

# Going Digital Computer Science

Teacher's Manual

Class I to V

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#### Class I

# **Lesson – 1: The Computer And Its Parts**

1. a. (ii)

- (ii) b.
- c. (iii)

- (ii) d.
- 7 2. a.

- b. 7
- 3 c.

3 d.

- 3 e.
- f 7

- 3 g.
- 3. a. fast

a.

4.

- keyboard h.
- C. mouse

- d. monitor (2)
- (1) b.

e.

(4) c.

- d. (3)
- COMPUTER 5. a.
- **KEYBOARD** h.
- **CPU** c.
- d. **MONITOR**

printer

- **MOUSE** e.
- Machines are man-made things. They make our work 6. a. easy and fast.
  - Computer is an electronic machine. h.
  - A computer is made up of 5 major parts i.e. monitor, c. CPU, speakers, mouse and keyboard.
  - d. Two features of computer are:
    - A computer works very fast.
    - A computer never gets tired.
- COMPUTER 7. a.
- **MACHINE** b.
- **KEYS** c.
- d. **MONITOR**
- **SPEAKERS** e.

### **Lesson – 2 : Helping Parts of a Computer**

- 1. printer a.
- keyboard h.
- speakers c.

- d scanner
- monitor e.
- Do Yourself. 2.
- 3. printer a.
- b. scanner
- c. mouse

- d. microphone
- CD e.

- **4.** Do Yourself
- 5. Do Yourself
- **6.** a. Full form of UPS is uninterrupted power supply.
  - b. A printer is used to print the work done in the computer on paper.
  - c. Headphone is used for listening to the music playing on the computer in your ears only.
  - d. The combination of headphone and microphone is called the headset.

#### **Lesson – 3: Uses of a Computer**

- **1.** a. (iv) b. (ii) c. (iv)
- **2.** a. 3 b. 7 c. 3
  - d. 7
- 3. a. hospital b. music c. text
  - d. games
- **4.** a. DRAW b. MESSAGE c. PLAY
  - d. SUMS
- 5. a. We can play games and listen to music on computer.
  - b. We see the computer at our school, office, hospital etc.
  - c. Computer is used to write text, do sums, watch movies, record sound etc.
  - d. I play Asphalt 8 and WWF Raw 2K16.

# **Lesson – 4 : Working With Computers**

- **1.** a. (ii) b. (i) c. (i)
  - d. (ii)
- **2.** a. 7 b. 7 c. 7
  - d. 7
- 3. a. electricity b. UPS c. shutdown
  - d. CPU
- **4.** a. Shut down means turning off the computer.
  - b. First step is to switch on the main power supply.

- c. The first step to shut down the computer is to place the mouse pointer at start button and press the left mouse button.
- d. The first screen which appears on the monitor is called desktop.

#### **Lesson – 5 : Computer Do's And Dont's**

- **1.** a. (i) b. (ii) c. (ii)
  - d. (iii)
- **2.** a. 7 b. 7 c. 7
  - d. 3
- 3. a. shoes b. clean c. dust cover
  - d. wires
- **4.** a. We should use dust cover to cover the computer, when they are not in use.
  - b. We should keep our hands clean and dry while working on computer.
  - c. We should keep our hands clean and dry in computer room and we should take off our shoes before entering the computer lab.
  - d. We should not press the keys of computer very hard and we should not open the windows of the computer room.

# **Lesson – 6 : Operating A Keyboard**

- **1.** a. (ii) b. (i) c. (i)
  - d. (iv)
- **2.** a. 7 b. 3 c. 7
  - d. 3
- **3.** a. spacebar b. enter c. number
  - d. alphabet
- **4.** a. keyboard b. number c. alphabet
  - d. spacebar e. arrow
- **5.** a. The number keys are used for typing numbers. These are 10 in number from 0 to 9.

- b. The alphabet keys are used for typing words and sentences. These are 26 in number.
- c. The spacebar key is used to insert blank space between two words or letters.
- d. The use of the keyboard is to write or work on computer.
- **6.** a. keys
- b. alphabet keys
- c. number keys
- d. spacebar key

# **Lesson – 7 : Mouse Operations**

- **1.** a. (ii)
- b. (ii)
- c. (ii)

- d. (iii)
- **2.** a. 3

- b. 3
- c. 7

- d. 3
- 3. a. pointer
- b. command
- c. click

- d. single
- **4.** a. Mouse is used to point things on computer screen, to give command to computer, to draw pictures on computer and to play games on a computer.
  - b. Single-click is used to select an item.
  - c. Double-click is used to open or move things on the computer screen by clicking mouse button.
  - d. The arrow on the computer screen is called the mouse pointer.
- 5. a. mouse/pointer
- b. single
- c. double
- d. pointer

# Class II

# **Lesson – 1 : History Of Computer**

- **1.** a. (iii) b. (iv) c. (iii)
- 2. a. Napiers Bones b. Blaise Pascal
  - c. Charles Babbage d. Difference Engine
  - e. Computer
- 3. a. Abacus First counting machine
  - b. Pascal's Calculator Blaise Pascal
  - c. Difference Engine Charles Babbage
  - d. Napier's Bone Add, subtract, multiple and divide.
  - e. Input Unit Count using pebbles
- **4.** a. Charles Babbage made the machine called Difference Engine.
  - b. Input unit inputs the data into the computer.
  - c. Output is given out the result.
  - d. The full form of CPU is central processing unit. It is the brain of the computer and orders other parts like monitor, mouse, speakers and printer to work.

#### Lesson – 2: Hardware And Software

- **1.** a. (iii) b. (iv) c. (ii)
- **2.** a. Hardware/Software
  - b. Hardware c. CPU
  - d. speakers e. software
- **3.** a. Keyboard b. Hardware/Software
  - c. Monitor d. Speakers
- **4.** a. Hardware contains all machine parts. Some of the hardware devices are listed below :
  - (a) Keyboard
  - (b) Mouse
  - (c) CPU (Central Processing Unit)
  - (d) Monitor
  - (e) Speakers
  - (f) Printer

All these hardware devices work only when they are instructed to do so. If we not give prepare orders, they will not work.

- b. Software instructs the Hardware (Computer machine parts) to work and give correct output.
- c. Two activities done by a software are:
  - (i) Storing the information in a floppy disk or in a compact disk (CD).
  - (ii) To open the space where the CD's are placed in the computer.
- **5.** a. Processes the data.
  - b. Help us to move the arrow and points towards the different items on the monitor.
  - c. Help us to type the data.
  - d. Displays the data and the answers.
  - e. Prints the output on the paper.
  - f. Speakers are devices that help us in listening to sounds.

#### **Lesson – 3 : Uses of a Computer**

- 1. (ii) h. (iii) c. (ii) a. d. (ii) (iii) e. 3 7 2. a. b. c. 7 d. 3 3 e.
- **3.** a. accuracy b. movies/cartoons
  - c. bills d. students
  - e. chatting
- **4.** Do Yourself.
- **5.** a. The three uses of a computer are :
  - (i) To diagnose diseases
  - (ii) To prepare bills
  - (iii) To enquire about trains
  - b. Computers are used in schools, hospitals, railway stations, etc.

- c. To keep record of customers.
  - To keep record of money
- d. Computers are used in schools:
  - (i) To learn new things.
  - (ii) Things can be explained easily on computer.
- e. (i) Tickets are printed on computer.
  - (ii) Total bill can be calculated and printed on a paper.
  - (iii) Medicines details can be kept.

#### **Lesson – 4: Characteristics Of Computer**

- 1. (iii) b. (iii) a. c. (i) d. (iii) (iv) e. 7 3 3 2. a. h. c. d. 7 3 e. 3. machine h. remember C. fast a. d. electricity e. machine 4. **MACHINE COMPUTER** h. a. TIRED d. THING c. e. **DEVICE**
- **5.** Do yourself
- 3 7 6. a. h. 3 c. 7 d. 3 f. 3 e. 3 h. g.
- **7.** a. Computer is an electronic device which accepts our instructions and gives out the result accordingly.
  - b. Computers are becoming so popular because:
    - (i) They are fast
    - (ii) They are accurate
    - (iii) They make our work easy
    - (iv) They can remember many things.
    - (v) They can do the different types of work.

