A HAND BOOK OF

ICT CONNECT

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

Teacher's Book 4

ICT CONNECT – BOOK 4

Chapter – 1

In-Text

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

   (a) Memory is used to store everything which is given to the computer.   ✓

   (b) The hard disk is a temporary storage medium.   ✗

   (c) The motherboard is the main circuit board. ✓

Exercise

A. Answer the following questions:

   1. A microprocessor is the brain of the computer, where actual processing is done.

   2. A modem is a device that converts digital data into analog data which can travel through telephone lines. It is used for connecting the computer to the Internet.

   3. Memory is used for storing data given to a computer. The main memory of the computer is known as RAM (Random Access Memory). It is fixed on the motherboard and keeps the information on hold until the computer is switched OFF.

   4. Power Supply takes Alternating Current (AC) which is available in electric points, and converts it into various volts of Direct Current (DC) on which electronic goods operate.

   5. The hard disk is a permanent storage medium. It has a large capacity. The information which you want to use frequently or in the future can be

stored in the hard disk.

B. Match the following:

a.	The results and reports of the activities are given in this part.	1. Input Unit
b.	It keeps input and output stored for further use.	2. Memory Unit
c.	It controls all the parts and components, and uses them for their specific roles.	3. Control Unit
d.	Arithmetic sums and logical (comparison and decision based) problems are solved here.	4. Arithmetic and Logic Unit
e.	It sends input to the CPU.	5. Output Unit

C. Write (T) for true statements and (F) false ones:

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

Multiple Choice Question

D. Choose the correct option and tick (✓) it.

1. Microprocessor   2. Keyboard
3. Printer   4. Memory
5. Hard Disk

Activity Time

Do it yourself

Project

Write the names of any four internal parts of a CPU box.

Mother board,   Modem,   Memory Card,

Hard Disk

Problem Solving

A. Solve the anagrams with the help of the pictures. One has been done for you.

    1. MOTHERBOARD   2. WEBCAM

    3. PRINTER   4. HARD DISK

    5. MICROPROCESSOR

B. Find the names of nine computer accessories in the word box and encircle them.

A	P	E	N	D	R	I	V	E	L
H	A	R	D	D	I	S	K	A	C
L	F	I	N	D	O	C	U	M	A
F	L	O	P	P	Y	A	T	O	P
W	H	A	M	R	O	N	U	U	T
T	I	S	M	I	G	N	T	S	O
I	D	D	N	N	A	E	C	E	P
M	O	N	I	T	O	R	E	P	I
C	A	B	L	E	N	H	I	E	T
D	C	O	M	R	A	M	P	L	E

Chapter – 2

In-Text

Put a tick (✓) for the correct statement.

    (a) A computer system has two basic parts, known as hardware and software. ✓

    (b) The physical parts of the computer are called hardware. ✓

    (c) The computer coded form of instructions is

known as software. ✗

Exercise

A. Answer the following questions:

1. The physical parts of a computer are called hardware, which you can see or touch.

2. The volatile part of the computer which no one can touch is called software. We can say that the computer coded form of instructions or programs is known as software.

3. When the computer completes the process of checking the devices, it searches for the operating system software on the hard disk. Windows is the most popular Operating System. When you turn ON a computer, the OS is loaded on the working memory of the computer and you get the Desktop to start your work.

4. The application software is generally developed by the computer user to fulfil his own needs. For example, banks use their own application software built by their own programmers to fulfil the needs.

5. The utility software is the category of software which is built to be utilized by anyone to serve his common purpose. The Backup and Anti-virus software are good examples of utility software.

6. Language processors are the software which are used for writing the application programs. The language processor works as a translator. LOGO, BASIC and C++ are examples of language

processors.

