



Based on Windows 7
& MS-Office 2007

A HAND BOOK OF

ICT CONNECT

Computer and Information
Technology now enhanced
to ICT (Information and
Communications Technology)



Teacher's Book 6

ICT CONNECT – BOOK 6

Chapter - 1

In-Text

Tick (✓) the correct statement and cross (X) the incorrect one.

- (a) Don't disable your security software because you feel it is slowing down your computer. ✓
- (b) Computers will have digital senses—speech sight smell, hearing-enabling them to communicate with human and other machines. ✓
- (c) Any computer cannot be infected by malware. ✗

Exercise

A. Answer the following questions :

1. The Internet is a huge network of computers around the world. These computers can be stand-alone systems or local area networks that can be connected to the World Wide Web through telephone lines, TVs, satellite phones, etc. Nobody is the sole owner of the Internet. Therefore, no one is responsible for wrong information available on the Net. It is a joint venture and, therefore, all the Internet users need to take precautions for using the information available on the Net.

The World Wide Web is one of the services available on the Net which displays documents presented by the other Internet users.

2. Most of the information that you will access through the Net is stored on computers that are known as servers. A server stores information for use by clients. A client is a computer or a computer

program which knows how to communicate with a particular type of a server.

3. A website means a particular web server or a part of a web server where information is stored. When we use a web browser to contact a website, the information on the server is displayed over the screen. This information on your screen is termed as a web page.

The term 'home page' has two meanings. First, it is a web page that your browser opens automatically on your screen. For example, the Internet Explorer can take you to the starting page on the web server of Microsoft. After that, a home page also describes the first of the web pages put up by an organization on the Internet. When you visit different websites, you will first get the home page of every website and then other pages linked to it can be seen.

Hyperlink or link is an object in the web page which can be clicked to jump to another page or another part of the same page of a website.

4. The abbreviation of Electronic Mail is E-mail. It is a service provided on the Internet for sending and receiving documents or mails because this mail is transferred electronically, so it takes no time to reach the destination. There is no extra expenditure even when it is being transferred from one end to another end of the world.
5. To use the Internet, you need to get connected to the Internet through a telephone line or cable. The first step will be to switch on the computer and then the external modem (if internal modem is being used, it is turned ON automatically along with the computer). After that, double click on the

icon for your ISP on the desktop. As a result, a dialog box with the connect button will appear over the screen. Click on the connect button and wait for dialing to ISP and get connected to the Internet. You may need to make several attempts for this connection depending on the data traffic on the Internet and telephone lines. When you get connected to the Internet, you can see a set of two computers as an icon on the right most part of the taskbar.

6. Surfing the web means searching and visiting a website for information which you require.
7. Most anti-virus programs work like the human immune system by scanning your computer for the signatures (patterns) of digital pathogens and infections. They refer to a dictionary of known malware, and if something in a file matches a pattern in the dictionary, the anti-virus software attempts to neutralize it. Like the human immune system, the dictionary approach requires updates, like flu shots, to provide protection against new strains of malware.
8. In this approach, instead of attempting to identify known malware, an anti-virus software monitors the behaviour of software installed on your computer. When a program acts suspiciously, such as trying to access a protected file or to modify another program, the anti-virus software spots the suspicious activity and alerts you about it. This approach provides protection against brand new types of malware that do not yet exist in any dictionary.
9. Recent technological advances in computing, communications, software and hardware have

enabled the significant growth of cyberspace, an important aspect of modern life that continues to transform the way citizens, businesses and governments interact, collaborate and conduct business. Our heavy dependence on various digital infrastructures has made them strategic national assets that must be protected to ensure economic growth, prosperity and safety in the future.

10. Cloud computing has emerged as a dominant paradigm, widely adopted by enterprises. Clouds provide on-demand access to computing utilities, an abstraction of unlimited computing resources and support for on-demand scale-up, scale-down, and scale-out. Cloud platforms are also rapidly becoming viable for scientific exploration and discovery, as well as education.

B. Write T for the True statements and F for the False ones:

1. T 2. T 3. T 4. T 5. F

C. Fill in the blank with an appropriate word:

- | | |
|--------------------|------------------|
| 1. net | 2. important |
| 3. tools | 4. fast |
| 5. clients | 6. communication |
| 7. protocols | 8. Internet |
| 9. website | 10. HTTP |
| 11. world wide web | 12. E-mail |

D. Write short notes on the following :

- a. **TCP/IP**—There are two protocols which are used for working with the Internet. These are known as Internet Protocol (IP) and Transmission Control Protocol (TCP). Nowadays, each network

and computer system on the Internet has a unique numeric address, known as the IP address that also has a corresponding name. When information is passed from one computer to another, the TCP breaks it into small packets. Each packet has the IP address of the sender and the recipient. The Internet Protocol finds the convenient route for each packet on the Internet. At the destination, the TCP reassembles the packets into complete information.

