your data in an orderly manner so that you can retrieve information easily whenever you need it. A DBMS is also called an attribute management system.

2. Quick Access Toolbar is a customize button with a down arrow. If you click on this button, a menu would appear.
3. Status bar : It is present at the bottom of the Access window and displays the current view of the active database.
4. Query: It is used to retrieve data from one or more tables based on some criteria and to display it on the screen.
5. A Primary Key is a field which uniquely identifies a record. For example, Roll No is a Primary Key for the table 'Student'.
6. A collection of fields in a database is called a record.

D. Match the following :

- | | |
|-------------|---------------------------------|
| 1. Database | c. A collection of files |
| 2. Record | d. A collection of fields |
| 3. Value | e. The smallest unit |
| 4. File | b. A collection of data records |
| 5. Field | a. A collection of values |

E. Answer the following questions :

Ans.

1. Database management involves creating, modifying, deleting, and adding data in a database. The software that performs these functions is known as Database Management System (DBMS). Some popular DBMS software are MS Access, Clipper, and FoxPro.
2. Step 1. Open the database that you want to modify.
Step 2. In the navigation pane right click the table in which you want to set the primary key and on the shortcut menu click design view.
Step 3. Select the field or fields that you want to use as a primary key.
3. To change the width of a column, the steps are as follows :
Step 1. Take the mouse pointer on the right border of a column header. The mouse pointer changes into a horizontal double arrow crossed by a vertical line.
Step 2. If you double-click now, the column would be resized to the widest possible size of that type.
OR
You can click the columns right border and drag it to the desired direction, left or right, until you get the desired width.
4. We can sort data alphabetically or can arrange numbers in ascending or descending order.
To sort data, follow the steps given below :
Step 1. Click on the drop down arrow on the right of the field name you want to sort.
Step 2. Click on Sort Smallest to Largest to sort data in ascending order or click on Sort Largest to Smallest to sort data in descending order. Choose according to your requirement.
5. There are different types of database objects :
 - Tables are used to store data in a database.
 - Forms make it easier to enter data in tables.

- Query is used to retrieve data the from one or more tables based on some criteria and to display it on screen.
 - Report displays the data in a printed format.
6. Query is used to retrieve data from one or more tables based on some criteria and to display it on the screen.
Report displays the data in a printed format.
7. The Create tab contains commands that allow users to create database objects.
To create a table, open the Create tab, and then click on the Table button. You will get the MS Access window. This window contains an empty table named Table 1 in the Datasheet view. This table contains a field, called ID.

Lab Activity

Ans. Do it yourself.



3

CorelDRAW Graphics Suite X3



Exercise

A. Tick (3) the correct option :

Ans. 1. b. 2. a.

B. Fill in the blanks :

- Ans.**
1. CorelDRAW files are saved with the extension **.cdr**.
 2. The **Drawing Window** is the main area of the interface in which you work.
 3. **Colour palette** is a bar that displays a variety of color swatches. This is the default color palette.
 4. **Property bar** contains commands specific to activated tool or object.
 5. **Tool box** contains several buttons-like tools, which you can use to create and modify

C. Answer the following questions :

- Ans.**
1. Fun, flexible and user-friendly, CorelDRAW is one of the most intuitive graphics design application that makes it easy to create professional artwork from logo creation and Web graphics to brochures or eye-catching signs.
 2. The installation wizard makes it easy to install CorelDRAW Graphics Suite X3 applications and its components. Try the following steps :
Step 1– Close all applications.
Step 2– Insert CD in the CD drive.
Step 3– If the installation wizard does not start automatically, click on Start on the Windows taskbar, and click Run. Type D:/CGS13/Setup, where D is the letter that corresponds to the CD drive.

Follow the InstallShield Wizard instructions for installing the software.

You can also activate the installation wizard by clicking Start on the Windows taskbar, clicking Run, and typing D:/autorun.