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

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

C. Fill in the blank the with an appropriate word:

1. Piece of hardware   2. brain

3. hardware   4. hardware

5. hardware

HOTS

Do it yourself

Multiple Choice Question

D. Tick (✓) the correct options:

	Hardware	Software
Compact Disc	✓	
Spreadsheet		✓
Webcam	✓	
Monitor	✓	
Printer	✓	
Anti-virus		✓

Activity Time

Do it yourself

Project

Make a list of all the pieces of hardware available in the computer lab of your school.

Monitor	Speakers	Modem
Motherboard	Keyboard	
Microprocessor	Mouse	
Memory chips	Printer	Hard Disk
Scanner	DVD ROM Drive	Web Camera

Cables   Microphone   Connectors

A. Answer the following questions :

1. Input devices are those devices which are used for feeding information or data into the computer.

2. The keyboard is the main input device of a computer. It has all the keys of a typewriter with additional keys like command and function keys.

3. A mouse has two or three push buttons on it. When the mouse is on the mouse pad, it moves the pointer accordingly. The pointer points on an item. By pressing the push button that item can be activated.

4. Touch Screen is an interactive screen that works like an input device as well as an output device. When it shows the display, it is treated as an output device .

5. Touchpad is also a pointing device. It is mostly used in laptops. You can select the menu, tools, options and buttons using the touchpad and can input your command or information.

6. The scanner is used for inputing images into the computer. There are different types of scanners used for different purposes. The common one is the flat bed scanner which is used for scanning Black and white or colour images. Just put the image on its glass bed and then operate it to send the copy of an image into the computer.

7. Webcam or Web camera is used for capturing still images or live videos appearing in front of the computer. If you want to take a snap of your friend or want to see him live, ask him to turn ON the Web cam of his computer. You can see him live through the Internet. You can also record your

movie using the Web cam.

B. Match the following:

1. Words ———————————— Keyboard
2. Numbers ——————————— Keyboard
3. Symbols ————————————— Keyboard
4. Options and Actions ————— Mouse
5. Sounds ——————————————— Microphone
6. Images ———————————— Scanner
7. Live Images —————————— Web Cam
8. Live Videos ——————————— Web Cam
9. Recording———————————— CD/ DVD

C. Fill in the blanks with an appropriate word: 1. input   2. pointing   3 . laptop

4. sound   5. microphone   6. images
7. images   8. data

HOTS

Web cam

Multiple Choice Question

D. Tick (✓) the correct options:

1. Mouse   2. Touch Pad
3. Touch Screen   4. Scanner   5. Hard Disk

Activity Time

Do it yourself

Projects

Do it yourself

Chapter – 3

In-Text

Tick (✓) the correct options.

1. Taskbar   2. WordPad   3. Taskbar

Exercise

A. Answer the following questions:

1. It is the most popular software in the world. It is

made by a company called Microsoft Corporation, USA.

Most of the people nowadays use MS Windows Operating System in their computers because of the following reasons:

- It is very easy to use.

- It is graphic based. So, you do not have to remember all the commands as are required in some other systems.

- It has small pictures called icons. On clicking these icons, you can do different things.

- Programs are arranged in different folders, files and directories.

2. The background picture of the Windows desktop is called the wallpaper.

3. An icon is a small picture that is used for opening a program, file or folder.

4. Taskbar shows the open tasks as small buttons including the Start button. It also shows the clock, speaker, network, anti-virus icons and quick launch buttons like the buttons, for Media Player, Internet Explorer, etc.

5. As the name suggests, it launches an application quickly. You can open the respective application by single clicking on its icon on the Quick Launch bar.