- b. HTTP**— The World Wide Web protocol is known as HyperText Transfer Protocol or HTTP. The documents passed from servers to clients are in hypertext format.
- c. URL**— URL stands for Uniform Resource Locator and it is a universal address of the documents and other resources on the World Wide Web.
- d. Domain name**— Domain name is the name of website
- e. Virus and Anti-virus**— Any computer can be infected by malware. Malware is a catch-all term for malicious programs, such as viruses, worms, trojans and spyware, which are designed to infect and take control of your computer. Once your computer has been infected, malware can capture all your keystrokes, steal your documents and use your computer to attack other computers. Anti virus software is designed to protect your computer against malware. It is available as a stand-alone product and is also included in most security software packages.
- f. Anti-virus tips**—
 - 1. Don't Assume You're Not At Risk**

Every computer, regardless of its operating system, is vulnerable to attack. While anti-virus programs cannot protect against all types of malware, the security of your computer is enhanced substantially when an anti-virus software is installed, up to date, and working properly.

2. Download Only From Trusted Sources

Obtain security software only from known, trusted sources and vendors. It is a common play of cyber criminals who pretend to sell anti-virus programs that are, in fact malware.

3. Keep Your Software Current

Make sure that you have the latest version of your anti-virus product installed and that it is set to update automatically. Check the status of the signature updates periodically to make sure they are current.

4. Don't Delay Updates

If your computer has been offline or powered off for a while, your anti-virus software will most likely need an update when you turn it back on or reconnect it to the Internet. Do not postpone these updates.

5. Scan Additional Devices

Make sure your anti-virus software automatically scans portable devices, such as USB sticks, when you plug them into your computer.

6. Track Warnings And Alerts

Pay attention to the onscreen warnings and alerts generated by your anti-virus software. Most alerts include the option of clicking on a link to get more information or a recommendation about what to do next. At the office, write down the alert

messages and contact your computer help desk or security team.

7. Don't Disable the Software

Do not disable your security software because you feel it is slowing down your computer, blocking a website, or preventing you from installing an app or a program. Disabling your anti-virus program will expose your computer to unnecessary risk and could result in a serious security incident. If problems persist, replace your anti virus software with another product.

8. Install One Program Only

Do not install multiple anti-virus programs on your computer at the same time. Doing so may leave your computer with less protection instead of providing more protection.

g. Latest trends in computer technology— Here are top 10 trends of the 21st century computers :

- ★ Computers will become powerful extensions of human beings designed to augment intelligence, learning, communications and productivity.
- ★ Computers will become intuitive — they will "learn," "recognize," and "know" what we want, who we are, and even what we desire.
- ★ Computer chips will be everywhere, and they will become invisible-embedded in everything from brains and hearts, to clothes and toys.
- ★ Computers will manage essential global systems, such as transport and food production, better than humans will.
- ★ Online computer resources will enable us to download applications on-demand via wireless access anywhere and any time.

- ★ Computers will become voice-activated, networked, video-enabled and connected together over the Net, linked with one another and humans.
 - ★ Computers will have digital senses-speech, sight, smell, hearing-enabling them to communicate with humans and other machines.
 - ★ Neural networks and other forms of artificial intelligence will make computers both as smart as humans, and smarter for certain jobs.
 - ★ Human and computer evolution will converge. Synthetic intelligence will greatly enhance the next generations of humans.
 - ★ As computers surpass humans in intelligence, a new digital species and a new culture will evolve that is parallel to ours.
- h. Future technology**— Computers are deciding which products to stock on shelves, performing legal discovery and even winning game shows. They will soon be driving our cars and making medical diagnostics. Here are five trends that are driving it all.

1. No-Touch Interface

The basic pattern of recognition technology has been advancing for generations and, we can expect computer interfaces to become almost indistinguishable from humans in little more than a decade.

2. Native Content

While over the past several years, technology has become more local, social and mobile, the new

digital battlefield will be fought in the living room, with Netflix, Amazon, Microsoft, Google, Apple and the cable companies all vying to produce a dominant model for delivering entertainment for consumers.

3. Massively Online

In the last decade, massively multiplayer online games, such as World of Warcraft became all the rage.

4. The Web of Things

Probably the most pervasive trend is the Web of Things, where just about everything we interact. Our homes, our cars and even objects on the street will interact with our smartphones and with one another, seamlessly.

5. Consumer-Driven Supercomputing

Everybody knows the frustration of calling to a customer service line and having to deal with an automated interface. It works well enough, but it takes some effort. After repeating yourself a few times, you find yourself wishing that you can just punch your answers in or talk to someone at one of those offshore centres with heavy accents.

These systems will know us better than our best friends, but will also be connected to the entire Web of Things as well as the collective sum of all human knowledge.

HOTS

Do it yourself

Multiple Choice Question

E. Tick (✓) the correct options:

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

Project

Do it yourself

In-Text

Put a tick (✓) for each of the correct statements and a cross (X) for each of the incorrect ones.

- (a) PowerPoint helps you to structure the ideas and information that you want to convey to your audience. ✓
- (b) Themes are design templates that can be applied to an entire presentation which allows for consistency throughout the presentation. ✓
- (c) Layout refers to the way things are arranged on a slide. ✓

Exercise

A. Answer the following questions :

1. MS PowerPoint is a presentation software. It is a part of Microsoft Office package. It is used for creating professional quality audio-video presentations.
2. A presentation consists of a number of slides. These slides are grouped together in a sequence to form a slide show. A slide show is an electronic presentation displayed on a computer screen.
3. The ribbon replaces menus, toolbars and most of the task panes that were found in PowerPoint 2003. The ribbon is located at the top of the document window and consists of tabs that are organized by tasks.
4. PowerPoint 2007 provides you with two types of tabs on the Ribbon. The first type are called

standard tabs, which are the default tabs that appear when you start Microsoft PowerPoint. They include Home, Insert, Design, Animations, Slide Show, Review, View and Add-Ins (optional). The second type are called contextual tabs, such as Picture Tools, Drawing, or Table that appear only when you perform a certain task. PowerPoint 2007 provides you with the right set of contextual tabs while performing certain tasks.

