Thinking Machine

(A Text Book of Computer Education)

Class-6-8

Book-6
Chapter-1 (Computer Fundamentals)

Practise Time

A. 1. (b)   2. (c)   3. (a)   4. (a)

B. 1. commands   2. Lady Ada Lovelace

   3. object   4. John W. Turkey, 1957

C. 1. TRUE   2. FALSE   3. FALSE   4. TRUE

D. 1. A computer basically performs a few major functions irrespective of its size. These are:

   ◘ it accepts data.

   ◘ it stores and process data as per our requirement.

   ◘ it gives results in the form of output.

   ◘ it order to carry out these operation, a computer allocates the task among its various functional units.

2. ***COMPILER***

   Compiler is a translator program used to convert a high level language program into machine language. it translate it into machine language. it generates the object code for the program along with the list of errors. The execution is very fast.

   INTERPRETER

   An interpreter is used to convert high-level program into machine language. However, the difference between a compiler and and an interpreter is that an interpreter translates one line at a time, and then executes it by which no object code is produced and the program has to be interpreted each time, it runs.

3. ***High Level:***

   ◘ Uses English words and mathematical operators.

   ◘ Machine- independent.

   ◘ Has to be converted into Machine language by Translator programs (Interpreter and compliers).

4   *GL:*
   - Machine-independent.
   - Minimal user skills required to obtain results.
   - Application development tool.

4. ***DECIMAL NUMBER SYSTEM***

The decimal number system is based on an ordered set of numbers of digits. The total number of digit used in a decimal number system is called 'base' or 'radix' of the number system. The decimal number system uses 10 digit- 0,1,2,.....9 and hence its base is 10.

BINARY NUMBER SYSTEM

The binary number system consists of only 0 and 1. The digits in binary system are called 'bits'. A 'word', and a group of 32 bits is called a ' double word'. This number system has its base as 2. Computers are designed to handle only binary numbers because computers circuits can handle only two binary digits, which simplifies the design of the circuits, reduces the cost, and improves their reliability.

F.   Java is a high level language.

Chapter-2 (More On Windows 7)

Practice Time

A. 1. (c) status bar   2. (c) windows 10
     3. (b) GUI   4. (b) 2001

B. 1. operating system   2. system
     3. Back button   4. Icons
     5. Address

C. 1. True   2. True   3. True
     4. false   5. false

D. 1. An operating system is the most important program that runs on a computer. Every general-purpose computer must have an operating system to run other programs and applications.

A computer needs an operating system tha allows you to operate your computer. The operating system interacts between the user and the computer. Operating system is a system software. Without operating system you cannot work on computer.

2. The control panel contains a number of icons (items). All these icons help us to manage different resources and fuctioning of the computer system.

    In simple words, control panel helps us to change the hardware and software settings of our computer.

3. *Window vista :* it was released in 2007. it has features such as user control account for excellent security purpose. it has improved GUI with stick animations and transparencies.

    Windows 7 : Nowdays it is a very popular Operating system for personal computers. some of the new features of Windows 7 are advancements in touch, speech and handwriting recognition, support for virtual hard disks, support for additional file formats and improved boot performances. If you have a touchscreen, you would not always need a keyboard or mouse for input. windows 7 supports 64-bit PCs.

4. *FEATURES OF MS WINDOWS :* some features of windows operating system are as follows.

    1. Windows is a Graphical User Interface (GUI) based operating system.
    2. The internet Explorer is readily available with Microsoft Windows.
    3. Windows allows processing of multiple tasks at the same time.

5. To change the window colour, follow the given steps :

    ☞ Right click on the blank area on the desktop screen. A pop-up menu will appear.

    ☞ Click on the personalize option. The personalize

window will appear.
- Click on Window color option.
- Select any colour of your choice.
- Click on save changes options.

Chapter-3 (more On Ms Word 2010)

Practice Time

A. 1. (a) two   2. (a) Home
3. (b) Hyperlik   4. (a) footnote
5. (b) Endnote

B. 1. orientation   2. ms word
3. paragraph spacing   4. mail merge
5. mailing

C. 1. false   2. false   3. true
4. false   5. true

D. 1. To insert a hyperlink, follow the steps given below:
- Select the text on which hyperlink is to be inserted.
- Click on the insert tab on the Ribbon.
- Click on the Hyperlink from Links group.
- The insert Hyperlink dialog box appears with various options, through which you can create a link. For example, if you click the option Existing File or Web Page, a list appears.
- Type the address of the website in the Address box or click any existing file from the list to create a link to that file. Here, the website address. 'http://www.shreekaarbooksinternational.com' is typed.
- Click on the OK button. This inserts a hyperlink in your document.

2. When you noticed a newspaper or magazine, you will find that it has columns. In MS word, the same can also be applied.
To apply column formatting, follow the given steps

given below.

- choose the matter that you want to format in coumns.
- Click on the page Layout tab on the Ribbon.
- on the columns from the page setup group.
- Choose the number of columns you want from the list that opens up.

3. Line spacing refers to the amount of vertical space between the lines of text in a paragraph.

   Paragraph spacing refers to the amount of space above or below a paragraph.

4.
- Open the Word document that contains the letter.
- The information of the letter should not change from letter to letter.
- Click on the Mailings tab.
- Go to the Start Mail Merge group.
- Click on Letters from the Start Mail Merge option.
- Click on the Select Recipients from the same group.
- the New Address List dialog box appears, displaying areas where you can enter the information.
- Click on each area and type the appropriate information for each person. It is not necessary to fill every entry.

   To enter the information for another person, click on New Entry.
- Repeat steps 7 and 8 for each person on your mailing list.
- When you finish creating your mailing list, click on the OK button. The save Address List dialog box appears.
- Type a name for a file that will store in your mailing list.

- Click on the save button to save the file.
- To make changes to the list of recipients go to Edit Recipients List from the group. The Mail Merge Recipients window appears.
- A check mark beside a person's name indicates that the word will create a personalized letter for the person. To add or remove a check, click on the box beside a persons name.
- Click on the OK button.
- Click on the locations where you want the inside address to appear in the letter.
- To add an address to your letter go to Write & insert Fields group and click on Address Block.
- Click on a format for each recipient's name. You can also preview the format here.
- Click on the OK button.
- Click on the location where you want the greeting to appear.
- Click on Greeting Line from the same group. The Insert Greeting Line dialog box appears.
- Click on these areas to specify the greeting format.
- Click on the OK button.
- Click on the preview Results from the Preview Result group.
- Click on the Next Record icon to preview the next letter and the previous record icon to move back and preview the previous letter.
- Click on the Finish & Merge from the Finish group and select Edit Individual Documents.
- Click on any button to specify which people from your mailing list you want to create letter for.
  All: All people on your mailing list.
  Current record: Only the displayed person.

from: people on your mailing list that you specify.

If you select from, click on the first text box and type the number of the first person you want to create a letter for. Then press the Tab key and type the number of the last person you want to create a letter for in the second text box.

- ☐ Click on the OK button to create the letters.

5. To print the letters, follow the steps given below.

- ☐ Click on the Finish & Merge button in the finish on the Mailing tab.
- ☐ Select the print Documents option from the drop-down menu.
- ☐ Merge to Printer dialog box appear fill the page number that you want to take print out.
- ☐ Click on the OK button.

F. At the time of a party or a function, you give invitation letters to your friends or relatives. Now, you have to type all the addresses of your friends or relatives. Typing all the names and addresses and then making the documents and saving them, is a difficult job.

With the help of Mail Merge feature in MS word, you can send the same letter to a number of people.

Mail Merge feature is used to combine a data source with the main document. it saves our time and energy to send letter at multiple addresses.