3. **Component** : Title Bar , Menu Bar, Standard Toolbar, Property Bar, Tool Box, Drawing Window, Drawing Page, Rulers, Document Navigator, Status Bar, Docker, Navigator, Color Palette.
4. (i) **Drawing page**–This is the solid outer rectangle in the Drawing window. You can print all the drawings that you create on this page.
(ii) **Rulers**–Horizontal and vertical scales, which you can use to determine the size and position of objects in a drawing.
(iii) **Document Navigator**–It provides controls to navigate between pages and insert pages into a document.
(iv) **Status Bar**–It displays information such as the size and the position of a selected object. It also shows the current position of the pointer.
(v) **Docker**–A pane on the right side of the application window that contains commands and settings specific to a tool or a task.
(vi) **Navigator**–A small rectangle in the lower-right corner of the Drawing window (adjoining vertical and horizontal scrollbars). When you click this button, a thumbnail preview of the Drawing page appears in which you can navigate.
5. The rectangles and squares can be drawn by dragging diagonally with the Rectangle tool or by specifying the width and height with the 3-point rectangle tool.

An ellipse or a circle can be drawn by dragging diagonally with the Ellipse tool, or you can draw an ellipse by using the 3 point ellipse tool to specify its width and height. The ellipse tool lets you quickly create an ellipse at an angle, eliminating the need to rotate the ellipse.

Lab Activity

Ans. Do it yourself.



4 Visual Basic 6.0



Exercise

A. Tick (3) the correct option :

Ans. 1. b. 2. d. 3. b.

B. Fill in the blanks :

- Ans.**
1. GUI stands for **Graphical User Interface**.
 2. A single VB project can have many **programs**.
 3. **Menu bar** is one of the properties of a command button.
 4. Option button Control is used to create **radio** buttons.
 5. **Text Box** Control creates a box where text can be entered.

C. Differentiate between the following :

- Ans.** 1. CUI stands for Character User Interface which means commands had

to be typed. Visual Basic on the other hand is GUI based. GUI stands for Graphical User Interface. All GUI based programs are executed by just a click of a mouse button. With Visual Basic, you can develop Windows based applications and games.

2. **Project**

Just like a book comprises of many chapters, all the programs created are organized and stored in a project. The default name of the first project, when visual basic is opened, is “Project1”. The file extension of a Visual Basic Project is .vbp.

Form

When the project is opened, a light grey colored area becomes visible with a default name called Form1. When your program runs then the content created within the form (which we will learn later) is executed. A single project can execute many programs and so a project can contain multiple forms. The file extension of a Visual basic form is .frm.

D. Answer the following questions :

Ans.

1. A Visual Basic Project is saved with the extension .vbp, which stands for “Visual Basic Project”.
2. The Toolbox contains the tools (like buttons, checkboxes, etc.) which can be clicked and drawn in the form. Each tool in the toolbar is accessed by a click of a mouse button and each control in the toolbox has a unique purpose to perform action which we will want.
3. Executing Your First Visual Basic Program
 - a. When you open the first project “Project1”, then some screen appears.
 - b. From the Menu Bar, click Run→ Start, Key F5 can also be pressed to directly run the project.
 - c. You will see the window when the project is executed.
 - d. To stop the execution and return back to the editing mode, click the cancel/close button (×).
4. Adding Controls in the Project
 - a. In the new project window, select the command button.
 - b. Default name “Command1” will appear on the command button. To make any change in the command button, its properties should be changed.
 - c. To open the property of any control, say command1, select it and then from the menu bar, click View → Properties Window (key F4 can also be pressed).
 - d. The property window appears on the right side of the screen.
 - e. Select option Property and change the name to “EXIT”.
 - f. Form name can also be changed in the similar manner to “Beginner Form”.
 - g. Execute the Form by pressing key F5.

Lab Activity

Ans. Do it yourself.



5 Event Handling in Visual Basic



Exercise

A. Tick (3) the correct option :

Ans. 1. c. 2. a.

B. Fill in the blanks :

- Ans.**
1. **Font** property of the Form can change the font size of text of the Form title.
 2. **Command click ()** event is invoked when the command button is clicked.
 3. **Visible** is a control which is used to display some content on the 100 m.
 4. **Fore color** is one of the properties of the label control.

C. Differentiate between the following :

Ans. 1. **End Command**

This command ends or stops the execution of the program.

Syntax : END

The val function stops reading the string at the first character it cannot recognize as part of a number, However, the function recognizes the radix prefixes and octal and hexadecimal.

