**QUESTION BANK(2022-23)**

**Chapter 1**

**Categories of Computers and Computer Languages**

**Choose the correct option**

**Question 1**

A ............... converts a complete program written in a high-level language into a machine language at once.

1. converter
2. compiler
3. interpreter
4. assembler

***Answer***

compiler

**Question 2**

A program written in a high-level language is called ............... .

1. object code
2. code
3. source code
4. binary code

***Answer***

source code

**Question 3**

Which of the following is not a high-level language?

1. Assembly language
2. Java
3. BASIC
4. Python

***Answer***

Assembly language

**Question 4**

Which of the following is known as first generation programming language?

1. High-level language
2. Assembly language
3. Machine language
4. none of these

***Answer***

Machine language

**Question 5**

An electrocardiogram (ECG) is an example of ............... computer.

1. digital
2. analog
3. hybrid
4. all of these

***Answer***

hybrid

**Question 6**

Who developed the BASIC programming language?

1. John G. Kemeny and Thomas E. Kurtz
2. Dennis Ritchie
3. Bjarne Stroustrup
4. James A. Gosling

***Answer***

John G. Kemeny and Thomas E. Kurtz

**Question 7**

Which of the following is not a programming language?

1. C++
2. COBOL
3. FORTRAN
4. English

***Answer***

English

**Question 8**

Which of the following is known as India's first supercomputer?

1. SUPREME
2. SIERRA
3. FUGAKU
4. PARAM

***Answer***

PARAM

**Fill in the blanks**

**Question 1**

***ENIAC*** was a fully electronic and general purpose first generation computer.

**Question 2**

***Transistors*** replaced vacuum tubes in the second generation computers.

**Question 3**

Machine language is used to give instructions in terms of ***0s*** and ***1s***.

**Question 4**

The fifth generation computer languages developed the concept of ***artificial intelligence***.

**Question 5**

An assembler is a software which is also known as language ***translator***.

**Question 6**

The Java language uses both ***Compiler*** and ***Interpreter***.

**Question 7**

***FORTRAN*** is known as the first computer language.

**Question 8**

Meter Scale is a type of ***analog*** computer.

**Write the full form of the following**

**Question 1**

ENIAC

***Answer***

Electronic Numerical Integrator And Calculator

**Question 2**

IBM

***Answer***

International Business Machines

**Question 3**

FORTRAN

***Answer***

Formula Translation

**Question 4**

SQL

***Answer***

Structured Query Language

**Question 5**

BASIC

***Answer***

Beginner's All-Purpose Symbolic Instruction Code

**Question 6**

UNIVAC

***Answer***

Universal Automatic Computer

**Question 7**

PROLOG

***Answer***

Programming in Logic

**Question 8**

COBOL

***Answer***

Common Business Oriented Language

**Name the high-level languages for the given areas of applications**

**Question 1**

A language translator

***Answer***

Compiler

**Question 2**

A high-level language used for engineering and scientific applications

***Answer***

C

**Question 3**

A high-level language used for web designing

***Answer***

JAVA

**Question 4**

A game console

***Answer***

PlayStation 4

**Question 5**

A fifth generation computer language

***Answer***

Prolog (Programming in Logic)

**Match the following**

**Question 1**

| **Column A** | **Column B** |
| --- | --- |
| Machine Language | Translator |
| Mnemonics | C++ |
| Interpreter | Binary Digits |
| Bjarne Stroustrup | High-level Language |
| BASIC | Assembly Language |

***Answer***

| **Column A** | **Column B** |
| --- | --- |
| Machine Language | Binary Digits |
| Mnemonics | Assembly Language |
| Interpreter | Translator |
| Bjarne Stroustrup | C++ |
| BASIC | High-level Language |

**Name the main component/technique used in**

**Question 1**

First Generation Computers

***Answer***

Vacuum tubes

**Question 2**

Second Generation Computers

***Answer***

Transistors

**Question 3**

Third Generation Computers

***Answer***

Integrated Circuits

**Question 4**

Fourth Generation Computers

***Answer***

Microprocessors

**Question 5**

Fifth Generation Computers

***Answer***

Artificial Intelligence

**Case-Study Based Questions**

**Question 1**

The computer languages are categorised into low-level and high-level languages. Low-level language is further classified into two types viz. machine language and assembly language. A computer understands instructions in machine language (using digits 0's and 1's). Hence, a computer program needs to be converted into machine language using any translator, e.g., compiler, interpreter or assembler. However, the instructions given in high-level languages are easily understood by the users. Based on the above case, answer the following questions:

(a) Which language uses binary code?

1. High-level language
2. Assembly language
3. Machine language
4. Machine and assembly languages

(b) The instructions are written using English letters or words in

1. High-level language
2. Machine language
3. Low-level language
4. Assembly language

(c) Which source code is converted into machine code using Assembler?

1. High-level
2. Assembly language
3. Machine language
4. Binary level

(d) Which of the following is not used as a translator?

1. Compiler
2. Assembler
3. Converter
4. Interpreter

***Answer***

(a) Machine language

(b) High-level language

(c) Assembly language

(d) Converter

**Question 2**

An analog computer works on physical quantities such as length, mass, time, current, voltage, etc.; whereas a digital computer works on digits or discrete values. A hybrid computer is a combination of analog as well as digital computers.

With reference to the above discussion, answer the following questions:

(a) Name an analog computer.

(b) What type of computer is a Smartphone?

(c) Name a hybrid computer.

(d) What type of computer is a Smart TV?

***Answer***

(a) Meter Scale

(b) Digital Computer

(c) ECG Machine

(d) Embedded Computer

**Define the following**

**Question 1**

Analog computers.

***Answer***

An analog computer works on varying physical quantities. The data input to a computer is continuous in nature irrespective of the variations in input and the results are obtained after comparison.

For example, meter scale, thermometer etc.

**Question 2**

An Assembler

***Answer***

Assembler is a software which is used to convert a program written in assembly level language into a machine level language. It helps a computer to perform its basic operations.

**Question 3**

Second Generation Computer Languages.

***Answer***

In Second Generation Computer Languages, the instructions are given using mnemonics and codes. Second Generation Computer Languages are known as Assembly Languages. It is not understood directly by the computer. So a language translator known as Assembler is required to convert the mnemonics based instructions into machine language.

**Question 4**

Digital Computers?

***Answer***

A digital computer accepts data in the binary form:

1. Zero (0) means OFF or low signal
2. One (1) means ON or high signal

It gives results in terms of digits. All personal computers and laptops are digital in nature.

For example, digital watches, calculators etc.

**Question 5**

Fourth Generation Computer Languages.

***Answer***

Fourth Generation Computer Languages are user-friendly as they are closer to human language. They are operating system independent. Users can develop their own applications using them. Structured Query Language (SQL) is an example of 4GL.

**Question 6**

Embedded Computer

***Answer***

Embedded Computers are devices that consist of hardware and software (program) combined together for dedicated tasks. The set of instructions needed for the task are permanently stored in the internal memory of the computer hence they are also known as Dedicated Computers. For example, Dishwasher, Smart Television, etc.

**Differentiate between the following**

**Question 1**

Machine Level and Assembly Level Language

***Answer***

| **Machine Level Languages** | **Assembly Level Languages** |
| --- | --- |
| Instructions are given as strings of binary digits (0s and 1s) | Instructions are given in terms of Mnemonics. |
| No OP-Code is required. | Mnemonics are further coded into OP-Code. |
| It takes more time in coding instructions. | It takes less time in coding instructions. |
| No translator is required for execution. | A translator is required for execution. |

**Question 2**

High-level and Low Level Languages

***Answer***

| **High-level Languages** | **Low Level Languages** |
| --- | --- |
| These languages are used to write programs in simple English and by using alphabets and numbers. | These languages are used to write programs with the combination of 0s and 1s. |
| They are machine independent languages. | They are machine dependent languages. |
| They are easy to learn. | They are difficult to learn. |
| Modification of programs is easy. | Modification of programs is time-consuming. |

**Question 3**

Compiler and Interpreter

***Answer***

| **Compiler** | **Interpreter** |
| --- | --- |
| It converts the entire program into its machine code at once. | It converts the entire program into its machine code line by line. |
| It displays the errors of the entire program only after compilation. | It displays the errors of one line at a time during the conversion to its machine code. |
| The control moves to the next line irrespective of any errors in the previous line. | The control doesn't move to the next line until the previous line is error-free. |

**Question 4**

First and Third Generation Computer Languages

***Answer***

| **First Generation Computer Languages** | **Third Generation Computer Languages** |
| --- | --- |
| First Generation Computer Languages are used to write programs with the combination of 0s and 1s. | Third Generation Computer Languages are used to write programs in simple English and by using alphabets and numbers. |
| Machine dependent languages. | Machine independent languages. |

**Long Answer Questions**

**Question 1**

What are the limitations of machine language?

***Answer***

The limitations of machine language are:

1. The process of generating binary codes is very time consuming.
2. There is always a chance of making mistakes during the conversion into binary codes.
3. It is a machine-dependent language.

**Question 2**

Mention two features of Fifth Generation Computer languages.

***Answer***

Two features of Fifth Generation Computer languages are as follows:

1. The programs mainly focus on the development of artificial intelligence.
2. They also made it possible to mimic the human sense and intelligence.

**Question 3**

What are the features of a high-level language?

***Answer***

The features of a high-level language are:

1. They are machine independent languages.
2. They are easy to learn and help to develop programming logic.
3. Programs in these languages are easily understood by the user and hence can also be modified.

**Question 4**

Why do we need to learn computer languages?

***Answer***

Today, programming and software have disrupted our way of life. From booking a railway reservation ticket, to hailing a cab, to ordering food, almost all of our day to day activities involve interacting with software. This makes a fundamental understanding of computers, software and programming an absolute necessity. It is the computer languages which power all this. Hence, we need to learn computer languages to gain a better understanding of the modern world we live in.

**Question 5**

In what ways instructions were given in 1GL?

***Answer***

In 1GL, instructions were given using a string of binary digits i.e, 0s and 1s, e.g. 10010100010, 1110100101, etc.

**Chapter 2**

**File Management: Organisation of Data**

**Choose the correct option**

**Question 1**

Among the below given options which two wildcard characters are used to search a file?

1. # and ?
2. \* and !
3. @ and !
4. ? and \*

***Answer***

? and \*

**Question 2**

Which of the following options represents the correct format of MS Word file?

1. \*.doc
2. \*.dox
3. \*.docx
4. both (a) and (c)

***Answer***

both (a) and (c)

**Question 3**

In a JPEG file, the letter J stands for

1. Jumble
2. Joint
3. Jip
4. Jointly

***Answer***

Joint

**Question 4**

Which of the following is a shortcut key to paste the content?

1. Ctrl+P
2. Ctrl+V
3. Ctrl+X
4. Ctrl+N

***Answer***

Ctrl+V

**Question 5**

When a file is copied from a pen drive to hard disk, a pen drive is known as the

1. destination drive
2. source drive
3. basic drive
4. home drive

***Answer***

source drive

**State True or False**

**Question 1**

We needn't require including an extension while writing a file name.  
***True***

**Question 2**

'Copy and Paste' can also be referred to as moving a file.  
***False***

**Question 3**

We can play MP3/MP4/CD on the Windows Media Player.  
***True***

**Question 4**

Windows Media Player allows us to play an audio CD as well as a VCD.  
***True***

**Question 5**

Deleting a file means removing it from the drive.  
***True***

**Question 6**

Windows does not allow handling multiple files.  
***False***

**Question 7**

External storage devices do not allow to play an audio or video file.  
***False***

**Question 8**

By default, the deleted files/folders are stored in the Recycle Bin.  
***True***

**Fill in the blanks**

**Question 1**

Information is stored in a storage device with a specific name called ***file***.