Chapter-4 (Microsoft Power Point 2010)

Practice Time

A. 1. (c) MS powerpoint   2. (a) WordArt
3. (b) pptx   4. (a) horizontal
5. (c) SmartArt

B. 1. green   2. clip Art   3. Chart
4. formatting   5. Insert

C. 1. False   2. True   3. False

4. True   5.   True

D. 1. Smart Art is a graphical way to represent your text in different features and style.

To add Smart Art in your presentation, follow the steps given below.

- Click on the Insert tab.
- Click on the Smart Art from Illustrations group. A dialog box appears.
- Select the layout of Smart Art from left pane and choose the type of smart Art.

2. To insert music, follow the steps given below:

- Click on the Insert tab.
- Click on sound option from Media group.
- Choose any one option from the list.

Sound from file: This displays Insert sound dialog box. Select the music file present on your system and click on the OK button.

<div align="center">OR</div>

Sound from clip Organizer: This displays Clip Art task pane with sound files. Click on a file to be added in the slide.

3. To insert a table, follow the steps given below.

- Choose any slide Layout that contains a Table Placeholders. for example: Title and content.
- Click on the Insert Table placeholder. The Insert Table dialog box will appear.
- Define the number of columns and rows. Click on the OK button.
- A table will be displayed according to the defined rows and columns.

4. 1. Value Axis: Value axis or Y-axis is the vertical axis which is used to plot the values.

2. Legend: It depicts the colours, patterns or the symbols

which are assigned to the data series.

3. Data series: Data series are the bars, slices or the other elements that show the data.

4. Category Name: The category names are the labels displayed on the X-axis and Y-axis.

5. Chart Area: The chart area includes complete area and all the object in a chart.

6. Category Axis: Category axis or X-axis is the horizontal axis. The matter that is compared and presented in the chart comes on the axis.

7. Plot Area: The plot area is a window within the chart area. It contains the actual chart itself and includes plotted data, data series, category and value axis.

5. a. To create chart on a slide , follow the steps given below:

- Click on the Layout button in slides group and select the Title and content layout from the drop-down menu.
- Click on the Insert Chart icon on the slide. The Insert Chart dialog box appears.
- Click and drag the scroll bar to view the chart types, or click any label on the chart types, or click any label on the left of the dialog box to see a specific chart style.
- Select the chart type and click on the OK button.

b. To change the chart Layout, follow the steps given below :

- We can format the chart to add title, change the text, font, live, colour, border style, data series etc.
- Select the chart and click on the design tab.
- Scroll through the option in the chart layouts groups, or Click on the More drop-down arrow to see all the chart layout options.
- Select any chart layout as per your choice.

F. To change the chart type, follow the steps given below :

- Select the chart and click on the Design tab under the chart tools.
- Click on the change chart type button in Type group on the Design tab.
- The change Chart Type dialog box will appear. Select any chart type and click on the OK button.
- The chart will change into a new chart type.

Chapter-5 (Microsoft Excel 2010)

Practice Time

A. 1. (b) multiplan   2. (a) cell
   3. (c) three   4. (c) =
   5. (c) ctrl+o

B. 1. 32767   2. active cell
   3. ctrl+down Arrow   4. three
   5. Numbers

C. 1. TRUE   2. FALSE   3. TRUE
   4. TRUE   5. FALSE

D. 1. MS Excel 2010 has various features. Some of them are:
   - It has builtin formulas, known as functions, which are used for performing simple and complex calculations.
   - Searching of data and replacing of data.
   - Data can be viewed in the form of charts, which help to understand, analyze and compare data.
   - The data is automatically recalculated in the whole worksheet if any change is made in the single cell.
   - Entering data in series using Auto fill option.

   2. CEll: A cell is an intersection of a row and a column in a worksheet. Each cell is denoted with cell address. A cell can contain upto 32,767 characters.

   ACTIVE CELL: While clicking on a cell, thick black border differtiates it from the rest of the cells. It indicates that the current cell is active.

RANGE: A range is a group oof continous cells that forms the shape of a rectangle. It can be as small as a single cell or whole entire worksheet.

NAME BOX: Name box displays the location of the cell pointer. It is located above the column heading on the left side of the window.

In MS Excel, three types of data can be entered. They are as follows:

1. Numbers   2. Text   3. Formulae

NUMBERS: Numbers are the values that consists of numerals, from 0 to 9 and the characters like +, -,*,%,^ etc., included in n umerical data. They can be used in calculations.

TEXT: Text data can contains letters, numbers spaces and special characters. By default text data is left aligned. They are generally used for worksheet heading, names etc.

FORMULAE: Formula is a mathematical equation involving number values, operators and cells addresses used for performing calculations on worksheet. Formula can range from basic mathematical operations to complex calculations. Every formulae must begin with in equal '=' sign.

- # DIV/0 : Division by zero is an invalid operation.
- # NIA : Data is not available .
- #### : The column is not wide enough to display the number.
- # VALUE : The formula contains an invalid operations.

5. (a) There are many predefined formulas that performs specific calculations in MS Excel. The most commonly used functions can be found under the AutoSum.

- Auto Sum: Adds all the numeric values

specified in a range automatically.

- Sum: Adds all the numeric values contained in the cells specified in the input argument.
- Average: Average all the numeric values contained in the cells specified in the input argument.
- Min: Determines the smallest numeric values among all the cells specified in the input argument.
- Max: Determines the largest numeric value among all the cells specified in the input argument.
- Count Numbers: counts how many cells contains numeric values in the input argument.

(b) There are many mathematical functions in MS Excel. Some of them are as follows:

- SUM (number 1, number 2....) : Calculates the total of given range of values.
- SQR (number) : Calculates the square root of the given number.
- MOD (number, division) : Calculates the remainder of the number.
- COUNTIF (range, criteria) : Returns the number of value that matches the criteria.

E. He can use stastical functions such as AutoSum.

Chapter-6 (Algorithm, Flowchart and pseudocode)

A. 1. (a) program   2. (c) Binary
     3. (b) input/Output   4. (c) procedure
     5. (a) Algorithm

B. 1. Algorithm   2. start/stop   3. flowchart
     4. flowchart   5. decision

C. 1. FALSE   2. TRUE   3. FALSE

4. TRUE   5. TRUE

D. 1. A program is a plan of action to accomplish a specific task. It is a set of instructions written in computer language that directs the computer to perform a particular task and produce the desired results.

2. An algorithm is a set of sequential steps to solve any logical or mathematical problem. An algorithm is the first step in developing a program. It is always written in simple language.
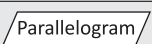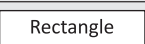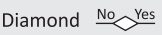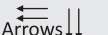
ADVANTAGES AND DISADVANTAGES OF ALGORITHM

ADVANTAGES

1. They are easy to write and understand.
2. They are easy to implement.
3. They do not depend on any computer language.
4. They help in detecting and eliminating errors.

DISADVANTAGES

1. They are time consuming.
2. They are difficult to show branching and looping.

3. Big tasks are difficult to put in algorithm from the program.

4. A flow chart is a pictorial representation of steps used for sloving a particular problem. A flowchart makes it easier to understand the logic of a program. To create a flowchart, different boxes are used which are connected to each other with the help of flow lines.

5.

Symbol	Name	Use
Oval	Start/stop box	Start/stop box is used to represent starting and ending of flowchart.
Parallelogram	Input/output box	input/output box is used to read and print the data.
Rectangle	Processing box	Processing box is used for calculations.
Diamond No Yes	Decision box	Decision box is used to take any decision, such as Yes/No or True/False.
Arrows	Flow lines	These lines are used to connect the Flowchart symbols.
Connectors	Connectors	These are used to connect one part of flow chart to another.