- c. We can do many different types of work on the computer like:
  - . Doing calculations
  - . Making drawing
  - . Playing Games
  - . Watch movies
  - . Listen to music
  - . Write text
  - . Design books and cards etc.
- d. Man is superior than machines because he created machines.
- e. Yes, machines help us to save our time as they work very fast. They never get tired.
- f. Man has created machines to do work very fast and easily. It does not get bored and tired.

# **Lesson – 5 : Input And Output Devices**

- 1. h. (ii) c. (ii) a. (ii) d. (i) e. (ii) 3 7 7 2. h. a. c. 3 3 d.
- d. 3 e. 3

  3. a. type writer b. printer c. mouse
  - d. speakers e. joystick
- **4.** a. Keys b. Monitor
  - c. Number Keys d. Alphabet Keys
  - e. Joystick f. Visual Display Unit
  - g. Printer h. Special Keys
- **5.** a. Keyboard helps us to type different things on a computer.
  - b. Joystick helps us in playing games.
  - c. Printer prints the work done by computer on paper.
  - d. Input devices help us to input data into the computer.
  - e. Output devices show the processed result given by the computer. Example : monitor, printer etc.

#### **Lesson – 6 : Keyboard**

- **1.** a. (ii) b. (iv) c. (i)
  - d. (iii) e. (i)
- **2.** a. 7 b. 3 c. 3
  - d. 3 e. 7
- 3. a. data b. function c. cursor
  - d. longest e. shift
- **4.** a. Alphabet keys b. Number keys
  - c. Caps lock key d. Backspace key
  - e. Enter key f. Space bar
  - g. Cursor control keys h. Delete key
- **5.** a. Keyboard is an input device used to sent the data into computer by typing.
  - b. Alphabet keys, number keys, special keys are the main types of keys on the keyboard.
  - c. The small blinking character on the screen which shows your position on the screen is a cursor.
  - d. Arrow keys helps you to move in all directions on the screen. The four directions can be Top, Bottom, Left, Right. These keys are also known as cursor control keys.
  - e. Numeric Keypad is situated the bottom right corner of the keyboard. It is used for typing numbers.

# **Lesson – 7 : Operating A Mouse**

- **1.** a. (ii) b. (ii) c. (i)
  - d. (iv) e. (iv)
- **2.** a. 7 b. 7 c. 7
  - d. 3 e. 3
- 3. a. ball b. left click c. red light
  - d. left e. double
- **4.** a. When you only move a mouse Point
  - b. When you press left mouse button once Drag
  - c. When you move and click together Click

- 5. a. To point an object
  - b. To start typing
- **6.** a. Mouse pad b. Click c. Dragging
  - d. Double click e. Dust f. Input device
  - g. Pointer
- 7. a. Mouse helps us to draw pictures on the screen and helps to select objects.
  - b. As we can input data with the help of a mouse it is called an input device.
  - c. A mouse has two or three buttons and one tail (longwire) links it to CPU.
  - d. A mouse helps us to click, double click, point and drag the objects on the screen.
  - e. Keeping the mouse button pressed, moving it on the mouse pad and then releasing the mouse button is called drag and drop.

#### Lesson – 8 : MS Paint

- **1.** a. (i) b. (i) c. (iii)
  - d. (iv) e. (ii)
- **2.** a. 3 b. 3 c. 7
  - d. 7 e. 7
- **3.** a. drawing b. toolbar c. pencil
  - d. airbrush e. ellipse
- **4.** a. Polygon Polygon tool is used for drawing polygons.
  - b. Line Line tool is used to draw line.
  - c. Air Brush Air brush tool is used to spray colour look on the drawing.
  - d. Rectangle Rectangle tool is used to draw rectangle.
  - e. Eraser Eraser tool helps us to erase or remove the part of a drawing.
- **5.** a. MS Paint is a very useful software to draw and colour the figure.

- b. Mouse is used frequently in MS Paint.
- c. The steps to start a paint program is as follows:
  - \* click on start button
  - \* click on programs
  - \* click on accessories
  - \* click on paint
- d. The main parts of a paint screen are:
  Toolbox, Menu bar, Title bar, Work area, Colour bar.
- e. (1) Rectangle tool is used to draw rectangles of different sizes.
  - (2) Eraser tool helps you to erase the object you have drawn by mistake.
  - (3) Ellipse tool helps you to draw circles of different sizes.
  - (4) Text tool is used to write/type something in paint.

# Class III

#### **Lesson – 1 : Computer Fundamentals**

**1.** a. (iii)

b. (ii)

c. (ii)

**2.** a. 3

b. 3

c. 7

d. 3

e. 7

f. 7

**3.** a. IPO

b. Software

c. CPU

d. CU

e. Input

f. storage

**4.** a. A computer works by following this cycle – *IPO* cycle.

b. Device for copying text from paper onto computer – *scanner*.

c. Quickly pressing the left mouse button twice – *double click*.

d. Records the voice - microphone

e. An input device used for typing – keyboard

f. To change the position of an object – *drag-and-drop*.

5. a. Printer

b. Mouse

c. MS Paint

d. Control Unit

e. Speakers

f. Typing

a. CPU

6.

b. Printer

c. Monitor

d. ALU f. DVD

e. Control Unit

7. a. Control U

a. Control Unit

b. Digital Versatile Disc

c. Central Processing Unit

d. Compact Disk

e. Input Output Process

f. Arithmetic And Logic Unit

8. a. IPO stands for Input Process Output. A computer receives data or instructions through the input devices. The entered data is processed or changed into meaningful information by CPU. The result of processing is known as output.

b. The different components of central processing unit are:

- (i) Arithmetic and Logical Unit (ALU)
- (ii) Control Unit (CU)
- (iii) Memory Unit (MU)
- c. The output devices are used to display the results of processing to the user. For example, monitor, printer, speakers are output devices.
- d. Hardware refers to the physical parts of a Computer that you can touch and feel where as software is a set of instructions given to the computer to perform a given task.
- e. Hard Disc and DVD are the two storage devices.

# **Lesson – 2 : Uses of Computer**

- **1.** a. (ii) b. (iii) c. (ii)
  - d. (iii)
- **2.** a. 3 b. 7 c. 3
  - d. 7 e. 3
- **3.** a. Money b. ATM's c. Presses
  - d. Computer e. Easily
- 4. Do Yourself.
- **5.** a. Writing, drawing, calculating, designing, maintaining records can be done on the computer.
  - b. Computers are used in : schools, banks, homes, offices, printing press, film editing etc.
  - c. (i) Banks
    - \* Records of money can be kept on computer.
    - \* ATMs are controlled by computer.
    - (ii) Railway Station
      - \* Railway tickets are printed on computer.
      - \* Railway traffic is controlled by computer.
    - (iii) School
      - \* We can learn new things on computer.
      - \* Difficult topics can be explained easily on computer.
    - (iv) Printing press

- To create and design books and newspaper.
- To gather news from different places.
- (v) Hospitals
  - Medicines details are stored on computer.
  - Medical reports can be made on computer.
- d. Krishh and Hanuman are made on computers.
- At home I use computer to learn new things and to e. play games.

# **Lesson – 3 : Types Of Computer**

- 1. (i) h. (ii) c. (iii) a. (iii) d. 3 2. b. 7 3 a. c. 7 3 d. e. 3. Electronic h. Abacus a. Micro computer c. Charles Babbage d. Super computer e. 4. ALU a. memory b. c. Input CPU d. Output e. Micro Computer 5. a. b. Super Computer Special Purpose Computer c. d. Super Computer Mini Computer e. f. Super Computer 6. Central Processing Unit a. Uninterrupted Power Supply b. Arithmetic Logic Unit c. Control Unit d.
- 7. abacus Charles Babbage a. b.
  - Binary language d. c. Binary Language
  - Computer languages f. ALU e. g.
- Computer is an electronic machine which is made up 8. a. of many devices that helps in accepting data and

orders from us and gives results as output after processing.

- b. The main units of a computer are Input Unit, Process Unit and output unit.
- c. Based on the size:
  - 1. Micro Computer: They are small in size. Used in schools, homes etc.
  - 2. Mini Computer: Better and faster than Micro Computer. Used in Banks, Universities etc.
  - 3. Mainframe Computer: They are large in size and fast multiuser computer. They help to manage very large amount of data.
  - 4. Super Computer: They are most powerful and very expensive. Used in weather forecasting etc. For eg. PARAM 10000.
- d. Machine language is the language based on binary numbers (0 and 1), which can be understood by computer directly.
- e. To Shutdown the computer, follow these steps:

Click on Start button.