The result of subtraction and multiplication is correct but for addition, its showing concatenation. This is because by default, the value inside a text box is taken as a text value and not a number value. To convert text to a number value “Val” function is used.

2. **Msgbox Command**

This command is used to display a message in a separate window during the execution. A message is used to give some indication in the program, which could be a welcome note or error message, etc.

End command ends or stops the execution of the program.

D. Answer the following questions :

- Ans.**
1. The term Event means “action”, which is invoked through a program. An event can be invoked by clicking a button or by pressing a key. Event Procedures are used to handle such events. We will learn some commands which are the part of these event procedures.
 2. Name : It gives the name to the Label. The default name is Label1.
Caption : It allows to change the name appearing on the Label.
 3. Text property is used to extract the value from text box.
 4. Name, Caption and font, are three properties of a command button.

Lab Activity

Ans. Do it yourself.



6 Computer Network



Exercise

A. Tick (3) the correct option :

Ans. 1. d. 2. d. 3. d. 4. b. 5. c.

B. Answer the following questions :

Ans. 1. The term computer network means an interconnected collection of autonomus computers.

2. Advantages of Using Network :

- To transfer files from one computer to another.
- To share application software thereby reducing the cost of multiple copies of the software.
- The various resources like printers, scanners, CD-ROM drives can be shared.
- Effective data communication system over the network reduces the paper work. Thus, it helps in making almost a paperless office.
- A network enables access to database located centrally on a server or distributed on machines.
- Railways and Airline reservations are not possible without a network of computers.

3. a. **Servers :** Servers can be mainframes, minis and micros which can support various software, to store and process information at high speed.

b. **Nodes :** The computers attached to the network for the users to carry out their tasks using network and server. Even printers, scanners etc. attached to the network are called nodes.

c. **Workstation :** A powerful node which can handle local information processing is called a workstation. A workstation has a small hard disk attached to it to carryout local tasks.

d. **Network Operating System :** To control all the information transfer activities on the network, a software called Network Operating System is used.

Example Windows NT, Windows 2000.

e. **Cables :** It is the medium or channel over which the information travels from computer to computer. Various types of cables viz. Coaxial, Fiber Optic, Twisted Pair are used for transmission of data in a network.

4. Topology is the term used to describe the way through which computers are connected in a network. The physical topology of a network refers to the layout of the cabling, links and nodes in connecting devices to form a network. Each topology is used for specific tasks and has its own advantages and disadvantages.

There are four basic types of topologies used for networking computers.

- a. Linear Bus Topology
 - b. Ring Topology
 - c. Star Topology
 - d. Tree Topology
5. Telephone calls, electronic mail.
6. The computer network is classified depending on transmission technology and scale. Different types of networks are listed here :
- a. Local Area Network (LAN)
 - b. Wide Area Network (WAN)
 - c. Metropolitan Area Network (MAN)
 - d. Wireless Network

a. Local Area Network (LAN)

LAN is a private network within a single building or area upto few meters in size. A typical LAN consists of a server, workstation, a network operating system and a communication link.

b. Wide Area Network (WAN)

WAN connects users across large geographical areas often a continent or country. A WAN may consist of other LANs. The LANs inside the WAN are called sub-networks. WAN consists of a collection of machines which are called hosts. The hosts are owned by customers or personal computers.

c. Metropolitan Area Network (MAN)

There are certain networks, which are bigger than LAN but smaller than WAN. This type of network is confined to a metropolitan city. So it is called Metropolitan Area Network. It is connected through telephone lines.

d. Wireless Network

In a wireless network, computers can communicate directly in digital form. A wireless network can be used for sending and receiving telephone calls, electronic mails, files etc. It is possible through infrared, satellites and radio waves.

7. Cable : It is the medium or channel over which the information travels from computer to computer. Various types of cables viz. Coaxial, Fiber Optic, Twisted Pair are used for transmission of data in a network.

Lab Activity

Ans. Do it yourself.



7

Introduction to Photoshop



Exercise

A. Tick (3) the correct option :

Ans. 1. a. 2. a. 3. c. 4. b.

B. Fill in the blanks :

- Ans.**
- 1. **Photoshop** is a graphics software that can be used for image manipulation.
 - 2. Photoshop was developed in **1987** by two American brothers, Thomas

and John Knoll.

