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# COMPUTER

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**SOLUTION**

**CLASS : VI TO VIII**



Compatible with

- Windows-10
- Photoshop-2016
- MS Office-2013
- QB64



**Puzzles** to try  
**Useful Words**  
**Quirky Facts**



### Exercise

#### A. Tick (3) the correct option.

1. (c), 2. (a), 3. (b), 4. (c), 5. (b), 6. (c)

#### B. Fill in the blanks.

1. A **barcode** is a set of lines of different thicknesses that represent a number
2. A **touch pad** works by sensing a user's finger movement..
3. A **web camera** is used for capturing still images and live videos.
4. **Laser printer** and **Inkjet printer** are non-impact printers.
5. **Primary** memory is also known as main memory.
6. Mnemonic codes are used in **Assembly language**.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (3), 3. (3), 4. (3), 5. (3), 6. (3)

#### D. Answer the following questions.

1. A barcode reader is a device used to read barcodes. A barcode is a set of lines of different thicknesses that represent a number. Nowadays, we find barcodes on many produces.

A barcode reader reads these lines and sends the information to a computer system. Barcodes are widely used in supermarkets for quickly recording the sale of items.

2. **Impact printers** : An impact printer is a printing device in which the printing surface strikes the paper. These printers are slow, noisy and not used for high-quality printing. Dot-matrix printers are example of impact printers.

**Non-impact Printers** : A non impact printer is a printing device in which the images are created without being struck onto the paper and hence generate less noise. These printers are faster than impact printers. Laser printers and inkjet

printers are example of non-impact printers.

3. **Monitor** : A monitor is one of the most familiar output device. It is also called Visual Display Unit (VDU). The images that we see on a monitor are made up of tiny dots called pixels. The clarity of the images depends on the number of dots on the screen.

**Plotter** : A plotter is a printing device that is used for creating high-quality graphics, charts, graphs, tables and diagrams. Plotters use ink pens or inkjets to create graphics on paper or polyester film.

#### 4. **Primary Memory**

- a. It is also known as the main memory or the internal memory.
- b. It is the in-built memory that is inside the CPU box. It stores data or instructions currently used by a computer.
- c. The primary memory can be divided into two parts – RAM (Random Access Memory) and ROM (Read Only Memory).

#### **Secondary Memory**

- a. It is also known as auxiliary memory or external memory.
  - b. It is needed because internal storage of a computer is insufficient to store and save large amounts of data for future reference and retrieval.
  - c. The hard disk, CD-ROM, DVD, blue-ray disc and pen drives are examples of secondary memory devices.
5. Machine language is a language that the computer understands, and can execute directly without translation. In machine language each instruction is written in binary form, i.e., '0' and '1', where 0 means 'off' state and 1 means 'on' state. It has the advantages of very high speed and very low memory utilisation.
  6. **Interpreter**
    - a. It translates line by line.
    - b. The object code produced by the interpreter is not saved.

## Compiler

- a. It translates the whole program at once.
- b. The object program is saved permanently for future use.

## Ch. 2

## More on Windows 10

### Exercise

#### A. Tick (3) the correct option.

1. (b), 2. (a), 3. (c), 4. (c), 5. (a), 6. (a)

#### B. Fill in the blanks.

1. If you don't like the way your tiles are arranged on the Start menu, you can **rearrange** them.
2. To make a tile bigger or smaller, right-click the tile, select **resize**, then choose the desired size.
3. **Microsoft edge** enables you to conduct a safe and quick search on the Internet.
4. If your computer also has a touchscreen, you can go into **tablet mode** at any time.
5. **Windows hello** requires appropriate hardware devices to be connected to the system for its proper working.
6. The **action center** is a place where we see important notifications.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (3), 2. (3), 3. (7), 4. (7), 5. (7), 6. (3)

#### D. Answer the following questions.

1. (i) **Tiles** : It displays information that are useful at a glance without opening an app. For example, the Weather tile displays the forecast while the News tile displays headlines. You can rearrange, resize, and move these tiles to make them work better for you.

(ii) **Microsoft Edge** : This new browser is designed to give Windows users a better experience on the Web. It's faster, more secure, and includes a lot of new features. It enables you to conduct a safe and quick search on the Internet. It also provides a reading mode that opens a web page,

- displaying only the text and hiding all other distractions, such as graphics, images, etc.
2. To create a new desktop, follow these steps :
    - (i) Click on the task view button located on the taskbar. The task view pane opens and displays the preview of all the open windows.
    - (ii) Click on the new desktop button placed at the bottom-right corner of the task view pane. A new desktop thumbnail named 'desktop 2' appears.
    - (iii) Click on the thumbnail to view the newly created desktop. It is a replica of Desktop 1 but doesn't display the applications opens in Desktop 2. You can group the desktop windows by opening similar kind of apps in one desktop.
    - (iv) Click on the task view button again to switch between desktops.
  3. You can move an app from one desktop to another by following these steps :
    - (i) Open the task view pane by clicking on the task view button.
    - (ii) Place the mouse pointer over the desktop thumbnail.
    - (iii) It will display the thumbnails of all the opened apps. Right-click on the app that is to be moved and select move to option.
    - (iv) This will display the desktop list that you have created.  
Choose the desktop to which you want to move the app.
  4. Task view allows aq user to quickly locate an open window, quickly hide all windows and show the desktop and to manage windows across multiple monitors or virtual desktops.
  5. The control panel is a system folder, using which we can make changes in the appearance and current setting of windows.
  6. To set one desktop background image, follow these steps :
    - (i) After opening the control panel, click on the appearance and personalization link in the control

- panel window.
- (ii) Click on the appearance and personalization link.
  - (iii) Click on the desktop background link.
  - (iv) Select the background option.
  - (v) Select the picture option from background drop-down menu.
  - (vi) Select the desired picture or click on the browse button.
  - (vii) Select the desired picture.
  - (viii) Click on the choose picture button.
  - (ix) Select the suitable option from the choose a fit drop-down menu.

## Ch. 3 More Formatting Features and Inserting Objects in Word 2013

### Exercise

#### A. Tick (3) the correct option.

1. (c), 2. (a), 3. (d), 4. (b), 5. (c)

#### B. Fill in the blanks.

1. Making changes to the settings of a page is called **page formatting**.
2. The default page orientation in Word 2013 is **portrait**.
3. A **page break** indicates the end of a page.
4. Print option is present in **file** tab.
5. Shapes in Word is divided into **eight main** categories.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (7), 3. (7), 4. (3), 5. (7)

#### D. Answer the following questions.

1. Making changes to the setting of a page is called page formatting. The page layout tab of word 2013 is used for page formatting.
2. The page margin is the amount of white space between the text and the edge of the page on all four sides.

