

Key to

ALL ABOUT COMPUTERS



3



PROGRESS PUBLISHERS

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1. COMPUTER BASICS

1. (a) hard copy (b) Input (c) CPU
 (d) Software (e) multifunction
2. (a) F (b) F (c) T
 (d) T (e) T
3. (a) ALU (b) Speakers (c) Hard disk
 (d) Keyboard
4. (a) CPU – Central Processing unit
 (b) SSD – Solid State disk
 (c) ALU – Arithmetic logic unit
 (d) BD – Blu-ray disc
 (e) CU – Control unit
 (f) HDD – Hard Disk
5. (a) Input (b) Input (c) Input
 (d) Process (e) Input (f) Output
 (g) Process
6. (a) A computer is an electronic device. It can perform a wide variety of tasks reliably, accurately, and quickly. Three characteristics of a computer that makes it a powerful device are accuracy, speed, and tireless working.
 (b) **Hardware** include all the parts of a computer that can be seen and touched, eg. – mouse, CPU, and hard disk. **Software** is the set of instructions or program which make a computer system work. It cannot be seen and touched, eg. – Microsoft Windows, Microsoft Office, and Paint.
 (c) Storage devices are the devices used to store larger volumes of data permanently. Hard disk, Solid State Disk (SSD), pen drives, and DVD/BD are examples of Storage devices.

- (d) The CPU has three main parts:
- **Arithmetic logic unit (ALU)** – The arithmetic logic unit performs all arithmetical calculations and logical operations on the data.
 - **Control unit** – The control unit controls the flow of data and instructions between the ALU and the memory unit. It also links the various parts of the computer together.
 - **Memory unit** – The memory accepts, stores, and transfer data and instructions that are being used by the ALU and the CPU.
- (e) The computer works in three basic steps:
- **Input** – Data is fed into the computer.
 - **Process** – The computer performs operations on the data.
 - **Output** – The result is given to the user.

The output of one process can serve as input for another process. A series of input, process, and output operations is called the IPO cycle.

2. WORKING ON A KEYBOARD

- | | |
|-------------------|-------------|
| (a) Backspace key | (b) cursor |
| (c) Caps lock key | (d) Esc Key |
| (e) Tab key | |
- | | | |
|-------------|------------|-----------|
| (a) QWERTY | (b) two | (c) Shift |
| (d) Page up | (e) Return | |
- | | | |
|-------|-------|-------|
| (a) F | (b) T | (c) T |
| (d) T | (e) F | |
- (a) Alphabet keys, Number keys, Function keys, Cursor Control keys, and Special keys.

- (b) The cursor is a small blinking line on the monitor screen. It indicates the position where the next letter or digit will appear on the screen.
The keys used to move the cursor on the screen are – Arrow keys, Home key, End key, Page up key, and Page down key.
- (c) The **Backspace** key is used to erase characters to the left of the cursor.
The **Delete** key is used to erase characters to the right of the cursor.
- (d) We can type the alphabet in upper case in two ways:
(i) By using the Caps Lock key.
(ii) By using the Shift key with alphabet keys when the Caps Lock is OFF.
- (e) The Function keys marked F1 – F12 are present at the top of the keyboard. These keys are used to perform specific tasks in different programs.

3. OPERATING SYSTEM

- | | |
|----------------------|---------------|
| 1. (a) Border | (b) Title Bar |
| (c) File Explorer | (d) Network |
| (e) Windows 10 | |
| 2. (a) T | (b) F |
| (d) T | (e) F |
| 3. (a) Start | (b) Task bar |
| (c) Operating system | (d) Window |
| (e) Status bar | |