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Chapter-7 (Introduction to QBASIC)

Practice Time

A. 1. (b) CUI   2. (a) Title
        4. (b) New   3. (c) program Area
        5. (a) Arithmetic

B. 1. high   2. QBasic   3. f5
        4. $ 5. Relational

C. 1. FALSE   2. TRUE   3. TRUE
        4. FALSE   5. TRUE

D.

1. (a) Arithmetic Operators: Arithmetic Operators are used to perform arithmetic operations or calculations in the program.

    (b) Relational Operators: Relational operators are used to compare the two values from relational expression.

    (c) Logical Operators: Logical operators are used to combine two or more conditions to give the single value result that is true or false. The most commonly used logical operators are AND, OR and NOT.

2. Qbasic is an Integrated Development Environment (IDE), developed by Microsoft to type, edit, debug and execute basic programs.

    QBasic is a version of BASIC and supports character User Interface (CUI) . QBasic uses English like words and mathematical symols to write programs. Every command or instruction in QBasic is called statements.

3. Constant are the values that do not change during the execution of a program and these values are fixed. These are also called data. There are two types of constants:

    (a) Numeric Constants: Any numeric value, an integer

or a real number, positive or negative is called a numeric constant.

(b) Alphanumeric or string constants: A Set of characters is string constant. They are enclosed within double qoutes and can be made up of letters, digits, special characters and blank spaces.

4. A character set is a set of symbols which are used in a programming language. QBASIC uses the following symbols as its character set.

- Alphabetic characters : A,B,C,D......Z
  a,b,c,d.....z
- Numeric characters : 0,1,2,3.......9
- Special characters : !,#,$,*,@,(,),-,+,1 and so on

5. LET: LET command is used to assign a value to the variable.

REM: The text after REM is taken as commets.

Syntax: REM<remarks>

INPUT : INPUT command is used to assign value to a variable. It can also be used to assign value to many variables at the same time. When the program executes, the computer read the INPUT and prompts the user to enter the values . It flashes a question mark (?) and you have to type the value of the variable.

syntax: INPUT <Variable>

F. He should use f5 key.

Chapter-8 (Internet Services)

Practice Time

A. 1. (c) E-Banking   2. (a) website
   3. (b) Home page   4. (b) Electronic mail
   5. (a) G-mail

B. 1. international network   2. E-commerce
   3. world wide web   4. Blog
   5. Chatting

C. 1. TRUE 2. TRUE 3. TRUE
4. FALSE 5. FALSE

D. 1. Advanced Research Projects Agency
2. Uniform Resource locator
3. Hyper Text Transfer Protocol
4. World wide web
5. Internet Service Provider

D. 1. Internet is not a recent thing. In 1970s, the U.S. Defence department established an agency for research and analysis in the field of defence. this agency was named as the Advanced Research Projects Agency (ARPA). ARPA set up a network of computers between different offices of defence department to exchange and share an important information. This network of computers was known as ARPANET.

Later on, the ARPANET has been opened for education purpose. Many universities and institutions also started using this network of computers for educational purposes. This network kept on growing bigger and bigger everyday that lead to the birth of the Internet.

2. The world wide web is a vast collection of websites in which all the information is available. It was founded by Tim Berners Lee. WWW contain millions of documents or 'bunch of pages' called webpages. The information available on the WWW is accessed using a web browser. The WWW is a small part of the Internet.

3. (a) E-learning stands for Electronic Learning. E-learning is the use of technology to enable people to learn anytime and anywhere. E-learning can include training, the delivery of just-in-time information and guidance from experts. E-Learning can be used to import training to a large group of students at a time. The study material can

cantain types of media like audio, text, video and animation.

(b) A blog is an essay to create website that help users to share their thoughts with the world. A blog is a regularly updated website or web page, typically one run by an individual or a small group, that is written in an informal style. The word 'blog' is derived from the word 'weblog' because a blog consists of a signed and dated log of an indiviual posting.

4. To create an e-mail ID in www.gmail.com, follow the steps given below.

  ◦ any web browser, for example, Google chrome.

  ◦ Type www.gmail.com in the address bar and press Enter key.

  ◦ Click on CREATE AN ACCOUNT button.

  ◦ the form and click on Next step button to submit a form. A new window appears.

  ◦ Add profile photo and then click on Next Step button.

  ◦ Now, confirm your e-mail account. Click on Continue to Gmail button to move to your E-mail account window.

5. (a) E-commerce stands for Electronic Commerce, that is, commercial activities over Internet. In e-commerce, you can do the various transaction like online shopping, booking tickets for trains/flights/movies/bus etc.

  You can buy or sell goods also on Internet. some popular e-commerece sites are www.homeshop 18.com, www.ebay.com, www.quickr.com, www. amazon.com etc.

(b) E-banking stands for Electronic banking. It is the way of performing bank transactions using

Internet. Through E-banking, one can check his/her account, transfer money, make FD etc. These transactions can be done from any part of the world if you have an Internet connection on your computer.

F. video conferencing.

Book-7

Chapter-1 (Computer Languages and Number System)

Practice Time

A. 1. (b) Decimal   2. (a) Machine

    3. (a) Ada lovelace   4. (b) Binary

    5. (c) Compilers

B. 1. two   2. 0 and 1   3. Go it friend Labina 2

    4. Translators   5. Aryabhatta

C. 1. TRUE   2. FALSE   3. TRUE

    4. TRUE   5. FALSE

E. 1. A program or software is a set of instructions which tells the computer what to do. The process of writing specific instructions in a computer language is called programming. Each programming language has its own specific rules and syntax.

    computer languages are classified into two broad categories.

- Low Level Languages
- High level Languages
- machine Languages
- Assembly Languages

    2. In olden days, when there were no means of counting, people used to count with the help of fingers, stones, pebbles, sticks, etc. These methods were not adequate and had many limitations.

    In view of this, many number systems were introduced. Among them, the main number system are as follows.

- Decimal number system
- Binary number system
- Octal number system
- Hexadecimal number system

    3. In the high level language, a program code cannot be executed directly. It needs to be converted into machine code. This is done by language processors or translators. There are two types of translators.

- compiler
- Interpreter

    4. **Machine Language**

    Machine language is the only language that is directly understood by the computer.

    This was the first computer language to be developed which consisted of data and instructions spelt out in 0s and 1s. It was

difficult to understand. The symbol 0 stands for the absence of electric pulse and 1 for the presence of electric pulse. 0 and 1 are called Binary digits.

Assembly Language

An assembly language is a low-level programming language for micro processors and other programmable devices. An assembly language instructions are given in the form of shorts words called mnemonics. For example, JMP for 'jump'. A program called assembler is required to translate the assembly language into binary code. A disassembler converts binary language back into the assembly language.

5.

E. 1.
```
  1 0 1 1 0 1 1
−     1 1 0 0
  ─────────────
  1 0 0 0 1 1 1
```

2.
```
      1 1 0 1
      1 0 1 1
      1 1 0 1
    1 1 0 1 ×
  0 0 0 0 × ×
1 1 0 1 × × ×
─────────────
1 0 0 0 1 1 1 1
```

3.
```
      1 0 ) 1 1 1 0 ( 1 1
           1 0
           ───
           1 1
           1 0
           ───
           1 0
           1 0
           ───
            ×
```

4.
```
    1 1 1 1 1
  + 1 0 0 1
  ─────────
  1 0 1 0 0 0
```

F.
```
      1 0 1 1
    + 1 0 1
  ─────────
  1 0 0 0 0
```

Chapter-2 (More on Windows)

Practice Time

A. 1. (B) Burning   2. (a) Libraries
    3. (c) on screen keyboard   4. (a) Windows Explorer
    5. (c) Tiles

B. 1. Large   2. Change Data and Time]
    3. Change Data and Time   4. Menu
    5. left pane and right pane

C. 1. TRUE   2. FALSE   3. TRUE
    4. FALSE   5. TRUE

D. 1. To open windows Explorer, follow the steps given below.
    ❑ click on the start button.

- click on the All programs option.
- click on the Accessories option.
- click on the windows Explorer option.