Select Shut down option from list.



Click on Shut down button



#### Click OK

Wait for sometime, till the power turns off, then press the power button of UPS OFF.

f. Computer languages are the languages close to English language. Some examples of Computer languages used to give instructions to it are LOGO, BASIC etc.

# **Lesson – 4 : Computer Software**

- **1.** a. (iv)
- b. (iv)
- c. (ii)

d. (iv)

e. (iii)

- **2.** a. 7 b. 3 c. 7
  - d. 3 e. 3
- 3. a. Directs
  - b. Hardware
  - c. Logic Oriented Graphic Oriented
  - d. Micro Soft Disk Operating System
  - e. Software
- **4.** a. Virus affects the working of entire computer.
  - b. MS Paint helps us draw and colour different objects.
  - c. LOGO helps us to build programs for drawing pictures, writing text and doing calculations.
  - d. Notepad is a software used to write and edit text.
  - e. MS Dos is a Disk Operating System.
- **5.** a. Hardware and software are needed to make the computer functional.
  - b. Computer software comprise of that part of computer which we cannot touch. For example windows, music or CD etc.
  - c. There are two types of software:
    - (i) System Software
    - (ii) Application Software
  - d. Notepad, MS Paint, Word Pad, Anti-virus are some softwares:

NotePad to write and edit text.

MS Paint to draw and colour different figures.

Word pad to write and edit text.

Anti-virus to protect our computer from virus programs.

e. The full form of LOGO is language of graphic oriented and MS DOS is Microsoft disk operating system.

# **Lesson – 5 : Operating System**

- **1.** a. (ii) b. (iii) c. (iii)
  - d. (ii) e. (iii)

- 2. 3 7 c. 3 b. a. 7
  - d. 3 e.
- 3. Machine language Computer language b. a.
  - Operating System **English** d. c.
  - System e.
- Windows is a graphical user interface system 4. a. software.
  - Operating system is a software which enables the b. user to interact with a computer.
  - Single user is an operating system that can be used c. by one user at a time.
  - Multi user is an operating system that can be used by d. many users to mark on it altogether.
  - Machine language is the language that a computer e. understands.
- 5. OS : Operating System a.
  - DOS: Disk Operating System b.
  - GUI: Graphical User Interface c.
- 6. An operating system is a software which enables the a. user to interact with the computer.
  - It is a machine which is actually working, but we b. the computer from a software called operating system.
  - c. Operating system is a system software.
  - Windows and DOS are the two operating systems. d.
  - Windows OS also called GUI (Graphical User e. Interface).
  - Operating system can be of two types: f.
    - Single user: It can be used by one user at a time.
    - (ii) Multi-user: man users can work on it altogether.

#### **Lesson – 6 : Welcome To Windows 10**

- 1. a. (i) h. (i) c. (i)
  - d. (i) e. (i)

- **2.** a. 3 b. 3 c. 3
  - d. 3 e. 7
- **3.** a. user and computer b. loads
  - c. desktop d. icons
  - e. Programs
- **4.** a. Maximize button: It expands the windows in the entire desktop screen.
  - b. Icons: Icons are small graphical pictures used to denote different types of programs called software.
  - c. Taskbar: Taskbar is found at the bottom of the desktop. It has start button, date/time box and list of few programs.
  - d. Mouse and Keyboard: These are the output devices used to send data into the computer.
  - e. Scroll bar: Scroll bars are used to move the screen to left, right, top or bottom as per the need of the user.
  - f. Minimize button: It reduces the size of the software window and displays it in the taskbar.
- **5.** a. Windows is the most popular operating system providing interface between user and machine.
  - b. Windows is so powerful as it has GUI (Graphical User Interface) that has small graphical pictures representing a program which works on single mouse clicks making your work very easy. It holds many useful programs and is easy to learn and use.
  - c. Windows are called GUI because it has small graphical pictures representing a program which works on single mouse clicks making your work very easy.
  - d. The main parts of a GUI screen are icons, desktop and task bar.

*Icons* are small graphical pictures used to represent different types of programs.

**Desktop** is the opening screen of the windows.

*Taskbar* is located at the bottom of the desktop. It consists of start button, date/time box and list of few programs.

- e. The three actions we can do on the software window in windows operating system are :
  - \* We can move the windows.
  - \* We can resize the windows.
  - \* We can minimize program and documents windows using the control menu.

#### Lesson – 7: Using A Keyboard

- 1. (iv) b. (ii) c. (i) a. d. (i) 2. 7 a. h. 7 7 c. d. 7 3 f. 3 e. 3. Caps lock c. Shift Delete h. a. d. Num lock End f. E e. S f. M h.
- **4.** a. By pressing the caps lock key ON we can type letters in capitals.
  - b. The backspace key erases any character that is present to the left of the cursor. Whereas the delete key erases any character that is present to the right of the cursor.
  - c. Small blinking line that shows where the next letter or number will appear on a computer screen is known as the cursor. The cursor can be moved left and right or up and down by pressing the four keys that have arrows on them.
  - d. The Enter Key is used to start a new line.

# **Lesson – 8 : Typing In WordPad**

**1.** a. (ii) b. (iv) c. (iv) d. (i) e. (iii)

- **2.** a. 3 b. 7 c. 3
  - d. 7 e. 3
- **3.** a. font box b. font colour/list
  - c. B (Bold) d. font size
  - e. <u>U</u> (underline)
- **4.** a. WordPad is a word processing software used to create text documents.
  - b. With WordPad you can format the text and edit the text.
  - c. To start WordPad follow these steps:
    - (i) Click on start button.
    - (ii) Click on Programs.
    - (iii) Click on Accessories.
    - (iv) Click on WordPad.
  - d. The main parts of the WordPad screen are work area, menu bar, formatting tool bar and standard toolbar.
  - e. To open file in WordPad:
    - (i) Click on open option.
    - (ii) Type the filename
    - (iii) Click on open, file is opened
  - f. To save a file in word pad:
    - (i) Click on save icon.
    - (ii) Give the file name.
    - (iii) Click on save.
- **5.** a. *Font box*: Font box helps us to type the text in different ways. It shows the list of many writing styles.
  - b. *Font style :* Font style option is used to type text in different styles.
  - c. New: This option helps us to create a new file in WordPad.
  - d. *Open*: This option helps us to open a previously saved WordPad file.
  - e. *Save*: This option helps to store your WordPad file in the computer memory.

#### **Lesson – 9: Introduction of LOGO**

**1.** a. (ii) b. (i) c. (ii)

d. (iv) e. (ii)

**2.** a. 3 b. 7 c. 3

d. 3 e. 3

3. a. Language of Graphic Oriented

b. Triangular

c. Commands

d. Command List Box

e. Input box

**4.** a. Parts of LOGO screen: LOGO screen consists of main output screen and command windows.

b. Parts of commander windows are input box, command list box and command buttons.

**5.** a. Reset Button: This button clears the LOGO output screen.

b. Halt Button: This button immediately stops LOGO from processing further.

c. Turtle: Turtle is LOGO's pen.

**6.** a. LOGO is the simplest computer language, stands for language of Graphic Oriented used to draw figures, type text and perform arithmetic calculations.

b. Commander window consists of all the tools you need to give commands to the turtle, in order to complete the desired text. It has many parts like commander, list box, input box and command buttons.

c. You can draw figures, type text and perform arithmetic calculations in LOGO.

d. LOGO helps to draw pictures, write text, do calculations and perform simple logical operations.

e. Debugging is the process of correcting the mistake from the program.