4. (a) Operating system is the most important software that runs on a computer. It is the first software installed in a computer. A computer is useless without an operating system.
- It controls all the hardware devices connected to a computer.
 - It enables other software to install and run.
 - It provides security measures to protect your computer and data.
- (b) Single user operating system is designed for use on computer by one user at a time. Multi-user operating system is designed for use on more than one computer by several users simultaneously.
- (c) Features of Microsoft Windows operating system are:
- It provides a Graphical User Interface that represents commands, programs, and files with pictures and animations.
 - It is easy to learn and use.
 - It allows all known hardware devices to be connected to a computer.
- (d) Desktop is the place in windows where programs are opened and all the work is done.
Some icons present on the Desktop are:
- This PC
 - Network
 - Recycle bin
- (e) Steps to move the Taskbar to the left edge of the Desktop are:
1. Move the mouse pointer on an empty area on the Taskbar.
 2. Click and drag the Taskbar to the left edge of the Desktop.
 3. Release the mouse button.
- The Taskbar is moved to the left edge at the desktop.

5. (a) **Title Bar** – The title bar is a horizontal bar present at the top of the window. It displays the name of the current program and the document.
- (b) **Status Bar** – The status bar is located at the bottom of the program window. It displays information about the current program or file.
- (c) **Control buttons** – The control buttons are located on the rightmost side of the title bar. These buttons are used to minimize, maximize, or close the window.
- (d) **Ribbon** – The ribbon is collection of commands related to the activities that can be carried out in a program.
- (e) **Scroll Bar** – A scroll Bar is used to view parts of the Work area that are currently not visible on the screen. There are two types of scroll bars in a window.
 1. Vertical scroll bar
 2. Horizontal scroll bar

4. NOTEPAD

1. (a) Title bar (b) Work area
(c) File menu (d) Style
2. (a) text-editing (b) Work area
(c) Font (d) File
3. (a) T (b) T
(c) F (d) F
4. (a) Steps to open Notepad are:
 1. Click the Start button on the Taskbar.
 - The Start menu appears. It displays a list of all programs in your computer.

2. Click windows Accessories.
 3. Click Notepad.
 - Notepad window appears on the desktop.
- (b) Formatting text refers to change in appearance of the text by changing its font style and size.
- (c) To select text in Notepad:
1. Place the cursor at the location from where you want to start selection of text.
 2. Press the left mouse button and drag the mouse over the text you want to select.
 3. Release the mouse button once you have made the selection.
 - The selected text gets highlighted.
- (d) Notepad is a basic text-editing program to create simple text documents such as letters, short stories, poems or notes. Three parts of Notepad window are:
1. **Title Bar** – The Title Bar is present at the top of the Notepad window. It displays the name of the currently opened document. It also has buttons to minimize, maximize, or close the window.
 2. **Menu Bar** – The Menu Bar is present below the title bar. It has five menus –File, Edit, Format, View, and Help. Each menu contains commands related to a specific type of activity.
 3. **Work Area** – Work Area is present below the menu bar. This is the area where you type text.

5. INTRODUCTION TO LOGO

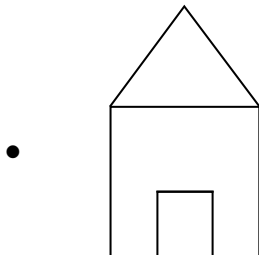
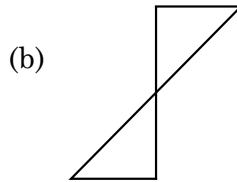
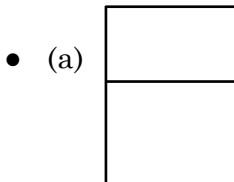
1. (a) Primitives (b) SETH
 (c) Head (d) BK 50
2. (a) LOGO (b) HOME
 (c) turtle (d) Bye (e) LEFT
3. (a) F (b) T
 (c) F (d) F
4. (a) Figure A (b) Figure C
5. (a) The turtle turns towards the right at an angle of 120 degrees without drawing any line.
 (b) The turtle moves back by 60 steps and draws a line.
 (c) The turtle gets rotated towards right by an angle of 150 degrees from its Home position.
 (d) The turtle comes back to its Home position, drawing a line from its last position to the Home position.
 (e) The turtle moves forward by 90 steps and draws a line.
6. (a) The Execute button executes commands typed in the input box.
 (b) The Reset button resets or clears the Main screen.
 (c) ● BK 50 ● SETH 60
 (d) The RT command turns the turtle towards right from the current position of the turtle, while the SETH command turns the turtle towards right from the Home position.
 (e) The RT command can be used to turn the turtle towards left by specifying the value for angle of rotation in negative.
 Eg. RT 90 will turn the turtle towards left by 90 degrees.