2. Libraries are user- defined collections of content. It is a kind of folder in windows 7 used to manage documents, music, picture and other files. A libraries gathers files that are stored in different locations and displays them as single collection, without moving them from where they are stored.

    To create your own library, follow the steps given below.
    - Choose the New library option in the toolbar.
    - The New library folder appears on the screen.

3. Control Panel is a system folder using which you can make changes in the appearance and current settings of the Windows. It includes :
    - system and security
    - Network and Internet
    - hardware and sound
    - programs
    - user accounts and family safety
    - appearance and personalization
    - clock, language and region
    - Ease of access

4. On screen keyboard is a feature provided by windows 7 to write/create documents. This keyboard is used when actual keyboard stop working, but the mouse is working. Windows has an on screen keyboard, which can be operated with a mouse.

5. It is the process of copying files to CD/DVD.
    To burn a CD/DVD, you need various things like:
    - a writeable CD-ROM/DVD-ROM.
    - a recordable CD drive or DVD drive.
    - a CD-burning software like NERO installed on your computer.

E. She can use 'NERO' software to burn the CD.

Chapter-3 (formulas and Functions in MS Excel 2010)

Practice Time

A. 1. (c) A8*4   2. (a) Relative
   3. (a) sorting   4. (b) =
   5. (c) COUNT
B. 1. basic   2. filtering   3. formula
   4. functions   5. cell reference
C. 1. TRUE   2. FALSE   3. FALSE

4. TRUE 5. TRUE

D. 1. The cell address in the formula is known as the reference. With reference, you can us data in different parts of the worksheet. Cell referencing are of three types in MS Excel 2010.
- Relative referencing
- Absolute referencing
- Mixed referencing

2. A formula is an expression that can include numbers, cell references, arithmetic operators and paranthesis that let you perform calculations like addition, subtraction, multiplication and division in a worksheet. It establishes a relationship between two or more cells.

An Excel formula may have one or more of the following elements.

1. References: The cell or range of cells that you want to use in your calculations, as A4 or B3: E3.

2. Arithmetic operators: symbols (+,-,*,/,^,%,&,etc) that specify the calculation to be perfomed.

3. Functions: Functions are pre-defined formulas in MS Excel. Detail of functions will be explained later in the chapter.

4. Values: Numbers like 1,629,7290 etc.

5. Text strings: A text like computer, school, etc.

3. SORTING DATA: sorting means arranging data either in ascending or descending order. There are three buttons to sort data in the sort & filter group of buttons on the data tab.

FILTERING DATA: filtering is a quick way to find a set of data in a range. A filtered range displays only the rows that meet the condition specified for a column. You can edit, analyze, format and can print the filtered data.

4. Functions are the special pre-written formulas and instructions that accept the values as arguments and return the result values in the cell in which they have been typed. They are used to perform simple and complex calculations.

SUM: It adds all the numbers in given range.

AVERAGE: It calculates the average of the numbers in given range.

COUNT: It counts the number of cells in given range which contains numerical value.

MAX: It returns the highest number from cells.

MIN: It returns the smallest number from cells.

IF FUNCTION: This is a conditional function. Conditional

always results in either TRUE or FALSE. The IF function returns the first value if the condition specified evaluates to TRUE and the second value if it evaluates to FALSE.

5. RELATIVE REFERENCING: When row and column parts are not fixed, it is called relative.

When you create a formula references to a cell or ranges are usually based on the position relative to the cell. When you copy or move the formula to other cells, the reference cell gets changed automatically.

ABSOLUTE REFERENCING: When row an d columns are fixed, it is called absolute.

Absolute reference is used when you do not want to change the address of the cell on copying the formula to another cell. An absolute reference is specified by using the $ sign along with the column and the row number in the cell.

6. # DIV/0!   Occurs when a number is divided by zero (0).

N/A   Occurs when a value is not available to a function or formula.

#REF!   Occurs when a cell reference is not valid.

Occurs when a column is not wide enough, or a negative date or time is used.

#VALUE!   Occurs when the wrong type of operand is used.

#NUM!   Occurs with invalid numeric values in a formula or fuction.

#NAME?   Occurs when Microsoft Excel does't recognize text in a formula.

#NULL!   Occurs when you specify multiple cell reference without providing operators or separators between them.

Chapter-4 (Advanced Features of MS Excel 2010)

Practice Time

A.
1. (a) X
2. (a) column chart
3. (a) plot area
4. (b) Chart title
5. (a) Line

B.
1. Y
2. chart
3. chart title
4. Insert
5. dough nut

C.
1. FALSE
2. FALSE
3. TRUE
4. TRUE
5. TRUE

D.
1. provides information about a data point on a chart.

2. Identifies the data series being represented by the chart.
3. vertical line
4. horizontal line
5. heading of chart

E. 1. conditional formatting can be used for applying a particular formatting to the worksheet cells according to the values contained in these cells. You can also use the color scales and data bars according to the values contained in these cells.

2. Chart is an attractive and effective way to display data in a pictorial form. A pictorial representation of numeric data is called of graph. There are many advantages of charts. some of them are:
- charts present data and information in an attractive manner.
- charts present data and information in a compact manner.
- charts are easier to understand and compare.
- charts have a long lasting effect on the mind than a simple data statement.

3. To create a chart, follow the steps given below:
- Create a new workssheet with the data.
- select the cells of the table having the data.
- click on the Insert tab.
- select any chart from the charts group.

4. The various elements of a chart are given below along with the figure.
   1. Chart Area: Chart area includes all the area and objective in a chart.
   2. Grindlines: Grindlines can either be horizontal or vertical lines depending on the type of chart. They extend across the plot area of the chart. Gridlines make it easier to read and understand the values.
   3. Data series: The data series is a group of related values, like all data values in a column of the data sheet.
   4. Plot Area: It is the area containing the chart axis and gridlines. It contains the actual chart and includes the plotted data, data series, category and value axis.
   5. Chart title: Chart title describes the objective and contents of the chart.
   6. Category Axis: The category names are the labels which are displayed on the x-axis and y-axis.
   7. Values Axis: The horizontal and vertical lines that surround the plot area are called axis. They are used as reference

points for measuring the data values being plotted on the chart.

The x-axis is usually the horizontal line and contains categories.

The y-axis is usually the vertical line and contains value or data.

8. Legends: Legends are used to represent the data series. It depicts the colours, patterns and symbols assigned to a data series.

5. COLOUMN CHART: It is the most commonly used chart type which displays data in the form of vertical bars. This chart shows the data changes in data over a period of time or illustrates comparisons among items.

BAR CHART: It is the chart which displays data in the form of long rectangular bars that are placed vertically or horizontally on the chart area. This chart shows comparison among individual items. They are very similar to column charts, the only difference is that bars are horizontal.

F. Company can use column chart or bar chart.

Chapter-5 (Graphics in QBASIC)

Practice Time

A. 1. (c) QBasic   2. (b) Esc   3. (c) CLs
     4. (a) screen   5. (b) play

B. 1. Input   2. End   3. circle
     4. Numeric   5. Integral

C. 1. FALSE   2. TRUE   3. FALSE
     4. TRUE   5. TRUE

D. 1. QBasic was developed by Bill Gates and Paul Allen at Microsoft in 1985. The QBasic language is a computer based high level language that uses windows environment. QBasic programs are not only designed to display text and alphanumeric output but they can also be used to display colourful graphics and figures. QBasic is an Integrated Development Enviornment (IDE) to write, edit, debug and execute basic programs.