The default setting for the top, bottom, left and right margins in word 2013 is 1 inch.

3. The page orientation is the property that determines the printing direction of the text. The page orientation can be either portrait (document printed along the width of the paper) or landscape (document printed along the length of the paper.)
4. WordArt is a text-styling feature in Word 2013. The WordArt gallery includes different styles that can be applied to any text.
5. To insert any shape in word, follow these steps :
  - (i) Click on the insert tab.
  - (ii) Click on the down arrow under shapes option in the illustrations group.
  - (iii) Select the desired shape in the gallery that opens.
  - (iv) The cursor changes to a + sing. Click, hold and drag the mouse to draw the shape.

## Ch. 4                      Editing Worksheets in MS Excel 2013

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (b), 3. (a), 4. (d), 5. (c), 6. (c)

#### B. Fill in the blanks.

1. To select an entire worksheet, click on the **select** button.
2. To delete the cell contents, select the cell and press the **delete** key.
3. You can move cell contents from one location to another by using **cut** and **paste** .
4. To insert a new column, click on the Insert **sheet column** option.
5. You can change the row height/column width either by dragging the border or by using the **format** option.
6. You can click on the **F2** key to edit the contents of a cell.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (3), 3. (3), 4. (7), 5. (3), 6. (7)

**D. Write the shortcut keys for the following.**

- |                                     |                         |
|-------------------------------------|-------------------------|
| 1. To select an entire row          | <b>Shift + Spacebar</b> |
| 2. To select an entire column       | <b>Ctrl + Spacebar</b>  |
| 3. To select an entire worksheet    | <b>Ctrl + A</b>         |
| 4. To copy the cell contents        | <b>Ctrl + C</b>         |
| 5. To cut the cell contents         | <b>Ctrl + X</b>         |
| 6. To paste the cut/copied contents | <b>Ctrl + V</b>         |

**E. Answer the following questions.**

- There are two ways in which you can edit the cell's contents.
  - ◆ By overwriting, thus changing the content completely
  - ◆ By modifying them partially
- We can copy data from one location to another using Copy and Paste. To copy cell contents, follow these steps :
  - Select the range of cells to be copied.
  - Click on the Copy option in the clipboard group on the Home tab. You will see a dotted line around the selected cells.
  - Select the destination cell where you want to paste the data.
  - Click on the paste option in the clipboard group on the home tab.

The selected cells are copied to the new location.
- To insert a new row, follow these steps :

To insert multiple rows at the same time, select more than one row and then choose Insert Sheet Rows. The number of rows inserted will be the same as selected by you.

  - Click on the row heading to select the row above which you want to insert the new row.
  - Click on the arrow next to the insert option in the cells group on the home tab. A drop-down list is displayed.
  - Click on the insert sheet rows option.

The selected row is shifted down and a new row is inserted at its place.
- The inset dialog box has four options :
  - Shift Cells Right** : Black cells are filled in the selected range. Existing cells are shifted right.



- (ii) **Shift Cells Down** : Blank cells are filled in the selected range. Existing cells are shifted down.
  - (iii) **Entire Row** : Rows that pass through the selected range move down and new rows are inserted.
  - (iv) **Entire Column** : Columns that pass through the selected range move right and new columns are inserted.
5. To change the column width, follow these steps :
- (i) Select the column (s).
  - (ii) Click on the down arrow next to the Format option in the cells group on the home tab. A drop-down list is displayed.
  - (iii) Click on the column width option for specifying the column width. The column width dialog box appears.
  - (iv) Enter a value in the column width text box.  
The column width is adjusted according to the value specified.
6. **To delete rows, follow these steps :**
- (i) Select the rows to be deleted.
  - (ii) Click the arrow next to the delete option in the cells group on the home tab. A menu appears.
  - (iii) Select delete sheet rows option to delete rows.  
The selected row is deleted.
- To delete columns, follow these steps :**
- (i) Select the column (s) to be deleted.
  - (ii) Click the arrow next to the delete option in the cells group on the home tab. A menu appears.
  - (iii) Select delete sheet columns option to delete rows.  
The selected column is deleted.

## Ch. 5

## Animation in PowerPoint 2013

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (c), 3. (b), 4. (c), 5. (c), 6. (a)

#### B. Fill in the blanks.

1. **Entrance** effects control the manner in which the object is

introduced during the slide show.

2. **Animations** are special effects that you can add to text and objects on a slide.
3. **Animation on Pane** shows all the animation effects for different objects on the current slide in the order they will appear during the slide show.
4. The **audio** option on the Playback tab is used to change the volume of the audio.
5. The **format** and **playback** tab appear when you insert an audio or a video file on a slide.
6. A **self-running** presentation is one in which you don't have to use the mouse or the keyboard to advance the slides.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (7), 2. (3), 3. (7), 4. (3), 5. (7), 6. (3)

**D. Answer the following questions.**

1. Slide transitions are the animation effects that are applied to whole slide whereas animation effects are applied to objects (text, shape, picture etc.) on a slide.
2. MS PowerPoint offers many animation effects. These have been organised under four categories :

**Entrance Effect**

Entrance effects control the manner in which an objects is introduced into the slide during the slide show.

**Emphasis Effects**

Emphasis effects occur when the object is on the slide during the slide show. They are used to emphasise the object.

**Exit Effects**

Exit effects control the manner in which the object exits during the slide show.

**Motion Paths**

Motion paths effects enable objects to move from one position to another on the specified path during the slide show.

3. To insert a sound file from a audio file in a slide, follow

these steps :

- (i) Click on the slide on which you want to add an audio file.
  - (ii) Click on the insert tab.
  - (iii) Click on the down arrow under audio option in the media group. A menu opens.
  - (iv) Click on the audio from file ... option. The insert audio dialog box appears.
  - (v) Select the desired audio file.
  - (vi) Click on the insert button.
4. To add multiple animation effects to an object, follow these steps :
- (i) Select the same object or text on which you want to apply multiple animations.
  - (ii) Click on the animations tab.
  - (iii) Click on the add animation option in the advanced animation group. A list of animation effects appear.
  - (iv) Select the desired animation effect.
5. The animation pane lets you view, modify and reorder the animation effects applied on objects on a slide. It shows all the animation effects for different objects on the current slide in the order they will appear during the slide show.
6. The Rehearse Timings feature helps you find out how much time you would need to present a slide and what would be the total time required for the presentation.

## Ch. 6 QBASIC : Programming with QB64

### Exercise

#### A. Tick (3) the correct option.

1. (b), 2. (b), 3. (d), 4. (d), 5. (c), 6. (b)

#### B. Fill in the blanks.

1. A **contents** is a value that con not be changed during the program execution.
2. The set of instructions given to a computer is known as **program**.
3. IF... THEN... ELSE is a **condition decision making** statement.