- 7. (a) FD 200
- RT 90
- FD 100
- RT 90
- FD 80
- LT 90
- FD 100

- (b) RT 90
- FD 100
- LT 90
- FD 100
- LT 90
- FD 100
- RT 90
- FD 100
- RT 90
- FD 100

PRACTICAL ASSESSMENT

- (a) FD 90
 - BK 45
 - RT 90
 - FD 60
 - LT 90
 - FD 45
 - BK 90
- (b) FD 120
 - RT 90
 - FD 70
 - RT 90
 - FD 120
 - BK 60
 - RT 90
 - FD 70
- (c) FD 90
 - RT 90
 - FD 65
 - RT 90
 - FD 45
 - RT 90
 - FD 130
 - LT 90
 - FD 45
 - LT 90
 - FD 65



6. MORE LOGO COMMANDS

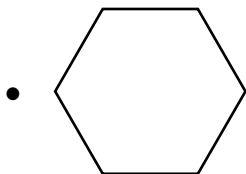
1. (a) CLEAN (b) SETPENCOLOR 0
(c) SETPENSIZE [6 6] (d) Commander window
2. (a) SETPENCOLOR (b) RESET
(c) pixels (d) black
3. (a) F (b) T
(c) T (d) F
4. (a) The CLEARSCREEN command is used to clear the Main screen and bring the turtle to its Home position while the CLEAN command is used to clear the screen but does not bring the turtle back to its Home position.
(b)
 - CLEARTEXT or CT
 - CLEARSCREEN or CS
(c) SETPENCOLOR command is used to change the color of the pen of the turtle while SETPENSIZE command is used to set the thickness of the pen of the turtle.

PRACTICAL ASSESSMENT

- | | |
|---|---|
| (a) FD 120
SETPENCOLOR 10
FD 40
SETPENCOLOR 12
FD 40
RT 90
FD 100
RT 90
FD 40
RT 90
SETPENCOLOR 3 | (b) SETPENCOLOR 1
FD 200
LT 90
SETPENCOLOR 5
FD 80
RT 90
FD 50
RT 90
FD 200
RT 90
FD 50 |
|---|---|

FD 100
BK 100
LT 90
SETPENCOLOR 10
FD 40
RT 90
FD 100

RT 90
FD 80
LT 90
SETPENCOLOR 1
FD 200
RT 90
HOME



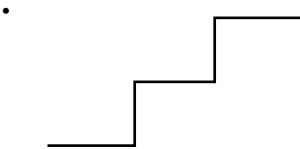
7. WRITING AND ARITHMETIC WITH LOGO

1. (a) LABEL SUM 2 5 (b) /
(c) 1 (d) 300
2. (a) LABEL (b) Commander
(c) PRODUCT (d) divide
3. (a) F (b) F
(c) T (d) T
4. (a) PR "text or PR [text] or Print "text or Print [text]
(b) PRODUCT n1 n2
(n1, n2 denote the numbers to be multiplied)
(c) QUOTIENT command is used to perform division of two numbers while REMAINDER command is used to calculate the remainder when a number is divided by another number.
(d) PRINT command displays text messages in the recall list box of the commander window while LABEL command displays text messages on the Main screen in the direction where the turtle is pointing.

5.