**Question 2**

A file extension is also referred as file ***type***.

**Question 3**

***.psd*** file type represents the Adobe Photoshop file.

**Question 4**

Duplication of files from one drive to other is called ***copying*** a file.

**Question 5**

The 'cut and paste' option is also called ***moving*** a file.

**Question 6**

***Searching*** means locating a file among a set of files.

**Question 7**

To delete a file, click the right button of the mouse on the file name and select the ***Delete*** option.

**Question 8**

Specific searching can be performed by using ***wild card*** characters.

**Name the following**

**Question 1**

The extension of two audio files

***Answer***

(a) .wmp

(b) .wav

**Question 2**

Two files using Arm?.docx

***Answer***

(a) Arm.docx

(b) Arms.docx

**Question 3**

The extension of two video files

***Answer***

(a) .mp4

(b) .divx

**Question 4**

Two well-known Wildcard characters

***Answer***

(a) \*

(b) ?

**Question 5**

Three different types of extension of a file

***Answer***

(a) .pdf

(b) .gif

(c) .jpg or .jpeg

**Question 6**

Three fundamental operations performed on a file

***Answer***

(a) Viewing data from a file

(b) Searching a file

(c) Deleting a file

**Question 7**

Three types of files

***Answer***

(a) Ordinary Files

(b) Folder/Directory Files

(c) Special Purpose Files

**Question 8**

Three Media Players

***Answer***

(a) VLC Player

(b) Windows Media Player

(c) KM Player

**Write down their file extensions**

**Question 1**

| **S. No.** | **File Type** | **File Extension** |
| --- | --- | --- |
| 1. | Adobe Photoshop |  |
| 2. | Graphic files |  |
| 3. | Acrobat portable document format |  |
| 4. | MS Word document file |  |
| 5. | MS Excel spreadsheet file |  |

***Answer***

| **S. No.** | **File Type** | **File Extension** |
| --- | --- | --- |
| 1. | Adobe Photoshop | .psd |
| 2. | Graphic files | .jpg |
| 3. | Acrobat portable document format | .pdf |
| 4. | MS Word document file | .docx |
| 5. | MS Excel spreadsheet file | .xls |

**Answer in one word**

**Question 1**

A device that contains a file.

***Answer***

Hard disk

**Question 2**

A portable storage device

***Answer***

Pen drive

**Question 3**

The term given for duplicating a file

***Answer***

Copying a file

**Question 4**

The character used for specific searching

***Answer***

'?'

**Question 5**

The term used for removing a file

***Answer***

Delete

**Case-Study Based Questions**

**Question 1**

You have participated in a quiz program. In the Rapid fire round, you were asked some questions as given below:

(a) What is the command used for removing a file from the hard disk?

(b) In which folder are all the deleted files stored?

(c) Which command is used to look for a file in the hard disk?

(d) Which command is used to move a file from one drive to other?

***Answer***

(a) Delete

(b) Recycle Bin

(c) dir

(d) Cut and Paste

**Question 2**

Windows 10 is a powerful operating system that provides various tools/commands for file manipulation. It uses .......(a)....... command to remove a file from the hard disk. The deleted files are stored in the .......(b)....... You can look for a file in the .......(c)....... box, by entering its name. If a drive is overloaded, you can shift a file to another drive using .......(d)....... command.

The above case includes some blanks. Choose the correct answer to complete the given case.

(a) This command removes a file from the hard disk.

1. Remove
2. Rem
3. Delete
4. Del

(b) This icon stores the deleted file in the system.

1. This PC
2. Recycle Bin
3. Chrome
4. VLC Player

(c) This box is used to find a file from the hard disk.

1. Search
2. Locate
3. Seek
4. Find

(d) This command is used to shift a file from one drive to other.

1. Copy-paste
2. Move
3. Transfer
4. Cut-paste

***Answer***

(a) Delete

(b) Recycle Bin

(c) Search

(d) Cut-paste

**Define the following**

**Question 1**

File

***Answer***

File is a named unit on a storage device that stores information in an organised manner. It is the smallest unit of storage.

**Question 2**

Folder

***Answer***

A folder is the storage space to keep files in an organised manner.

**Question 3**

Wildcard character

***Answer***

Wildcard characters are special symbols used to replace or represent one or more characters in the filename. They are used when we want to search a file whose exact name is not known to us.

**Question 4**

Moving a file

***Answer***

Moving a file is the process of transferring a file from one destination to other. It is also termed as 'Cut and Paste'. In this process a file is removed from its original position and made available at another destination.

**Question 5**

Copying a file

***Answer***

Copying a file refers to making a duplicate copy of a document. Files can be copied from one storage area to another area as the need maybe.

**Long Answer Questions**

**Question 1**

Differentiate between copying a file and moving a file.

***Answer***

The differences between copying a file and moving a file are as follows:

| **Copying a file** | **Moving a file** |
| --- | --- |
| It means to make a duplicate copy of a file. | It means to transfer a file from one location to another. |
| It uses **'Copy and Paste'** option. | It uses **'Cut and Paste**' option. |
| The original file remains at the source location. | The original file is moved to the destination location. |

**Question 2**

Can the deleted files be restored in the computer? Comment.

***Answer***

Yes, deleted files can be restored. When we delete a file from the computer, by default it gets stored in Recycle Bin. From Recycle Bin, the file can be restored by selecting the option 'Restore'.

**Question 3(a)**

Mention all the steps to search a file using '\*' Wildcard character.

***Answer***

Let's assume, we want to search for all the Excel files in C drive that start with letter P and have the extension .xlsx. The steps to search for the same using '\*' Wildcard character are as follows:

**Step 1** — Open the command prompt window by clicking on its icon on taskbar. Incase the icon is not present on taskbar, click Start and then Command Prompt.

**Step 2** — Change the drive to C by typing **C:** followed by **cd\**

**Step 3** — Type dir command using the wildcard \* like this:

C:\>dir P\*.xlsx

**Step 4** — Press Enter Key

Names of all Excel files starting with letter P are listed on the screen.

**Question 3(b)**

Mention all the steps to search a file in D drive of the hard disk.

***Answer***

The steps to search a file in D drive of the hard disk are as follows:

**Step 1** — Click the 'This PC' icon on the desktop. Incase it is not present on the desktop, click 'Start' and then select 'This PC'.

**Step 2** — Double click on D drive showing in the This PC window. The 'Search (D:)' box appears on the extreme right side of the window.

**Step 3** — Enter the file name to be searched in the 'Search (D:)' box and press enter key.

The computer will look for all such files in D: and show the results in the window.

**Question 3(c)**

Mention all the steps to copy a file from E drive to a pen drive.

***Answer***

Let's assume, we want to copy a file named 'Curriculum Vitae' from E drive to a pen drive. The steps to copy it are as follows:

**Step 1** — Click the 'This PC' icon on the desktop. Incase it is not present on the desktop, click 'Start' and then select 'This PC'.

**Step 2** — Select E drive (source drive) by double clicking on it.

**Step 3** — Right click on the file named 'Curriculum Vitae'.

**Step 4** — Click the 'Copy' option from the drop down menu.

**Step 5** — Double click the Pen Drive/Removable Drive (destination drive) available on the left pane of the window. It will display all the files and folders stored on the drive.

**Step 6** — Right click on the blank space of the window. From the drop-down menu, select 'Paste' option.

**Step 7** — The file gets copied to the pen drive and start showing in the pen drive window.

**Question 3(d)**

Mention all the steps to play an audio or a video file on any media player.

***Answer***

To play an audio file or a video file, follow these steps:

**Step 1** — Insert the audio or video CD/DVD in the DVD drive (if available on your system)

OR

Insert the external device such as pen drive, SD card, etc. in the appropriate port (USB or SD card port).

OR

Select the audio/video file present on your computer system which you want to play.

**Step 2** — Open the folder that contains your favourite audio or video file that you want to play.

**Step 3** — Select the audio or video file to be played and right-click on it.

**Step 4** — Select 'Open with' option and click on any media player available in your system.

**Step 5** — The media player will start playing the audio or a video file.

**Chapter 3**

**Word Processor: Tabular Presentation**

**Choose the correct option**

**Question 1**

Editing a table means

1. Copying a table
2. Moving a table
3. Updating a table
4. Creating a table

***Answer***

Updating a table

**Question 2**

Which of the following is the correct term used for combining two or more rows or columns?

1. Joining
2. Adding
3. Merging
4. Splitting

***Answer***

Merging

**Question 3**

Due to which of the following a table is created?

1. Union of rows and columns
2. Intersection of rows and columns
3. Concatenation of rows and columns
4. None of the above

***Answer***

None of the above

**Question 4**

Which of the following buttons is clicked under insert tab of the ribbon to insert a table?

1. Format
2. Layout
3. Table
4. Design

***Answer***

Table

**Question 5**

Which of the following buttons is clicked from 'Table Tools' to change the row height of the selected table?

1. View
2. Layout
3. Insert
4. Design

***Answer***

Layout

**State True or False**

**Question 1**

We can insert a row but not a column in a table.  
***False***

**Question 2**

We can delete a table along with its contents.  
***True***

**Question 3**

By dragging the two-headed arrow sideways, the column width can be increased or decreased.  
***True***

**Question 4**

Merging cells is the same as splitting cells.  
***False***

**Question 5**

We can delete columns as well as rows in a table.  
***True***

**Question 6**

A cell is the smallest unit of a table which is formed using rows and column.  
***True***

**Question 7**

Press Ctrl + Y to cancel the previous action taken in the document.  
***False***

**Question 8**

The alignment means the position of data/text placed within the boundary of a cell.  
***True***

**Fill in the blanks**

**Question 1**

Table is defined as a grid of ***rows*** and ***columns***.

**Question 2**

The 'Layout' tab for a table ribbon is available on the under the ***Table tools*** option.

**Question 3**

A table is inserted in a document with respect to the position of the ***cursor***.

**Question 4**

Rows state information that is represented ***horizontally*** in a table.

**Question 5**

The lines that mark the cell boundaries are called ***gridlines***.

**Question 6**

Click ***Insert*** tab to create a table in the document.

**Question 7**

***Resizing*** of a table means increasing or decreasing the table size in the document.

**Question 8**

You can also insert ***pictures*** in a table along with texts.

**Name the following**

**Question 1**

Two basic components of a table

***Answer***

(a) Rows

(b) Columns

**Question 2**

Three types of alignment

***Answer***

(a) Align Left

(b) Center

(c) Align Right

**Question 3**

Three different tasks while editing tables

***Answer***

(a) Inserting Rows or Columns in a Table

(b) Deleting Rows or Columns in a Table

(c) Changing the Row Height or Column Width in a Table

**Question 4**

Three different options of adding border to a table

***Answer***

(a) Outside Borders

(b) All Borders

(c) Top Border

**Name the shortcut keys for the following tasks**

**Question 1**

Align text Left

***Answer***

Ctrl + L

**Question 2**

Highlight the text

***Answer***

Alt + H + I

**Question 3**

Justify

***Answer***

Ctrl + J

**Question 4**

To open a new document

***Answer***

Ctrl + N

**Question 5**

Center alignment

***Answer***

Ctrl + E

**Question 6**

Align text right

***Answer***

Ctrl + R

**Case-Study Based Questions**

**Question 1**

While working in MS Word, using the mouse for selecting different options can sometimes be quite cumbersome. Hence, it would be helpful to know some of the shortcut keys that can be used for these operations such as UNDO, PRINT, OPEN, etc. so that one can work faster to perform such tasks. Write down the shortcut keys to perform the following:

(a) To cancel previous action.