# **Lesson – 10 : Writing in LOGO**

**1.** a. (iv) b. (iv) c. (iii)

d. (ii) e. (iii)

| 2. | a.       | 7 b.   | 3            | c.               | 7    |  |  |  |  |  |  |
|----|----------|--|--------------|------------------|------|--|--|--|--|--|--|
|    | d.       | 3 e.   | 7            |                  |      |  |  |  |  |  |  |
| 3. | a.       | Instructions b.  | primitives   | c.               | PR   |  |  |  |  |  |  |
|    | d.       | square brackets or do  | ouble quotes |                  |      |  |  |  |  |  |  |
|    | e.       | space  |              |                  |      |  |  |  |  |  |  |
| 4. | a.       | Syntax to write number   |              |                  |      |  |  |  |  |  |  |
|    |          | PRINT Number or PR Number  |              |                  |      |  |  |  |  |  |  |
|    | b.       | Syntax to write text:  |              |                  |      |  |  |  |  |  |  |
|    |          | PRINT " <u>TEXT</u> " or <u>PR</u> Text                                  |              |                  |      |  |  |  |  |  |  |
|    | c.       | Syntax to clear the commander list box :                                 |              |                  |      |  |  |  |  |  |  |
| _  |          | Clear Text or CT Command   |              |                  |      |  |  |  |  |  |  |
| 5. | a.       | 1  | Commander    | Win              | dow  |  |  |  |  |  |  |
|    | c.       | One d.   | No           |                  |      |  |  |  |  |  |  |
|    | e.       | Print  | 4            | ~ 4 <b>1</b> ~ ~ |      |  |  |  |  |  |  |
| 6. | a.<br>b. | Syntax is the way of typing/writing the command.                         |              |                  |      |  |  |  |  |  |  |
|    | υ.       | To type text or number in LOGO print command is used.                    |              |                  |      |  |  |  |  |  |  |
|    | c.       | To type text in LOGO the syntax used are square                          |              |                  |      |  |  |  |  |  |  |
|    |          | brackets ([]) or double quotes ("").                                     |              |                  |      |  |  |  |  |  |  |
|    | d.       | To clean the contents of commander list box (clear taxt) command is used |              |                  |      |  |  |  |  |  |  |
|    | e.       | text) command is used. PR (i) Full form of PR is print.                  |              |                  |      |  |  |  |  |  |  |
|    | C.       | (ii) It displays the text which you give it.                             |              |                  |      |  |  |  |  |  |  |
|    |          | (iii) It needs symbol like [ ] or " " to accept                          |              |                  |      |  |  |  |  |  |  |
|    |          | input.   |              |                  |      |  |  |  |  |  |  |
|    |          | CT (i) Full form of CT is clear text.                                    |              |                  |      |  |  |  |  |  |  |
|    |          | (ii) It clears the list box screen.                                      |              |                  |      |  |  |  |  |  |  |
|    |          | (iii) It doesn't need any symbol.  |              |                  |      |  |  |  |  |  |  |
|    |          |  |              |                  | _    |  |  |  |  |  |  |
| 4  |          | <b>Lesson – 11 : I</b>   | _            |                  |      |  |  |  |  |  |  |
| 1. | a.       | (i) b.   | (i)          | c.               | (iv) |  |  |  |  |  |  |
| 2. | d.       | (ii) e. 7 b.   | (iii)<br>7   | 0                | 3    |  |  |  |  |  |  |
| 4. | a.<br>d. | _  | 7            | c.               | 3    |  |  |  |  |  |  |
|    | u.       | 3 e.   | 1            |                  |      |  |  |  |  |  |  |

- **3.** a. Primitives b. CS or clear screen
  - c. LT or left turn d. BK or Backward
  - e. FD or Forward
- **4.** a. RT: RT stands for Right Turn. It tells the turtle to take the right turn.
  - b. FD: FD stands for forward. It tells the turtle to move in forward direction.
  - c. HOME: Home sends the turtle to its original position.
  - d. CS: CS stands for clean screen. This command erases the drawing on the main screen and make it ready for new drawing.
  - e. LT: LT stands for left turn. This command tells the turtle that it has to take the left turn.
  - f. BK: B stands for backward. It tells the turtle to move in backward direction.
- **5.** a. FD 80
- b. BK 90
- c. RT 90

- d. HOME
- e. CS
- **6.** a. The LT command tells the turtle to take the left turn.
  - b. To turn the turtle's head in the right direction by 120 steps RT 120 command is given.
  - c. To move the turtle in backward direction by 90 steps type BK 90.
  - d. Command button

#### **Lesson – 12: Calculation in LOGO**

**1.** a. (iii)

- b. (ii)
- c. (i)

d. (ii)

e. (iii)

**2.** a. 7

3.

- b. 3
- c. 3

d. 3

- e. 7
- a. PR b. two
- c. \*

- d. division
- e. arithmetic
- **4.** a. Addition (+), multiplication (\*), subtraction (-) and division (/) are the operators used to do calculations in LOGO.

- b. We give input for calculation in the input box of LOGO screen.
- c. To perform multiplication we use asterisk (\*) and for division we use slash (/) in LOGO.
- d. Sum command is used to add different numbers.

**Product** command is used for multiplying different input numbers.

**Quotient** command takes two inputs. It divides first number with second number and give the quotient as result.

e. For typing numbers with operators both the ways given below can be used :

PR 45 + 72

PR SUM 4572

#### Class IV

#### **Lesson – 1 : Evolution of Computer**

**1.** a. (ii)

b. (iii)

**2.** a. 3

- b. 7
- c. 7

- d. 3
- **3.** a. Pascaline
- b. tables
- c. five

- **4.** a. Abacus
- b. Pascaline
- c. Mark-I

- d. Charles Babbage
- 5. a. Size of computers in the successive generations is decreasing gradually, this is because in every new generation new component was used and it finally reduced the size of the computers.
  - b. First Generation Computers (1942-1955) : Computers during this period showed features :
    - 1. Size: Very Big
    - 2. Main Components: Vacuum Tubes
    - 3. Storage: Paper tapes, Punch Cards
    - 4. Cost: Very Expensive
    - 5 Examples: ENIAC, EDSAC

Second Generation Computers (1956 -1965): Main features were:

- 1. Size: Smaller than Ist generation Computers
- 2. Main Components: Transistors
- 3. Storage : Magnetic tapes and Drums
- 4. Cost: Less Expensive
- 5. Examples: PDP-1, NCR 304

Third Generation Computers (1966 – 1975): Main features were:

- 1. Size: Much smaller
- 2. Main Components: IC Integrated Circuits
- 3. Storage: Magnetic Disk, Drums, Tapes
- 4. Cost: Comparative Low cost
- 5. Examples: IBM 360, PDP11, CRAY 1

Fourth Generation Computers (1976 - 1985) : Main features were :

- 1. Size: Smaller
- 2. Main Components : LSI Large Scale Integration , VLSI
- 3. Storage: Magnetic Disk, Floppy Disk
- 4. Cost: Lower cost
- 5. Examples: IBM PC, 486, Pentium, CRAY 2

Fifth Generation Computers (1986 - till date ): Work is going on to inculcate intelligence in the computers. Main features are:

- 1. Size: Small
- 2. Main Components : VLSI (Very Large Scale Integration)

ULSI (Ultra Large Scale Integration)

- 3. Storage: Magnetic Disks, drives etc
- 4. Cost: Comparative low cost
- 5. Examples : Robots etc.
- c. Memory unit is the storage unit of the computer system.
- **6.** a. (i) Rods and beads
  - (ii) Rods
  - (iii) Toothed wheel and gears
  - b. done earlier
- 7. a. ATM: Automated Teller Machine
  - b. MIPS: Million Instructions Per Second
  - c. IC: Integrated Circuit
  - d. LSI: Large Scale Integration
  - e. VLSI: Very Large Scale Integration
  - f. ULSI: Ultra Large Scale Integration

# Lesson – 2: Working of a Computer

- **1.** a. (i) b. (ii) c. (ii)
  - d. (ii) e. (iii)

- **2.** a. 3 b. 3 c. 3
  - d. 7 e. 3 f. 3
  - g. 3 h. 3 i. 3
  - j. 3 k. 7 l. 7
- **3.** a. Data b. Processing c. Touch Screen
  - d. Digital e. ALU f. CU and RAM
  - g. Dot Matrix h. Hardware i. RAM
  - i. Laser
- **4.** a. A computer is a machine that accepts data (in digital form) and processes it into some information (useful result) based on a program sequences of instructions.
  - b. Data is the collection of facts and details which are unorganized.
  - c. The memory of computer is made up of 'CHIPS'. The main working memory of a computer is called the Random Access Memory (RAM). It holds the data and calculates results while you are working and its contents get erased when the computer is switched off.
  - d. *Input devices*: Keyboard, joystick, mouse, scanner. *Output devices*: Printer, speakers, monitor.
  - e. The computer is a combination of hardware and software. The hardware is like the body of the computer and the software is like its intelligence.