3. The **option bar** is beneath the menu bar and holds options for different tools.
4. Digital images are made up of **pixels**, which can be defined as colored squares.

C. State 'True' or 'False':

Ans. 1. True 2. False 3. False 4. True

D. Name the following :

Ans. 1. Selection Tools 2. View Tools 3. Marquee Tool

E. Answer the following questions :

- Ans.**
1. Photoshop is a graphics software that can be used for image manipulation. It has a wide ranging set of tools that help in creating and changing images. It was developed in 1987 by the American brothers, Thomas and John Knoll. It is basically used to edit and design different types of pictures, photographs, logo designs, brochures, etc.
 2. The Marquee Tool (M) lets you select rectangles, ellipses and 1-pixel rows and column. By default, a selection border is dragged from its corner. To use one of the marquee tools, click on and drag out the selection with the mouse in your image.
 3. Palettes : These are individual “panes” that hold information or options for working with your file, known as palettes (or panels), float on the right-hand side.
Each palette is labelled with a tab and can be minimized, closed, grouped with other palettes or dragged in and out of a panel dock.
 4. The Crop Tool allows you to redefine the active image area. It's like cutting out a smaller picture from a larger photo with a pair of scissors. The steps to use this tool are :
Step 1. Click on the crop tool from the toolbox.
Step 2. Use the crop tool to select that part of the image that is to be cropped.
Step 3. Press Enter on the keyboard. The image will be cropped.

Lab Activity

Ans. Do it yourself.



8 Drawing with Photoshop



Exercise

A. Tick (3) the correct option :

Ans. 1. a. 2. a. 3. c. 4. b. 5. c.

B. Fill in the blanks :

- Ans.**
1. **The Healing Brush** tool allows you to fix image imperfection such as blemishes, scratches, etc.
 2. **The clone stamp** tool can be used to fix your image by creating a clone.

3. **The Red eye** tool is used to correct the red eye error.
4. **Eraser** tool deletes the pixels in the image.
5. **The sharpen** tool focuses on soft edges to increase clarity.
6. **The smudge** tool simulates the actions of dragging a finger through wet paint.

C. Name the following :

- Ans.**
1. Rectangle Tool, Round Rectangle Tool, Ellipse polygon Tool, Line Tool, Custom shape tool.
 2. Horizontal Type Tool, Vertical Type Tool, Horizontal Type Mask Tool, Vertical Type Mask Tool.
 3. The Stamp Tool, The clone stamp tool. The pattern stamp tool.

D. Differentiate between the following :

Ans. 1. The Brush Tool

This is one of the most important tools that helps to paint. It has numerous presets defined that can also be used. Using this tool, many different images can be created. The steps to use this tool are :

Step 1: Click the Brush tool to select it. Change the settings in the options bar (change settings of Brush size and shape, opacity, flow and blending modes).

Step 2: Finally, click and drag over the area you want to draw.

The Eraser Tool

This tool helps to delete pixels in the image as you drag your mouse through them.

2. The Gradient Tool

This tool fills blended color on the image or selected part of the image.

Shape Tool

Photoshop provides six shape tools that enable you to draw geometric and predefined shapes.

Using the shape tool, different types of shapes of various sizes can be created.

E. Answer the following questions :

- Ans.**
1. Step 1. Create a new image file in Photoshop.
Step 2. Select the shape tool (use different tools) and click the mouse on the document and draw using the selected shape tool.
Here, all the tools have been used. You may change the size, color, custom style, etc. and create a better image.
 2. The Photoshop stamp tool allows you to copy one area of an image, and copy it onto another area. There are two stamp tools :
 - (i) The Clone Stamp tool can be used to fix your image. It is a tool that helps you to create a clone image.
 - (ii) The Pattern Stamp tool takes sample from Pattern preset instead from sample point in the image and create images.
 3. The Red Eye Tool is used to correct red eye error that may have occurred by using electronic flash. You can roughly select around the eye and set pupil diameter to easily correct the red eye. The steps to use this tool are :

- Step 1. Click File and select Open, Browse the photo on your computer, select the File name and click Open.
- Step 2. Click on the Red Eye Tool to select it.
- Step 3. Select the area you want to correct and click on that area.