(b) To print the document.

(c) To open an existing document.

(d) To align the text from either side of the margins.

***Answer***

(a) Ctrl + Z

(b) Ctrl + P

(c) Ctrl + O

(d) Ctrl + J

**Define the following**

**Question 1**

Cell

***Answer***

A cell is the smallest unit of a table that is formed at the intersection of a row and a column.

**Question 2**

Resizing a table

***Answer***

Increasing or decreasing the size of a table as per requirement is known as resizing a table. A table can be resized length-wise or width-wise depending upon the data item.

**Question 3**

Merging and splitting of cells

***Answer***

**Merging cells** means to combine cells by converting one or more cells into a single cell.

**Splitting cells** is the reverse of merging cells. It happens when a particular cell is divided into a number of small cells.

**Question 4**

Cell alignment

***Answer***

Cell alignment defines the position of data/text placed within the boundary of a cell.

There are two different types of alignment of text within a cell:

1. **Vertical alignment** — It arranges the text in an upright direction in the selected cells. It is further categorised as **Top, Center and Bottom**.
2. **Horizontal alignment** — It arranges the text within the same level of the selected cells. It is further categorised as **Align Text Left, Align Text Right, Center Text and Justify**.

**Write all the steps to perform the following tasks**

**Question 1**

Creating a table

***Answer***

To create a table, follow these steps:

**Step 1:** Click at the position on the document where you want to insert a table.

**Step 2:** Click the **'Insert'** tab on the ribbon.

**Step 3:** Select **'Table'** and then **'Insert Table'** from the drop-down list. The 'Insert Table' dialog box will appear on the screen.

**Step 4:** Enter the number of columns and rows in the **'Insert Table'** dialog box.

**Step 5:** Click **'OK'**. The table will be created.

**Question 2**

Deleting a column in a table

***Answer***

To delete a column in a table, follow these steps:

**Step 1:** Select the column that is to be deleted.

**Step 2:** Click the **'Layout'** tab on the ribbon under the **'Table tools'** option.

**Step 3:** Now in 'Rows and Columns' group, click 'Delete'. A drop-down list opens with four options — (1) Delete Cells (2) Delete Columns (3) Delete Rows (4) Delete Table.

**Step 4:** Select 'Delete Columns' from the drop-down list.

Thus, the selected column will be deleted.

**Question 3**

Inserting a row in a table

***Answer***

To insert a row in a table, follow these steps:

**Step 1:** Set the cursor in any cell in the row above or below where you want to insert a new row.

**Step 2:** Click the **'Layout'** tab on the ribbon under the **'Table Tools'** option.

**Step 3:** Click on 'Insert Below' or 'Insert Above' option as appropriate. A row will be inserted in the table.

**Question 4**

Merging cells in a table

***Answer***

To merge cells in a table, follow these steps:

**Step 1:** Select the cells which are to be merged.

**Step 2:** Click on the **'Layout'** tab under the **'Table Tools'** option.

**Step 3:** Select the option **'Merge Cells'**.

The selected cells are merged into a single cell.

**Question 5**

Changing the row height in a table

***Answer***

To change the row height in a table, follow these steps:

**Step 1:** Select a cell or cells of the desired table.

**Step 2:** Click the **'Layout'** tab from **'Table Tools'** option. It will display the row height of the selected row in the table in the **'Cell Size'** group.

**Step 3:** In the **'Height Box'**, click on up-arrow or down-arrow button to change the height of the row as per your requirement.

The row height will be changed as per our needs.

**Question 6**

Adding borders to a table

***Answer***

To add borders to a table, follow these steps:

**Step 1:** Select the cell or cells of the table where a border is to be added.

**Step 2:** Click the **'Design'** tab from **'Table Tools'**.

**Step 3:** Under the 'Borders group', click on the drop-down arrow button of the 'Borders' option. From the drop-down list select the desired border type.

The border will be added to the selected cells.

**Chapter 4**

**Word Processor: Mail Merge**

**Choose the correct options**

**Question 1**

You can start 'Mail Merge' by clicking on the .......... option in the Ribbon.

1. Insert
2. Mailings
3. Review
4. None

***Answer***

Mailings

**Question 2**

In MS Word, the 'Print' option is available in ..........

1. Backstage View
2. File
3. Home
4. All of the above

***Answer***

File

**Question 3**

By default, the system prints .......... copy/copies of the merged document.

1. one
2. five
3. six
4. none

***Answer***

one

**Question 4**

In the first step of the Mail Merge Wizard, you need to select the ..........

1. recipients' list
2. starting document
3. document type
4. none

***Answer***

document type

**Question 5**

In Mail Merge, the list of recipients can be edited in the .......... window.

1. Save address list
2. Mail Merge Recipient
3. New Address List
4. none

***Answer***

Mail Merge Recipient

**State True or False**

**Question 1**

Mail Merging means keeping a number of documents together in a file.  
***False***

**Question 2**

In Mail Merge, the document containing the common text is called the main document.  
***True***

**Question 3**

The mail merge process is completed in six different steps.  
***True***

**Question 4**

The current document opened in MS Word can be used in the Mail Merge process.  
***True***

**Question 5**

In Mail Merge, multiple copies of the merged document can't be printed.  
***False***

**Fill in the blanks**

**Question 1**

Mail Merge is the process of combining a ***formal*** letter with the contents of a database.

**Question 2**

The ***database document*** contains the names and addresses of the recipients of formal letters.

**Question 3**

The ***Merge to New Document*** window is displayed when we click on 'Edit Individual Letters' in the last step of the Mail Merge process.

**Question 4**

The ***New Entry*** option allows to enter the details of the recipients in the New Address List as soon as one entry is completed.

**Question 5**

In Mail Merge, the list of recipients can be saved in the ***Save Address List*** window.

**Match the following**

**Question 1**

| **Column A** | **Column B** |
| --- | --- |
| Main Document | Viewing individual letters |
| Recipients' Entry List | Mail Merge Recipients |
| Preview Letter | Merged letter |
| Edit Recipients' List | Body of the letter |
| Complete the Merge | New Address List |

***Answer***

| **Column A** | **Column B** |
| --- | --- |
| Main Document | Body of the letter |
| Recipients' Entry List | Mail Merge Recipients |
| Preview Letter | Viewing individual letters |
| Edit Recipients' List | New Address List |
| Complete the Merge | Merged letter |

**List 6 steps of Mail Merge Wizard**

**Question 1**

List the six different steps of the Mail Merge Wizard.

***Answer***

1. Select document type
2. Select starting document
3. Select recipients
4. Write your letter
5. Preview your letters
6. Complete the merge

**Case-Study Based Questions**

**Question 1**

Mail Merge is a technique to create a document (letter, notice, invitation, etc.) along with a database containing the names and addresses of different people. The document is merged with the database to print the common message with the name and address of each person. Based on the above discussion, answer the following questions:

(a) What will be the extension of the database file?

(b) Name the tab you should click on the ribbon to start Mail Merge.

(c) How many steps are there to perform the Mail Merge?

(d) What will you do with merged file, if it is not to be printed immediately?

***Answer***

(a) .mdb

(b) Mailings

(c) 6 steps

(d) The merged document can be saved as a word document, if it is not to be printed immediately.

**Short Answer Questions**

**Question 1**

What is Mail Merge?

***Answer***

Mail Merge is a special feature of MS Word that helps to create multiple individual letters using a data list.

**Question 2**

Define data source.

***Answer***

Data source is the file which contains the names and addresses of different friends or persons. It can be a word document with tables or an excel file.

**Question 3**

What is meant by main document?

***Answer***

Main document is the document which contains text and graphics. It may be a formal or an official letter.

**Question 4**

Name the two types of documents that are required in the Mail Merge process.

***Answer***

The two types of documents that are required in the Mail Merge process are:

1. Main Document
2. Data source

**Long Answer Questions**

**Question 1**

What are the advantages of Mail Merge?

***Answer***

The advantages of Mail Merge are as follows:

1. The Mail Merge feature makes it easy to send the same letter to a large number of people.
2. By using Mail Merge, we don’t have to type each recipient’s name separately in each letter.
3. We need to proofread only the main document.
4. It is economical and saves a lot of time.
5. It is one of the fastest ways to produce hundreds of personalised letters.
6. It is easy to edit the letter as a single change made in the main letter will be reflected in the letters meant for all other recipients.

**Question 2**

How will you create a list of recipients during the Mail Merge process? Explain.

***Answer***

To create a list of recipients during the Mail Merge process, we follow these steps:

**Step 1:** Click on the **'Type a new list'** from the Mail Merge pane.

**Step 2:** Click on **'Next: Write your letter'** or click on **'Create'** from the Mail Merge pane. It will show the **'New Address List'** window on the screen.

**Step 3:** Click on **'Customize Columns'** which displays the **'Customize Address List'** window on the screen.

**Step 4:** A list of **'Field Names'** appears in this window. We can delete the fields which are not required by using the **'Delete'** option. Thus, a customized address list can be created as per our requirement.

**Step 5:** Finally click **'OK'** and the customized address list is ready.

**Step 6:** Now enter the name and address in the space provided in the **'New Address List'**.

**Step 7:** Click on the **'New Entry'** option as soon as you complete one entry.

**Step 8:** Finally click **'OK'**. It indicates that all the entries have been written in the **'New Address List'**.

**Step 9:** After clicking **'OK'** the **'Save Address List'** window appears on the screen. It indicates to save the data file.

**Step 10:** Enter a suitable name in the space provided and finally click on **'Save'**.

The data file is saved.

**Question 3**

Mention all the steps to be followed to print a merged document.

***Answer***

To print a merged document, follow these steps:

**Step 1:** Click the option 'Print' from the Mail Merge pane which displays the 'Merge to Printer' window.

**Step 2:** Choose an appropriate option (say, 'All' to print records).

**Step 3:** Click **'OK'** and the 'Print' window appears on the screen.

**Step 4:** Click **'Find Printer'** option to select the printer to set with your computer (if not done).

**Step 5:** Select 'Page range' (if any) and click 'OK'.

The merged document will be printed.

**Question 4**

Explain the process of merging the main document with the list of recipients.

***Answer***

To merge the main document with the list of recipients, follow these steps:

**Step 1:** Click on **'More items'** in the Mail Merge pane.

**Step 2:** An **'Insert Merge Field'** window appears on the screen. It contains all the selected fields.

**Step 3:** Click on **'Database Fields'**.

**Step 4:** Now set the position of the cursor where you want to insert the field values in the document.

**Step 5:** Click **'Insert'** to place the field values at that position.

**Step 6:** Press the **'Enter'** key and continue the process for the rest of the field values.

**Step 7:** Finally click on the **'Close'** button.

**Step 8:** Click on **'Next: Preview your letters'** from the lower part of the Mail Merge pane.

The main document will be merged with the list of recipients.

**Question 5**

Write all the steps to insert field values (say: name, address and pin code) in the main document.

***Answer***

To insert field values in the main document, follow these steps:

**Step 1:** Click on **'More items'** in the Mail Merge pane.

**Step 2:** An **'Insert Merge Field'** window appears on the screen.

**Step 3:** Click on **'Database Field'**. It contains all the selected fields (say: name, address and pin code).

**Step 4:** Set the position of the cursor where you want to insert the name.

**Step 5:** Select the **'Name'** from the **'Database fields'** in the **'Insert Merge Field'** window and click the **'Insert'** button.