Commands	Output	Main screen/ Commander window
LABEL "India	Displays India on the main screen in the direction that the turtle is pointing	Main screen
PR 50 * 20	1000	Commander window
PRINT QUOTIENT 105 5	21	Commander window
FD (SUM 10 20 30)	Move the turtle 60 steps forward	Main Screen
PRINT REMAINDER 135 20	15	Commander window

PRACTICAL ASSESSMENT



8. MORE ON PAINT

- (a) View tab (b) Undo button
(c) Object (d) Ctrl + C
- (a) Desktop (b) Skew
(c) Undo (d) Flip vertical
(e) Clipboard
- (a) F (b) F (c) T
(d) F (e) F

4. (a) Zoom (b) Flip horizontal (c) Paste
(d) Redo (e) Skew
5. (a) Moving an object means to change the position of the object from one place to another. Copying an object means to make a duplicate copy of the object at another place in the picture.
- (b) To select an entire picture in paint:
1. On the Home tab, in the Image group, click the down arrow under select option.
 - A list of options appears.
 2. Under Selection options, click Select all.
 - The entire picture gets selected with a dashed boundary all around it.
- (c) To set a picture as Desktop background:
1. Click File tab
 2. Move the pointer to Set as Desktop background option.
 - Set as desktop background options appears.
 3. Select any one of the three options.
 - Fill : To fill the entire Desktop with the picture.
 - Tile : To fill the Desktop with tiles of the picture.
 - Centre : To place the picture in the centre of the Desktop.
- (d) Undo command is used to cancel or reverse the last action performed.
Redo command is used to repeat an action which was reversed with the Undo.
- (e) Resize option is used to increase or decrease the size of a picture or a part of a picture while Skew option is used to twist the picture in the horizontal or vertical direction.

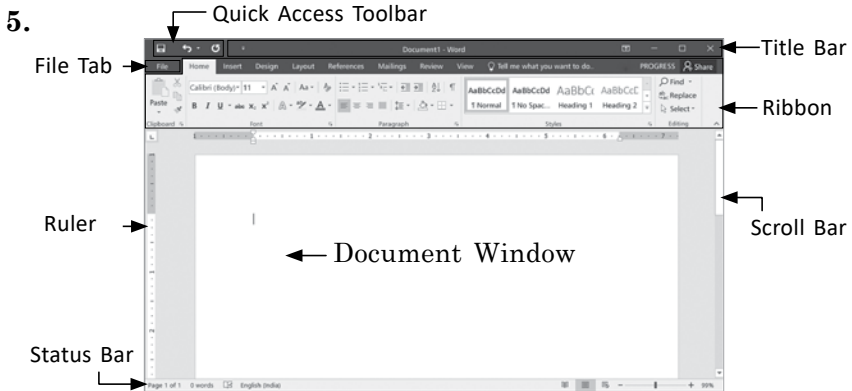
9. INTRODUCTION TO WORD 2016

1. (a) Document gallery (b) Quick Access toolbar
(c) Status bar (d) Ctrl+S
(e) Work area
2. (a) pre-designed (b) scroll bar
(c) Quick Access toolbar (d) backstage view
(e) .docx
3. (a) T (b) T (c) F (d) F (e) F
4. (a) A Word Processor is a software that enables you to create attractive documents on a computer easily and quickly. eg Word 2016
(b) To save a document in Word 2016:
 1. Click File tab.
 - The Backstage view opens.
 2. Click Save.
 3. Click Browse.
 - The Save As dialog box appears.
 4. Enter a name for the document in the File name box.
 5. Click on Save button.
 - Word saves the document and its name is displayed in the Title bar.
- (c) Features of Word 2016 are:
 1. Word 2016 create documents with text, pictures, equations, and diagrams.
 2. Edit text, find, and correct spelling and grammar mistakes.
 3. Format text in different styles, sizes, colours, and layouts.
 4. Copy and move text from one position to another.
 5. Insert tables in different layouts.


- (d) Word window has two rulers –
Horizontal and Vertical

Horizontal ruler is used to set tabs, left and right margins, and width of table columns. Vertical ruler is used to set top and bottom margins and height of table rows.