Lab Activity

Ans. Do it yourself.



9

Using Filters in Photoshop



Exercise

A. Tick (3) the correct option :

Ans. 1. a. 2. a. 3. b.

B. Fill in the blanks :

- Ans.**
1. Filters are used to change the **appearance** of an image.
 2. In Photoshop, there are **11** categories of filters.
 3. **Blur** filters are used to soften either an area of a photograph that you have selected or an entire image.
 4. Not all filters in Photoshop are available through the **filter Gallery**.

C. Name the following :

- Ans.**
1. Artistic
 2. Blur
 3. Render
 4. Sharpen
 5. Stylize

D. Answer the following questions :

- Ans.**
1. Filters allow users to manipulate images with the click of a mouse. Using filters is one of the easiest yet, most powerful functions of this versatile and dynamic application. Filters are used to change the appearance of an image. In Photoshop, there are 11 categories of filters and a total of 47 filter options.
 2. To Use the Filters from the Gallery, the Steps are :
Step 1. Click on Filter and choose Filter Gallery.
Step 2. The Filter Gallery window appears. Here you can choose the options and view the effects.
 3. I. **Artistic** : Using one of these filters will make your image look like it was created by an artist.
II. **Noise** : The Noise filters add or remove noise or pixels with randomly distributed color levels.
III. **Blur** : Blur filters are used to soften either an area of a photograph that you have selected or an entire image.
VI. **Distort** : Using one of these sets of filters lets you distort your image in creative ways.
 4. **a. Pixelate**–Pixelate filters combine pixels of similar colors into cells creating an impression of a magnified pixel of image, as if you are looking at an image through a powerful magnifying glass.
b. Preview–It shows real time preview of filter that you select. When you change the filter setting or apply new filter layer, the preview will

change. You can also zoom in or out to see the details of the effect.

c. Filter Thumbnails column–You can select filter to apply to your image from this column by clicking at its thumbnail. Filters are organised in foldable menu by group that is listed above.

Lab Activity

Ans. Do it yourself.



10 Virus and Anti-Virus



Exercise

A. Fill in the blanks :

1. A **virus** is a program that infects a computer by attaching itself to another program.
2. **Relax** and **Melissa A** are examples of Macro Virus.
3. The **Trojan Horse** program disguises itself as a utility program but can destroy the data stored in the computer.
4. **Dr. Solomon's** and **Norton's Antivirus** are popular Anti-Virus programs.
5. The first PC virus was created in **1986** by **Bashir** and **Amjad Farooq**.

B. Name the following :

- Ans.** 1. Virus 2. Logic Bomb 3. Boot Sector Virus
4. Network Virus 5. Worms

C. Give an example of each :

- Ans.** 1. Polyboot B, Anti EXE. 2. Friday the 13th
3. Bashir and Amjad Farooq. 4. Dr. Solomon's
5. Installing a good anti virus

D. Answer the following questions :

- Ans.** 1. A virus is a program that enters the computer system by attaching itself to another program and then spreads itself across the system.

Some viruses damage the files stored in your computer while others cause damage by simply replicating themselves.

Viruses enter the computer system very cleverly. Sometimes their presence is detected only after they have caused damage.

It may be infected your computer system if it shows any of these symptoms.

- slow performance.
 - takes long to load programs.
 - shows a sudden decrease in the free space on your disk.
 - data files become output or missing.
 - programs do not run.
 - a disk drive light flashes constantly.
 - shows an unusual display on the screen.
2. The term hacker refers to the people who use their skills to enter into computer systems without authorization. Hackers are computer

enthusiasts, who break into secure systems to gain knowledge about them and possibly use this knowledge to play pranks.

On the other hand, a Cracker is a malicious programmer who gains unauthorized access to computer systems for the purpose of stealing, altering or corrupting information. They often destroy the confidential or crucial data of the systems they invade. They break the security on application software and create destructive programs like viruses.