**Step 6:** Set the position of the cursor where you want to insert the address.

**Step 7:** Select the **'Address'** from the **'Database fields'** in the **'Insert Merge Field'** window and click the **'Insert'** button.

**Step 8:** Set the position of the cursor where you want to insert the pin code.

**Step 9:** Select the **'Pin Code'** from the **'Database fields'** in the **'Insert Merge Field'** window and click the **'Insert'** button.

The field values (name, address and pin code) will be inserted in the main document.

**Chapter 5**

**Presentation: Visual Effects**

**Choose the correct options**

**Question 1**

Slides are .......... pages displayed on a computer screen.

1. hard
2. colour
3. electronic
4. none

***Answer***

electronic

**Question 2**

Animation can be removed from a slide by selecting the .......... button from the Animation Pane.

1. Remove
2. Quit
3. Delete
4. Del

***Answer***

Remove

**Question 3**

The 'Play All' button is available on the ..........

1. Ribbon
2. Transition to Slide
3. Apply to All
4. Animation Pane

***Answer***

Animation Pane

**Question 4**

In an MS PowerPoint presentation, the default view of the slide layout is ..........

1. Reading
2. Slide Sorter
3. Normal
4. Slide Show

***Answer***

Normal

**Question 5**

When one slide follows another slide on the screen, it is called ..........

1. Slide Show
2. Transition
3. Animation
4. Presentation

***Answer***

Slide Show

**Question 6**

The shortcut keys to create a new slide are ..........

1. Ctrl + N
2. Ctrl + M
3. Ctrl + N
4. Ctrl + X

***Answer***

Ctrl + M

**Reason** — Ctrl + M is the shortcut key to insert a new slide.

**Fill in the blanks**

**Question 1**

In PowerPoint, the individual pages of a presentation are called ***Slides***.

**Question 2**

***Custom Animation*** allows to add different visual effects to text and objects on a slide.

**Question 3**

***Slide Master*** is the topmost slide that contains information of all the slides in a presentation.

**Question 4**

***Slide Sorter*** view displays miniature image of slides in a PowerPoint presentation.

**Question 5**

In PowerPoint, the shortcut key for the slide show is ***F5***.

**State True or False**

**Question 1**

MS PowerPoint is a part of MS Office.  
***True***

**Question 2**

Slide transition merges the next slide during the slide show.  
***False***

**Question 3**

The function key to start 'Slide Transition' is F5.  
***False***

**Question 4**

You can insert online audios but not online videos in a slide.  
***False***

**Question 5**

You can record your own voice in a slide.  
***True***

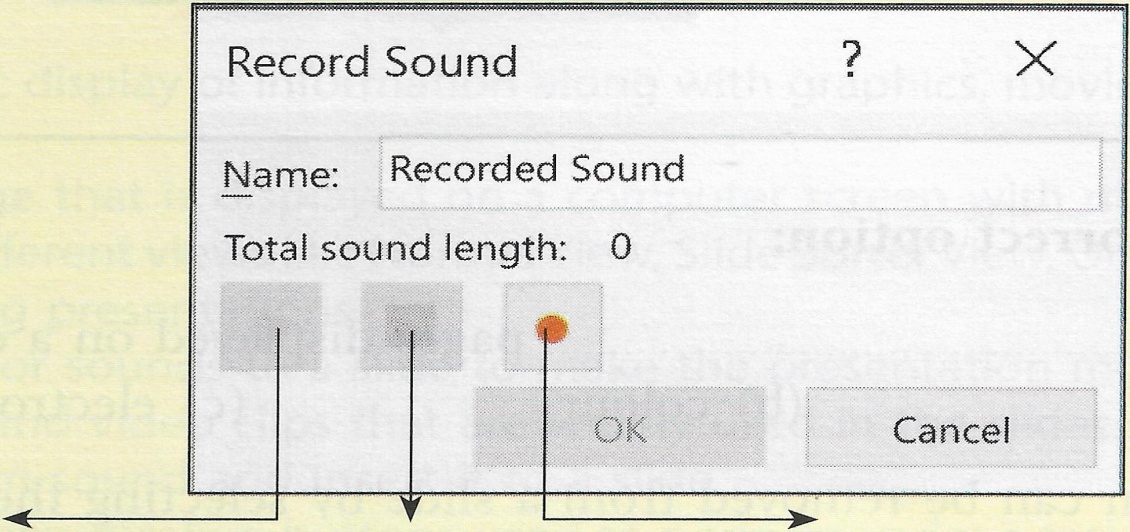
**Question 6**

Slide Master is the very first slide of the presentation.  
***True***

**Identify labelled buttons**

**Question 1**

Identify labelled buttons of a 'Record Sound' window.



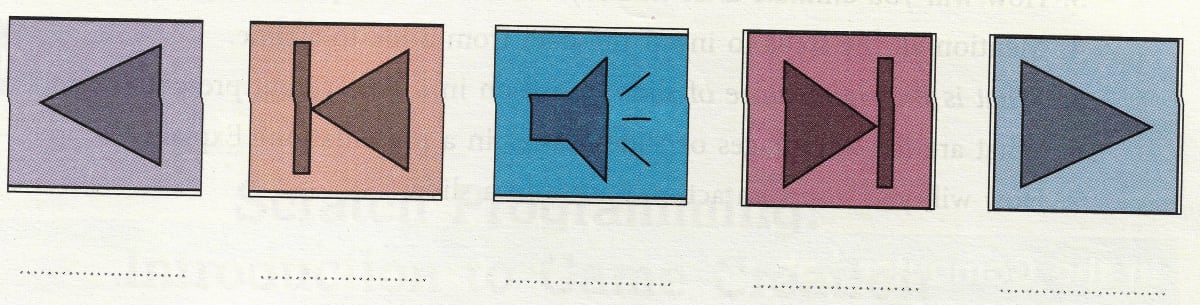
***Answer***

1. Play
2. Stop
3. Record

**Name the following Action Buttons**

**Question 1**

Name the following 'Action Buttons'



***Answer***

1. Back or Previous
2. Beginning
3. Sound
4. End
5. Forward or Next

**Name the following**

**Question 1**

Three types of Custom Animation

***Answer***

1. Entrance
2. Emphasis
3. Exit

**Question 2**

Three options of Action Buttons

***Answer***

1. Beginning
2. End
3. Home

**Question 3**

Three types of Slide transitions

***Answer***

1. Subtle
2. Exciting
3. Dynamic Content

**Case-Study Based Questions**

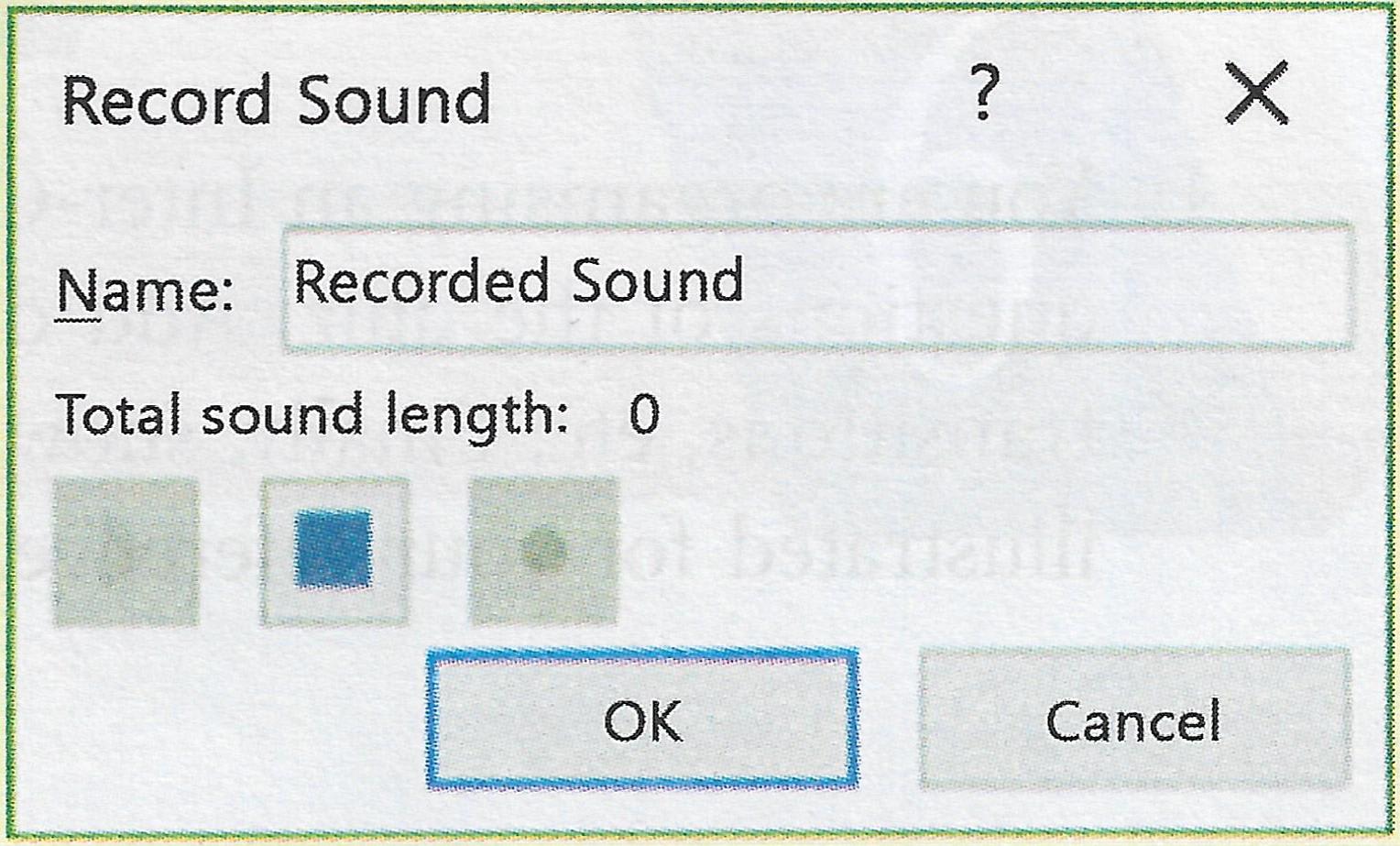
An Intra School Debate Competition is organised in the school of your friend for which he has created a PowerPoint presentation. Further, his teacher told him to add audio to some of the slides so that the whole presentation could be given a realistic look. He wants you to clear some of his queries by answering the given below:

(a) Under which group 'Audio' option is available to record the voice?

(b) Name the dialog box shown alongside.

(c) Name the highlighted button shown on the dialog box.

(d) What is the significance of OK button on the dialog box?



***Answer***

(a) 'Audio' option is available under the 'Media' group on the 'Insert tab'.

(b) It is the 'Record Sound' dialog box.

(c) Stop button

(d) OK button stops the recording and inserts the recorded file on the slide.

**Define the following**

**Question 1**

A Slide

***Answer***

A slide is an electronic page that is displayed on a computer screen with multimedia effects. Slides are used to communicate information to the audience.

**Question 2**

Custom Animation

***Answer***

Custom animation allows us to add different visual effects to a slide. Through animation effects, we can make our slide-show more interactive.

**Question 3**

Action buttons

***Answer***

Action buttons are communicative buttons which can be added on the slides to perform various actions during the slide show. For example: Forward, Home, Sound, End etc.

Action buttons become active during the slide show. Sound to an action button is optional.

**Question 4**

Slide Master

***Answer***

A slide master is the topmost slide in the order of slides that provides common information to all the slides in a presentation.

The common information can be regarding the theme and slide layouts of a presentation. This may include the background, color, fonts, effects etc.