6. It displays the current time.

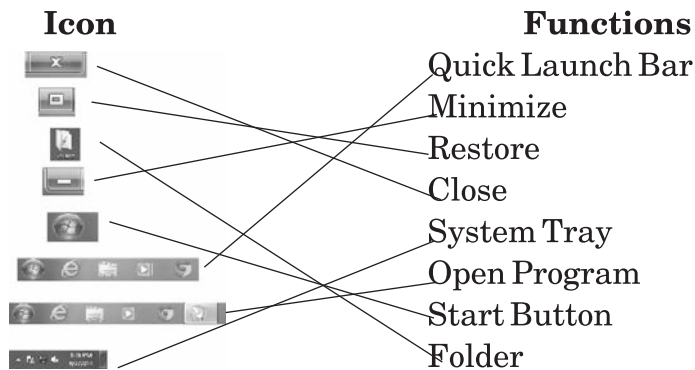**B. Write T for True statements and F for False ones.**

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

C. Fill in the blanks with appropriate word :

1. Files

2. Mouse

3. Recycle bin

4. Error

5. Right button of mouse

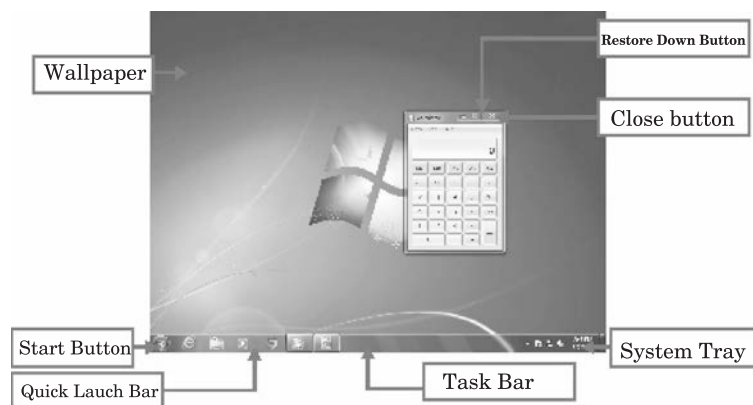**D. Match the following buttons with their respective functions :**

Icon	Functions
	Quick Launch Bar
	Minimize
	Restore
	Close
	System Tray
	Open Program
	Start Button
	Folder

HOTS

Do it yourself

Multiple Choice Question

E. Tick (✓) the correct options:

1. Search
2. Microsoft
3. Minimize

Activity Time

Label the following picture.

65

In-Text

Tick (✓) the correct options.

     1.   upside down   2. 360   3. Skew

Exercise

A. Answer the following questions:

1.   The Image menu contains the following options:

    Flip/Rotate   Stretch/Skew

    Invert Colours   Attributes

    Clear Image   Draw Opaque

2.   The Flip Horizontal option gives a mirror image as shown below. The Flip Vertical option gives you an image which is upside down.

3.   The Stretch command allows you to change the drawing, making it narrower, wider, shorter or longer.

4.   Press CTRL+R to Flip or Rotate.

B. Match the following.

                      Rotate 90 degree

                      Rotate left 90degree

                      Rotate 180 degree

                      Flip Vertical

                      Flip Horizontal

HOTS

Do it yourself

C. State whether the following sentences are True or False.

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

Multiple Choice Question

1. a mirror   2. image

3. invert   4. clear Image

Chapter – 6

In-Text

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

(a) The Office button is a circular button with office logo. ✓

(b) Zoom in - Zoom out sliding bar is used to adjust the view area. ✓

(c) The Status bar shows the title of a document. ✗

Exercise

A. Answer the following questions :

1. MSWord is the most popular word processor used worldwide as it is compatible with Windows Operating System available on a most computers.

2. The Quick Access Toolbar contains three command buttons (Save, Do, Redo).You can execute any command by a single click.

3. The Office Button is a circular button with office logo in its centre and situated at the top-left corner of the program window.

4. The Horizontal Scroll Bar is used for scrolling the page in left or right direction.

5. Zoom in - Zoom Out sliding bar is used for adjusting the view area as per the requirement.

6. It is a blinking upright line that precedes your text

as you type.