2. a. This command is used to enter data assinged to the variable given within in the program while it is running. A question mark (?) and a cursor will prompt on the screen to give value. INPUT command asks the value from the user at the time of execution of the program.

b. Screen statement is used to set the screen resolution.

Syntax: [Line No.] SCREEN mode paramater.

There are many screen modes that can be used in QBSIC. Every mode has a different resolution and supports different number of colours.

c. This command is used to display the text on the screen. Whatever you would like to print you must put it in double quotes after the PRINT command. If you only type PRINT, a blank line will be printed. If you type a variable after a PRINT command, the variable's content will be printed on the screen.

3. CONSTANTS: The items in the data whose values do not change at the time of execution of program are called constants.

VARIABLE: A variable is a named location in the memory of computer that stores the data temporarily. Variables are assigned data type that can change throughout the program operation. It can hold one data at a time and can accept different values during the execution of the program.

4. COLOR STATEMENT: color statement is used to set attractive screen colours for displaying the text and graphics.

Syntax:

[Line No.] COLOR Parameter f

[Line No.] COLOR parameter f, parameter b

Where parameter f specifies the foreground colour and parameter b specifies the background colour.

PAINT STATEMENT: The paint statement is used to fill a closed area with colour.

syntax:

PAINT (x,y), color, border color

◻ coordinates x and y specify the centre location of a circle on the screen.

◻ fill color is the colour (specified in number) which the figure is filled with.

◻ Border color is the color (specified in number) of the border of the figure, which must be specified. If it is not specified, then the whole screen is filled with the fill color.

5. BEEP STATEMENT: The BEEP statement is used to produce a beep sound for about half a second.

syntax: BEEP

PLAY STATEMENT: The play statement is used for playing music.

syntax: PLAY "string"

Chapter-6 (Introduction to HTML)

Practice Time

A.   1.   (a)   HTML   2.   (c)   Hyper Text markup language
        3.   (a)   two   4.   (c)   MS Power point
        5.   (a)   attributes

B.   1.   Tim Berners Lee in 1991
        2.   what you see in what you get
        3.   Attribute
        4.   notepad and word pad
        5.   container

C.   1.   TRUE   2.   FALSE   3.   TRUE
        4.   TRUE   5.   TRUE

D.   1.   HTML or HYPER Text markup language is a computer language used to create documents called web pages on the world wide web. Basically, an HTML document is an plain text file that contains text and nothing else. when a browser opens an HTML file, the browser will look for HTML codes in the text and use them to change the layout, insert images, or create links to other pages.

        2.   Two basics tools are needed to work with HTML documents. An HTML editor is used to create and save the documents. There are two types main types of HTML editors.
        WYSIWYG EDITORS: wysiwyg stands for what you see is what you get. These editors enable you to create web pages without knowing how to write HTML. HTML allows you to insert images, tables, lists, hyperliks, etc. Some WYSIWYG HTML editors are microsoft front page, kompozer and Adobe Dreamweaver.
        simple text editors include text editors like Notepad and wordpad. They can also be used to create HTML documents.

        3.   There are two types of HTML tags.
            ◗   Container Tag: A container tag is a tag which has both opening tag and end tag as well as attributes.
                opening tag- <Body> opening tag
                closing tag- </Body> closing tag
            ◗   Empty Tag: An empty tag is a tag which has only starting tag and it has no attributes.
                for example: <BR> is an empty tag because it has no attributes.

        4.   To create a web page using a text editor, follow the steps given below.
            ◗   click on the start button.

- ☐ on all programs option.
- ☐ on the Accessories option.
- ☐ click on the Notepad. The notepad window appear.
- ☐ New, start typing the HTML code.
- ☐ click on the file menu.
- ☐ click on the save option. The save As dialog box appears.
- ☐ Give the file name.
- ☐ click on the save option.

5.
 tag is an empty tag and does not require any end tag. When you want to break the text into the next line. You can just place it after text and the next line start.

While designing a web page, sometimes you need to seperate text text or image from each other. At that time, you can use the <HR> tag. This is a container tag because it has many attributes as well as end tag. It produces a horizontal line as output.

Chapter-7 (Internet Services)

Practice Time

A. 1. (c) facebook   2. (a) Blogger
    3. (c) e-greetings   4. (c) E-commerce
    5. (c) Electronic fund transfer

B. 1. Internet   2. web log   3. G talk and skype
    4. Internet service provider   5. blog

C. 1. TRUE   2. TRUE   3. FALSE
    4. TRUE   5. TRUE

E. 1. Internet is the largest network of computers that connects the computers worldwide.

The Internet helps us to access and share information on any topic. The most important feature of the Internet is that it mkakes easier for people to communicate with one another.

You require various things to connect to the Internet. some of them are as follows:
- ☐ connection- phone line, cable, DSL or wireless
- ☐ Modem
- ☐ Network software- TCP/IP
- ☐ Internet sevice provider (ISP)

2. E-Commerce stands for Electronic commerce. It is also known as E-business It is the buying and selling of goods and services over the Internet. The payment for items purchased is made by using the Debit card, credit card, UPI and COD (cash on delivery).

Benefits of Online shopping

- Stores are open 24 hours a day, 365 days a year.
- It gives us the convenience to browse and buy goods from our home.
- there is a wider range of choice - customers can access stores all over the world and buy things.
- Best bargain as you can visit numerous shops/suppliers.
- Lower costs since no expensive retail stores and staff have to be set up.

3. E-Learning stands for Electronic Learning.

E-Learning is a form of learning that takes place in an electronically simulated environment. It can be web-based, computer based and internet-based training.

E-Learning can be done using an internet connection, a network, an intranet, or a storage disk. It uses a variety of media, like audio, text, virtual environments, videeo and animation.

E-Learning, in some ways, is even better than classroom learning methods as it is a one-on-one learning method. It is self-placed and has an experimental-learning format.

4. VIDEO CONFERENCING: video conferencing is the face to face conversation between two or more people over the internet. Here people do not meet physically but electrically by using their computers, video cameras, and the Internet. Video conferencing is very useful for business meetings, educational training and health care conferences.

SOCIAL NETWORKING: social networking is amongst the most popular services provided on Internet. Human beings need to express their ideas, feelings and need to be in touch with friends and relatives. This is done through social networking. social networking sites are online communities that let people come together, communicate and share things.

Twitter, Facebook, Instagram and My space are some very popular social networking sites through which poeple can make friends and can keep in touch with each other.

5. E-mail stands for Electronic Mail. It is a process of sending and receiving text messages, data files, audio (video files, etc. over the Internet, you must have an e-mail account to access e-mail on the internet. Using e-mail you can create,send, forward, print,delete, e-mail messages.

The e-mail system is managed by mail servers. Gmail, Yahoo mail, rediff mail, etc. are some famous e-mail servers.

The advantage of e-mail are as follows.

1. Speed: E-mail is faster than ordinary mail.
2. Low cost: It is very cheap to send an e-mail as compared to the cost of sending a letter by post or though courier.
3. Waste Reduction: An e-mail helps to reduce usage of paper which indirectly reduces the cutting down of trees to great extent.
4. Convenient: An e-,mail can be sent anywhere in the world.