5. Some groups within PowerPoint 2007 have a Dialog Box Launcher that is located on the bottom right-hand corner of each group. Clicking on the Dialog Box Launcher will open dialog boxes or task panes that will allow you to modify the current settings.
6. They allow you to zoom in or out using the slide or the buttons.
7. Themes are design templates that can be applied to an entire presentation which allows consistency throughout the presentation.
8. PowerPoint provides you with a powerful spell-checker that works in the same fashion as the one in Microsoft Word.

It's always a good idea to use a spell checker and proofread your presentation yourself; however, the spellchecker can sometimes be a lifesaver.

To check an entire presentation, don't select any text. If you run the spellchecker with a specific text selected, it will only check that text. You don't have to click on the insertion point at the beginning of a presentation to begin spellchecking, as the spellchecker will wrap around until it has checked the entire presentation.

9. Animation of text in PowerPoint refers to the

manner in which individual text or other objects appear as they enter or exit a slide. Normally, all objects on a slide appear at the same time when you display the slide. However, you can make different objects appear and exit at different times under your control as the slide show proceeds.

10. For each slide in a presentation, you can set a different transition effect and determine how fast the transition will happen.

To set transition effects:

1. Switch to Slide Sorter view.
2. Select the slides to which you want to assign a transition.
3. Choose the Animation button on the ribbon to open the Slide Transition task pane.
4. From the Apply to Selected Slides list box, select the transition effect you want to apply. PowerPoint previews the effect on the selected slides and displays a Preview Animation button beneath each selected slide.
5. In the Modify Transition section, select a speed (Slow, Medium, or Fast) for the transition effect. Once again, PowerPoint previews the effect on the selected slides.
6. To preview the effect again, click on Animation Preview button beneath the slide on the left side.
7. Close the Slide Transition pane.

B. Write T for True statements and F for False ones:

1. T 2. T 3. T 4. T

C. Fill in the blank with an appropriate

word:

1. presentation
2. idea
3. top
4. two
5. available

HOTS

Do it yourself

Multiple Choice Question

D. Choose the correct options :

1. a
2. b
3. c
4. a
5. a
6. a
7. c
8. b
9. c

Activity Time

Do it yourself

Chapter - 3

In-Text

Put a tick (✓) on each of the correct sentences and a cross (✗) on each of the incorrect ones.

- (a) Joystick is a pointing device. ✓
- (b) Light pen consists of a photocell and an optical system placed in a small tape. ✓
- (c) OMR is used to input music. ✗

Exercise

A. Answer the following questions :

1. Word provides an amazing range of tools to help you create professional-looking documents. Characteristics that affect the appearance of one or more characters are called character formats.
2. The style of typeface that you use is called the font and there are literally hundreds to choose from.

To change your font:

- a. First, select the relevant text. This can be anything from a single character to the entire

document.

- b. Find the Font field on the Home ribbon.
 - c. Click on the drop-down arrow next to the Font field.
 - d. You'll see a list with a number of font choices. Scroll through the list until you've found the font that you want to use. As you move the mouse over a particular font, your text will show how that font would look like. This is called Live Preview.
 - e. Select the desired font by clicking on its name.
3. It is easy to change your text into bold, italic or underlined. As usual, you can start by selecting the text that you want to format; otherwise, Word will not know where the new formatting should be applied.
- a. Select the relevant portion of your text.
 - b. Click on the appropriate character formatting button on the Home ribbon.
 - for Bold
 - for Italic
 - for Underline

The arrow next to the underline button offers you a choice of underlining styles.
 - c. To turn a character format OFF, click on the same button again.

You can select multiple formatting characteristics at the same time, for example, by clicking on Bold and then Italic.
4. Paragraph formatting applies to a complete paragraph, that is, all the text between two occurrences of ENTER. And you don't even need to select the text first, unless you want to format more than one paragraph. Just position your cursor anywhere inside the paragraph that you

want to format, i.e.,

Right, left, or in the middle.

By default, paragraphs are usually left-aligned: the left margin is straight, but the right margin is jagged (like in this page). Word provides you with a number of other options though. Just position your cursor anywhere in the paragraph, and click on one of the text alignment buttons on the Home ribbon.

5. Here's how you can create a bulleted list.

- a. First, type the points that you want to bullet, one under another. Make sure you create them as individual paragraphs by pressing ENTER after typing each point.
- b. Select the paragraphs that you'd like to use bullets on.
- c. Click on the Bullets button in the Paragraph section of the Home ribbon.
- d. You can see that the selected paragraphs have been formatted as bulleted points.

The drop-down arrow on the right of the Bullets button allows you to choose from different bullet styles.

6. Line spacing options

Single Default option - This option sets line spacing to one line.

1.5 lines – This option is one and a half times that of single line spacing.

Double – This option is twice that of single line spacing.

At least – This option sets a minimum amount of space between lines.

Exactly – This option sets fixed line spacing, expressed in points.

Multiple – This sets the line spacing to accommodate multiple lines.

7. There are five types of tab stops available which do the following:

Left-aligned – Text flows to the right.