- (e) File tab is used to get the information about the current document and commands for various file activities such as Open, Save, and Print. It is also used to change various settings in Word.



ASSESSMENT SHEET – 1

- (a) Status bar (b) Operating system
(c) Esc Key (d) 
(e) Network
- (a) Soft copy (b) Home (c) All apps
(d) Work area (e) Tiles
- (a) T (b) F (c) T
(d) F (e) T
- (a) NUM Lock (b) Software (c) Title bar
(d) Icons (e) Recycle bin

5. (a) Single-user operating system is designed for use on one computer by one user at a time while A multi-user operating system is designed for use on more than one computer by several users simultaneously.
- (b) Input is the data and instructions fed into the computer. Data can be in the form of words, numbers, pictures, audios, or videos. Some input devices are keyboard and mouse. Output is the result produced by the computer after processing the data. It can be in the form of text, image, audio, or video. Some output devices are monitor, printer, and speakers.
- (c) The output printed on a paper is called a Hard copy. The output displayed on the monitor is called the Soft copy.
- (d) The Backspace key is used to erase characters to the left of the cursor while the Delete key is used to erase characters to the right of the cursor.
- (e)
- SSD is a storage device in a computer. It is fixed inside the CPU box while DVD is a portable storage device which is not fixed inside of the CPU box.
 - SSD can store large volume of data while DVD stores a small amount of data.
6. (a) The CPU has three parts:
- i. Arithmetic logic unit (ALU) – The Arithmetic logic unit performs all arithmetical calculations and logical operations on the data.
 - ii. Control unit (CU) – The control unit controls the flow of data and instructions between the ALU and memory unit. It is also links the various parts of the computer together.

- iii. Memory unit (MU) – The memory accepts, stores and transfer data and instructions that are being used by the ALU and the CU.
- (b) Operating system is the most important software that runs on a computer. It is the first software installed in a computer. A computer is useless without an operating system. Its functions are:
 - i. It controls all the hardware devices connected to a computer.
 - ii. It enables other software to install and run.
 - iii. It provides security measures to protect your computer and data.
- (c) The cursor is a small blinking line on the monitor screen. It indicates the position where the next letter or digit will appear on the screen.

Keys that can be used to move the cursor on the screen are Arrow keys, Home key, Enter key, end key, page up key, and page down key.

- (d) Formatting text refers to change in appearance of the text by changing its font, style, and size.

Different attributes of text that can be formatted in Notepad are :

Font: It refers to the manner in which the characters appears on the screen.

Style: It gives a distinct look to the text by making the text appear Regular, Bold, Italic, etc.

Size : It makes the text appear smaller or larger.

- (e) A computer works in three basic steps :
- i. Input: Data is fed into the computer.
 - ii. Process: The computer performs operations on the data.
 - iii. Output: The result is given to the user.

The output of the process can serve as input for another process. A series of input, process and output is called the IPO cycle.

ASSESSMENT SHEET – 2

1. (a) CS command (b) FD-50
(c) Recall list box (d) View tab
(e) File tab
2. (a) SETH (b) Resize
(c) Ctrl + S (d) LABEL
(e) Apple Pages
3. (a) F (b) T (c) F
(d) T (e) T
4. Figure A
5. (a) The RT command turns the turtle towards the right direction from its current location while SETH command turns the turtle towards right by an angle measured from the Home position.