4. The **REM** statement is used to give remarks or comments in a program.
5. The **PRINT** statement is used to clear the output screen.
6. **QBS4** is an updated version of QBASIC.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (7), 2. (7), 3. (3), 4. (3), 5. (3), 6. (3)

**D. Identify the errors and rewrite the statements.**

**Do yourself.**

**E. Answer the following questions.**

1. **Constants** : Constants are values in a program that cannot be changed during the program execution.

**Variable** : A variable is a location in computer memory that has a name and is used to store data temporarily. You can change the values in variable while the program is executing.

2. See book pg. no 71 table.
3. The PRINT statement is used to display output on the screen.
4. The INPUT statement is used to take a value from the user while program execution and store it in a variable. The computer asks for a value by displaying a question mark (?) and puts a cursor on the screen where the user should type the data and press Enter key.

**Syntax** : INPUT "MESSAGE"; <VARIABLE>

**Example**

```
PRINT "Enter Marks"
INPUT "hindi: "; H
INPUT "English: "; E
INPUT "Maths: "; M
Total = H + E + M
PRINT "Total = "; Total
```

5. Conditional statements are used to execute a block of statements depending upon a condition. They help to control the flow of the program and hence are also known as control statements.
6. The following rules should be kept in mind while naming a

variable.

- (i) The first character of the variable name should be an alphabet.
- (ii) Variable names can consist of only letters of the English alphabet, digits and the underscore ( \_ ) character.
- (iii) String variable names should have '\$' as the last character.

## Ch. 7

## More About Internet

### Exercise

#### A. Tick (3) the correct option.

1. (a), 2. (b), 3. (c), 4. (d), 5. (b)

#### B. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (3), 3. (3), 4. (3), e. (3)

#### C. Fill in the blanks.

1. A **gateway** is a device that connects two dissimilar networks.
2. Web pages usually contain **hyper links** to other web pages.
3. **WWW** makes the Internet so user-friendly and multi-functional.
4. The search tool provides us with **urls** to other pages.
5. Searching the web means finding information from the **web**.

#### D. Expand the following terms.

**Do yourself**

#### D. Answer the following questions.

1. A Backbone is the central interconnecting structure that connects one or more networks.

Internet is not governed by any particular body. It is managed by many volunteer organization like :

- (i) Internet Architecture Board (IAB)
- (ii) Internet Engineering Task Force (IETF)

(iii) Inter Nic, etc.

2. The main functions of the internet are :

- ◆ Internet allows people on one computer to send messages to people on another computer.
- ◆ It helps in transferring files from one computer to the another.
- ◆ It is the easiest and the most economical way of communicating with the people sitting at the different corners of the world in real time. It is known as chatting.
- ◆ It helps in doing shopping while sitting at our home.

3. Hyperlinks are usually highlighted words. They are usually underlined or highlighted in a different colour to indicate that they are special words.

When we click on a hyperlink, it magically transport us to another web page which may belong to a different site altogether. Usually this web page gives more detailed information on the word that was clicked.

4. In 1969, the Us department of Defence started with a project to allow researchers and military personnel to communicate with each other in an emergency and named the project as ARPANET. Later in 1980s another federal agency, National Science Foundation, created a new network called NSF NET for academic and engineering research. This network was more capable than ARPANET.

5. The common top-level domains are :

- .com – Commercial entity
- .edu – Educational site
- .mil – Military site
- .org – Organization site
- .info – Commercial and personal
- .int – Organizations established by international treaty
- .gov – Government organizations

## Ch. 1

## Classification of Computers

### Exercise

#### A. Tick (3) the correct option.

1. (a), 2. (b), 3. (b), 4. (d), 5. (c)

#### B. Fill in the blanks.

1. A **digital** computer is a computer which works on digits.
2. **Portable** computers contain a rechargeable battery.
3. **Tablet PCs** are good for taking notes in locations where standard notebook computers cannot be used.
4. A **mainframe** can accommodate many users at a time.
5. **Param** and **Anurag** are two super computers developed in India.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (3), 2. (3), 3. (7), 4. (3), 5. (3)

#### 4. Name the places where :

##### Do yourself

#### 5. Answer the following questions.

1. Computers may be classified into the following three categories on the basis of principles of operation "
  - i. Analog Computer
  - ii. Digital Computers
  - iii. Hybrid Computers
2. Special Purpose Computers are those which are designed for a specific application.
3. Desktop computer is a micro computer designed to fit comfortably on the top of a desk, typically with the monitor in front and the system unit on the side.
4. PDA (Personal Digital Assistant) is a term for any small mobile hand-held device that provides computing and information storage and retrieval capabilities for personal or business use, often or keeping schedule calendar and

address book information handy.

5. An embedded system is a computer system with a dedicated function within a larger mechanical or electrical system, often with real-time computer constraints. Embedded computers perform a variety of tasks depending on the requirement of the product within which they reside.
6. In Analog computers everything is measured by some analogous things. A digit computer can process both non-numerical and numerical data and a hybrid computer is a combination of both analog and digital.
7. **(a) Notebook Computers :** Notebook computers typically weigh less than 6 pounds and are small enough to fit easily in briefcase.

**(b) Palmtop Computer :** A small computer that literally fits in our palm is known as palmtop. Compared to full size computers, palmtops are severely limited, but they are practical for certain functions such as, phone books and calendars.

**(c) Tablet PCs :** A tablet computer is a mobile computer with touchscreen display, circuitry and battery in a single unit. Tablet PCs are good for taking notes in locations where standard notebook computers cannot be used.

**(d) Portable Computers :** Portable computers or mobile computers are those computers which can be carried from one place to another. They are lightweight computers. They contain a rechargeable battery.

8. Micro computer was earlier a commonly used term for personal computer. A 'personal computer' assemblage consists of CPU, computer memory and various input and output devices. Only one person can use it at a time. It is slow and has relatively less storage capacity as compared to a mini computer or a mainframe computer. It is commonly used in classrooms, homes, banks, universities, etc.
9. Mainframes are huge computers that can occupy an entire room or even a whole floor. A mainframe can accommodate many users at a time. Terminals are used to connect a user to this computer. A terminal is a device that has a keyboard and



a screen integrated together.

10. A super computer is a computer with a very high-level computational capacity. This kind of computer can do jobs faster than any other computer of its generation. They are usually thousands of times faster than ordinary personal computers made at that time.