**Question 5**

Slide Transition

***Answer***

Slide transition is a special effect applied to slides when we display the next slide during a slide show. It determines how the current slide switches to the next. There are three types of slide transitions:

1. **Subtle**
2. **Exciting**
3. **Dynamic Content**

**Question 6**

Slide Show

***Answer***

A slide show is an electronic presentation displayed on the computer screen with multimedia effects. It is a collection of slides arranged in a systematic order to communicate information about a particular topic.

**Explain the following with reference to MS PowerPoint**

**Question 1**

How will you insert a sound file to a slide? Explain.

***Answer***

To insert a sound file to a slide, follow these steps:

**Step 1:** Select the slide to which a sound file is to be added.

**Step 2:** Click the **Insert** tab on the ribbon.

**Step 3:** Click the **Audio** option in the 'Media' group. Then select **Audio on My PC** from the drop-down list.

**Step 4:** An **Insert Audio** window will appear on the screen.

**Step 5:** Browse the sound file that is to be added.

**Step 6:** Select the sound file and click **Insert**.

The sound icon will appear on the slide. One can hear the sound by clicking the **Play** icon.

**Question 2**

You want to insert your own sound in a slide. How will you perform this task?

***Answer***

To insert your own sound in a slide, follow these steps:

**Step 1:** Select the slide to which your own sound is to be added.

**Step 2:** Click the **Insert** tab. Then click the **Audio** option in the 'Media' group followed by the **Record Audio** option from the drop-down list. The **Record Sound** dialog box appears on the screen. It contains three buttons — play, stop and record.

**Step 3:** Click the **record** button to record your voice. Notice that the timer begins maintaining the sound length of your recording.

**Step 4:** Click **OK** to stop recording and insert the recorded file.

The **Sound** icon will appear on the slide. Click the **Play** button to hear the recorded sound.

**Question 3**

How will you animate a/an text/object in a slide? Explain.

***Answer***

To animate a/an text/object in a slide, follow these steps:

**Step 1:** Select the slide and then the text or object you want to animate.

**Step 2:** Click the **Animations** tab on the ribbon.

**Step 3:** In the **Animations** group, click down (▼) button and choose an animation type (say, Entrance) followed by any effect (say, Wipe).

**Step 4:** Click the **Effect Options** button and select **From Left** (say). Repeat the process for other elements of the slide. Similarly, you can add effects to the elements of rest of the slides. Finally, save the presentation.

**Question 4**

Mention all the steps to insert the data from a file to a slide.

***Answer***

To insert the data from a file to a slide, follow these steps:

**Step 1:** Open the PowerPoint presentation. Select the slide or insert a new slide as per your choice to import data from the other application.

**Step 2:** Click the **Insert** tab.

**Step 3:** Click the **Object** option in the **Text** group and the **Insert Object** dialog box appears.

**Step 4:** Select the **Create from File** radio button.

**Step 5:** Click the **Browse** option and the **Browse** window appears on the screen.

**Step 6:** Select the document from the source drive and click **OK**. The **Insert Object** dialog box appears on the screen showing the entire path of the source file.

**Step 7:** Click **OK**.

The data will be inserted in the selected slide of the presentation.

**Question 5**

What is the significance of slide transition in a PowerPoint presentation?

***Answer***

Slide transition determines how the current slide switches to the next. It adds a special visual effect to slides when transitioning from one slide to the next during the slide show.

Slide transitions add to the professional appearance of the slide show and draw attention to specific important slides.

Hence, they play a significant role in making a presentation attractive and effective.

**Question 6**

What are the advantages of Slide Master in a presentation? Explain.

***Answer***

The advantages of Slide Master in a presentation are as follows:

1. We can make universal style changes to every slide in our presentation.
2. When we use a slide master, we don't have to type the same information on more than one slide.
3. When we make a presentation that contains a lot of slides, slide master helps to manage the presentation.
4. When we create and edit a slide master, it affects and improves the look of the entire presentation.

**Question 7**

How will you insert an action button in a slide?

***Answer***

To insert an action button in a slide, follow these steps:

**Step 1:** Select the slide on which the action button is to be inserted.

**Step 2:** Click the **Insert** tab and then the **Shapes** option in the **Illustrations** group.

**Step 3:** From the drop-down list, select an action button from the **Action Buttons** section. The mouse pointer will take the shape of **'+'** sign.

**Step 4:** Bring the pointer on the selected slide.

**Step 5:** Drag the pointer to draw the shape of the button. An **Action Settings** dialog box appears on the screen. Select the tab **Mouse click** or **Mouse Over**.

**Step 6:** Select the radio button **Hyperlink to** under **Action on click** section and choose an action (say, Previous Slide) from the drop-down list.

**Step 7:** Click the checkbox **Play Sound** to choose a sound from the drop-down list. It will enable the sound when the action button is clicked.

**Step 8:** Click **OK**.

The action button will perform its task when clicked during a slide show.

**Chapter 6**

**Scratch Programming: Introduction to Game Creation**

**Fill in the blanks**

**Question 1**

Scratch is a ***visual*** programming language.

**Question 2**

The platform on which animation is created is called the ***stage***.

**Question 3**

***Block*** contains various scripts.

**Question 4**

***Backdrop*** is the background of the stage on the Scratch window.

**Question 5**

Each object available on the stage is known as a ***sprite***.

**Question 6**

The process of ***customisation*** adds different forms to a sprite.

**State whether the following statements are True/False**

**Question 1**

Script area is the stage where an object appears while animation.  
***False***

**Question 2**

You can change an existing sprite with another sprite on the stage.  
***True***

**Question 3**

You can add multiple sprites on stage.  
***True***

**Question 4**

It is difficult to customise the backdrop in Scratch programming.  
***False***

**Question 5**

Unwanted costumes can be deleted from the list.  
***True***

**Match the blocks**

**Question 1**

Match the blocks with their appropriate scripts

| **Blocks** | **Scripts** |
| --- | --- |
| Events | say 'Hello!' for '2' secs |
| Control | play note '60' for '0.5' beats |
| Sound | turn anticlockwise 15 degrees |
| Motion | when 'space' key pressed |
| Looks | if ' ' then |

***Answer***

| **Blocks** | **Scripts** |
| --- | --- |
| Events | when 'space' key pressed |
| Control | if ' ' then |
| Sound | play note '60' for '0.5' beats |
| Motion | turn anticlockwise 15 degrees |
| Looks | say 'Hello!' for '2' secs |

**Short Answer Questions**

**Question 1**

What is meant by a sprite?

***Answer***

Each object appearing on the stage is called a sprite. Sprite can be:

1. posted from the library
2. can be an image from a camera, or
3. created through a paintbrush.

**Question 2**

Define costume.

***Answer***

A costume refers to alternate appearances of a sprite. Sprites can change their look to any of its costumes.

**Question 3**

What is meant by block palette?

***Answer***

Each block contains a list of commands. The set of commands under each block is listed when a block is clicked. They are called block palettes.

**Question 4**

What is meant by changing the backdrop?

***Answer***

Changing the backdrop means to change the background of the stage on which the sprite appears.

**Question 5**

In what way can a costume be deleted?

***Answer***

To delete a costume, follow these steps:

**Step 1:** Select the sprite from the list of sprites on the Scratch window.

**Step 2:** Click **Costumes**. It will show the costumes of the selected sprite.

**Step 3:** Select the costume that is to be deleted.

**Step 4:** Click the **Delete** button that is shown on the top right corner of the costume icon.

The selected costume will be deleted.

**Long Answer Questions**

**Question 1**

Write all the steps to customise a sprite.

***Answer***

To customise a sprite, follow these steps:

**Step 1:** Select the sprite from the list of sprites on the Scratch window.

**Step 2:** Click **Costume** and then click **Costume from Library**.

**Step 3:** Select **Category** or **Theme**. A list of various costumes will appear in the right pane.

**Step 4:** Select an appropriate costume and click **OK**.

**Step 5:** The sprite with other costumes will appear in the costume pane.

**Question 2**

How is the size of a sprite changed?

***Answer***

To change the size of a sprite, follow these steps:

**Step 1:** Click the **Shrink** or **Grow** option available on the File tool bar.

**Step 2:** Set the mouse pointer on the appropriate sprite and keep clicking the left mouse button.

**Step 3:** The sprite will shrink or grow accordingly.

**Step 4:** Remove the mouse pointer from the sprite and keep it on the blank space of the stage and click the left mouse button once.

**Step 5:** The sprite will be resized as per the requirements.

**Question 3**

Give two differences between the Move block and the Looks block.

***Answer***

Two differences between the Move block and the Looks block are as follows:

| **Move block** | **Looks Block** |
| --- | --- |
| This block is used to set movement in a sprite or backdrop. | This block is used to change the appearance of a sprite or backdrop. |
| It includes scripts like move, turn, point, go to etc. | It includes scripts like say, think, colour, show, hide etc. |

**Question 4**

Why do we need to use a control block?

***Answer***

Control block allows us to control the actions of a sprite or a backdrop. Some control options are wait, repeat, forever, if, if-else, etc.

The scripts- repeat, forever and if-else are container scripts because they enclose one or more scripts within them. As soon as the container script is clicked, all the enclosed scripts are executed simultaneously.

**Question 5**

Mention any three points that you will keep in mind while planning an animation.

***Answer***

Three points that one will keep in mind while planning an animation are-

1. The type of backdrop design to be added on the stage.
2. The types of sprites appearing on the stage.
3. Types of movements to be created among the sprites.

**Chapter 7**

**HTML: An Introduction**

**Fill in the blanks**

**Question 1**

HTML means ***Hyper Text Markup Language***.

**Question 2**

A set of pages of information on the Internet about a particular subject is called a ***website***.

**Question 3**

The language used to create web pages is known as ***HTML***.

**Question 4**

Every HTML document begins with ***<HTML>*** and ends with ***</HTML>*** tags.

**Question 5**

The tags which require start and end tags are called ***container tags***.

**Question 6**

***Empty*** tags do not require a closing tag in an HTML document.

**Question 7**

An HTML document has two parts ***<Head>*** and ***<Body>***.

**Question 8**

The content written within the ***<Title>*** tag does not appear on the web page tags.

**Question 9**

An HTML file is generally created on ***Notepad***.

**Question 10**

An HTML document is saved with the extension ***.html***.

**Write the HTML codes for the following by using superscript and subscript tags**

**Question 1**

(m - n)2

***Answer***

(m - n)<SUP>2</SUP>

**Question 2**

p2 + q2 - r2

***Answer***

p<SUP>2</SUP> + q<SUP>2</SUP> - r<SUP>2</SUP>

**Question 3**

a2b3 - c4d5

***Answer***

a<SUP>2</SUP>b<SUP>3</SUP> - c<SUP>4</SUP>d<SUP>5</SUP>

**Question 4**

H2SO4

***Answer***

H<SUB>2</SUB>SO<SUB>4</SUB>

**Question 5**

KNO3

***Answer***

KNO<SUB>3</SUB>

**Question 6**

Na2CO3

***Answer***

Na<SUB>2</SUB>CO<SUB>3</SUB>

**Short Answer Questions**

**Question 1**

What is HTML?

***Answer***

HTML is a language used to create web pages. It has all the features of basic word processing including graphics. It helps to make the web pages attractive and informative as well as publish the information globally.

**Question 2**

What is the basic structure of an HTML document?

***Answer***

The basic structure of an HTML document is as follows:

<HTML>

<HEAD>

<TITLE>...the title of the web page....</TITLE>

</HEAD>

<BODY>....

.........the body of the document.......

.....

</BODY>

</HTML>

**Question 3**

What is meant by HTML tags?