*Hardware :* Hardware is any part of a computer system you can see or touch. Some examples of hardware are the keyboard, the CPU, the mouse and the speakers.

**Software**: Software is a program or a set of programs that tell a computer what to do. Some examples of software are the Paint program or the MS Word program and also the games which you play on the computer.

f. (i) Processing is the sequence of instructions given to a machine to change data into information.

- (ii) Information is the final result which comes after the processing of the data. Information is always useful to a user and is used in decision making.
- **5.** A scanner is used to copy the textual or graphic contents on a paper into a computer. The process of doing so is called scanning.

#### **Lesson – 3: Storehouse of Computer**

- **1.** a. (ii) b. (ii) c. (ii) d. (iv) e. (iii)
- **2.** a. False b. True c. True
  - d. False e. False
- 3. a. memory b. storage c. bits and bytes
  - d. machine e. binary digit f. bit
  - g. byte h. byte i. secondary
  - j. primary k. hard disk l. optical
- **4.** a. 1024 Byte b. 1024 KB c. Giga Bytes
  - d. Tera Bytes e. 8 bit f. Hard Disk
  - g. compact disk h. floppy disk
- **5.** a. Random Access Memory
  - b. Read Only Memory
  - c. Compact Disk Read Only Memory
  - d. Floppy Disk Drive
  - e. Hard Disk Drive
- **6.** a. Hard disk b. floppy disk c. magnetic tape
  - d. pen drive e. hard disk f. CD
  - g. ROM h. RAM
- **7.** a. The place where computer holds the data, instruct or results are called memory unit.
  - b. Primary memory/main memory or internal memory and the secondary memory are the two types of memory unit.
  - c. Primary memory is a small capacity memory unit of computer. It can hold the data for short period. The data stored in it kept here for temporary use.

- d. RAM and ROM are the two types of Primary memory.
- e. Secondary memory unit is the group of storage device which can be used to store the data, information and software permanently.
- f. Hard disk, floppy disk, compact disk, pen drive etc. few secondary storage devices.
- g. **ROM**: ROM stands for Read Only Memory. ROM contains all the instructions needed by permanent and it is switched on the memory if permanent and is not erased when the system is switched OFF. you cannot store the data of your choice in ROM as it is given by manufacturers.

**RAM**: RAM stands for Random Access Memory. It is temporary memory and is erased when the computer is switched off or power supply is stopped. Whatever you do on computer, that data is kept temporary in RAM. You can read as well as write the data in RAM.

#### **Lesson – 4: Computer Software**

- **1.** a. (ii) b. (iii) c. (iii)
  - d. (ii) e. (iii)
- **2.** a. True b. False c. True
  - d. True
- **3.** a. Software f. Disk Operating System
  - b. Program g. Graphic User Interface
  - c. Software h. Microsoft Windows
  - d. System i. Programmers
  - e. Application j. Graphic User Interface
- **4.** a. Complete Computer Hardware + Software
  - b. Software controlling hardware system software
  - c. Software for painting, playing etc. application software
  - d. We can type command in MS DOS
  - e. We click on commands in GUI
  - f. Programmers make programs

- **5.** a. DIR This command shows the list of files stored in the computer.
  - b. CLS Clears the screen of the computer.
  - c. DATE This command shows the date to the users.
  - d. Time This commands shows the date to the users.
  - e. CopyCon This command creates the files in DOS.
- **6.** a. Software: Software are the group of programs given to use the computer in different manner.

There are different types of softwares in the computer:

- (i) System Software : Software which controls the working of the hardware.
- (ii) Application Software: Software made for different types of work like, painting, writing, etc.
- b. Operating system is the interface between the user and the machine which manage the working of the entire computer system and make it ready do work.

The two common operating systems are:

(i) DOS

- (ii) Windows
- (i) DOS: Is an operating system, where you have to type commands to get any work done by the computer.
- (ii) Windows: Windows is an operating system represented by the program and files with small graphical pictures, which can be controlled by mouse as well as keyboard.
- c. Windows are becoming very popular these days. Main reason for its popularity are as follows:
  - (i) Easy to operate
  - (ii) Provide attractive layout
  - (iii) Allows you to enter commands by pointing and clicking at objects that appear on the screen.
  - (iv) It provides a similar looking background and acting interface for different types of softwares.

# **Lesson – 5 : Working In Windows**

| 1. | a. | (ii)   | b.  | (i)   | (         | c.   | (i)        |  |
|----|----|--|-----|-------|-----------|------|------------|--|
|    | d. | (i)  | e.  | (ii)  |           |      |            |  |
| 2. | a. | True   | b.  | Tru   | e         | c.   | True       |  |
|    | d. | False  | e.  | Fals  | se        |      |            |  |
| 3. | a. | Operating  | b.  | Bac   | k Ground  |      |            |  |
|    | c. | Start  | d.  | Star  | t up menu | l    |            |  |
|    | e. | More   | f.  | Scr   | een Saver |      |            |  |
|    | g. | Shut down  | h.  | recy  | cle bin   |      |            |  |
|    | i. | right click  |     |       |           |      |            |  |
| 4. | a. | System Tray  |     |       |           |      |            |  |
|    |    | (i) Date/Time  | box |       |           |      |            |  |
|    |    | (ii) Icons of some services that may be executing the back ground. |     |       |           |      |            |  |
|    | b. | File Name  |     | -     |           |      |            |  |
|    |    | (i) Primary na   | me  |       |           |      |            |  |
|    |    | (ii) Secondary   |     | /exte | nsion     |      |            |  |
|    | c. | Windows Explo  |     |       |           |      |            |  |
|    |    | (i) Left pane  |     |       |           |      |            |  |
|    |    | (ii) Right pane  |     |       |           |      |            |  |
| 5. | a. | Notepad  |     |       | .txt      |      |            |  |
|    | b. | MS Word  |     |       | .doc      |      |            |  |
|    | c. | MS Paint   |     |       | .bmp      |      |            |  |
|    | d. | Graphic file   |     | —     | .gif      |      |            |  |
| 6. | a. | Start up menu  |     | —     | Programs  | 3    |            |  |
|    |    |  |     |       | Documen   | ıt   |            |  |
|    |    |  |     |       | Settings  |      |            |  |
|    |    |  |     |       | Find      |      |            |  |
|    |    |  |     |       | Shut dow  | 'n   |            |  |
|    | b. | Program menu   |     | —     | Microsof  | t E  | xcel       |  |
|    |    |  |     |       | Accessor  | ies  |            |  |
|    |    |  |     |       | Microsof  | t Po | ower point |  |
|    |    |  |     |       | Paint     |      |            |  |
|    |    |  |     |       | Notepad   |      |            |  |
|    |    |  |     |       |           |      |            |  |

c. Floating Popup Menu — Active Desktop
Arrange icons
Refresh
New
Properties

d. Display properties window — Themes

Desktop Screen Saver Appearance Settings

- 7. a. *Desktop*: It is the opening screen of windows. This screen provides the background to the operating system. It can be made attractive by giving different settings. This screen always remains open when window is loaded and we work on it. It is also known as windows work space.
  - b. *Icon*: These are the small graphical pictures to represent a software or a program. It is found on a desktop as well as in other menus of the operating system. The name of the is written below system. The name of the software is written below it and it is opened when you double click on it.
  - c. *Programs*: Shows the list of programs that run on the computer.
  - d. *File*: A file is a collection of data stored under one name in the computer memory.
  - e. *Folder*: A folder is a place where all the files and other folders can be stored together..
- 8. a. Operations you can perform on files and folders:
  - (i) We can save a file and folder.
  - (ii) We can give a name to a file and folder.
  - (iii) We can open a file and a folder by double clicking on it.
  - b. Rules to give file name:
    - (i) File name, must start with alphabet like a, b, d, e, k.