Centered – Text centres on this position as you type.

Right-aligned – Text flows to the left.

Decimal-aligned – Text aligns on the decimal point while using numbers.

Bar – Inserts a vertical line at tab stop Setting tabs using the ruler. This is the easiest way to set tabs.

8. Adding text to your table is very easy. This is how you can do it.

- a. After you've created the table, the cursor will be blinking in the first cell. You can begin typing here.

- b. To move on to the next cell, just press the TAB key.

- c. When you want to move to the next line, just press TAB again. Don't press ENTER. It will create a new line inside the current cell.

If you've reached the end of the table and you need another row, press the TAB key and a row will automatically be added into the table.

9. If you like to delete a row or a column, here's how you can do it:

- a. Position the cursor in the row or column that you want to get rid of.

- b. Click on Layout ribbon tab.
 - c. Click on the Delete button and a drop-down menu will appear.
 - d. Select an option to delete cells, columns, rows or even the entire table.
10. a. Click on the point in your document where you'd like to add a Clip Art graphic.
- b. Click on Insert ribbon tab.
 - c. Click on Clip Art button.
 - d. A Clip Art pane will open on the right of your document.
 - e. Type a descriptive term in the Search For field, for example, sport. Then click on Go or press ENTER.
 - f. The Clip Art Gallery will show you all the available graphics related to this theme.
 - g. Clicking on a picture will insert it in your document.

B. Fill up each blank with an appropriate word:

- | | |
|-----------|-----------------|
| 1. appear | 2. professional |
| 3. font | 4. underlining |
| 5. new | 6. bullet |

Multiple Choice Question

D. Tick (✓) the correct options:

- | | | | |
|------|------|------|------|
| 1. a | 2. c | 3. a | 4. b |
|------|------|------|------|

HOTS

Do it yourself

Activity Time

Do it yourself

Chapter - 4

In-Text

Tick (✓) the correct statements and cross (✗) the incorrect ones.

- (a) To start Excel, click on the Start button on the desktop and then on All Programs and click on Excel in the list of programs. ✓
- (b) When you move the mouse pointer in the work area, it changes from the shape of an arrow to a minus sign. ✗
- (c) We should start the formula with the = sign. ✓

Exercise

A. Answer the following questions :

1. A spreadsheet is a program that provides a table to put the data in rows and columns. After putting the data, we may compute them by using formula and find the result in any desired cell.

An electronic spreadsheet has rows and columns and the intersection of a row and column is called a cell. A cell may contain numbers, text or a formula that tells us about its relations with the value of other cells. If you change the value of any cell in the entire worksheet, the result related to it is also changed in the same way.

2. When you move the mouse pointer in the work area, it changes from the shape of an arrow to a plus sign. Now, you may choose a cell where you want to input the data. Click on the cell of your choice.

If you want to change from one cell to another, you may use the concerned arrow keys.

3. Before working with a worksheet, you should know how to select the cells. You may select a group of cells (range) in the following way.

Left click on the button of your mouse and drag it over the selection. Now, click on one cell and hold down the shift key and drag the cursor to the

opposite corner of the selected area.

4. When you are working in a worksheet, you may copy the contents of the cell from one place to another. For doing this, first select the cell by clicking the left mouse button at the starting point and then drag your mouse over the entire area that you want to copy. Now, go to Edit menu and select copy or click on the copy icon. After this, click on the cell area where you want to place the contents. Again, go to Edit menu, select Paste and click on the Paste icon.
5. The worksheet may be printed by using the Print command over the File menu. You may also print it by using the print icon on the toolbar. Here, the entire worksheet is very large and you have only entered data on a very small portion of it, so if you give the print command without specifying the area which has to be printed, most of the pages will be blank. Before printing a worksheet, the area that has to be printed must be specified.

To set the print area, drag your mouse over the cells that you want to print. On the File menu, select Set Print Area. A dotted line surrounds the selected cells on the worksheet. Now select Print from the File menu or click on the Print icon. Thus, only the selected area of the worksheet will get printed.

B. Fill in the blanks with appropriate word :

- | | |
|--------------|--------------|
| 1. worksheet | 2. file |
| 3. file | 4. MS office |
| 5. file menu | 6. cells |
| 7. editing | |

C. Tick (✓) the correct statement and cross (✗) the incorrect one:

- | | | | |
|------|------|------|------|
| 1. ✓ | 2. ✓ | 3. ✓ | 4. ✓ |
| 5. ✓ | | | |

HOTS

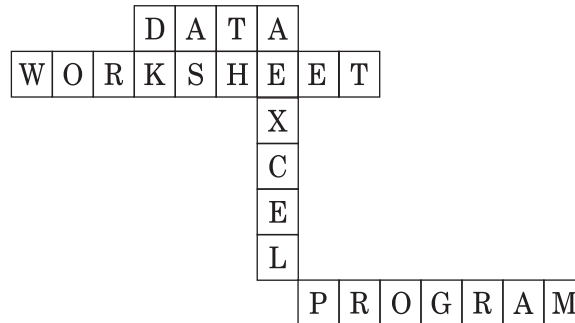
Do it yourself

Project

Do it yourself

Activity Time

Complete the crossword:



Chapter - 5

In-Text

Tick (✓) the correct statements and a cross (✗) for each of the incorrect ones.