## Ch. 2

## Formulas and Functions in Excel

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (a), 3. (b), 4. (d), 5. (c), 6. (d)

#### B. Fill in the blanks.

1. The cell references passed to a function are called **arguments**.
2. A **function** is a predefined formula that performs calculations using specific values in a particular order.
3. **The sum** function is used to add all the numbers in a range of cells.
4. The **auto sum** feature is particularly useful when you want to add all numbers in a row or a column.
5. The cell address in a formula that does not change on copying is considered as **absolute reference**.
6. A function must be followed by opening and closing **parenthesis**.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (7), 3. (3), 4. (3), 5. (7), 6. (7)

#### D. Answer the following questions.

1. An Excel formula always starts with an equal to (=) sign and it can contain values, cell references, functions and operators = (B4 + B5 + B6 + B7) \* (10)
2. While you can create simple formulas in Excel manually (for example, =2+2 or =5\*5), most of the time you will use cell addresses to create a formula. This is known as making

a cell reference.

There are three types of cell reference :

- ◆ Relative Reference
- ◆ Absolute Reference
- ◆ Mixed Reference

3. Relative cell references move when you copy them but absolute references do not mixed reference is a combination of relative and absolute reference in this type of reference either a row or a column has to remain fixed.
4. Commonly used functions are : sum, product, average, max, min, count etc.
5. The AutoSum feature is used to add numbers in the selected range of cells quickly. This feature is particularly useful when you want to add all numbers in a row or a column.
6. Do yourself

## Ch. 3                      **Advanced Features of MS Excel 2013**

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (c), 3. (b), 4. (a), 5. (c), 6. (a)

#### B. Fill in the blanks.

1. **Data series** are the bars, slices or other elements that represent the data values.
2. A **chart** is a pictorial representation of data.
3. **Sorting** means arranging data either in ascending or descending order.
4. **Pivot table** is a powerful tool for consolidating, summarising and presenting data.
5. **Validation** is used to restrict the cell entries within a specified range.
6. **Subtotal** help us to manage and analyse data.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (3), 2. (3), 3. (7), 4. (3), 5. (7), 6. (7)

## D. Answer the following questions.

1. A chart is a pictorial representation of data. Charts make it easier to draw comparison and analyse the growth, relationship and trends among the values in a range.

Column Chart

Line Chart

Pie Chart

Bar Chart

Doughnut Chart

2. A column chart is a commonly used chart type to display data in the form of vertical bars whereas. A Bar chart display the comparisons among individual items as a set of horizontal bars.
3. Sorting means arranging data either in an ascending or in a descending order in a worksheet. Data can be sorted in rows on the basis of text, numbers, combination of text and numbers or dates. Once the data is organised, it becomes easy to work with.
4. PivotTable is a powerful tool for consolidating, summarising and presenting data.

You can re-arrange the data in any way you like. You can also change the place of buttons here. If you do not like their placement, click the Undo button.

5. Sorting arranges data alphabetically or numerically in ascending or descending order. The filter feature allows you to see only those records that you want to display.
6. Conditional formatting is a feature in Excel that lets you apply formatting such as cell shading or font colour to a cell only when the cell contents satisfy a given condition. When the value of the cell meets the format condition, the selected formatting is applied to the cell. If the value of the cell does not meet the format condition, the default formatting is used.

**Exercise****A. Tick (3) the correct option.**

1. (b), 2. (d), 3. (c), 4. (a), 5. (b)

**B. Fill in the blanks.**

1. The use of **electronic mail** over the Internet has greatly speeded communication between companies and individuals.
2. E-commerce refers to the buying and selling of things over the **internet**.
3. Chatting is done into a **chat room**.
4. Online retail is sometimes known as **e-tail**.
5. Today's web presents a diversified **multimedia** experience.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (3), 2. (3), 3. (7), 4. (3), 5. (3)

**D. Answer the following questions.**

1. The name 'Internet' itself suggests its meaning. It stands for International Network of computers.

A network is an interconnection between two or more computers. The internet is a "network to networks" that consists of millions of computers across the world. Internet allows us to share the information worldwide, with just a mouse click.

2. Today the Internet is being used in many ways as listed below:
  - (i) Primarily Internet is used to get access to all types of information and to send and receive e-mails.
  - (ii) Internet is used to get access to complex databases such as, financial databases.
  - (iii) The use of electronic mail over the Internet has greatly speeded communication between companies and individuals.

- (iv) Use of Internet for E-commerce is increasing day-by-day. This includes advertising, selling, buying and distributing products and services. It is also used in providing after sales services through call centers.
  - (v) Business houses and institutions use the Internet for voice and video conferencing and other forms of communication that enable people to telecommunicate or work together from a distance.
  - (vi) Media and entertainment companies use the Internet to broadcast audio and video, including live radio and television programs. They also offer online chat groups, in which people make discussions via written text.
3. E-commerce or Electronic Commerce refers to the buying and selling of things over the Internet. These days, a large number of companies and business organizations (both big and small) have set up their own websites providing details of their products and services and how to buy them. We can visit these sites and buy virtually anything on the Internet including books, toys, clothes, tickets and more. We usually buy goods and services online using a personal credit card or debit card. In case of e-tickets and other such services there is no physical component involved.
  4. We can ‘talk’ to people over the internet by writing text and reading it. This is called Chatting. To participate in a chat, we enter a Chat room. Once the chat is initiated, the user types text and it appears on the monitor of the person who is typing and also on the monitor of the person with whom the chat is going on.
  5. The term “blog” is the shorthand for “Web log”. A blog is just a website where the entries are made in a diary/journal style. People write blogs to put their thoughts on the web to let people know what they think. Most people write blogs to share their experiences, to speak up about an issue for which they really care. Blogs usually include text, images and links to other blogs and web pages.

6. Here's what happens to a piece of data (e.g., a web page) when it is transferred over the Internet :
  - (i) It is broken up into a whole lot of same-sized pieces (called packets).
  - (ii) A header is added to each packet that explains where it came from, where it should end up and how it fits in with the rest of the packets.
  - (iii) Each packet is sent from computer to computer until it finds its way to its destination. Each computer along the way decides where next to send the packet. This could depend on things like how busy the other computers are when the packet was received. All packets may not take the same route.
  - (iv) At the destination, the packets are examined. If there are any packets missing or damaged, a message is sent asking for those packets to be resent. This continues until all the packets have been received intact.
  - (v) The packets are reassembled into their original form.
7. Video conferencing is a live conference between two or more people. Here, people do not meet physically but electronically by using their computers, video cameras, and the Internet. Video conferencing is an extremely useful method of communication because it saves people, the time and expense of travel and can often accomplish many of the things that a physical meeting can.
8. We have learnt that we can retrieve, upload and share text files on the internet. Today's web presents a diversified multimedia experience. In fact, the web has become a broadcast medium, offering live TV and Radio, pre-recorded video, photos, images and animations. We will encounter multimedia just about anywhere on the web.