- (ii) It can have numbers in it, only after alphabet numbers can be written.
- (iii) Try to avoid using key words like open, save etc.
- c. Special features of window operating system:
  - (i) You can open a program by simple clicking on its icon.
  - (ii) Easy to learn and use.
  - (iii) Supports multimedia features like sounds, movie, etc.
- 9. a. Window operating system has been given the name as windows because all the facilities provided by it are given with in the simple rectangular boundaries called windows. You can view many windows with in Window Operating System.
  - b. The main components of windows operating system are: Windows, desktop, icons, taskbar etc.
  - c. Taskbar consists of start button and system tray.
  - d. To change the wallpaper setting of the desktop right click on the plain area of desktop. Floating popup menu appears. Click on properties. Display properties dialog box will appear. Choose the wall paper from the list and click on. New wallpaper will be set on desktop.
  - e. A file is a collection of data stored under one name is the computer memory where as a folder is a place where all the files can be stored together.
  - f. Windows explorer is a powerful program which helps you to organize files and folders in an efficient manner.
  - g. Windows Operating System is a system software where as windows is facility provided by window operating system.
- **10.** a. Done earlier.
  - Open the display properties dialog box by clicking on properties option of floating pop up menu of desktop. Click on screen saver. Choose the desired screen saver and click OK.

c. First right click on the blank area on the desk top or in window explorer.

Click on new option from the menu displayed.

d. In windows explorer click on the displayed.

1

Click on copy icon from the menu box.

1

Double click the folder where you want to copy the content.

1

click on paste icon.

e. To open paint program double click on its icon.

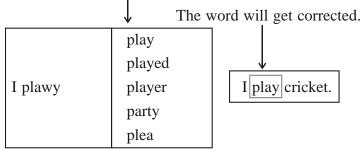
Or

Click on start  $\rightarrow$  Programs  $\rightarrow$  Accessories  $\rightarrow$  Paint

#### **Lesson – 6 : Microsoft Office Word**

- **1.** a. (iii) b. (iv) c. (ii)
  - d. (ii)
- **2.** a. 7 b. 3 c. 3
  - d. 7 e. 3 f. 3
- 3. a. Word processor b. Microsoft c. Editing
  - d. Cut e. Ctrl Z
- **4.** a. *Ribbon*: On the ribbon, you will find various tabs like Home, Insert, Page Layout, Reference, Mailing and view.
  - b. *Office Button*: The commonly used commands like to open, save and print documents are stored here.
- 5. a. The property of the text wrapping itself to the next line when it goes past the right margins is called the word wrap.

- b. A paragraph is a portion of the text typed continuously without pressing the Enter key. When you press the Enter key, the insertion point will jump to the new line and a new paragraph will start.
- c. Editing means making corrections or changes in the text. The term 'editing' includes deleting, copying, moving and replacing of the text.
- d. Let's Do It!: To use spell check to correct spelling mistakes.
  - 1. Right click on the mis-spelt word. (A red wavy line under it will appear.)
  - 2. A pop-up menu will appear with the suggestions for the mis-spelt word. Click on the suggestion which you think is correct.



- e. Let's Do It!: To print a file:
  - 1. Click on the office button
  - 2. The print dialog box will open
  - 3. Select the print option
  - 4. Enter the number of copies you want to print.
  - 5. Click on the OK button

The specified number of copies of your file will get printed.

f. To exit from Word.

Click on the Office button and select the Exit Word option. Word will close.

#### **Lesson – 7 : Features of MS Word**

1. (iv) h. (iv) a. c. (iii)

d. (iv)

2. True False a. True b. c.

f. d. True False False e.

g. True

3. Font size b. numbered c. Bold a. d.

Italic e. Justify f. larger

- Formatting is the way to improve the appearance of 4. a. the text to make it look beautiful, arranged and systematic.
  - A font is the design of the characters which you type. b. By changing the font size the text can be made bigger on smaller in size as required.
  - Numbering is applied to paragraphs when we require c. sequence number in front of them.
  - A Bulleted list is a typed list in which the separate d. paragraphs are highlighted upon by putting a symbol in front of them. The order of the items in the bulleted list is not important.
  - In left alignment, the typed text aligns to the left e. margin.
  - In Justified alignment, the text aligns to the left as f. well as the right margins creating evenly aligned text.

#### Lesson - 8: LOGO 1

1. (ii) (iii) (i) a. b. c.

d. (i) (iii) e.

2. a. True b. False c. True

d. False True e.

b. 3. 0 and 1 **BBN** c. turtle a.

Primitive f. Set head d. e. Paint

LT, RT g. Pen erase h.

4. Section A Section B

a. FD Forward

b. BK Back

c. RT Right Turn

d. LT Left Turn

e. PD Pen Down

f. PE Pen Erase

g. PPT Pen Paint

h. SETH Set head

**5.** a. CLEAN: Erases every thing on the screen.

b. HOME: Helps or moves the turtle back to its original position.

- c. HT: It disappears the turtle from the screen.
- d. ST: It keeps the turtle to reappear on the screen.
- e. SETH: It sets the head of a turtle is specified direction.
- f. REPEAT: It repeats the given sets of LOGO command as many times specified by you.
- g. ST: Done earlier.
- h. RT: It turns the turtle right.
- **6.** a. **LOGO Screen**: main screen and commander window.
  - b. *Commander Box*: Input box, command list box and command buttons.
- **7.** a. *PU and PD :* Helps the turtle to move on screen without drawing a line where as PD enables the turtle to draw lines again.
  - b. *FD and BK*: Helps the turtle to move forward where as BK moves the turtle backward as per specified.
  - c. *ST and HT*: HT command disappears the turtle from the screen where as ST helps the turtle to reappear on the screen.

- d. *RT and LT*: RT turns the turtle to right, LT turns the turtle to left direction.
- e. *CS and HOME*: CS cleans the entire matter on the screen where as home moves the turtle back to its original position.
- **8.** a. LOGO is a functional programming language stands for language of graphic oriented.
  - b. (i) We can draw simple shapes figures, patterns and drawing.
    - (ii) Can do arithmetic calculations such as addition, subtraction, multiplication and division.
    - (iii) Also helps us to display text messages.
  - c. Click on start button.



Click on program option.



Click on Microsoft Window LOGO



Click on Microsoft Windows LOGO sub option.

- d. The pen looks like a triangle on LOGO screen is called a turtle in LOGO.
- e. The top pointed end of the turtle is called its head. The bottom wide base of turtle is called its tail.
- f. A LOGO program is a set of primitives command/instructions.
- g. The two basic types of LOGO commands are:
  - (i) *Action Commands*: Those which show some action on the screen when they are given. Few example FD, BK, LT, RT, etc.
  - (ii) *Control Commands*: Those which control some group of commands for eg. REPEAT.

### Lesson – 9: LOGO 2

**1.** a. (i)

- b. (i)
- c. (i)

d. (ii)

e. (iii)

**2.** a. True

- b. False
- c. False

d. True

e. True

3. a. PRINT

- b. FIRST
- c. Show upper case
- d. SUM
- e. To and End
- f. Procedure

- g. .lgo
- 4. Do Yourself
- 5. a. HELLO I AM IN THE SCHOOL
  - b. My name is Nandini
  - c. 2+2+5+8
  - d. 20
- **6.** a. PR: This command prints the text within it in the output.
  - b. LAST: LAST command displays the last word of the whole text.
  - c. SHOW UPPER CASE: Change the text in the capital alphabet.
  - d. SUM: SUM is used to add the given numbers.
  - e. FIRST: First shows you the first word of the text.
  - f. SHOW LOWER CASE: Change the text in the small alphabet.
  - g. PRODUCT: Gives you the product of the given numbers.
  - h. TO PROCEDURE NAME: Create a procedure.
  - i. LOAD : LOAD bring the file from the secondary memory unit to the RAM.
  - j. SAVE : Save command is used to save a logo program or a procedure in a computer memory.

- **7.** a. FIRST, LAST, Show uppercase and show lowercase are the four commands used in LOGO for text editing.
  - b. We can do calculation in LOGO by using operators like +, —, \* and / or by giving the key words like sum, product, difference etc. to perform calculations.
  - c. When you need to give list of LOGO commands altogether, you must give them in the group. Such set of LOGO commands or instructions given to turtle is known as logo procedure.
  - d. (i) Procedure has group of logo commands.
    - (ii) Procedure is saved with a name.
    - (iii) Procedure is defined by using TO and END command.
    - (iv) It can be saved for further use.
  - e. To save a logo procedure : Save "Filename.lgo".
  - f. To bring a procedure from secondary memory to RAM LOAD "filename.lgo".