- (a) Tim Berners Lee at CERN designed the original HTML document type in year 1990. ✓
- (b) HTML consists of standerdised codes that are used for defining the structure of information on a web page. ✓
- (c) The body part of the HTML document contains all other elements except the HEAD element. ✓

Exercise

A. Answer the following questions.

1. The Hypertext Markup Language is a developed form of Standard Generalized Markup Language (SGML). Tim Berners Lee at CERN designed the original HTML document type in the year 1990. After this in 1992, Dan Connolly wrote the HTML document type and a brief HTML specification.

Since 1993, a number of people have contributed to the evolution of the HTML. In the year 1994, Dan Connolly and Karen Olsen Muldrow rewrote the HTML specification.

2. The HTML document may be displayed on the host computer at any distant location. It is a versatile language which can be used on any Windows or other platform. Being platform independent, HTML indicates the way in which the document is to be read by the interpreter. This is done by a set of HTML elements, that mark up the document and inform the browser about the action which has to be taken.
3. Web page is a document page on the computer which has a set of information containing text, pictures, links and other elements. HTML consists of standardised codes (tags) that are used for defining the structure of information on a web page. These codes enable you to have several features, like making the text bold, italics, putting headings, paragraph breaks, numbered or bullet list, images, hypertext links, etc.

HTML uses a descriptive markup to define the structure of a text area. There are different tags which are used for defining a document area which has certain characteristics. These tags are called HTML elements. The structure of an HTML document is very simple. HTML helps us to design attractive web pages with less effort.

4. There are many HTML elements that we use to create an HTML file. The HTML element consists of a less than sign (<) followed by the name of tag and closed by a greater than sign (>).

The HTML elements may be classified in con-

tainer elements and empty elements. The container elements are paired and have a starting and ending tag. The ending tag is the same as that of the starting tag except that the former has a slash that precedes the text within less than and greater than sign. For example, `<HTML> ... </HTML>`. The empty elements are those which do not have the end tag but only the starting tag. An empty element takes the attributes which are given within the angular brackets, along the tag name. For example, `<INDEX>` and `(LINK)`.

5. We use these attributes to set the color of the link text in the document when the hyperlinks are displayed. The `LINK` attribute is used for specify the color. The default color is blue that appears automatically. `VLINK` stands for Visited LINKS. Its default color is purple but you may change it by changing the value in this attribute. A `LINK` stands for Active LINK and its default color is red that can also be altered by changing the attribute.
6. There are certain elements which are used for text block formatting in HTML document. All the block formatting elements are placed inside the body.

B. Define the following attributes.

- a. `SIZE` attribute — The size attribute allows the user to give a specific size for the font. The valid value range is from 1 to 7 but the default size is 3. You may add + or – sign to increase or decrease the size from the base font of the document.

Example : `` changes the font size to 4

``

- b. `COLOR` attribute — The colour attribute changes

the text colour which appears over the screen. The colour may be set by giving the value as # ggrrbb, a hexadecimal value. It may also be set by giving the name of the colour supported by the browser.

Example: `
`

- c. FACE attribute — By using face attribute, you may select a typeface to use in the text. You may use only that typeface which is available on your computer.

Example: ` `

When you use this font size, the characters followed by this element will appear in Arial font.

- d. CLEAR attribute — We use this attribute with the `
` element. You may use it in several ways as shown below :
 - (i) CLEAR = LEFT breaks the line and moves down vertically until there is a clear left margin.
 - (ii) CLEAR = RIGHT breaks the line and moves down vertically until there is a clear right margin.
 - (iii) CLEAR = ALL breaks the line and moves down until both the left and right margins are clear.
- e. WIDTH attribute — The horizontal ruler by default is made of the same width as the width of the page width. This may be changed by using width attribute with the HR element. The width may be specified as a number of pixels or as a percentage.

Example : `<HR WIDTH = 30%>`

This will make the horizontal rule 30% width of

the full width of the page.

- f. ALLGN attribute — We use the Align attribute to determine the vertical or horizontal alignments and placement of the image.

We use this attribute as mentioned below:

ALIGN = LEFT : Sets the image against the left margin and gets placement on the left hand side of the text.

ALIGN = RIGHT : Sets the image against the right margin and the text remains on the left side of the image.

ALIGN = TOP : By using Align attribute in this way, the image is aligned on top of the page.

ALIGN = MIDDLE: It aligns the image in the middle of the screen.

C. Write 'T' for the True statements and 'F' for the False ones:

1. T 2. T 3. F 4. F

D. Fill up the blanks:

- | | |
|-------------|-------------|
| 1. HTML | 2. color |
| 3. document | 4. element |
| 5. HTML | 6. HTML |
| 7. Web page | 8. location |
| 9. 1994 | 10. 1990 |

HOTS

Do it yourself

Multiple Choice Question

E. Choose the correct options.

Chapter - 6

1. a 2. c 3. b 4. a 5. b 6. c

Activity Time

Do it yourself

In-Text

Tick (✓) the correct statements and cross (✗) the incorrect ones.