## Exercise

**A. Tick (3) the correct option.**

1. (a), 2. (d), 3. (b), 4. (a), 5. (b), 6. (c), 7. (b)

**B. Fill in the blanks.**

1. A **data base** is an organised way of storing information.
2. A database helps us to manage and access large amount of information **quickly** and **efficiently**.
3. Data redundancy means **duplication** of data.
4. Access comes with several **pre-installed** templates.
5. Databases in MS Access 2013 are composed of **four** main objects.
6. **Tables** are the building blocks of a database.
7. If forms are the input, then **reports** are for output.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (7), 2. (3), 3. (7), 4. (3), 5. (3), 6. (3), 7. (3)

**D. Answer the following questions.**

1. A database is a collection of data that is organized for easy access, retrieval and management of its contents. A database has one or more related tables of data. The data can be any format like text, numeric, images, audio and video. It helps us to manage and access large amount of information quickly and efficiently.
2. RDBMS is stands for 'Relational Database Management System.' A RDBMS is a DBMS designed specifically for relational databases. Therefore, RDBMS are a subset of DBMSes. It is used to organise and manipulate data. It organises data in the form of tables.
3. The two main advantages of a databases are :  
**(i) Reduces Data Redundancy** : Data redundancy means duplication of data. The redundancy or duplication of data is reduced in a database as you can arrange the data in a particular order.

**(ii) Ensures Data Security :** In a DBMS, the database administrator has complete control over the database and ensures that the data is accessible only to authorised people. Different categories of users can be given different permissions. Some may have the authority to only view the data while others may have the authority to modify the data too.

4. Tables are the building blocks of a database. They store the complete data in a structured manner, i.e., in the form of rows and columns. Every table has a finite number of columns and rows.
5. A 'query' is a special view of a table corresponding to some desired information to be extracted. A query can display chosen records or chosen fields within records. A query can apply to one table or to multiple tables, if they are linked by common data fields.

Form	Form
i. Form is primarily used for entering data.	i. Reports is used for presenting the data.
ii. Form is also used for displaying records but one record at a times.	ii. Report is used for displaying whole records.
iii. Data can be modified through the form.	iii. Data can not be modified through report.
iv. Form is designed to be used on screen.	iv. Report are designed to be printed.

## Ch. 6

## Computer Virus

### Exercise

#### A. Tick (3) the correct option.

1. (c), 2. (d), 3. (a), 4. (b)

#### B. Fill in the blanks.

1. The word 'virus' is used in the same sense as the **biological** equivalent.



2. Viruses cause a lot of damage to the system as well as **to files**.
3. **Stealth** virus attempts to hide its presence.
4. Worms often use **network** such as the Internet to spread from one computer to another.
5. **Craker** break the security on application software and create destructive programs like viruses.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (3), 2. (3), 3. (3), 4. (7), 5. (3)

**D. Answer the following questions.**

1. VIRUS stands for Vital Information Resources Under Siege. A computer virus is a self-replicating computer program written to alter the way a computer operates without the permission or knowledge of the user. A true virus must replicate itself and must execute itself. While viruses can be intentionally destructive; *for example*, destroying data, some viruses are merely annoying.
2. Given below are some common symptoms of computer virus :
  - ◆ Unusual messages appear on the screen.
  - ◆ Disk space is reduced.
  - ◆ Files start vanishing.
  - ◆ Computers unexpectedly start rebooting.
  - ◆ Keyboard keys lock up.
3. 'Hacker' refers to the people who use their skills to enter into computer systems without permission. Hackers are computer enthusiasts, who break into secure systems to gain knowledge about them and possibly use this knowledge to play pranks.
4. 'Cracker' is a malicious programmer who gains unauthorized access to computer systems for the purpose of stealing, altering or corrupting information. They often destroy the confidential or crucial data of the systems they invade. They break the security on application software and create destructive programs like viruses.

5. Some harmful effects of viruses are given below :
  - ◆ Viruses increase the size of the files which occupy the space of disk unnecessarily.
  - ◆ Viruses can infect the parts of the system that are used to run programs and perform functions such as, start up and shut down.
  - ◆ Viruses can destroy the address book of the e-mail account.
  - ◆ Different types of viruses attack and infect files leading to the total loss of data. Sometimes all the data stored in the hard disk is lost.
6. A computer gets viruses from a number of sources. Some common ones are given below :
  - ◆ An e-mail attachment that we may have opened while reading an e-mail.
  - ◆ While downloading a software from the Internet, we may also download viruses.
  - ◆ An already infected pen drive or other removable data transfer media (such as CD, DVD or Floppy disk), that we have used in our computer for transferring some information.
  - ◆ A person may even gain unauthorized access to our computer and infect it with a virus.
7. Antivirus software is a utility program which safeguards our computer system from virus attacks. However, certain kinds of viruses are difficult to remove even by antivirus software. Antivirus program starts with the booting of the computer system. It examines all the files of the computer system for checking viruses. If any virus is detected, it will try to remove the same.
8. A worm is a program very similar to a virus; it has the ability to self-replicate, and can lead to negative effects on your system and most importantly they are detected and eliminated by antiviruses. *Examples* : PSW Bugbear.B, Lovgate.F, Trile.C, Sobig.D, Mapson.

9. There are several things we can do to protect our computer against viruses :

Remove all data transfer media (Pen drive, Floppy, CD, etc.) from the computer before switching it ON.

Install antivirus software from a well-known, reputable company. Update it regularly and use it regularly.

Pay attention to news about virus alerts. We might want to subscribe to a virus alert e-mail notice from one of the antivirus software makers.

Scan all floppy disks with an antivirus software before copying data from them.

Scan the floppies also if they have been used somewhere else.

## Ch. 7

## Looping Statements

### Exercise

#### A. Tick (3) the correct option.

1. (a), 2. (c), 3. (b), 4. (c), 5. (b), 6. (d)

#### B. Fill in the blanks.

1. A **loop** is used to repeat a block (group) of statements multiple times.
2. The **for.... next** statement is used when you want a group of statements to be executed a specific number of times.
3. A **counter** is a variable that controls and counts the iteration of a loop in a program.
4. The **FOR...NEXT**, which lies outside or encloses the second **FOR...NEXT** statement is called an **outer** loop.
5. The **loop** is executed as long as the specified condition is true.
6. Exit command followed by either **FOR** or **DO** is used to exit from a loop before the loop comes to an end on its own.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (7), 2. (7), 3. (7), 4. (7), 5. (3), 6. (7)

**D. Answer the following questions.**

1. A loop is used to repeat a block (group) of statements multiple times. Statements that enable you to create loops are known as looping statement.