# **Lesson – 10: The Internet Application**

- 1. (ii) b. (ii) c. (iii) a. 2. 3 7 3 a. b. c. f. 7 d. 3 e. 7 3 g.
- **3.** a. Internet b. www
  - c. Web browser d. Search Engine
  - e. e\_mail f. chatting
- **4.** a. The INTERNET is the largest network in the world connecting millions of people world-wide.
  - b. The world wide web (www) is a graphical part of the Internet consisting of text, pictures, sound and video.

- c. When you click a web page, you will notice lot of words (many underlined) and picture to which when you point the pointer change to a hyperlink. These are Hyperlinks.
  - When you click on a hyperlink the web page linked to that hyperlink will open.
- d. E-mail is the short form for electronic mail. It is the electronic way of sending mails using the Internet as a medium. We can send text, audio, video and animation files using the e-mail.
- e. In chatting you can type a message that will be read by the person who is on the other end and that person will reply to your message instanty but in e\_mails it does not happen.
- f. A web browser is a software application which makes it possible for a user to display and interact with text, images, video, music and other information available on a web page. Using a web browser you can easily navigate between the opened web pages and save it in various formats.

## Class V

# **Lesson – 1 : Classification of Computers**

- 1. a. size and performance
  - b. microprocessor
  - c. VAX 8842 and CDC 600
  - d. PARAM
  - e. Micro
  - f. Personal Digital Assistant
  - g. Watches and televisions
- **2.** a. (c)
- b. (b)
- c. (d)

- d. (a)
- **3.** a. Computers are classified on the basis on their size and performance as follows:
  - (1) Micro Computers
  - (2) Mini Computers
  - (3) Mainframe Computers
  - (4) Super Compuers
  - b. Personal Computer
    - \* CPU is a microprocessor
    - \* Single user
    - \* Eg. Laptop, PDA's

## Mini Computer

- \* More powerful than personal computer.
- \* Multi user
- \* Eg. PDP-11 and VAX-7500
- c. Super computers are used in places like weather forecasting, nuclear science, seismology etc. A few well known super computers are CRAYX-MP, CRAY-2, and CRAY-3. PARAM is the super computer which has been designed in India.
- d. Laptop
  - \* Can be kept on one's lap.
  - \* Can be carried anywhere.
  - \* Can run on rechargeable battery

## Desktop

- \* Can be kept on desks or table tops only.
- \* Cannot be carried anywhere.
- \* Cannot run on rechargeable battery.
- **4.** a. True
- b. False
- c. True

- d. False
- e. False
- f. False

# **Lesson – 2 : Computer Languages**

- 1. a. Language
- b. Hindi and English
- c. Binary
- d. Assembly
- e. Virus
- **2.** a. Language is a medium through which we communicate with each other. If two people do not understand each other's language, then communication is not possible.
  - b. Hindi and English are the two main languages of communication.
  - c. There are three types of computer languages:
    - 1. Machine Language
    - 2. Assembly Language
    - 3. High Level Language
  - d. 0 to 1 is called a BIT where as 8 bits form a BYTE.
  - e. A mnemonics is a short name given to an operation. For example, SUM is for addition, SUB is for subtraction, etc.
  - f. As a computer understands only machine language that is 0's and 1's the assembly language has to be converted to machine language. To convert assembly language into machine language a software program called the assembler is used.
  - g. C, C++, COBOL etc. are some high level languages.
  - h. Application Software and System Software

- i. When we switch on a computer, the necessary files of the operating system get loaded into the memory of the computer to make it ready to accept commands. This process of loading files is called booting.
- **3.** a. True
- b. True
- c. False

- d. False
- e. False

## **Lesson – 3: Flow Chart And Programming**

**1.** a. (ii)

b. (i)

c. (ii)

c.

True

d. (ii)

e. (i)

**2.** a. True

- b. False
- d. True e. True
- **3.** a. Software
- b. Multimedia
- c. Program
- d. Programmers
- e. Flow chart
- f. Algorithm
- g. language
- h. logical

i. oval

- j. arrow head
- **4.** a. Terminal Box
- b. Flow lines
- c. Decision Box
- d. Process Box
- e. Input/output Box
- f. Connector
- **5.** a. People who design in computer understandable language and give the detailed procedure to solve the program are called programmers.
  - b. There are three steps to solve the problem i.e. algorithm, flowchart and program.
  - c. Pictorial representation of the step by step procedure to solve a problem is called a flowchart.
  - d. Flow chart is the pictorial representation of step by step procedure to solve the way of giving step by step procedure to solve a program.
  - e. Following are the rules to make a flow chart:
    - (i) Flow of chart should be either top to bottom or left to right.

- (ii) Arrow heads must be used as with flow lines showing the flow sequence.
- (iii) Crossing lines should be avoided.
- (iv) If flow chart is using more than one page connectors must be used.
- f. Following are the uses of flow charts:
  - (i) Problem solving is made simple
  - (ii) Data flow can be seen properly.
  - (iii) It is easy to understand.
  - (iv) It is not based on computer language
  - (v) Simple to make.
- g. Loop is the way to represent the repeated steps again and again.

### **Lesson – 4 : MS Office – At A Glance**

- **1.** a. (iv)
- b. (iv)
- c. (i)

- d. (i)
- 2. a. MS Outlook
- b. MS Publisher
- c. Ctrl+X
- d. MS PowerPoint
- e. Ctrl+V
- **3.** a. MS Outlook, MS Word, MS PowerPoint are the different components of MS Office.
  - b. Microsoft word is a tool which is used to create professional looking documents. The document can include text, graphics, table, clipart, borders and shadings etc. These documents can be created, saved, edited and printed as and when required.
  - c. (i) MS Excel is a popular spreadsheet program that allows us to work well with numbers. You can store data in Excel in the form of rows and columns that can then be organised and processed.
    - (ii) MS Excel can be used for calculation, database management, preparation of charts etc.

- (iii) You can do any kind of calculation using formulae and functions.
- d. You can add customised transitions to the slide show to make it more appealing to the audience. Follow these steps for customise slide transitions.
  - (i) Select the slide where you wish to add a transition.
  - (ii) On the Slide Show menu at the top of the screen, click on *Slide Transition*.
  - (iii) In the *Apply to selected slides*: box, select the suitable transition.
  - (iv) To apply the transition to all the slides, click on *Apply to All*.
  - (v) Repeat the process for each slide where you want to add a transition.
  - (vi) To view the transitions, click on *Play*.
- **4.** a. (2) b. (4) c. (1)
  - d. (3)

## Lesson – 5: Inserting Objects In Word

- **1.** a. (ii) b. (ii) c. (ii)
  - d. (i)
- **2.** Do Yourself.
- **3.** a. Clipart b. Special effects
  - c. Home tab d. insert, clipart
- **4.** a. The Clip Art is a collection of pictures, sound and video clips which are ready to use in the computer files.
  - b. WordArt is a text with special effects applied to it.
  - c. To change the case of any text, follow the given steps:
    - 1. Select the text.
    - 2. Click Home tab.
    - 3. Click Change Case from the font group and select the required case from the list.

- d. To ungroup the objects, follow the given steps:
  - 1. Right-click on the object.
  - 2. Click on the Grouping and Ungroup option from the shortcut menu.

The objects/shapes get ungrouped.

- e. To insert the Word Art "Digital India" in your file.
  - 1. Click on the Insert tab.
  - 2. Click on the WordArt arrowhead.
  - 3. From the WordArt style box, select the WordArt style to apply.
  - 4. The Edit WordArt Text box opens.
  - 5. Type the text.Text box opens.
  - 6. Click on the OK button.
  - 7. The WordArt text will get insert.
  - 8. From the style gallery above, you can change the style of WordArt too.
- f. To add symbols, follow the given steps:
  - 1. Place the cursor where you want to insert the symbol.
  - 2. Click the Insert tab.
  - 3. Click Symbol from Symbol group. A list of Symbols appears.
  - 4. Select the symbol you require.