***Answer***

Tags are special codes in an HTML document. They are marked by angle brackets (< and >) which are understood by the web browsers.

Syntax:

<tag name>String of text</tag name>

**Question 4**

Name the two documents located in a computer's network.

***Answer***

The two documents located in a computer's network are:

1. hypertext
2. hypermedia

**Question 5**

Name two softwares which are used to view an HTML document.

***Answer***

Two softwares which are used to view an HTML document are-

1. Internet Explorer
2. Google Chrome

**Question 6**

Distinguish between <P> and <BR> tags.

***Answer***

| **<P> tag** | **<BR> tag** |
| --- | --- |
| The paragraph tag helps to identify and separate paragraphs in an HTML document. | The line break tag avoids blank spaces between the lines. |
| It is a container tag. | It is an empty tag. |

**Explain the following with reference to HTML**

**Question 1**

Container tags

***Answer***

Container tags require opening and closing commands. These tags are used in pairs along with angle brackets in an HTML document.

They are also known as ON and OFF tag. ON tag uses angle brackets whereas OFF tag used forward slash (/) after the opening of the angle bracket.

For example:

<P>paragraph</P>

**Question 2**

Empty tags

***Answer***

Empty tags do not require a closing tag in an HTML document. It has only an ON tag in the document which is understood by the browser.

For example:

line 1.....<BR>

**Question 3**

Head tags

***Answer***

The heading of the document is generally written in the <HEAD> tag. It includes another tag called <TITLE> tag.

Both the <HEAD> tag and the <TITLE> tag are container tags.

**Question 4**

Body tags

***Answer***

The <BODY> tag is the actual text of the HTML document which appears on the web page. It starts just below the HEAD tag and indicates the beginning of the HTML text. It is a container tag.

**Question 5**

Paragraph tags

***Answer***

Paragraph tags are container tags. These tags are used to create different paragraphs in the web page.

The opening paragraph tag <P> is written at the beginning of the paragraph and the closing paragraph tag </P> is written after the end of the paragraph.

For example:

<P>...paragraph...</P>

**Question 6**

Line breaks

***Answer***

Line break tag <BR> is used to provide blank spaces between the lines. The BR tag is an empty tag and so, it doesn't require any closing tag. This tag is written at the end of the line.

For example:

Line 1...<BR>

**Write all the steps**

**Question 1**

To start writing an HTML document

***Answer***

To start writing an HTML document on Notepad, follow these steps:

**Step 1:** Click the 'Start' button.

**Step 2:** Select 'All Programs' from the pop-up menu.

**Step 3:** Select 'Accessories' from the drop-down menu.

**Step 4:** Click 'Notepad' from the drop-down menu. An untitled notepad will appear on the screen.

**Step 5:** Now, one can start writing the HTML code by using the following tags:

<HTML>

<HEAD>

<TITLE> HTML DOCUMENT </TITLE>

</HEAD>

<BODY>

...................

...................

</BODY>

</HTML>

**Question 2**

To view an HTML document on a web page

***Answer***

To view an HTML document on a web page, follow these steps:

**Step 1:** Click on the 'Internet Explorer' icon or select Start >> Programs >> Internet Explorer. Internet Explorer window will open.

**Step 2:** Click 'File'.

**Step 3:** Click 'Open' from the File menu. The 'Open' window will open.

**Step 4:** Click 'Browse' and the Windows Internet Explorer window will appear on the screen. Now look for the file path in the window.

**Step 5:** Write your filename in the 'File name' box and click 'Open'. The 'Open' window will display the complete path of the HTML file which will be shown in the 'Open' box.

**Step 6:** Click OK.

**Step 7:** The desired web page will be opened.

**Answer the following**

**Question 1**

Write an HTML document by using paragraph and line tags to format the following poem 'Two Little Dicky Birds'.

TWO LITTLE DICKY BIRDS  
TWO LITTLE DICKY BIRDS  
SITTING ON A WALL  
ONE NAMED PETER, ONE NAMED PAUL  
FLY AWAY PETER, FLY AWAY PAUL  
COME BACK PETER, COME BACK PAUL

***Answer***

<html>

<head>

<title> TWO LITTLE DICKY BIRDS </title>

</head>

<body>

<p>

TWO LITTLE DICKY BIRDS <BR>

TWO LITTLE DICKY BIRDS <BR>

SITTING ON A WALL <BR>

ONE NAMED PETER, ONE NAMED PAUL <BR>

FLY AWAY PETER, FLY AWAY PAUL <BR>

COME BACK PETER, COME BACK PAUL <BR>

</p>

</body>

</html>

**Question 2**

The format of an HTML document is given below. Rearrange the format so that it can be understood by the web browser.

<HEAD>

<HTML>

</TITLE>

MY FIRST STEP TO HTML

<TITLE>

</BODY>

SEARCH ENGINES ARE THE SOFTWARES ON THE WEB

WHICH HELP YOU TO LOOK FOR THE SPECIFIC

INFORMATION.

<BODY>

</HEAD>

</HTML>

***Answer***

<HTML>

<HEAD>

<TITLE>

MY FIRST STEP TO HTML

</TITLE>

</HEAD>

<BODY>

SEARCH ENGINES ARE THE SOFTWARES ON THE WEB

WHICH HELP YOU TO LOOK FOR THE SPECIFIC

INFORMATION.

</BODY>

</HTML>

**Chapter 8**

**Internet: Online Surfing**

**Write down the full forms of the following**

**Question 1**

WWW

***Answer***

World Wide Web

**Question 2**

ISP

***Answer***

Internet Service Provider

**Question 3**

URL

***Answer***

Uniform Resource Locator

**Question 4**

HTTP

***Answer***

Hyper Text Transfer Protocol

**Question 5**

HTML

***Answer***

Hyper Text Markup Language

**Fill in the blanks**

**Question 1**

You need your e-mail ID and the ***password*** to open your mail box on a website.

**Question 2**

An e-mail address is composed of a username, a ***host*** and a ***site***.

**Question 3**

The address of a web page is called the ***Uniform Resource Locator***.

**Question 4**

In a web address, the host and the type of site together is called the ***domain***.

**Question 5**

***Web browser*** is a software used for accessing any information on the world wide web.

**Question 6**

***Offline*** means your Internet service is disconnected and you cannot browse.

**Question 7**

The mail received from an unknown source is called ***spam***.

**Question 8**

***Podcasting*** is an act of creating and uploading audio files on a website.

**Question 9**

***Blog*** can be defined as a journal or a diary maintained online.

**Question 10**

***E-commerce*** means buying and selling of products online.

**Name the following**

**Question 1**

Two websites

***Answer***

1. [www.google.com](http://www.google.com/)
2. [www.amazon.com](http://www.amazon.com/)

**Question 2**

Web addresses of two websites

***Answer***

1. [http://www.google.com](http://www.google.com/)
2. [http://www.yahoo.com](http://www.yahoo.com/)

**Question 3**

Two commonly used web browsers

***Answer***

1. Internet Explorer
2. Google Chrome

**Question 4**

Two search engines

***Answer***

1. Google
2. Yahoo

**Name the type of websites**

**Question 1**

.edu

***Answer***

Educational Institutions

**Question 2**

.org

***Answer***

Non-profit organizations

**Question 3**

.com

***Answer***

Commercial sites

**Question 4**

.gov

***Answer***

Government organizations

**Write short notes on the following**

**Question 1**

The Internet

***Answer***

The term 'Internet' stands for International Network. It is a global network which has revolutionised communication in today's world by allowing the sharing of large amounts of information. It also connects people from different parts of the world.

**Question 2**

E-mail

***Answer***

Electronic mail is a method of exchanging digital messages. It accepts, forwards, delivers and stores messages on the behalf of users, who only need to connect to the e-mail infrastructure.

**Question 3**

Search Engine

***Answer***

Search engine is a tool that searches the Internet to find information on the basis of the keywords provided by the user. For example- Google, Yahoo etc.

**Question 4**

Online Shopping

***Answer***

Online shopping can be defined as purchasing of products or getting services over the Internet. It is done through an online shop, e-shop or e-store. In this process, all products are described through text with photos or with multimedia files.

**Question 5**

Blog

***Answer***

A blog is a journal or a diary that is maintained online. It is a platform that allows you to share your thoughts among people worldwide. A blog is like a website that one can keep updating on a regular basis.

**Question 6**

Podcasting

***Answer***

Podcasting is an act of creating and uploading audio files on a website. The audio files can even be stored ina digital device called an I-pod.

**Question 7**

E-commerce

***Answer***

E-commerce refers to the buying and selling of products and services online. It also refers to the transmitting of funds through the Internet.

**Question 8**

Electronic Transfer

***Answer***

Electronic transfer or NEFT facilitates the transfer of funds to other bank accounts across the country instantly. It is a simple, secure, safe, fast and cost-effective way to transfer funds.

**Long Answer Questions**

**Question 1**

What are the uses of the Internet?

***Answer***

The common uses of Internet are as follows:

1. We can access information about anything on the Internet.
2. We can send messages, greetings, etc. to our friends and relatives by using an e-mail.
3. We can watch movies and play games on the Internet.
4. We can chat on the Internet and make new friends.
5. We can buy things on the Internet.

**Question 2**

An e-mail address is composed of three main parts. Explain them.

***Answer***

An e-mail is composed of the following three parts-

1. **Username-** It can be any name that one chooses, provided it is not already in use by somebody else in your domain.  
   Username is followed by a **symbol @** which separates the username from the rest of the e-mail address.
2. **Host-** This is the name of the server which receives and sends e-mail messages. For example- Google.
3. **Site-** The extreme right-hand side of an e-mail address specifies the type of site. For example- .com.

**Question 3**

Give three advantages and three disadvantages of an e-mail.

***Answer***

**Advantages of e-mail:**

1. It is one of the fastest ways of communication where messages can be sent anywhere around the world in an instant.
2. It is cheap.
3. It is simple and very easy to use.

**Disadvantages of e-mail:**

1. E-mails require both the sender and the receiver to have an e-mail address and access to a device that has an Internet connection.
2. E-mail attachments can contain viruses.
3. E-mail can be impersonal and easily misunderstood by people.

**Question 4**

What is Google Drive? Write down all the steps to upload a file on a Google Drive.

***Answer***

Google drive is a storage space provided by Google. This is a cyber space which is like the hard disk of your computer and where you can store your files and folders. The files in the Google Drive can be easily sent or shared to other devices/persons.

To upload a file on a Google Drive, follow these steps:

**Step 1:** Let the file to be uploaded be available on the computer's desktop where the Google Drive icon is available.

**Step 2:** Click the file to be uploaded, drag and drop it on the Google Drive icon.

**Step 3:** The file will be uploaded into the Google Drive.

**Question 5**

What are the advantages and disadvantages of online shopping?

***Answer***

**Advantages of online shopping-**

1. Online stores are open 24X7 throughout the year.
2. You can choose goods that fit your budget.
3. You can shop both at work and at home provided you have access to the Internet.
4. Online stores give many discounts and a better price for goods as compared to conventional shopping.
5. There is no need for vehicles and hence, unnecessary fuel consumption is saved.

**Disadvantages of online shopping-**

1. It doesn't have any interaction with the dealer.
2. Items are to be selected within the availability.
3. Special offers are to be availed within the time mentioned by the dealer.
4. Sometimes, it becomes time consuming as there is confusion in selecting the goods.
5. The booking of an item is totally dependent on the network connectivity.
6. You can't touch, see and test the product.
7. It mainly caters to urban areas.

**Question 6**

Explain the purpose of using a blog.