B. State whether the following sentences are True or False.

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

C. Tick (✓) the correct options.

1. Status Bar   2. in the middle of the screen

3. Backspace   4. Quick Access Toolbar

5. Title bar

Activity Time

Chapter – 7

In-Text

1. Do it yourself

2. Match the following :

(i) LT 45°

(ii) RT 90°

(iii) BK 20

(iv) FD 40
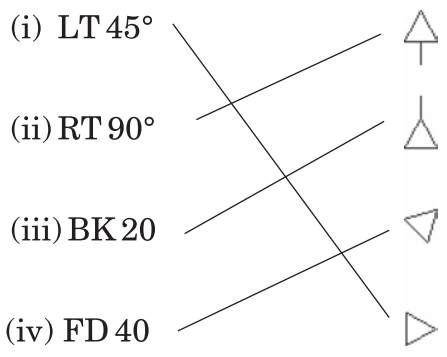
Exercise

A. Answer the following questions :

1. LOGO stands for Language of Graphics Oriented. It is an old but popular computer language used by students through which they learn to give instructions to the computer in its language to make drawings. You just have to learn a few commands (Primitives) after which you can draw

anything using LOGO.

2. Take the following steps to open MSW LOGO on your computer:

a. Click on the Start button.

b. Click on All Programs.

c. Click on Microsoft Windows Logo.

3. FD or forward moves the turtle forward as many steps as you want. BK or backward moves the turtle backward as many steps as you want.

4. LOGO commands are used for moving and turning the turtle on the screen so that the figures may be drawn.

5. FD or forward moves the turtle forward as many steps as you want.

6. ST command displays the turtle again on the screen.

7. PU or pen up lifts the invisible pen and the drawing facility.

8. You can give a name to the procedure. Always keep the following points in mind:

a. The procedure name can be letters, numbers or any other symbol of the keyboard, such as FIRST, 123, F*F etc.

b. There should be no space in between the letters, numbers or symbols.

c. The procedure name should not contain any of the LOGO commands.

d. The name should be connected with the procedure.

B. Fill up each blank with an appropriate word:

1. Turtle   2. Trail

3. backward 4. figures

5. backward

C. State whether the following sentences are True or False:

1. T 2. T 3. T

4. T 5. T

D. Match the following LOGO commands with their functions:

Commands	Functions
PE	returns the turtle to the centre of the screen, called home.
PD	moves the turtle backward as many steps as you want.
BK	moves the turtle at the said angle in the right direction.
RT	hides the turtle.
HOME	displays the turtle again on the screen.
HT	lifts the invisible pen and the drawing facility.
ST	enables the drawing facility again.
CS	removes the drawing which occurs on the path of the turtle.
PU	makes the screen clear.

Chapter – 8

In-text

Put a tick (✓) on each of the correct statements and

a cross (✗) on each of the incorrect ones.

(a) Abacus was the first calculating device invented by the Chinese. ✓

(b) In 1914, another scientist called John Napier invented a calculating device, called the Napier's Bones. ✗

(c) The first mechanical computer was invented by Charles Babbage about 160 years ago. ✓

Exercise

A. Answer the following questions:

1. The computer was mainly developed to assist in computing work, but now it has so many features that it has replaced a number of machines, like calculator, clock, calendar, notebook, typewriter, TV and so on.

2. Third Generation: 1964-1972. Integrated Circuit based. Fourth Generation: 1972-1990. VLSI Microprocessor based.

3. It was the first calculating device invented by the Chinese. It was used for performing simple addition and subtraction.

4. In 1642, a great French mathematician and philosopher, Blaise Pascal, invented the first calculating machine, known as Pascal's calculator or Pascaline.

   It was a machine operated by hand. With the help of this machine, one could perform only addition and subtraction.

5. In year 1614, another scientist called John Napier invented a calculating device, called the Napier's Bones. With the help of this calculating device, one could perform multiplication and division

besides addition and subtraction.