3. a. **Macro Virus**—Since the 1980's Macro viruses have become very common. Macro virus infect data files. These viruses spread by infected documents and spreadsheets like a Word or Excel file. The first macro virus (CONCEPT) was written for Microsoft Word. Relax, Melissa A, Bablas are examples of this type of virus.
- b. **Network Virus**—This kind of virus spreads across the networks in computers, for example, Nimda and SQL SLAMMER worms are viruses which spread over corporate networks or the Internet via e-mails.
- c. **Logic Bomb**—A logic bomb is a program that gets executed only when a specific condition is met. The virus Friday the 13th was so programmed so as to get executed on that particular date.
4. A Trojan Horse program is a file that appears harmless unless it has been executed. The Trojan Horse program disguises itself as a game or a utility program but when executed it can destroy the data stored in the computer. The name Trojan Horse has been derived from Greek mythology.
5. a. **Trojan Horse**—A Trojan Horse program is a file that appears harmless unless it has been executed. The Trojan Horse program disguises itself as a game or a utility program but when executed it can destroy the data stored in the computer. The name Trojan Horse has been derived from Greek mythology.
- b. **Worms**—Worms are programs which have been created to enter data processing programs and destroy or modify the data. Worms spread from one computer to another by using networks.
Worms on the Internet spread by e-mail programs. When a worm enters a computer system by e-mail, it searches for the address book of the mailing system. It then mails itself to all the recipients.
- c. **Network Virus**—This kind of virus spreads across networks in computers, for example, Nimda and SQL SLAMMER worms are viruses which spread over corporate networks or the Internet via e-mails.
6. To protect you system against viruses, you have to follow these steps—
 - Install a good Anti-virus software on your computer.
 - Update the Anti-virus regularly.
 - Avoid downloading programs from unknown sources.
 - Always scan your floppies, CDs, flash drives before using them.
 - Do not use pirated software.
7. **Stealth Virus**—There are some viruses which try to hide themselves

from Anti-virus software by resorting to tricks. Stealth virus can falsely show an Anti-virus software that a certain file is uninfected.

Lab Activity

Ans. Do it yourself.



11 Internet Applications



Exercise

A. Tick (3) the correct option :

Ans. 1. b. 2. d. 3. b. 4. d.

B. Fill in the blanks :

- Ans.**
1. **Internet Explorer** and **Mozilla Firefox** are popular web browsers.
 2. The online buying and selling of goods and services is known as **E-commerce**.
 3. **Netscape News** is an example of a newsgroup.
 4. TTFN stands for **Ta Ta for Now**.
 5. Search engines are useful when you don't know the **URL** of a site.

C. State 'True' or 'False':

Ans. 1. True 2. True 3. False 4. False 5. True 6. True

D. Differentiate between the following :

- Ans.** 1. Freeware is a software that can be downloaded for free and used by anybody.

Shareware is software which can be downloaded for free but after sometime you will have to pay to use these.

2. A hacker is an intelligent person who is an expert of programming languages and computer systems. Hackers enjoy breaking into computer systems and gaining unauthorized access to private networks for fun. They do not have evil intentions.

A Cracker is a person who gets unauthorized access into an individual or organization's computer system to cause harm. Crackers should cause damage to the data stored in the computer or steal the confidential data. Crackers have been known to break into websites of government organizations and cause great harm.

3. The e-mail is a fast, easy and inexpensive way of communicating over the Internet. It is one of the earliest and most popular services of the Internet. E-mailing allows you to send text messages, images, videos and music files to any Internet user who has an e-mail account. The person receiving the mail can also answer back immediately.

Instant Messaging programs allow you to create a group which consists of friends, family or people at work, with whom you can engage in a private chat when you are online. Whenever any one in the group comes online, all the others who are also online are notified of his or her presence. ICQ, MSN messenger, Yahoo messenger and AOL messenger are some of the most popular Instant Messaging programs

used by people. These programs can be downloaded easily into your PC.