***Answer***

The purposes of using a blog are as follows:

1. Blogs serve as a platform for people to voice their ideas, thoughts and feelings.
2. Blogs help to educate others who are interested in the field in which the author has expertise.
3. Blogs can also be used as a teaching tool.
4. Blogs are a great way to build awareness and support, especially on social issues.

**Chapter 9 - Unit 1**

**Fundamentals of QBASIC: A Programming Language**

**Objective Questions**

**Question 1**

Write down the symbols of the special characters

| **Name** | **Symbol** |
| --- | --- |
| hash |  |
| forward slash |  |
| asterisk |  |
| colon |  |
| semi-colon |  |
| dollar sign |  |
| double quotes |  |
| exclamation |  |

***Answer***

| **Name** | **Symbol** |
| --- | --- |
| hash | # |
| forward slash | / |
| asterisk | \* |
| colon | : |
| semi-colon | ; |
| dollar sign | $ |
| double quotes | " |
| exclamation | ! |

**Question 2**

Complete the table with reference to arithmetical operators as shown below:

| **Operation** | **Operand** | **Format used in QBASIC** |
| --- | --- | --- |
| Multiplication |  | M \* N |
| Addition | + |  |
|  |  | M / N |
|  | ^ |  |
| Subtraction |  | M - N |

***Answer***

| **Operation** | **Operand** | **Format used in QBASIC** |
| --- | --- | --- |
| Multiplication | \* | M \* N |
| Addition | + | M + N |
| Division | / | M / N |
| Exponent | ^ | M ^ N |
| Subtraction | - | M - N |

**Question 3**

Write down the names of the following relational operators:

| **Relational Operator** | **Meaning** |
| --- | --- |
| > |  |
| <= |  |
| = |  |
| <> |  |
| < |  |
| >= |  |

***Answer***

| **Relational Operator** | **Meaning** |
| --- | --- |
| > | Greater than |
| <= | Less than or equal to |
| = | Equal to |
| <> | Not equal |
| < | Less than |
| >= | Greater than or equal to |

**Question 4**

Name the three types of logical operators and also mention how they are used in QBASIC.

***Answer***

| **Logical Operators** | **Format used in QBASIC** |
| --- | --- |
| AND | (A = B) AND (B = C) |
| OR | (A = B) OR (B = C) |
| NOT | NOT(A = B) |

**Question 5**

Convert the following mathematical expressions into QBASIC expressions.

| **Mathematical Expressions** | **QBASIC Expressions** |
| --- | --- |
| 4 x 5 + 15 |  |
| a + bc |  |
| (ab + cd)/2 |  |
| pqr |  |
| a2 + b3 + c4 |  |

***Answer***

| **Mathematical Expressions** | **QBASIC Expressions** |
| --- | --- |
| 4 x 5 + 15 | 4 \* 5 + 15 |
| a + bc | a + b \* c |
| (ab + cd)/2 | (a \* b + c \* d) / 2 |
| pqr | p \* q \* r |
| a2 + b3 + c4 | a ^ 2 + b ^ 3 + c ^ 4 |

**Question 6**

Rewrite the given instructions in QBASIC:

1. The product of p, q and r is divided by 100.
2. m raised to the power 2 plus n raised to the power 3.
3. The sum of a and b is divided by the product of a and b.
4. Subtract 5 from m and the result is multiplied by 10.
5. The sum of p and q is multiplied by 2.
6. A is greater than or equal to B.
7. The sum of A and B is less than the product of A and B.
8. Twice the product of A plus thrice the product of B is greater than or equal to 50.

***Answer***

1. (p \* q \* r) / 100
2. m ^ 2 + n ^ 3
3. (a + b) / (a \* b)
4. (m - 5) \* 10
5. (p + q) \* 2
6. A >= B
7. (A + B) < (A \* B)
8. (2 \* a + 3 \* b) >= 50

**Answer the following questions**

**Question 1**

What is meant by the language QBASIC?

***Answer***

QBASIC is a programming language developed by Bill Gates and Paul Allen. It is intended to replace GWBASIC programming language.

This language is best suited for beginners. It is user friendly as all types of tasks like general programs, graphics, etc. can be performed using this language. It supports all the commands and instructions of GWBASIC.

It is a compiler based high-level language where tasks are performed in the Windows environment.

**Question 2**

What are the features of QBASIC language?

***Answer***

The features of QBASIC language are as follows:

1. It is user-friendly.
2. The syntax of the statements is very simple.
3. It provides Windows-based platform for writing programs.
4. It is a compiler based language.
5. Debugging can be easily done.
6. It doesn't require specifying line numbers.
7. It provides the facility to find errors in a program.
8. It works with numeric as well as non-numeric data.
9. It is useful for mathematical, scientific and engineering purposes as well.
10. It is one of the simplest high-level languages for beginners.

**Question 3**

What is meant by character sets? Name the different types of character sets.

***Answer***

A character set defines the valid characters that can be used in source programs or interpreted when a program is running.

In a computer, three types of character sets are used for entering the data items. They are:

1. Alphabets
2. Numbers
3. Special Characters

**Question 4**

What is an operator? Name the different types of operators.

***Answer***

Operators are the symbols which are used to perform different arithmetical or logical operations.

The three types of operators are:

1. Arithmetical Operators
2. Relational Operators
3. Logical Operators

**Question 5**

Define the following with two examples of each:

(a) Arithmetical Operator  
(b) Relational Operator  
(c) Logical Operator

***Answer***

**(a) Arithmetical Operator**

Arithmetical operators are used to perform mathematical calculations in a program. These operators work in the same sequence in which they are used in mathematics.

For example- addition (A + B), subtraction (A - B).

**(b) Relational Operator**

A relational operator is used to determine the relationship between two or more operands. The relational operator checks the condition and returns the result in either 'true' or 'false' for further processing.

For example- less than (A < B), greater than (A > B).

**(c) Logical Operator**

Logical operators are needed to compare two or more expressions. These operators give result in 'true' or 'false', depending upon the outcome of the logical expressions.

For example:

AND ⇒ ((A = B) AND (B = C))  
NOT ⇒ (NOT(A = B))

**Question 6**

What are the rules to write arithmetical operators?

***Answer***

The rules to write arithmetical operators are as follows:

1. There must be an operator between two operands.  
   For example, to multiply A and B, we need to write A \* B.
2. Zero raised to the power of any number is insignificant.  
   For example, 0 ^ 4.
3. Division by zero is an invalid statement.  
   For example, 8 / 0.

**Chapter 9 - Unit 2**

**Fundamentals of QBASIC: Constants and Variables**

**Fill in the blanks**

**Question 1**

Alphanumeric variables always end with a ***dollar ($)*** sign.

**Question 2**

***Numeric*** constants include only numbers.

**Question 3**

The maximum length of a variable is ***12***.

**Question 4**

***Alphanumeric*** constants are always enclosed in double quotes.

**Question 5**

Variables always begin with ***alphabets***.

**Question 6**

Comma is not allowed while writing ***numeric*** constants.

**State whether the following statements are True/False**

**Question 1**

A45 is a valid numeric variable.  
***True***

**Question 2**

A+B is not a valid alphanumeric variable.  
***True***

**Question 3**

Special characters are used in variables.  
***False***

**Question 4**

Numeric constants are stored in numeric variables.  
***True***

**Question 5**

0.5495 is a valid numeric constant.  
***True***

**Question 6**

Decimals are not allowed in numeric constants.  
***False***

**Match the following**

**Question 1**

| **S. No** | **Column 1** | **Column 2** |
| --- | --- | --- |
| 1 | Numeric constants | Alphanumeric constants |
| 2 | Alphanumeric variables represent | are always enclosed in " " |
| 3 | Alphanumeric constants | must begin with an alphabet |
| 4 | A variable | String variables |
| 5 | Alphanumeric variables are called | can take part in mathematical operations |

***Answer***

| **S. No** | **Column 1** | **Column 2** |
| --- | --- | --- |
| 1 | Numeric constants | can take part in mathematical operations |
| 2 | Alphanumeric variables represent | Alphanumeric constants |
| 3 | Alphanumeric constants | are always enclosed in " " |
| 4 | A variable | must begin with an alphabet |
| 5 | Alphanumeric variables are called | String variables |

**Name them**

**Question 1**

Two types of variables

***Answer***

1. **Numeric variables**
2. **Alphanumeric variables**

**Question 2**

Two types of constants

***Answer***

1. **Numeric constants**
2. **Alphanumeric constants**

**Correct the following expressions**

**Question 1**

B$ = WORLD CUP 2007

***Answer***

B$ = "WORLD CUP 2007"

**Question 2**

"DELHI PUBLIC SCHOOL" = D$

***Answer***

D$ = "DELHI PUBLIC SCHOOL"

**Question 3**

$$A = "ARYA PUBLISHING COMPANY"

***Answer***

A$ = "ARYA PUBLISHING COMPANY"

**Question 4**

P$ = (A + B)2

***Answer***

P = (A + B) ^ 2

**Question 5**

4B$ = "NEW DELHI"

***Answer***

B4$ = "NEW DELHI"

**Question 6**

A = 4P + 5Q

***Answer***

A = 4 \* P + 5 \* Q

**Question 7**

AVG = (2A + 3B + 4C)/3

***Answer***

AVG = (2 \* A + 3 \* B + 4 \* C) / 3

**Question 8**

A\*B = AB + CD

***Answer***

AB = A \* B + C \* D

**Write down the appropriate variables for the following**

**Question 1**

\_\_\_\_\_\_\_\_\_ = "Understanding Information Technology"

***Answer***

***UIT$*** = "Understanding Information Technology"

**Question 2**

\_\_\_\_\_\_\_\_\_ = A \* B \* C

***Answer***

***Product*** = A \* B \* C

**Question 3**

\_\_\_\_\_\_\_\_\_ = "15th August 1947"

***Answer***

***Date$*** = "15th August 1947"

**Question 4**

\_\_\_\_\_\_\_\_\_ = 1/2 \* A + 1/4 \* B

***Answer***

***Ans*** = 1/2 \* A + 1/4 \* B

**Question 5**

\_\_\_\_\_\_\_\_\_ = 11.99

***Answer***

***Num*** = 11.99

**Define the following terms**

**Question 1**

Variables

***Answer***

Variables change their values at the time of execution. A variable may be a single character or a set of characters.  
For example: A, B, B10, C$ etc.

**Question 2**

Constants

***Answer***

Constants are data items, the values of which do not change at the time of execution of the program.  
For example: 76, -43, "Hello", etc.

**Question 3**

Numeric variables

***Answer***

These are the variables which can store numbers or numeric values. They can also store integer and real type numeric values.  
For example: A = 45.

**Question 4**

Alphanumeric variables

***Answer***

These variables are used to store alphabets, words and special characters or their combinations. The set of characters to be stored must be put within double quotes (" ").  
For example: A$ = "Hello".

**Question 5**

Alphanumeric constants

***Answer***

Any set of characters enclosed within double quotes (" ") can be called an alphanumeric constant. They do not change their value at the time of execution of the program.  
For example: "Rishi", "April 4".

**Question 6**

Numeric constants

***Answer***

Numeric constants are the constants comprising of the digits. They may be accompanied by a negative sign or a decimal point. These constants are used for all kinds of mathematical operations.  
For example: 56, -43, 7.43, -5.32 etc.