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

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

C. Fill up each blank with an appropriate word.

    1.1642   2. 1614   3. Charles babbage

    4. Computer   5. Vaccum tubes   6. chip

D. Write short notes on the following :

Do it yourself

HOTS

Do it yourself

Multiple Choice Questions

    1. Formula Translation

    2. 1614   3.   General

Activity Time

    1. First Generation   2. Third Generation

    3. Fourth Generation   4. Fifth Generation

Chapter – 9

In-text

Put a tick (✓) for the correct statement.

    (a)   Don't throw dirt in the computer room. ✓

    (b)   Don't keep the mouse on the mouse pad.✗

    (c)   Always keep your back straight while working on the computer.✓

Exercise

A. Answer the following questions :

    1. A computer is a very delicate machine.

    2. a. Walk in a proper row while entering the computer room and keep silence.

b. Remember to remove your shoes before going inside the computer room.

c. Don't throw dirt and dust in the computer room. Dust is harmful to computers.

d. Remember to take permission before doing work on computers.

e. Keep your mouse on the mouse pad. It works properly on the flat surface as compared to the rough surface.

f. Always keep your back straight while working on a computer.

3. Ergonomics is the science in which we study about the bad effects on our body due to the use of electronic machines like—a computer. Here are some points which you need to keep in mind and obey in order to use a computer safely.

4. Do not peek into the other's computer.

✓ ALWAYS be polite (No swearing or rudeness).

✓ NEVER bother anyone online or through email.

✓ NEVER forward emails that you get from other people (unless you have the sender's permission).

✓ ALWAYS remember the Internet copyright.

B. Write T for True statements and F for False ones:
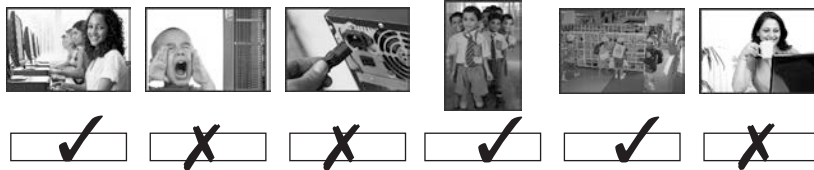
1. T   2. T   3.T   4.T   5.T

C. Fill up each the blank with an appropriate word:

1. smoothly   2.   low

3. shoes

4. dirt

5. permission

6. dust cover

Activity Time

In this visual-based activity, you have to tick (✓) the right action and cross (✗) the wrong ones.

| ✔ | ✗ | ✗ | ✔ | ✔ | ✗ |

HOTS

Do it yourself

Multiple Choice Question

D. Tick (✓) the correct options:

1. mouse pad   2. straight

3. computer   4. monitor

5. noise   6. cables

Projects

Do it yourself

Problem Solving

Here are some balls representing computer netiquette. Drop them either in ALWAYS basket or in NEVER basket. One has been done for you.

1. Always   2. Never   3. Never   4. Always

5. Never   6. Always   7. Never   8. Always

9. Always   10. Always   11. Never   12. Always

Multiple Choice Questions

Task-1

1. a,   2. a,   3.a,   4.a,   5.a,   6.a,
7.a,   8.a,   9.a,   10.a,   11.a,   12. a,
13.c,   14.b,   15.a,   16. c,   17. a,   18. a,
19. b,   20. b,   21. c

Task-2

1. a,   2. b,   3.b,   4.b,   5.a,   6.a,
7.a,   8.a,   9.a,   10. a,   11. a,   12.a,
13.a,   14. a,   15. a,   16. a,   17.a,   18.a,
19.a,   20.a

N C National Cyber Olympiad-1

1. a,   2. b,   3. a,   4. b,   5. a,   6. a,
7. a   8. a   9. c   10. c   11. d   12.c
13. b

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14. c,   15. b,   16. a,   17. a,   18. a,
19. a,   20. a

N C National Cyber Olympiad-2

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

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17. d,   18. b,   19. b,   20. b,   21. c
22. b   23. d   24. b   25. c   26. d
27. c   28. b   29. d   30. b   31. d
32. a   33. d   75