- (a) LIST command is used for listing the programs. ✓
- (b) SYSTEM command is used for closing the system. ✗
- (c) RME command is used for showing the position of the mistake. ✓

Exercise

A. Answer the following questions.

1. Features of Qbasic
 - a. It is a user-friendly language.
 - b. It is a widely known and accepted programming language.
 - c. It is one of the most flexible languages as modification can be done easily in already existing program.
 - d. Language is easy since the variables can be named easily and they use simple English phrases with mathematical expressions.
2.
 - a. All QBasic programs are made up of series of statements, which are executed in the order in which they are written.
 - b. Every statement should have at least one QBasic command word. The words that BASIC recognizes are called keywords.
 - c. All the command words have to be written using some standard rules, which are called

"Syntax Rules". Syntax is the grammar of writing the statement in a language. Syntax errors are generated when improper syntax is detected.

3. Data are a collection of facts and figures which are entered into the computer through the keyboard.
4. Once QBASIC program is loaded into the computer memory, OK prompt displays. Ok means it is ready to accept the commands. QBASIC can be made to translate your instructions in two modes:
 - Direct Mode
 - Program Mode
5. a. CLS: This command is used for clearing the screen.
b. PRINT: Print command is used for displaying the output on the screen. E.g. Print "HELLO WORLD!!!"
Print 80 * 8
Print – Only Print command will leave a blank space.
Print Tab(10) "Prakriti" – will print Prakriti on 10 column.
c. REM: It stands for remark. It gives an explanation of the program or of the statements in the program thereby making the program more understandable to the reader. The computer does not execute this statement since whatever is written after REM is ignored by the compiler. REM can be used anywhere and many times in a program.

B. Write 'T' for the True statements and 'F' for the False ones:

1. T 2. T 3. T 4. T

C. Fill up the blanks :

1. Beginner's 2. programs 3. keywords

- 4. one
- 5. LET
- 6. \$
- 7. OK

HOTS

Do it yourself

D. Describe the following in one line.

- a. **LIST** – This command is used for listing the program on the screen.
- b. **RUN** – This command is used for executing the program.
- c. **LPRINT** – This command is used for getting the output of the program on the hard copy.
- d. **NEW** – This command is used for clearing the memory of the existing program.
- e. **SYSTEM** – This command is used for taking you back to dos prompt.
- f. **SAVE** – This keyword is used for saving the program.

Multiple Choice Question

E. Choose the correct options :

- 1. a
- 2. c
- 3. c
- 4. a
- 5. b
- 6. a
- 7. b
- 8. c

Project

Do it yourself

Chapter - 7

In-Text

Tick (✓) the true statements and cross (X) the false ones.

- (a) The loop will execute only once if the start and end values are equal. ✓
- (b) If step is not given, then QBASIC assumes the

increment to be 2. ✘

- (c) When a set of instructions are repeatedly executed, a fixed number of times, it is termed as a loop. ✓

Exercise

A. Answer the following:

1. Command PRINT displays text or numbers on the screen.

The program line looks like this:

```
PRINT "My name is Utkarsh."
```

2. QBASIC also needs to keep words or numbers in its memory. To do this, you use variables in QBASIC memory, which can keep information. A variable can be named with any letter, for example :- • It can also have a longer name, which can be almost any word. It is important to know that there are two main types of variables one that keeps a number and the other that keeps a word or a string of words.
3. INPUT is a command that allows you or anybody else who runs the program to enter the information (text or number) when the program is already running. This command waits for the user to enter the information and then assigns this information to a variable. Since there are two types of variables, the INPUT command may look like this – INPUT a (for a number), or INPUT a\$ (for a string).
4. Quite often you don't want the program to run exactly in the order you put the lines, from the first to the last.

Sometimes, you want the program to jump to a

particular line. For example, your program asks the user to guess a particular number:

```
~ ~ ~ 'some of the program here  
INPUT "Guess the number"; n  
~ ~ ~ some of the program there
```

The program then checks if the entered number is correct. But if the user gives the wrong answer, you may want to let him try again. So you use the command GOTO, which moves the program back to the line where the question is asked.

5. QBASIC can perform the following mathematical operations:

Operator	What it does	Example	Result
+	Add	$7 + 2$	9
-	Subtract	$7 - 2$	5
*	Multiply	$7 * 2$	14
/	Divide	$7 / 2$	3.5

Examples:

a. 1. $a = 15 / 4 + 3$

```
PRINT a
```

Result on the screen – 6

b. PRINT "Enter the first number"

```
INPUT a
```

```
PRINT "Enter the second number"
```

```
INPUT b
```

```
c = a + b
```

```
d = a * b
```

```
PRINT a; "+"; b; "="; c
```

```
PRINT a; "*"; b; "="; d
```

```
END
```

When you run this program, it goes like this:

Computer: Enter the first number

You: 22

Computer: Enter the second number

You: 18

Computer: $22 + 18 = 40$

6. In many programs (for example - games), the user has a choice of what to enter. In this case, QBASIC has to check what the user has typed and react accordingly. This can be done with the

IF...THEN command.

IF...THEN...ELSE

This command checks if an argument involving a variable is true. An argument may look like this:

IF a

= 15 THEN... If the argument is true (and a is really equal to 15), then QBASIC executes the command

you put after the IF...THEN.

Example:

IF a = 15 THEN PRINT "OK"

If the argument is not true (if a is not equal to 15), QBASIC bypasses this line and goes to the next.

7. When a set of instructions are repeatedly executed a fixed number of times, it is termed as loop.

To make interesting and efficient programs, you can make QBASIC to execute a part of a program more than once. This is called looping, when QBASIC goes through a part of a program over and over again.