F. Online Booking of tickets.

Chapter-8 (Computer Virus)

Practice Time

A. 1. (a) virus   2. (a) friday, the 13th virus
    3. (a) Boot sector   4. (b) Antivirus
    5. (b) McAfee

B. 1. Space filler virus   2. Program file
    3. program file   4. pen drive
    5. Antivirus

C. 1. TRUE   2. TRUE   3. FALSE
    4. TRUE   5. FALSE

D. 1. a. A computer virus is actually a computer program that is deliberately written by Virus Programmers.It is a program that can copy itself to different locations on the same computer or try to infect different computers automatically. The full form of VIRUS is vital Information Resources Under Seize.

       Two types of viruses are: a. Boot sector viruses

     b. Bombs

   2. Boot sector Viruses: These viruses infect the boot record or master boot records. They replace the boot record that is responsible for loading the operating system in memory by copying it elsewhere. Boot viruses become active at the time of booting the machine. for example, Disk Killer, stone virus, Etc.

       Trojans: These viruses at first appear to be friendly but are very malicious prgrams.They steal information from the computer.

   3. A virus can cause problems in a computer in many ways, such

     ❑ Computer programs take longer time to load than normal.
     ❑ The floppy disk drive or hard drive runs when you are not using it.
     ❑ The computer's hard drive constantly runs out of free space.
     ❑ You are unable to access the hard drive while booting from

the floppy drive.

- New files keep appearing on the system and you don't known where they came from.
- Strange sounds or beeping noises come from the computer or keyboard.
- Files have strange names that you don't recognize.
- Program size keep changing.
- Programs act erratically.

4. There are several things you can do to protect your computer against viruses. To prevent virus attack, follow the given tips:

- Every PC should be equipped with some anti-virus program.
- Always scan the pendrive before opening/ copying files.
- Always scan the hard disk twice a month.
- Always take the backup of important files everday.
- Do not install pirated softwares.
- Use internet and e-mail attachments very carefully.

5. Antivirus (or anti-virus) software is used to safeguard a computer from malware, including viruses, computer worms, and Trojan horses. Antivirus software may also remove or prevent spyware and adware, along with other forms of malicious programs. Antivirus programs are memory resident. Whenever the computer gets started, this program starts with it. It than scans the computer.

E. She might have her computer affected by computer virus. She must be scan her computer to make it run smoothly.

Book-8
Chapter-1 (Computer Networking)

Practice Time

A.
1. (b) peer to peer
2. (c) Route
3. (a) PAN
4. (c) Fibre optic
5. (c) Bus

B.
1. Networking
2. Connector
3. Hub
4. Tree
5. WAN

C.
1. TRUE
2. FALSE
3. TRUE
4. FALSE
5. TRUE

D.
1. Network Interface Card
2. Personal area Network
3. Metropolitan Area Network
4. Hyper Text Transfer Protocol
5. Transmission Control Protocol

E.
1. Networking means interconnection of various devices to share their resources. A network can be wired or wireless.

ADVANTAGES OF NETWORKING

Computers connected to each other allow information to get transferred easily and quickly.

- It is difficult to maintain regular backups on a number of standalone computers. When you keep backups on a central location, you have one place to look for the information.
- The network stores most of the information on a central computer. Storing information on one or two central computer make it easy for people to work with and manage their files.
- Computers connected to a network can share equipments and devices including printers and hard drivers. These equipments and devices are called resources. The ability to share resources

reduces the cost of buying computer hardware.

◻ The deletion, modification or upgradation of the software / data is to be done at a single point only in a network. This brings more efficiency and effectiveness into working system.

◻ Computer network reduces the need for hard copies of all documents.

2. Network Security is the process of taking physical and software preventive measures to protect the underlying networking infrastructure from unauthorised access, misuses, destruction, modification, etc. thereby creating a secure plat form for computers, users and programs to perform their permitted critical function within a secure environment.

3. ◻ Local Area Network (LAN)

In LAN, two or more computers and peripheral devices are connected within the small area such as campus or office building. In LAN computer terminals are physically connected with wires. Usually, this type of network does not consist of more then 100 computers.

Metropolitan Area Network (MAN)

A MAN is a network which connects on area larger than LAN but smaller than WAN. It is a computer network made up of collection of Local Area Networks. MAN connects computers located in the same geographical area such as a city or town.

for example, branches of a local bank in a city.

Wide Area Network (WAN)

A WAN is computer network that is dpread over a large geographical area, such as different cities/ countries or even continents. A WAN connects LAN and MAN together.

for example: Internet, ATM facility, etc.

4. on the basis of architectures, computer networks are of two main types.

    (a) Client Server Network

    The term client-sever refers to a model for computer networking tha utilizes client and server devices, each designed for specific purpose.

    Client Server is a computer network where several computers called clients or workstations are connected to the main computer called the server.

    (b) Peer to Peer Network

    It is a network where a few computers having equal capacity and capabilities are connected together to use the resources available on the network.

    Peer to Peer networking is common in small local area networks, particularly home networks.

5. (a) Bus Topology

    In Bus topology all nodes are connected to a central cable called bus. It is made up of a main single cable with the terminators at both ends. Computer and the other devices including the server are connected to this linear cable for communications.

    (b) Ring Topology

    In Ring topology, all the computers and other devices are connected to each other in a closed circle. So, every workstation has equal access to resources.

    All message travel through a ring in the same direction either 'clockwise' or ' anticlockwise'.

    (c) Star topology

    In star topology, all the computers are connected to a central system called server, which forwards data towards its final destination. The server

control the communication on the network.

6. Network protocols are formal standards and polcies comprised of rules, procedures and formats that define communication between two or more devices over a network.

A network protocol defines rules for communication between network devices.

INTERNET PROTOCOL (IP)

The Internet protocol (IP) is the method or protocol by which data is sent from one computer to another on the internet. Each computer on the Internet has at least one IP address which uniquely identifies it from all other computer on the internet.

TRANSMISSION CONTROL PROTOCOL (TCP)

The Transmission control protocol (TCP) is one of the main protocols of the Internet protocol suites. This protocol puts the packets back in right order.

HYPERTEXT TRANSFER PROTOCOL (HTTP)

HTTP is set of rules for transferring files like text, graphic, images, sound, videos, and other multimedia files on the world wide web. When a user opens the web browser, the user is indirectly making the use of HTTP. HTTP is an application protocol that runs on top of the TCP/IP protocols.

E. Peer to Peer nerwork.

Chapter-2 (MS access 2010)

Practice Time

A. 1. (c) File   2. (c) .accdb   3. (a) Two
     4. (b) candidate   5. (a) ribbon

B. 1. Text   2. Field   3. fields
     4. database   5. forms

C. 1. FALSE   2. TRUE   3. FALSE
     4. TRUE   5. TRUE

D. 1. datasheet view
    2. pivot chart view
    3. pivot table view
    4. Design view

E. 1. Database is an organised and stuctured set of related data. It helps us to manage and access large amount of information quickly and efficiently.

    Database has various advantages . Some of them are:

    - Easy sharing of data
    - Reduction of data incosistency
    - Reduces data redundancy
    - Easy retieval and manipulation of data
    - Data security
    - Maintains data integrity

    2. To start MS Access 2010, follow the steps below:

    - click on the start button
    - click on the All programs option.
    - click on the microsoft office.
    - click on the microsoft Access 2010 option.

    3. (a) A primary key is the unique identifier for each record in a table. MS Access will not allow duplicate entries in a primary key field. When creating a new table, Access automatically creates a field "ID" with the autonumber data type, and assigns this as the primary key. A primary key does not allow null values.

        (b) A candidate key is an attribute (or set of attributes) that uniquely identifies a row. A primary key is one of the candidate keys. A table may have more than one candidate key but has only one primary key.