**Give two differences between**

**Question 1**

Numeric constants and Alphanumeric constants

***Answer***

| **Numeric constants** | **Alphanumeric constants** |
| --- | --- |
| Numeric constants comprise of digits. | Alphanumeric constants comprise of a set of characters. |
| Numeric constants are not enclosed in double quotes. | Alphanumeric constants are enclosed in double quotes. |

**Question 2**

Numeric variables and Alphanumeric variables

***Answer***

| **Numeric variables** | **Alphanumeric variables** |
| --- | --- |
| Numeric variables store numeric values. | Alphanumeric variables store alphabets, words, special characters or their combinations. |
| These variables are used for mathematical operations. | Mathematical operations are not possible. |

## Chapter 9 - Unit 3

# Fundamentals of QBASIC: Commands and Statements

## Fill in the blanks

#### Question 1

The full form of QBASIC is ***Quick Beginner's All-Purpose Symbolic Instruction Code***.

#### Question 2

***LET*** statement is used to assign a value to a variable.

#### Question 3

The term used to correct errors in a program is called ***debugging***.

#### Question 4

***F5*** function key is used to execute a program in QBASIC.

#### Question 5

***REM*** is a non-executable statement.

#### Question 6

The extension of BASIC program file is ***.bas***.

#### Question 7

The maximum number of characters in the primary name of a BASIC file is ***eight***.

#### Question 8

Using ***EXIT*** command, you can quit QBASIC and return to the desktop.

#### Question 9

***Statements*** are the set of instructions to a program.

#### Question 10

***Save As*** option is used to store a program in the secondary memory for the future use.

## Correct the errors

#### Question 1

CLEAR  
LET A = 15  
TAKE B = 10  
P = (A + B)2  
DISPLAY P  
END

***Answer***

CLS  
LET A = 15  
LET B = 10  
P = (A + B) ^ 2  
PRINT P  
END

#### Question 2

CLS  
INPUT A = 10  
LET B = 45  
P = (A x B) / 5 + B  
PRINT P  
STOP

***Answer***

CLS  
LET A = 10  
LET B = 45  
P = (A \* B) / 5 + B  
PRINT P  
END

## Explain the meaning of the following commands/statements with reference to QBASIC

#### Question 1

New Program

***Answer***

It allows the user to clear the working memory for fresh storage of the next program.

#### Question 2

Open Program

***Answer***

It allows the user to open an existing program which is already stored in the main memory of the computer.

#### Question 3

Save As

***Answer***

It allows the user to save the current program in the computer's memory for future use.

#### Question 4

Print

***Answer***

It allows the user to get a hard copy of the current program.

#### Question 5

Exit

***Answer***

It allows the user to quit QBASIC and return to the desktop.

## Write short notes on

#### Question 1

RUN

***Answer***

This command is used in QBASIC to execute any program or to see the output of the program. This can also be done by pressing F5, a function key. The output of the program is displayed on the output screen.

#### Question 2

CLS

***Answer***

CLS means to clear the content of the program and the output screen. This command is used at the beginning of the program. It allows the user to study the desired output of the program.

#### Question 3

LET

***Answer***

LET statement is used to assign a value to a variable. This statement can be used to assign a numeric or string constant to a variable.

Syntax-  
LET <variable> = <constant or variable or expression>

#### Question 4

REM

***Answer***

REM statement is used to write remarks about any program which basically shows the purpose of a program. It is a non-executable statement. Hence, the computer will ignore the content of the REM statement at the time of execution and the content will go to the next line.

Syntax:  
REM <comment about the program>

#### Question 5

PRINT

***Answer***

PRINT statement is used to display any data, value, or message on the screen. PRINT statement may be used with or without a variable.  
For example-  
PRINT "HELLO"  
PRINT A, B

## Write down all the steps to perform the following tasks in QBASIC

#### Question 1

Write a new program

***Answer***

To write a new program, follow these steps:

**Step 1:** Click 'QBASIC' icon. The QBASIC window opens. Otherwise, select a path and open QBASIC window.

**Step 2:** Press 'ESC' key to clear the contents of the screen.

**Step 3:** Select the 'File' menu and click the option 'New Program'.

The QBASIC screen will be ready to write the program.

#### Question 2

Save a program

***Answer***

To save a program, follow these steps:

**Step 1:** Click 'File' and select 'Save As' from the drop-down menu.

**Step 2:** The 'Save As' window appears on the screen. Select a directory/drive from the box.

**Step 3:** Write the file name in the 'File Name' box.

**Step 4:** Click 'OK'.

The file will be saved in the desired location.

#### Question 3

Get the hard copy of a program

***Answer***

To get the hard copy of a program, follow these steps:

**Step 1:** Open the program whose hard copy is required.

**Step 2:** Click 'File' and select 'Print' option from the drop down menu. Print window will appear.

**Step 3:** Select the printer, page layout, number of copies required etc. and click 'Print' option.

The program will be printed.

#### Question 4

Save the current program

***Answer***

To save the current program, follow these steps:

**Step 1:** Click 'File' and select 'Save As' from the drop down menu.

**Step 2:** The 'Save As' window appears on the screen. Select a directory/drive from the box.

**Step 3:** Write the file name in the 'File name' box.

**Step 4:** Click 'OK'.

The file will be saved at the destination with the given name.

#### Question 5

Quit QBASIC platform

***Answer***

To quit QBASIC platform, follow these steps:

**Step 1:** Click 'File' and select 'Exit' from the drop down menu.

**Step 2:** Press 'Enter' key.

**Step 3:** If you have made any changes to the current program, the system will ask for confirmation from the user. Click 'Yes', 'No' or 'Cancel' according to your need.

QBASIC platform will close and return to the Windows.

## Distinguish between

#### Question 1

RUN and PRINT

***Answer***

| **RUN** | **PRINT** |
| --- | --- |
| This command is used in QBASIC to execute a program or to see the output of the program. | This command is used to display any data, value or message on the screen. |

#### Question 2

Program Screen and Output Screen

***Answer***

| **Program Screen** | **Output Screen** |
| --- | --- |
| Program screen is used for writing or editing a program. | Output screen shows the output of a program when the program is run. |

## Solutions to Unsolved Programs on LET & PRINT

#### Question 1

Write a program in QBASIC to greet your friend on the occasion of New Year by using PRINT statement. The output of the program is shown as:

Season's Greeting

Best Wishes for

A Happy and Prosperous New Year

From:

Name:

##### Solution

PRINT "Season's Greeting"

PRINT "Best Wishes for"

PRINT "A Happy and Prosperous New Year"

PRINT "From:"

PRINT "Name: Stewart School"

##### Output

Season's Greeting

Best Wishes for

A Happy and Prosperous New Year

From:

Name: Stewart School

#### Question 2

There are 28 boys and 22 girls in your class. Write a program in QBASIC to find the percentage of boys and girls in the class.

##### Solution

Cls

Let B = 28

Let G = 22

Let T = B + G

Let PERB = B / T \* 100

Let PERG = G / T \* 100

Print "PERCENTAGE OF BOYS= "; PERB

Print "PERCENTAGE OF GIRLS= "; PERG

End

##### Output

PERCENTAGE OF BOYS= 56

PERCENTAGE OF GIRLS= 44

#### Question 3

The base and height of a triangle are 15 cm and 10 cm respectively. Write a program in QBASIC to calculate the area of the triangle.  
(Hint: Area of a triangle = 1 / 2 \* base \* height)

##### Solution

Cls

Let B = 15

Let H = 10

Let A = 1 / 2 \* B \* H

Print "AREA OF THE TRIANGLE= "; A; "SQ CM"

End

##### Output

AREA OF THE TRIANGLE= 75 SQ CM

#### Question 4

A salesman sold 14 chairs at the rate of ₹ 275 each and 3 tables at the rate of ₹ 650 each. Write a program in QBASIC to calculate the total sale.

##### Solution

Cls

Let C = 14

Let COSTC = C \* 275

Let T = 3

Let COSTT = T \* 650

Let TOTAL = COSTC + COSTT

Print "TOTAL SALE= Rs. "; TOTAL

END

##### Output

TOTAL SALE = Rs. 5800

#### Question 5

Write a program in QBASIC to calculate the area and circumference of a circle of the radius 14 cm.  
(Hint: Area of a circle = 22/7 \* r2, Circumference = 2 \* 22/7 \* r)

##### Solution

Cls

Let R = 14

Let A = 22 / 7 \* R \* R

Let C = 2 \* 22 / 7 \* R

Print "AREA= "; A; "SQ CM"

Print "CIRCUMFERENCE= "; C; "CM"

End

##### Output

AREA = 616 SQ CM

CIRCUMFERENCE = 88 CM

## Home Assignment

#### Question 1

Write a program in QBASIC to find the value of the given expressions when a = 10, b = 5, c = 2.

1. a2 +b3 +c4
2. (a + b)2
3. a2 + b2
4. (a - b + c)2

##### Solution

Cls

Let A = 10

Let B = 5

Let C = 2

Let EXP1 = A \* A + B \* B \* B + C \* C \* C \* C

Let EXP2 = (A + B) ^ 2

Let EXP3 = A \* A + B \* B

Let EXP4 = (A - B + C) ^ 2

Print "ANSWER OF EXPRESSION 1= "; EXP1

Print "ANSWER OF EXPRESSION 2= "; EXP2

Print "ANSWER OF EXPRESSION 3= "; EXP3

Print "ANSWER OF EXPRESSION 4= "; EXP4

END

##### Output

ANSWER OF EXPRESSION 1= 241

ANSWER OF EXPRESSION 2= 225

ANSWER OF EXPRESSION 3= 125

ANSWER OF EXPRESSION 4= 49

#### Question 2

In a class of 60 students, 90% are present. Write a program in QBASIC to calculate the number of students present and absent.

##### Solution

Cls

Let T = 60

Let PRESENT = 90 / 100 \* 60

Let ABSENT = T - PRESENT

Print "STUDENTS PRESENT= "; PRESENT

Print "STUDENTS ABSENT= "; ABSENT

END

##### Output

STUDENTS PRESENT= 54

STUDENTS ABSENT= 6

#### Question 3

The rate of petrol is ₹ 47.60 per litre. You paid ₹ 250 to the pump attendant and asked for 5 litres of petrol to be filled in the tank. Write a program in QBASIC to calculate the cost of petrol and the amount of money refunded.

##### Solution

Cls

Let RATE = 47.6

Let COST = 5 \* RATE

Let PAID = 250

Let REFUND = PAID - COST

Print "MONEY REFUNDED = Rs. "; REFUND

END

##### Output

MONEY REFUNDED = Rs. 12

#### Question 4

In a book fair, you purchased the following books:

Harry Potter Books : ₹ 950  
English Dictionary : ₹ 1200  
Encyclopedia : ₹ 1600

You gave an amount of ₹ 4000 to the shopkeeper. Write a program in QBASIC to calculate the total amount to be paid to the shopkeeper and the money refunded by him.

##### Solution

Cls

Let HPB = 950

Let ED = 1200

Let EN = 1600

Let TOTAL = HPB + ED + EN

Let AMT = 4000

Let REFUND = AMT - TOTAL

Print "TOTAL MONEY TO BE PAID = Rs. "; TOTAL

Print "REFUND = Rs. "; REFUND

End

##### Output

TOTAL MONEY TO BE PAID = Rs. 3750

REFUND = Rs. 250

#### Question 5

'LEXPO' announces 25% discount on all leather items. You purchased a leather bag that costs ₹ 660 and a belt priced ₹ 160. Write a program in QBASIC to calculate the amount to be paid to the shopkeeper.

##### Solution

Cls

Let LB = 660

Let B = 160

Let TOTAL = LB + B

Let DISC = 25 / 100 \* TOTAL

Let AMT = TOTAL - DISC

Print "AMOUNT TO BE PAID = Rs. "; AMT

End

##### Output

AMOUNT TO BE PAID = Rs. 615