E. Answer the following questions :

- Ans.**
1. While sending e-mails, certain etiquettes should be followed. They could be listed as :
 - Your e-mail should always have a subject.
 - It is rude to use all uppercase letters while typing a message. IT LOOKS LIKE YOU ARE SHOUTING.
 - Check your mail for spelling and grammatical mistakes before sending it.
 - Do not send Spam (junk mail).
 - Avoid sending large attachments with your e-mails unless you have notified the receiver.
 2. The Internet Watch Foundation (IWF) was established in 1996 to focus on removing illegal material from the Internet.
 3. Video conferencing is a facility provided by the Internet where a group of people placed all over the globe can have an online conversation. They can hear and see each other and at the same time exchange text messages. It is a form of communication using a combination of video, audio and text data.
 4. **Disadvantages of Internet :**
 - The Internet has no single governing body and so there are no official rules and regulations to control the activities involving it. This has led to many problems being associated with the Internet.
 - Individuals or organizations use their computers to store important and valuable data. Very often this data is confidential and needs to be stored securely. However, with the Internet connecting all these computers this security is now being threatened.
 - The Internet gives hackers and crackers easy access to the data being stored in the personal computers of individuals or organizations.
 5. E-commerce refers to the buying and selling of goods and services online. The Internet is becoming extremely popular as a place to carry out business. Individuals or companies wishing to sell a product can do so by hosting their websites or advertising their products on web portals which have been created particularly for such transactions. This is known as Online Marketing.

Lab Activity

Ans. Do it yourself.



12 Flash 8



Exercise

A. Tick (3) the correct option :

Ans. 1. b. 2. d. 3. d. 4. c.

B. Fill in the blanks :

- Ans.** 1. **Rectangle** tool is used to make a square.
2. **Frame** represents the content of the movie at one point of time.
3. The layer that you work on is called **active layer**.
4. **Timeline** is an area on the screen to work with layers and frames.

C. State 'True' or 'False':

- Ans.** 1. True 2. False 3. False 4. True

D. Name the following :

- Ans.** 1. Adobe Flash 2. Macromedia Flash 8
3. Symbols 4. Directory

E. Answer the following questions :

- Ans.** 1. Layers : A layer contains its own time line with endless frames. The active layer is indicated with the pencil icon next to a layer name in the time line.

When you open a new Flash document, by default it contains only one layer. You can add more layers as per your requirement.

2. A symbol is a graphic, image, animation or button. The use of symbol helps to keep the file size small. There are mainly three types of symbols i.e. Graphics, Buttons, Movie Clips.
3. Each layer of Flash movie is divided into frames. A frame represents the content of movie at one moment of time. To insert a frame, press F5.
4. This tool is used to copy the colour from one object to another.
5. Select a frame in the timeline and select insert > timeline > key frame right click or control click a frame in the timeline and select insert key frame.
6. It is used to scale, rotate, compress, stretch and skew the object or shape. It has four options i.e. Rotate and Skew, Scale, Distort and Envelope.
7. • It provides interactive graphics and animation for the web.
• It is a powerful drawing tool and a movie editor.
• It is easy to use with drag-and-drop user-interface components.
• It provides several special effects that you can add to objects.
• It is not dependent on browsers.
8. The Property Inspector displays the properties of the selected objects. Some of the properties are Stroke Colour, Fill Color, Stroke Height and Stroke Style.

Setting Document Properties :

To set the frame rate, colour, background and ruler units use the following steps :

Step 1. Click File → New. The New Document dialog box appears → Select the Flash File → Click OK.

Step 2. Select Modify → Document. The Document Properties dialog box appears.

Make the desired changes with the help of Document

Properties dialog box.

9. Grouping allows you to combine different shapes together as one. To group the shapes, select all the shapes one by one and click on Modify menu and select Gro up Or press Ctrl + G. Select Ungroup from the Modify menu to ungroup the grouped objects. Or press Ctrl + Shift + G.
10. Animation is the display of sequence of images in a manner to show movement. There are two types of animation.
 - a. Frame by Frame Animation
 - b. Animation with Tweening Effect : Motion tweening and shape tweening

Frame by Frame Animation

The basic form of animation is frame-by-frame animation. You need to create the object for each frame to produce an animation sequence.

Since, unique and different drawing is required in each frame, so it is time consuming and movie created in this form takes a lot of disk space.

In a frame-by-frame animation, you change the content of each frame manually.

Motion Tween Animation

Motion tweening is moving an object from one place to another. Motion tween can also mean changing colours over time. You can implement motion tweening to an object by specifying the first and last keyframe. Flash automatically fills in the frames in between.

Shape Tween Animation

Shape tween makes a drawing changes into another drawing. There is no need to convert drawing into symbol as it doesn't work in symbols.

Lab Activity