This can be done with the GOTO command, but in QBASIC there are some good ways to loop the program. One of them is FOR...NEXT command.

While using counters, we have to follow the following points:

- a. Initialize the counter
- b. Increase or Decrease the counter
- c. Check for the maximum limit

This process may become very tedious, if the program is very long with several counters. In that case, we use a loop and there are different types of loops like For-Next.

FOR...NEXT

This command allows you to execute a part of a program a certain number of times. It looks like this:

```
FOR i = 1 TO 4
PRINT "I am looping!"
NEXT
```

This little stupid program will print on the screen:

```
I am looping!
I am looping!
I am looping!
I am looping!
```

8. **LEN** : Returns the length of the string.

Syntax : $L = \text{Len}(\text{string});$

Where, L = the variable storing the number of characters the string has.

String = the string whose length has to be found.

Example :

```
10 cls
20 s$ = "Kalpana"
30 m = len(s$)
```


40 print m

50 end

The above program would give output = 7, as even space is considered as a character.

B. Write 'T' for the True statements and 'F' for the False ones:

- | | | | |
|------|------|------|------|
| 1. T | 2. T | 3. T | 4. T |
| 5. F | 6. T | 7. T | |

C. Fill up the blanks:

- | | | | |
|---------------|-----------|-----------|---------|
| 1. empty line | 2. screen | 3. letter | 4. end |
| 5. \$ | 6. once | 7. good | 8. blue |
| 9. input | 10. loop | 11. 1 | 12. end |

Chapter - 8

In-text

Tick (✓) the true statements and cross (✗) the false ones.

- (a) Printing options have been reconfigured in Office 2010. ✓
- (b) The Backstage View, or File tab, replaces the Office button, present in Office 2007. ✓
- (c) The ribbon is arranged in files. ✗

Exercise

A. Answer the following.

1. The application icon in the upper left corner of the window contains commands to restore, minimize, maximize and close the active window, much like the commands located in the upper right corner.

The Backstage View, or File tab, replaces the Office Button, present in Office 2007.

Familiar commands, such as Save, Save As, Open and Close, are located near the top of the tab.

2. Options for sending files via e-mail, publishing them to the web using Windows Live, and saving to a SharePoint site are located here. The Change File Type option lists a variety of file types. Starting the file saving process in this way is an alternative to going directly to the traditional Save As dialog box; yet, clicking on Save As button located here launches the Save As dialog box as well. This category is called Save & Publish in Access 2010.
3. The Help feature located in the Backstage View provides links to Microsoft Office online tools, along with tools to access application Options and Check for Updates. Application Help may also be accessed using the blue circle with the white question mark in the upper-right corner of the interface.
4. The Ribbon is arranged in tabs. Each tab houses categorized groups of application-specific commands. Each application has a certain number of default tabs and may show contextual tabs with additional tools when certain elements in the file are active. In Office 2010, the ribbon can be minimized, as well as customized.
5. Custom tabs and groups can be added to the ribbon, commands can be added to custom groups and the names of existing tabs and groups can be changed. The tools to perform these processes are found in the Customize Ribbon category in the Application Options dialog box. The Application Options dialog box can be accessed directly from the Options command in the Backstage View/File

tab list, in the Backstage list's Help category under Tools for Working with Office. It can also be found by right-clicking a Ribbon tab and selecting Customize the Ribbon.

- Add and name a custom Ribbon tab
 - Within the Application Options dialog box, click on New Tab button.
 - Select New Tab (Custom) in the list.
 - Click on Rename button.
 - Type the new name and click on OK button in the Rename dialog box.
 - Click on OK button for Application Options dialog box.
6. The Screenshot feature is located on the Insert tab in Word, PowerPoint and Excel. This feature captures screenshots from all open applications and allows them to be selected and pasted into the active file. The Screen Clipping command allows the screenshot to be cropped as needed before being pasted in the active file.
7. The Sparklines feature is found in the Sparklines group of the Insert tab. Sparklines are small charts in individual cells. They may be used to summarize data and show trends. There are three types of Sparklines: Line, Column and Win/Loss. When the command is selected, a dialog box appears to collect the Data Range to be used and the Location Range where the mini charts will be placed. When a Sparkline is inserted into a worksheet, the Sparkline Tools Design contextual tab appears on the ribbon to provide formatting options.

8. Table, Datasheet, View, Fields Tab present under the Table Tools contextual tab, contain tools to create and format a table in Datasheet view. The More Fields command provides an expanded list of field templates, including Quick Start options used for inserting individual and groups of fields based on commonly used field categories. A Calculated Field option inserts calculations into the table based on field data type.

B. Write 'T' for the True statements and 'F' for the False ones:

1. T 2. T 3. F 4. T 5. T
6. T 7. T 8. T 9. T

C. Fill up the blanks:

1. office 2007 2. reconfigured 3. tools
4. ok 5. access 6. updates

Multiple Choice Questions

D. Choose the correct options:

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

Chapter - 9

In-text

Put a tick (✓) for each of the correct statements and a cross (✗) for each of the incorrect ones.