        (c) If a primary key of one table is used in another table to establish a relation, then the primary key of one table is the foriegn key in other table.

4. DATASHEET VIEW

    It displays data arranged in rows and columns format that allows you to view, enter or manipulates data.

    DESIGN VIEW

    It display the view that allows you to enter field name, data types and the description into your table. To switch between views, follow the steps given below

    🔲 click view in the Home tab of the Ribbon.

    🔲 A drop down list appears. From the list, choose the view you want.

5. DATASHEET VIEW

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    🔲 click view in the home tab of the Ribbon.

    🔲 A drop down list appears. From the list, choose the view you want.

6. Fields Data Type

    It determines which type of data the field can store. Following data types are available in MS Access 2010:

    🔲 Text: IT used to enter short text and alphanumeric values such as last name that are not used in mathematical calculaion. It can store up to 255 characters.

    🔲 Memo: It is used to enter long blocks of text . It can store up to 64000 characters.

    it is used for detailed product description.

    🔲 Date/Time: It is used to enter date and time values for the years 100 and 9999.

    🔲 Number : It is used to enter numeric values, such as

distances. Note that there is a seprate data type for currency.

- Currency: It is used to enter currency. It stores numbers representing monetary values.
- Auto Number: A unique value generated by Access for each new record. It is used to create a primary key.
- Yes/no: It is used when only one of two values is valid. Yes/no, True/False, etc.
- Hyperlink: It is used to store hyperlinks.
- Attachment: documents, charts, images, spreadsheet files, etc attached to the records in your database. it is similar to attaching files to e-mail messages.

E.
- click on the file menu.
- click on the save option.

Chapter-3 (Forms, Queries and Reports In Ms Access 2010)

Practice Time

A. 1. (b) design   2. (b) Two   3. (a) Show
    4. (c) sort   5. (b) Table

B. 1. form   2. Criteria   3. Layout
    4. Table   5. reports

C. 1. TRUE   2. TRUE   3. TRUE
    4. FALSE   5. FALSE

D. 1. A query displays specific records from a table to meet a certain criteria. You can use queries to view, change, summarize and analyze specific data in different ways. It becomes difficult for the user to pick out specific records from the table when the number of records in a table increases.

    2. To create a query, follow the steps given below:
- Click on the create tab in the Queries group.

- Click on the Query Design option. The show Table dialog box will appear.
- Select the table on which you want to generate your query.
- Click on the Add button. The selected table is added to the query window.
- Click on the close option to close show Table dialog box.

3. The design grid shows the following headings.

   Fields: This row displays the selected fields from the table.

   Table: This row displays the name of the existing table.

   Sort: This row is used to filter the data either in ascending or descending order.

   Show: This row displays a check mark which indicates that this field will be visible when the query is being run.

   Criteria: This row is used to specify the condition on the basis of which the records will be filtered in the query output.

   Or: This row is used to specify multiple criteria.

4. In general, a form resembles a fill in the blanks sheet that you would complete by hand. In MS Access 2010, forms works quite similar to it. It allows you to add an updated data in one records at a time in a table. MS Access links a form to a table and stores the information that you put in the form into the table.

   To create a form, follow the steps given below:
   - select the table in the navigation pane for which you want to create the form.
   - click on the create tab on the Ribbon.
   - click on the form option in the forms group.
   - A new form opens in layout view, in which you can change the appearance of a form.

- You can change the view to form view using the views group in the Design tab to feed the data into the data source. By using format tab, you can modify design.

5. Reports are methods of presenting and printing information in a formatted and organised manner, using the table or the query as it source. It is an effective way to present your data in a printed format.

   To create a report, follow the steps given below:
   - Select the table on which you want to create a report.
   - click on the create tab.
   - click on the report option in the reports group, the report is created.

F.
- Select the table on which you want to create a report.
- click on the create tab.
- click on the report option in the reports group, the report is created.

   PRINTING REPORTS

To print a report, follow the given steps.
- click on the file tab.
- click on the print option.
- Again, click on the print option. The Print dialog box will appear.
- click on the OK button.

Chapter-4 (Introduction To Photoshop CS3)

Practice Time

A. 1. (c) Thomas knoll   2. (b) status bar
   3. (a) image   4. (a) .psd
   5. (b) view

B. 1. Adobe photoshop   2. menu
   3. stage   4. select
   5. ruler

C.   1.   TRUE   2.   FALSE   3.   TRUE

     4.   TRUE   5.   TRUE

D.   1.   Adobe photoshop, is a popular graphics editing software developed by Adobe system that allows you to create animations, games, cartoons, text, graphics and other special effects. Adobe photoshop was developed by American brothers, Thomas and John Knoll in 1987.

Adobe photoshop CS3 has various features. some of them are as follows.

- It has user friendly interface.
- In photoshop, the photo can be easily edited in lesser time.
- In photoshop, pictures can be resize or crop without losing the quality of an image.
- It enhance the quality of the image by adjusting the brightness, contrast, colour balance, curves, etc.
- Files can be compressed by 10 to 50% of its original size. You can also make animated graphics (GIF).
- By using vanishing paint tool, unwanted area can be remove from the picture.

2.   To start Adobe Photoshop CS3, follow the steps given below:

- click on the start button.
- click on the All Programs options.
- click on the Adobe Master Collection CS3 option.
- click on the Adobe Photoshop CS3.

3.   TITLE BAR

Title bar is located at the top most of horizontal bar of the application window which displays the name of the program.

TEXT MENU

It is located below the title bar. It has the list of different

menus that contain the commands to work in the photoshop program.

MENU BAR

It gives access to all the commands available in photoshop. Menu bar contains the following options.

- File Menu: File menu helps in the basic opening, closing saving, import/export, printing of files, etc.
- Edit: Edit menu is used to spcify most of the standard global changes to open an image.

CONTEXT MENU

It is located below the text menu. This menu is also known is also known as option bar. The item in this menu change to reflect the options associated with the tool being selected.

PALETTES: On the right side of the photoshop window, there is a seprate area for palettes. Palattes contain functions that help you monitor and modify images.

STATUS BAR: staus bar is located at the bottom of window and displays information such as current magnification, file size, etc.

STAGE: stage is the area where your work is displayed. it is the white rectangular area.

WORK AREA: Work area is the light grey around the stage. The objects can be placed here until you want them to appear on the stage.

RULER: It gives the precise information on the width and height of the active document.

TOOL BOX: It lies to the left in window and contains various editing tools available in photoshop.

4. To save a file, follow the steps given below:
    - click on the file menu.
    - click on the save option. The save As dialog box appears.
    - type the file name.

       ◘   click on the save option.
5. To close a file, follow the steps given below.

    ◘   click on the file menu.

    ◘   choose the close option.

F. Selection tools

Chapter-5 (More on Photoshop CS3)

A. 1. (a) Lasso   3. (b) Magic wand

    4. (c) type   5. (b) Gradient

B. 1. Move

    2. Cropping

    3. Rectangular Marquee

    4. Single column marquee

    5. Pencil

C. 1. TRUE   2. FALSE   3. TRUE

    4. FALSE   5. TRUE

D. 1. LASSO   2. PENCIL   3. GRADIENT

    4. TYPE   5. MARQUEE

E. 1. Selection tools are used to select an image or any part of it to perform cut, copy, edit or retouching operations. The main selection tools are as follows:

    ◘   Marquee Tools

    ◘   Lasso Tools

    ◘   Magic Wand Tool

    ◘   Quick Selection Tool

    ◘   Crop Tool

    ◘   Move Tool

    2. This tool is used to automatically select the adjacent areas of the same color in an image. To use Magic Wand Tool, follow the steps given below:

    ◘   Click on the Magic Wand Tool.