Given below are the name of looping statements in QB64 :

FOR ..... NEXT

WHILE.....WEND

DO.....LOOP

2. We can increase or decrease the value as per our choice using STEP statement. It is optional and can be either positive or negative.
3. The DO WHILE LOOP is executed as long as the specified condition is TRUE whereas in the DOUNTIL..... LOOP, the execution of the loop continues as long as the condition is FALSE.
4. When FOR...NEXT statement is used within another FOR...NEXT statement, it is known as nested FOR...NEXT statement.

The FOR...NEXT, which lies outside or encloses the second FOR...NEXT statement is called an Outer Loop. The one which lies inside is called an Inner Loop.

The same control variable cannot be used in different loops. The innermost loop will be executed first, then the outer loop.

Syntax : FOR < Control Variable-1 > = < Initial Value > To < Final Value >

FOR < Control Variable-2 > = < Initial Value > To < Final Value > Statement(s)

NEXT <Control Variable-2>

NEXT <Control Variable-1>

5. The GOSUB enables you to jump to a certain position in a program. Labels are used to specify at what point in the program to continue execution.

The GOSUB-RETURN command is the same as GOTO, except that when it encounters a RETURN statement, the program returns to the GOSUB command.

In other words, RETURN continues program execution after the previous GOSUB statement.

6. EXIT FOR statement is used in the FOR... LOOP whereas the EXIT DO statement is used in the Do WHILE... LOOP or DO UNTIL... LOOP.

## Ch. 8

## Graphics and Sound in QB64

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (b), 3. (d), 4. (a), 5. (c), 6. (c)

#### B. Fill in the blanks.

1. The **CIRCLE** statement is used to draw a circle, ellipse or an arc of a circle.
2. The **PAINT** statement is used to fill a closed area with colour.
3. The **PLAY** statement is used for playing music.
4. **GRAPHICS** mode is used to draw figures on the screen.
5. The display on a computer screen is made up of a thousand dots called **pixels**.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (3), 2. (7), 3. (7), 4. (3), 5. (3), 6. (3)

#### D. Answer the following questions.

1. The **SCREEN** statement is used to set the screen mode for displaying graphics.
2. The display on a computer screen is made up of thousands of dots called pixels. Pixel stands for picture element. The number of pixels in an image determines the resolution of the image.
3. The **COLOR** statements is used to change the color of the text and graphics whered **PAINT** statements is used to fill a

close area with colour.

4. The SOUND statement allows you to play a musical note. It also lets you control how high or low the note will be and how long it will last.
5. The LINE statement is used to draw a straight line between two points (pixels.)

The CIRCLE statement is used to draw a circle, ellipse or an arc of a circle.

Syntax : CIRCLE ( X, Y), <Radius>, <color code>

Example :

CLS

SCREEN 13

CIRCLE (180, 150), 30, 2

6. The PSET statement is used to display a pixel on the screen. PSET stands for Point Set.

## COMPUTER-8

### Ch. 1

### Computer Software

#### Exercise

#### A. Tick (3) the correct option.

1. (b), 2. (d), 3. (c), 4. (b), 5. (b)

#### B. Fill in the blanks.

1. Software is a set of **programs**.
2. **Database** packages are used to store and retrieve data in an organized way.
3. **Graphics** packages are used to produce and manipulate artwork.
4. An **Interpreter** does not convert program into machine code format, instead of directs the CPU to obey each program statement.
5. C++ is a **general** purpose language which can be used for most tasks.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (3), 2. (7), 3. (7), 4. (3), 5. (7)

**D. Distinguish between the following pairs.**

1. System software is used for operating computer hardware whereas application software is used by user to perform specific task.
2. Ready-made software are developed by software companies for general purpose application on the other hand customised software is build as per specific requirement.
3. A compiler is a language processor which translates source code from high level language into binary machine code whereas interpreter translates and executes each statements of instruction simultaneously.

**E. Answer the following questions.**

1. Software consists of all the components that we cannot touch. Software is a set of programs. A program is a set of instructions that tells the computer to perform tasks.
2. The software that are used to perform specific tasks are known as application software.
3. System software include all those software programs that control and coordinate the internal working of the computer and perform many other tasks to maintain the system.
4. The system program which translates the high-level languages into machine languages is called language processor.
5. An operating system (OS) is the most important software that runs on a computer. It is a system software which controls and coordinates the internal working of the computer and performs a large number of functions which are essential to operate the computer system.
6. These programs are developed by software companies for general purpose applications. These programs can be bought and used right away.

Some ready-made application software, their examples and purposes are given in the table below :

Application Soft.	Examples	Purpose
Database packages	MS Access, Lotus Approach, Paradox	Used to store and retrieve data in an organized way.
Spreadsheet packages	MS Excel, Lotus 123	Used for tasks that involve a lot for calculations and for creating graphs and charts.
Word processing packages	Ms Word, WordPerfect	Used to produce documents such as, letters, reports and memos.

7. **Compiler** : A compiler is a language processor which translates source code from high level language into binary machine code.

**Assembler** : An assembler translates from a low level language to binary machine code. The assembler produces one machine instruction for each source instruction.

**Interpreter** : An interpreter is different from compiler and assembler. It does not convert program into machine code format, instead of directs the CPU to obey each program statement. That means interpreter translates and executes each statement of instruction simultaneously.

8. Utility program is a program that supports activities that go in a computer system.

9. A programming language is a set of words, symbols and codes that enables a programmer to communicate a solution algorithm to the computer.

Given below are some programming languages and their purposes :

**C++** It is a general purpose language which can be used for most tasks. C++ programs usually execute faster than programs written in other



	high level languages.
<b>COBOL</b>	It is used for business applications.
<b>BASIC</b>	It is a general purpose programming language originally designed for beginners.
<b>LOGO</b>	It is developed for use in education, used to draw pictures.

## Ch. 2 Working with Tables in MS Access 2013

### Exercise

#### A. Tick (3) the correct option.

- (c), 2. (a), 3. (b), 4. (b), 5. (d)

#### B. Fill in the blanks.

- Datasheet** view is used to enter data in a table.
- In **design** view of the table, you can enter the field names, their data types and description.
- A table consists of **rows** and **columns**.
- The **long text** data type is used to store lengthy text that is up to 65,536 characters.
- The **required** field property forces you to enter a value, if it is set for Yes.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

- (7), 2. (7), 3. (3), 4. (3), 5. (7)

#### D. Answer the following questions.

- A table is a database object, which is used to store information in an organised manner. It consists of rows and columns.