You see the symbol inserted at the position of the cursor.

# **Lesson – 6 : Starting Microsoft Office PowerPoint**

- 1. a. False
- b. True
- c. True

- d. True
- e. False
- **2.** a. PowerPoint
- b. New Slide
- c. Slide Area
- d. Place holder
- e. From beginning Slide Show View
- **3.** a. A Presentation is the act of presenting the contents of a topic to an audience.

- b. A presentation consists of number of slides. Each slide can contain text, graphics, audio and video as required to convey the idea effectively.
- c. Microsoft Office PowerPoint is a presentation making software which provides facilities to create slides that include text, picture, audio and video on it.
- d. You can add text, picture, sound, clip, video clip, table and chart contents on a slide.
- e. The area where you have a dashed border in which you insert the elements is called a placeholder. On a slide, you enter elements like text, pictures and tables by using the placeholders.

### **Lesson – 7 : Animating Slides in MS PowerPoint**

| 1. | a. | (iii) | b. (ii) | c. (iv) |
|----|----|-------|---------|---------|
|    |    |       |         |         |

d. (iv)

**2.** a. True b. False c. False

d. True e. True

**3.** a. Animation effects enhance the usual appearance of the presentation and help to grab the attention of the audience.

Where as slide transitions are animation effects that appear between slides.

- b. The four effects available under the add effects option of the custom animation task pane are as follows:
  - \* Entrance effects enable the objects to enter and appear in a special way.
  - \* Emphasis effects animate the objects on the spot during slide show.
  - \* Exit effects on objects enables them to exit in a special way.
  - \* Motion Path effects on objects enable them to move from one position to another on the slide on the specified path.

- c. To modify the order of Animated objects are as follows:
  - \* Select the object in the list under Modify.
  - \* Hold the mouse on that items in the list and drag it up or down to change the order of objects.
- d. To create a slide transition follow these steps:
  - \* Move the cursor over the transition buttons to preview the effects.
  - \* Click on the Transition effect button to apply the slide transition effect.
  - \* Click on Transition Sound button to apply sound effect for transition.
  - \* Click on Transition Speed button to adjust the speed.
  - \* Click on Apply to All to apply the same transition effect to all the slides.
- e. Change the order of the slides follow these steps:
  - \* View Tab >> Presentation View >> Slide Sorter
    - . This view is used to change over the transition buttons to preview the effects.
  - \* Or, select Slides tab in the left frame in the Normal View. You can see thumbnails of the slides in your presentation.
    - . Click on a slide thumbnail and drag up and down to change the order.
- f. There are two ways to present the slide show:

Present the Slide Show

#### Manual Presentation

View Tab >> Presentation View >> Slide Show To move to the next slide in your presentation do one of the following :

- \* Click the left mouse button
- \* Hit the spacebar
- \* Use the arrow keys on the keyboard. Up and left go back, right and down go forward.

\* Click on the Esc key on keyboard to go back to Normal View

#### Automatic Presentation

Animation Tab >> Transition to this Slide >> Advance Slide

- \* Click on the check box for "Automatically After."
- \* Set the time to automatically change to the next slide after a certain duration of time.
- \* This feature is useful if you are under a time constraint or if you want to present in a more movie-like style.

### **Lesson – 8: Introduction To MS Excel**

- **1.** a. (iv) b. (i) c. (iii)
- **2.** a. cell b. autofill
  - c. cell pointer d. name box
  - e. formula bar f. range of cells
  - g. .xls
- 3. a. True b. False c. True
  - d. False
- **4.** a. A worksheet is a collection of cells in the form of rows and columns where as each Excel file is known as a workbook.
  - b. Ms Excel in a spreadsheet software. Number and calculations are managed efficiently and it allows data to be shown in the form of charts.
  - c. G8
  - d. Cell can contain text, numbers or mathematical formulas. By default
    - 1. Text entries are left aligned.
    - 2. Numbers are right aligned.
    - 3. Formulas begin with '=' sign. These are left aligned before an Enter Key is pressed. After

pressing the Enter Key it gives the answer in numbers which are again right aligned.

### **Lesson – 9 : Internet A Concept**

- **1.** a. (iii) b. (iii) c. (i)
  - d. (iv) e. (iii)
- **2.** a. True b. True c. False
  - d. True e. True
- **3.** a. Towers b. Computer Network
  - c. Internet d. World
  - e. Electronic Mail f. ARPANET
  - g. ISP's g. Websites
- **4.** a. LAN Local Area Network
  - b. MAN Metropolitan Area Network
    - c. Internet International Network
    - d. URL Uniform Resource Location
    - e. Modem Modulator Demodulator
    - f. Arpanet Advance Research Agency Network
    - g. VSNL Videsh Sanchar Nigam Limited
    - h. WAN Wide Area Network
    - MTNL Mahangar Telephone Nigam Limited.
- **5.** a. *Network*: A big connectivity where anything is shared by users from the common platform is termed as network.
  - b. *URL*: The own identifying address of a website or a webpage is defined as URL.
  - c. *Internet*: It is very large network of computer connected together to share resource across the world.
  - d. *Video Conferencing*: It is a facility by which you can speak to the people by looking at them as if you are talking face-to-face.

- e. *Modem*: It is the device which converts telephone signals to digital signals and digital signals of computer to telephone signals.
- f. Web page: Web page are the pages on Internet which form the www. It can contain graphics, audio, video and links to other page. It displays information.
- g. Website: Collection of webpages form websites.
- h. *ARPANET*: It was the first network set up by the department of Defence of USA. Its full form is Advance Research Project Agency Network.
- **6.** a. Connectivity between various computer is called computer network. It can be following types
  - (i) LAN
- (ii) WAN
- (iii) MAN
- b. Internet provides us resource sharing, e\_mail, video conferencing, information, sales and purchase facility.
- c. E\_mails are better than postal mails because they are fast, cheap and does not need paper. With the help of e-mail we are capable to send the same message to many people together. You can also send pictures, music, video etc. If your address get damaged, your e\_mail ID is forever.
- d. To connect to internet computer, telephone line, modem and internet connection is required.
- e. Telephones carries signals.
- f. Modem converts telephone signals to digital signal and digital signals of computer to telephone signals.
- g. URL is the identifying address of a website or a webpage.
- h. E\_mail address is the location where your data mails are stored. E\_mail address remain same whenever you access internet. It is never changing unless you stop using your mail or change it.
- **7.** a. E mail
- b. ARPANET

c. ISP

- d. Internet Connection
- e. Web page

## **Lesson – 10 : Searching On Internet**

**1.** a. (i) b. (ii) c. (ii)

d. (iii) e. (i)

**2.** a. False b. True c. True

d. True e. False

**3.** a. Webpages and websites b. Web browsers

c. HTML d. Web Browsers

e. Browsing f. Title bar

g. Refresh h. Search Engines

**4.** HTML — Hypertext markup language

Home — First page

Yahoo, Google — example of search engine

Website — collection of web pages

Internet — big network

Hyperlink — underline text of web page.

Search item — is search by search engine.

History — shows all pages you visited

Netscape Navigator — type of web browser

Menu bar — has different menu options

- **5.** a. Web browsers are the softwares which enable the users to connect with a website and use the webpage.
  - b. Internet explorer and webpage navigator are two common web browsers.
  - c. The main contents of the Internet explorer are menu bar, address bar, title bar, display area and tool bar.
  - d. Some highlighted text or image when selected displays the information on the particular topic, it is called Hyperlink.
  - e. Some of the features of hyperlink are:

It is underlined or it is given with different colours. When you move a pointer over it, its shapes changes from arrow to hand shaped pointer showing hyperlink.

- f. Search Engines are the websites that help you to search the information from the internet.
- g. Some search engines are : google.co.in, yahoo.com and altavista etc.
- h. To search the item from search engine follow these steps:
  - i. On the Address bar of web browers type URL of search engine.
  - ii. Once the search engine screen appears, type the search terms.
  - iii. Click on search box.
- **6.** a. Home It takes you to the first page of the webside.
  - b. Back It takes you back to previous page.
  - c. Forward It takes you to next page.
  - d. Stop It stops the loading process of webpage from internet.
  - e. Refresh It restarts the loading process.
  - f. History It saves and stores the previously visited sites for a particular period.