- (a) The imported files come up in the Collection Pane in the Windows Movie Maker. ✓
(b) A video effect decides how a video clip, picture or title gets displayed in your project. ✓
(c) Titles or credits allow you to add text, such as the title of your movie, your name, date, etc. ✓

Exercise

A. Answer the following questions:

1. To add video effects, take the following steps:
 - ✓ Click on View Video Effects of the movie task.
 - ✓ Now, video effects will appear in the collection pane, e.g. Blur, Ease In and Ease Out.
 - ✓ After that, drag a video effect and drop it on a video clip of the Storyboard.
2. It includes the following:
 - a. Show collections
 - b. View video effects
 - c. View video transitions
 - d. Make title or credits
3. To add Video Transitions, follow the steps given below:
 - ✓ Click on View Video Transitions of the movie tasks.
 - ✓ Video transitions will appear in the collection pane, e.g. Bars, Circle, Bow tie and Horizontal.
 - ✓ Now drag a video transitions and drop it between the two clips or pictures over the Storyboard.
4. It controls how your movie plays from one picture to the next. You may also add a transition between two pictures on the Storyboard/ Timeline.

A Video effect decides how a video clip, picture or title gets displayed in your project.

B. Write T for the True statements and F for the False ones:

1. F 2. T 3. T 4. T

C. Fill in the blanks with an appropriate word:

1. play 2. full 3. storyboard, timeline

- | | | |
|--------------|------------------|---------------|
| 4. tasks | 5. transition | 6. collection |
| 7. clips | 8. story board | 9. collection |
| 10. pictures | 11. video effect | 12. monitor |

D. Define the following terms:

1. Storyboard : Storyboard shows the sequence of clips, whereas Timeline shows the timing of clips.
2. Timeline : Timeline displays your work in progress.
3. Video effects : A video effect decides how a video clip, picture or title gets displayed in your project.
4. Video transition : It controls how your movie plays from one picture to the next. You may also add a transition between two pictures on the Storyboard/Timeline.

HOTS

Do it yourself

E. Match the following:

S.No.	Task	Shortcut keys in Movie Maker
1.	Create a new project	CTRL+N
2.	Open an existing project	CTRL+I
3.	Save a project	CTRL+A
4.	Save a project with a new name	ALT+ENTER
5.	Save a movie	CTRL+D
6.	Import an existing clip	CTRL+O

- | | | |
|----|--|--------|
| 7. | Select all clips | CTRL+S |
| 8. | Play video in full
screen | F 12 |
| 9. | Add selected clips
to the Storyboard/
Timeline | CTRL+P |

Project

Do it yourself

Chapter - 10

In-text

Put a tick (✓) for each of the correct statements and a cross (X) for each of the incorrect ones.

- (a) Parallel port is the slowest common transfer method.✓
- (b) Fire wire is an interface that is much faster than USB 1.1 and compatible to USB 2.0.✓
- (c) A SCSI connection may transfer data at the highest speed which both the controller and the device support.✓

Exercise

A. Answer the following questions:

- 1. It shows that how the document will appear on the paper.
- 2. It is an interface that is much faster than USB 1.1 and compatible to USB 2.0. Fire wire speeds are 25, 50, 100, 400 and 800 megabytes/second.
- 3. Scanners may transfer data quickly and they are easier to use and cheaper than SCSI devices. The early USB 1.1 standard could transfer data at

only 1.5 megabytes/second, but the latter USB 2.0 standard transfers up to 60 megabytes/second resulting in a faster operation.

4. A SCSI connection may transfer data at the highest speed which both the controller and the device support. It supports almost all computers when you insert an SCSI interface card with the PC.

5. The quality of a scanner depends on:

- a. Pixels : It is made up of small squares to represent an image.
- b. Resolution : Total number of pixels.
- c. Colour Depth : The amount of information in each pixel is known as colour depth.
- d. Density Range : The amount of space available on a disk for recording images.

B. Write (T) for each of the True statements and (F) for each of the False ones:

1. F 2. T 3. T 4. T 5. F 6. T 7. F

C. Fill up the blanks:

- 1. Pixel per inch
- 2. Dots per inch
- 3. Universal serial bus
- 4. Small computer system interface
- 5. Portrait, lands cape
- 6. Margins
- 7. Scanners
- 8. Device
- 9. Fire wire
- 10. Flat bed

HOTS

Do it yourself

D. Define the following terms:

1. Color depth : The amount of information in each pixel is known as colour depth.
2. Resolution : Total number of pixels.
3. Density range : The amount of space available on a disk for recording images.
4. Pixel : It is made up of small squares to represent an image.

E. Match the following:

- | A | B |
|---------------|--|
| a. Parallel | is the total number of pixels. |
| b. SCSI | can transfer data up to 60 megabytes/second. |
| c. USB | speeds are 25,50,100, 400 and 800 megabytes/ second. |
| d. Fire wire | Ctrl+ P. |
| e. Resolution | made up of small squares. |
| f. Pixels | stands for small computer system interface. |
| g. Print | is the slowest common transfer method. |



National Cyber Olympiad-1

Multiple Choice Questions

Task-1

1. d, 2. a, 3. c, 4. b, 5. c, 6. b, 7. b,
8. b, 9. b, 10. b, 11. c, 12. a, 13. b, 14. b,
15. a 16. c 17. a 18. b 19. a 20. c 21. b
22. b 23. a 24. d 25. b 26. c 27. c 28. b
29. a 30. c 31. b 32. 43

1. d, 2. a, 3. a, 4. b, 5. a, 6. d, 7. a,
8. d, 9. b, 10. b, 11. c, 12. d, 13. a,
14. c, 15. d 16. a 17. b 18. c 19. d