1. Field or Attribute

2. Record

3. Primary Key

- A primary key is a field or a combination of fields that uniquely identifies the records in a table. A primary key field cannot have repetitive values and cannot be left blank.

Place the cursor on the field to be set as the primary key.

Click on the Primary Key option in the Tools group on the DESIGN tab under TABLE TOOLS. You will notice that a key symbol appears on the field.

3. The Design View window is divided into two parts :

**Field Grid Pane :** It is used for entering field names and their data types. You can also give an optional description about each field in this pane.

**Field Properties Pane :** This section is used to set properties for the fields in the table.

4. To sort records, open the table in Datasheet View and follow these steps :

1. Select the field on the basis of which you want to sort the records.

2. Click on the \_\_\_\_\_ or \_\_\_\_\_ option in the Sort & Filter group on the HOME tab. The records get sorted.

5. Data types are used to declare the fields of a table. A data type determines the type of data in it. Once the data type is defined, we cannot enter a different type of data in it. If we try to do so, an error message will be displayed.

## Ch. 3 Working with Queries, Forms and Reports

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (b), 3. (c), 4. (b), 5. (d)

#### B. Fill in the blanks.

1. A **Query** is a method of getting answers to questions.
2. The **form** view is used to enter, edit and view data of the form.
3. Queries, forms and reports are **objects** of Access.
4. **Design** view displays only the structure of your form.
5. A **report** is an effective way to present your data in printed form.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (3), 2. (7), 3. (3), 4. (3), 5. (7)

**D. Answer the following questions.**

1. A Query is a method of getting answers to questions about the data. The query can involve a single table or multiple tables to answer a question about the data. A query is used to retrieve selective data based on specific criteria.
2. Forms are input to the information system and Reports are an effective way to present your data in printed format forms provide an easy way to enter, edit, delete and view data in a table. But you can not make changes to the table data in a report.
3. Specifying the first condition in the Criteria row, and other conditions in the Or row and the rows beneath, it results in a query that meets one or more of the specified conditions.
4. **Print Preview** : This view displays the report as it will appear after printing.

**Design View** : This view displays only the structure of your report. In this view, you cannot see the underlying data, but you can perform some tasks that you cannot perform in Layout View, such as viewing the header and footer sections, etc.

5. **Layout View** : You can view the data and make changes in the form, such as changing the size of the various controls.

**Design View** : Design view displays only the structure of your form. In this view, you cannot see the underlying data, but you can perform some tasks that cannot be performed in layout view, such as viewing header and footer.

## Ch. 4

## Computer Networking

### Exercise

**A. Tick (3) the correct option.**

1. (c), 2. (a), 3. (c)

**B. Fill in the blanks.**

1. A **Router** is a device that transfers data from one network to another in an intelligent way.
2. A **server** is a powerful version of a desktop computer.
3. A **NIC** is the computer's gateway to the network.
4. A **WAN** will be most powerful for large companies.
5. The **ring** pattern connects the computers and other devices one to the other in a circle.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (3), 2. (3), 3. (7), 4. (3), 5. (3)

**D. Write the full abbreviations of the following.**

1. NIC            **Network Interface Card**
2. WLAN        **Wireless Local Area Network**
3. SAN           **Storage Area Network**
4. TCP           **Transmission Control Protocol**

**E. Answer the following questions.**

1. 'Networking' refers to the interconnection of various computers to share their data and information. In other words, we can say that when through a cable, two or more computers are connected with one another to share their data and information between them, this connection is known as Networking.
2. **Data Sharing** : Networking allows users access to data stored on other's computers. This keeps everyone up-to-date about the latest data, since it's all in the same file, rather than having to make copies of the files, which are immediately out-of-date.

**Security** : Files and programs on a network can be password-protected and specific users can be given specific types of access rights to the folders and files to restrict access to authorized users only.

**Speed** : Sharing and transferring files within networks is very rapid. Thus, it saves time, while maintaining the

integrity of the file.

### 3. Disadvantages of Computer Networking

- ◆ Access anything across a network is slower than accessing our own computer.
  - ◆ More complexity adds new problems to handle.
  - ◆ Network faults can cause loss of data.
4. A LAN is a larger network that usually spans several buildings in the same city or town whereas WAN is a network system that covers a large geographical area such as different cities in a country or different countries of the world.
5. A topology refers to both the physical and logical layout of a network. The physical topology of a network refers to the actual layout of the computer cables and other network devices. The logical topology of a network, on the other hand, refers to the way in which the network appears to the devices that use it.

Some of the most common topologies are :

Bus Topology          Ring Topology          Star Topology  
Mesh Topology          Tree Topology

6. It is a network which is set up by using radio signal frequency to communicate among computers and other network devices.

Sometimes it is also referred to as Wifi Network or WLAN. This network is getting popular nowadays due to easy to use setup feature and no cabling involved. We can connect computers anywhere in our home/office without any need for wires.

**Exercise****A. Tick (3) the correct option.**

1. (b), 2. (c), 3. (b), 4. (d), 5. (c)

**B. Fill in the blanks.**

1. **Property Bar** is an on-screen area that displays tools that change according to the active tool.
2. **Basic Shapes** tool is used to draw basic shapes like arrows, flowchart, banner and callout.
3. **Cropping** and **erasing** tools let us remove parts of a document.
4. **Smart Fill** tool is used to fill any enclosed area.
5. We can select multiple objects with the **pick** tool.

**C. Tick (3) the correct statements and cross (7) the incorrect ones.**

1. (7), 2. (3), 3. (7), 4. (3), 5. (3)

**D. Give one-word answer.**

1. Cyan, Magenta, Yellow and Black
2. Red, Green and Blue
3. Color Palettes
4. Tital Bar
5. Zoom

**E. Answer the following questions.**

1. CorelDraw is a component of the CorelDraw Graphics Suite. CorelDraw transforms ideas into specialized graphics, logos, advertisements and marketing projects. Its intensive graphic creation as well as strong text handling activities make it a perfect software to create complex illustrations as well as text projects like brochures and reports.
2. To start CorelDraw, perform these steps :  
Step 1 : Click on the Start button. The Start menu will appear.

Step 2: Click on All apps.

Step 3: Click on CorelDraw Graphic Suite. The sub-folder of CorelDraw Suite appears.

Step 4: Click on CorelDraw.

Quick Start window appears which shows us some common options that are used in the beginning.

3. The components of the CorelDraw window are.

- ◆ Title Bar
- ◆ Standard Toolbar
- ◆ Toolbox
- ◆ Ruler
- ◆ Color Palette
- ◆ Document Page
- ◆ Menu Bar
- ◆ Property Bar
- ◆ Scroll Bars
- ◆ Navigator
- ◆ Document Window

4. To draw a circle :

Step 1: Select the Ellipse Tool in the toolbox. The mouse pointer changes to a crosshair with a small ellipse beneath it.