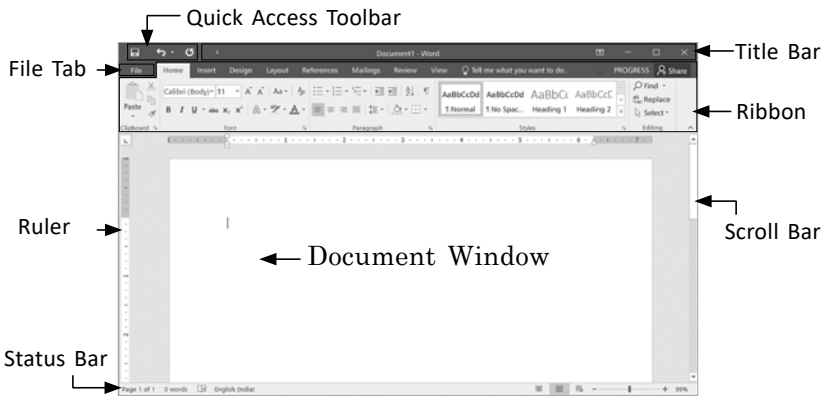
(b) CS command is used to clear the Main screen and bring the turtle to its Home position while CT command is used to clear the Recall list box in the commander window.

- (c) Moving an object means to change the position of the object from one place to another while Copying an object means to make a duplicate copy of the object at another place in the picture.
- (d) Resize option is used to increase or decrease the size of a picture or part of a picture while skew option is used to twist the picture in the horizontal or vertical direction.

- 6. FD 60
LT 90
FD 35
BK 70

- 7. (a) Zoom in
(b) Flip horizontal
(c) Paste from
(d) Redo

8.



9. (a) The commander window is the area where LOGO commands are typed and executed. The results of some commands also gets displayed here.

It has three parts:

1. Input Box
2. Recall List Box
3. Control Buttons

- (b) i. 2 – Commander Window
ii. Logo is Fun – Commander Window

- (c) Features of Microsoft Word 2016 are:

1. Create documents with text, pictures, equations and diagrams.
2. Edit text, find and correct spelling and grammar mistakes.
3. Format text in different styles, sizes, colours, and layouts.
4. Copy and move text from one position to another.
5. Insert tables in different layouts.

- (d) To select a part of a picture :

1. On the Home tab, in the Image group, click the down arrow under select option.
 - A list of options appears.
2. Under selection shapes –
 - Click rectangular selection to select a rectangular part of the picture.
 - Click Free form selection to select a part of the picture in freehand.

3. Move the pointer on the drawing area.
 - The pointer changes to a plus sign.
4. Click and drag the pointer over the part of the picture you want to select.

The required part of picture gets selected with a dashed boundary all around it.

- (e) `SETPENCOLOR` and `SETPENSIZE` commands are used to change the behavior of the turtle in `MSWLOGO`.
Syntax for `SETPENSIZE` is
`SETPENSIZE [n n]`, where `n` is the thickness of the pen in pixels.
Syntax for `SETPENCOLOR` is
`SETPENCOLOR n`, where `n` is the required color code.

MSWLOGO

1.
 - (a) `FD 150`
`RT 90`
`FD 250`
`RT 90`
`FD 50`
`RT 90`
`FD 100`
`RT 90`
`FD 50`
`RT 90`
`FD 100`
`RT 90`
`FD 150`
`RT 90`

FD 250
RT 90
FD 50
RT 90
FD 100
RT 90
FD 50
HOME

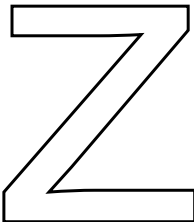
(b) FD 80
RT 90
FD 80
LT 90
FD 50
RT 90
FD 100
RT 90
FD 50
LT 90
FD 80
RT 90
FD 80
RT 90
FD 260
HOME

(c) FD 100
RT 90
FD 100
LT 90
FD 50







```
RT 90
FD 100
RT 90
FD 100
LT 90
FD 100
RT 90
FD 50
RT 90
FD 300
HOME
```

```
(d) FD 100
    RT 72
    FD 100
    RT 72
    FD 100
    RT 72
    FD 100
    RT 72
    FD 100
    HOME
```

2.



CYBER BYTES

1. RT
2. Search Box
3. Ctrl + S
4. ALU
5. 
6. Format
7. Title bar
8. 
9. MSWLogo
10. 
11. 4
12. 8
13. 44
14. 45
15. 
16. 6 trips
17. 
18. 243
19. 
20. Shoe