    ◘   Click anywhere on the image and drag mouse to make a freehand selection border around the part

of the image to be selected.

3. This tool is used to type text on a page. When you click on the Type tool, each time new portion of the page with new layer will be created.

   Click on the Type Tool.

   Type the text on the canvas area. Once your text is entered, you can also change the font size, style, colour, etc.

4. (a) This tool is used to remove blemishes and other imperfection in the image.

   (b) This tool is caused by a reflection of the camera's flash in the retina of your photo's subject or subjects. This effect is more often when you are taking pictures in a dark room because the subject's eyes are wide open. With the help of this tool, red eye is extremely easy to fix in Photoshop.

   (c) This tool allows you to fill an area with a range of colours in a specified pattern. It creates a blend between two or more colours. Gradients of colour can be filled with linear, angle, reflected and diamond gradients.

5. To rotate or resize the selection, follow the given steps.
   - Select the area using the Selection Tool.
   - Click on the Edit menu.
   - Choose Free Transform option.
   - Now, click on the selection border to rotate or resize it.

F. color Replacement tool.

Chapter-6 (Formatting and Images in HTML)

Practice Time

A. 1. (a) font face   2. (b) B
   3. (a) IMG SRC   4. (b) ALT

B. 1. <font size=4>

2. <IMGSRC="imagename.jpg">
3. <IMGSRC="imagename'jpg"border=6>
4. <IMGSRC=<imagename.jpg"ALT=imagename">

C.

D. 1. HTML or hyper markup language is a widely used computer language used to create documents called web pages on the world wide web.

2. The code is as follows:

```
<HTML>
<HEAD>
computer
<TITLE>
world of computer
</TITLE>
</HEAD>
<BODY>
```

I am a learner. I am learning computer from class-1 I love to learn computer. Let us learn about computer devices.

```
<P>
<FONT SIZE=2> Input Devices are used to give input to
```
the user.
```
</FONT>
</P>
<P>
<FONT SIZE=4>output devices are used to display the
```
output to the user.
```
</FONT>
</P>
<P>
<FONTSIZE=6>storage Devices are used to store the
```
output for future reference.
```
</FONT>
```

```
</P>
</BODY>
</HTML>
```

3. The code is as follows:
```
<HTML>
<HEAD>
computer
<TITLE>
world of computer
</TITLE>
</HEAD>
<BODY>
I am a learner. I am learning computer from class-1 I love to learn computer. Let us learn about computer devices.
<P>
<B> Input Devices are used to give input to the user.
</B>
</P>
<P>
<I>output devices are used to display the output to the user.
</I>
</P>
<P>
<U>storage Devices are used to store the output for future reference.
<U>
</P>
</BODY>
</HTML>
```

4. Adding a border to the image highlighted on the web

page.

5. Alternative text is added to the web page to add a text in place of the image if the image does not load.

6. <HTML>

<HEAD>

computer

<TITLE>

world of computer

</TITLE>

<BODY>

I am a learner. I am learning computer from class-1 I love to learn computer. Let us learn about computer devices.

<P>

<FONT FACE="Comic Sans MS">

Input Devices are used to give input to the user.

</FONT>

<IMG SRC="Keyboard.jpg" ALT="Image of keyboard">

</P>

<P>

<FONT FACE="Arial">output Devices are used to display the output to the user.

</FONT>

<IMG SRC="monitor.jpg"

ALT="Image of monitor">

</P>

</BODY>

</HTML>

Chapter-7 (Visual Basic 2008)

Practice Time

A. 1. (b) 1991   2. (b) string
   3. (c) code editors   4. (b) relational

5. (a) picture box
B. 1. F5   2. Text box   3. command
    4. project   5. Black colour
C. 1. Label   (b)
    2. Check box   (e)
    3. List box   (d)
    4. option box   (c)
    5. Text box   (a)
D. 1. FALSE   2. FALSE   3. TRUE
    4. TRUE   5. FALSE
E. 1. Visual Basic (VB) is a popular and easy to learn programming language developed by Microsoft in 1991. It is event-driven programming language and used by software developers to built graphical application interfaces. It is a high level programming language.
    2. In computer programming, event-driven programming is a programming paradigm in which the flow of the program is determined by events such as user actions (mouse clicks, pressing keys, sensor ouptputs, or messages form other programs/threads.
    3. TITLE BAR
        TOOL BAR
        MENU BAR
        PROPERTIES WINDOW
        FORM WINDOW
        CODE EDITOR WINDOW
        SOLUTION EXPLORER
        VISUAL BASIC TOOL BOX
    4. ARITHMETIC OPERATORS
        Arithmetic operators are used when an arithmetic operations is equal to be performed in the program.
        RELATIONAL OPERATORS

These operators are used to compare two values and return True or False as a result.

LOGICAL OPERATORS

These operators are used to combine two or more conditions, while applying logic in a program.

5. In programming, instructions are generally executed on the basis of their sequence. But sometimes it is required to instruct the program to move its control from one part to another. At time, it is necessary to repeat a process without checking any condition. This can be done with an unconditional jump. But in certain cases, depending on the decision, we want to change the order of execution of statements. It means computer has to follow one set of instructions for False condition and the other set instructions for true condition.

F. Picture box and text box.

Chapter-8 (Internet and Cyber security)

Practice Time

A. 1. (b) B2B   2. (b) B2c
    3. (c) 1999   4. (b) weblog
    5. (b) cyber terrorism

B. 1. commerce   2. video conferencing
    3. web camera   4. cyber crime
    5. espionage

C. 1. TRUE   2. TRUE   3. TRUE
    4. FALSE   5. TRUE

D. 1. E-commerce refers to buying and selling goods and services online using the Internet. Electronic commerce drawson technologies such as mobile commerce, electronic funds transfer, online transaction processing, electronic data interchange (EDI), automated data collection system etc.

TYPES OF E-COMMERECE

E-commerece can be classified on the type of transaction.

- Business to Business (B2B)
- Business to consumer (B2C)
- Consumer to Consumer (C2C)
- Digital Middlepersons

Business to Business (B2B)

B2B e-commerce transaction refers to a company selling or services to/from other companies. They include manufacturers, traders and retailers.

Business to Consumer (B2C)

This refers to the transaction that takes place between a company and a consumer.

When businesses sell electronically to end-consumers, it is called B2C e-commerce. The company establishes its website so that consumer may order any product and get information about them.

Consumer-to-consumer (C2C)

There are many sites offering free classified and auctions where you can buy and sell products. For example: Quickr, oly, etc.

Digital Middlepersons

This refers to a company that provides information about several companies on a single website. This company gathers information from other companies about the same type of products and services. A commission is charged for every sale or purchase by the company hosting the website.

2.

3. Real-time communication (RTC) is a term used to refer to any live telecommunications that occurs without transmission delays. RTC is nearly instant with minimal latency.

RTC data and messages are not stored between transmission and reception. RTC is generally a peer-to-peer, rather can than broadcasting or multicasting, transmission.

4. It is alternatively referred to as cyber crime, e-crime, electronic crime, or hi-tech crime. Computer crime is an act performed by a knowledgeable computer user, sometimes referred to as a hacker that illegally browses or steals a company or individual's private information. In some cases, this person or group of individuals may be malicious and destroy or otherwise corrupt the computer or data files.

5. Computer security includes procedures and techniques that are designed to protect a computer from accidental or intentional theft, unauthorised access or manipulation.

   Computer security breaches are often viewed as a disaster for the user because they can cause serious damages to both the individual user and the organization in terms of loss of revenue, loss of revenue, looks of productivity, data loss etc.