Step 2: Click on anywhere in the drawing area and hold down the Ctrl key while dragging the mouse pointer.

Step 3: Release the mouse button where you like the end of the circle.

5. To create a straight line :

Step 1: Select the Freehand Tool from the toolbox. The mouse pointer will change to a crosshair shaped pointer.

Step 2: Click anywhere in the Drawing page to draw line.

Step 3: Drag your mouse to the position where you would like to end your line and click again.

6. **Pick Tool** : The Pick tool lets us select and size, skew and transform (rotate) objects.

**Shape Tool** : Shape editing tools let you change the shape

of an existing object.

**Crop Tool :** Cropping and erasing tools let us remove parts of a document.

**Rectangle Tool :** It is used to draw rectangle/square.

**Ellipse Tool :** It is used to draw circle/ellipse.

**Polygon Tool :** It is used to draw many different shapes, including stars, polygons, graph paper and spirals.

**Basic Shapes Tool :** It is used to draw the basic shapes like arrows, flowchart, banner and callout.

7. Step 1 : Click on Layout. The Layout menu will appear.
- Step 2 : Click on Rename Page.  
The Rename Page dialog box will appear.
- Step 3 : Type the name of the page in the Page name box.
- Step 4 : Click on OK.  
The name of the page will be changed.

## Ch. 6 Introduction to Visual Studio 2015 Express

### Exercise

A. Tick (3) the correct option.

1. (c), 2. (b), 3. (d), 4. (c), 5. (a)

B. Fill in the blanks.

1. Visual Basic was developed by **Microsoft** in May, **1991**.
2. The **Toolbar** contains buttons that give access to frequently used menu items.
3. The **form** window is the primary work area that forms the background of the application.
4. The statements written by a programmer are executed by the end-user in **run** mode.
5. **Property** are the characteristics of an object such as colour and size.

C. Tick (3) the correct statements and cross (7) the incorrect ones.



1. (3), 2. (7), 3. (7), 4. (3), 5. (3)

**D. Answer the following questions.**

1. Visual Basic (VB) is a programming language popular among beginners. It was developed by Microsoft in May, 1991.

It is a high-level language that offers a Graphical User Interface (GUI) for designing and developing programs as compared to Small Basic that offers a text-only environment.

2. While using an application, a user performs actions such as pressing a key, clicking a mouse, selecting a list, etc. Such actions are called events.

In event-driven programming, the program responds to events. It does not run step-by-step as in Small Basic. The user may click on any control at any time, so each control is programmed independently.

3. A property refers to the characteristics of an object, such a colour and size. A method is an action that can be performed on an object and an event can be thought of as an occurrence of some user generated action applied on an object.

4. There are three ways to run a Visual Basic Project :

Method 1 : Press the F5 key on the keyboard.

Method 2 : Click on the Debug > Start Debugging option in the Menu bar.

Method 3 : Click on the Start button on the Standard toolbar.

This will run the Visual Basic program.

5. The Button control is similar to push buttons used for initiating some action on the form.

Let us learn the common properties of Button control.

Property	Description
Name	Sets the name of the Button.
Font	Sets the font, font size and font style of the text to be displayed.
Enabled	Controls whether the button can respond to user-generated action or not.
Text	Specified the text that appears on a button.

## Ch. 7 Programming in Visual Studio 2015 Express

### Exercise

#### A. Tick (3) the correct option.

1. (a), 2. (c), 3. (b), 4. (c), 5. (a)

#### B. Fill in the blanks.

1. **String** data type is used to store a set of characters.
2. **Operators** are special symbols that are used to perform calculations, make comparisons and check logical conditions.
3. The **logical** operators are used to combine two or more conditions.
4. The **relational** operators are used to compare two values.
5. **For Next** statement is used to repeat a set of statements a fixed number of times.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (3), 3. (3), 4. (7), 5. (7)

#### D. Answer the following questions.

1.

Property	Action
Name	Identifies a label while writing the program
Checked	Indicates whether the RadioButton is checked or not
Enabled	Sets True or False at run time only
Text	Contains the text, which is displayed on the RadioButton
Visible	Determines whether the control is visible or hidden

2. Variable refers to a memory location used to store data temporarily. It has a unique name, which is used to identify it in the program.

Dim statement is used to declare a variable in Visual Basic.

3. Operators are special symbols used to perform calculations, make comparisons and check logical conditions in a program.

Arithmetic Operators

Relational Operators

Logical Operators

4. The statements in a program are executed in a sequence. But sometimes, we wish to change the flow of control.

Control statements are useful in these situations. They are used to control the execution of a program, either by repeating or by skipping the execution of a statement, or a set of statements.

IF... THEN... ELSE are the decisions of control statement.

5. It is used for making decisions based on the result of comparisons. If the condition is true, then the statements written after “Then” are executed. But if the condition is false, then the statements written after “Else” are executed.

## Ch. 8

## Adobe Photoshop CS6

### Exercise

#### A. Tick (3) the correct option.

1. (d), 2. (b), 3. (a), 4. (d)

#### B. Fill in the blanks.

1. The **Marque tools** allow you to select different portions of an image in a specific range.
2. The **Magic Wand** tool is used to automatically select the adjacent areas of the same colour in an image.
3. The **Move** tool is used to drag a selected part of an image to a new location.
4. The **Color Picker** tool lets you select a colour for setting the foreground and the background colours.
5. The **Brush** tool is used to create smooth strokes of colour.

#### C. Tick (3) the correct statements and cross (7) the incorrect ones.

1. (7), 2. (3), 3. (3), 4. (7), 5. (7)

#### D. Answer the following questions.

1. Polygonal Tool allows you to select polygonal areas by clicking at different points whereas the Magic Wand Tool is used to select automatically the adjacent areas of the same colour in an image.

2. The custom shape tool is used to draw a variety of preset shape like flowers and grids.
3. A gradient is a fill consisting of two or more colours blending together. The Gradient Tool is used to fill a selected area or an entire layer with a gradient. You can choose from Linear, Radial, Angle, Reflected, or the Diamond gradient types.
4. The Colour Picker Tool lets you select a colour for setting the foreground and the background colours.
5. **Tolerance**– It determines how closely the colours should be matched. Specifying a low value selects colours that are very similar to the pixel where you clicked. Specifying a higher value selects a wide range of colours.  
**Anti-alias**– It produces a smooth edge by partially filling the edged pixels.  
**Contiguous**– It lets you select only adjacent areas that share the same colours.