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1. Computer Language

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Computer language 2. Object program 3. Binary digits 4. Machine language
5. Assembler

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. False 4. False 5. True

D. Very Short Answer Question:

1. The people who write the programs are called programmers.
2. Assembly Language.
3. Zero (0) and one (1).
4. Machine Language.
5. BASIC and COBOL.

E. Short Answer Question:

1. A language that is directly understood by a computer is called Machine language.
2. Alphanumeric symbols used in assembly language are called mnemonics.
3. Locator Identifier Separation Protocol.
4. An assembler is a translator that enables the computer to convert the program written in assembly language in machine code i.e., 0 and 1.
5. A source program is a collection of instructions written using a programming language.

F. Long Answer Question:

1. A computer language is the means by which instruction and data are transmitted to the computer. It is a set of words, symbols and codes that the computer can understand. Computer language has been classified into following two categories:
(i) Low level language (ii) High level language
2. The main difference between machine language and assembly language is that the machine language consists of binary digits 0 and 1 that can be directly executed by a computer while an assembly language is a low level programming language in which binary digits are replaced by the alphanumeric symbols called mnemonics assembly language requires a software called on assembler to convert it into machine language.

3.	Interpreter 1. Translates program statement line by line and execute it immediately. 2. Interpreted code run slower. 3. Display all errors after compilation all at the some time.	Compiler 1. Translates the whole program at once and execute it later. 2. Compiled code run faster. 3. Displays error of each line one by one.
4.	High-level Language (HLL) 1. High-level languages are easy to learn. 2. These are near to human languages. 3. These are machine independent. 4. Translator is required. 5. High-level programs are slow in execution.	Low-level Language (LLL) 1. Low-level languages difficult to learn. 2. These are far from human languages. 3. These are machine dependent. 4. No translator is needed. 5. Low-level programs are fast in execution.

2. More About Windows 8.1

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Right 2. System 3. Sleep 4. Windows defender 5. Applets 6. Theme

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. True 4. False 5. False 6. True

D. Very Short Answer Question:

- Win+X
- An operating system
- Graphical User Interface
- Right click

E. Short Answer Question:

- A power plan is a collection of hardware and system settings that manages how our computer uses power.
- File explorer is the option of start menu that is used to access and manages the files and folders stored on your computer.
- Very small applications available in control panel for performing one of a few simple functions called applets.

F. Long Answer Question:

- An operating system is a system software that manages and controls all the computer hardware and software resources. It acts as an interface between a user and computer.
Three popular PC operating system are Microsoft Windows, Linux and Mac.
- Windows defender is a built-in security feature that can identify and remove viruses, spyware and other harmful malware. Following are the steps to open Windows defender:

- (i) Go to the Start screen and move the mouse pointer to the upper-right or lower-right corner of the screen.
 - (ii) In the charms bar, click on the search charm that will open the search pane.
 - (iii) Type 'Windows defender' in the search bar and press the enter key.
3. The control panel is a collection of several applets that allow you to control the setting of the various software and hardware components of the computer. Following are the different applet categories shown on the control panel:
- (a) System and Security
 - (b) User accounts and family Safety
 - (c) Network and Internet
 - (d) Appearances and Personalization
 - (e) Hardware and Sound
 - (f) Clock, Language and Region
 - (g) Programs
 - (h) Ease of Access
4. The Run option opens the Run dialog box that allows you to open a program, file, folder, document or Internet resources directly by typing the Run command or the complete path. We can also click the browse button on the Run dialog box to select a file to open.

3. Working with Tables in MS-Word

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Insert 2. row, columns 3. tab 4. Move 5. Sizing 6. Header

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. True 4. True 5. True

D. Match the following:

- | | |
|---------------------------------------|---------------|
| To move to the last cell in a row | Alt+End |
| To move to the first cell in a column | Alt+Page Up |
| To move to the first cell in a row | Alt+Home |
| To move to the last cell in a column | Alt+Page Down |

E. Very Short Answer Question:

1. Design tab of Table tools.
2. Shift key
3. Ctrl key

F. Short Answer Question :

1. A grid of cells arranged in horizontal rows and vertical columns is called table.
2. A rectangular box formed at the intersection of a row and column is known as cell.
3. The top row of a table is known as header row.

G. Long Answer Question:

1. Following are the steps to select a single cell:
 - (a) Position the mouse pointer in the selection area of cell.
 - (b) The pointer will change to a diagonally pointing arrow (↖).
 - (c) Click the left mouse button.
The cell will get selected.

2. The move handle is used to move a table and sizing handle is used to change the size of a table.
3. The design tab contains options to allow you to format the table and change its design. The layout tab contains options to allow you to modify the structure of a table and to edit the table data.
4. Following are the steps to add a style to a table:
 - (i) Select the table to which you want to apply a table style.
 - (ii) Open the design tab under Table tools.
 - (iii) In the Table style group, scroll through the gallery of the table styles and point at each one to see a preview of your table with that style.
 - (iv) When you find a table style that matches your requirement, click on it.
The style will get applied to the table.

4. Advanced Features of MS-Word

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Write 'T' for true statements and 'F' for false statements:

1. False 2. False 3. False 4. False 5. True 6. False

C. Fill in the blanks with the help of given hints:

1. Insert 2. Track changes 3. Status bar 4. Data source 5. Mailings

D. Very Short Answer Question:

1. Review tab
2. Insert
3. Data source file
4. Mail merge feature
5. Main document file and Data source file

E. Short Answer Question:

1. Mail merge is feature that allows us to merge a document file (containing standard text) with a data source file (containing data like names and addresses of the recipients) to create multiple personalized copies.
2. Hyperlink is an underlined text which when clicked takes a user to another documents with which it is linked.
3. Mail merge procedure consist of two types of files:
 - (i) The main document file that has text common to all the documents.
 - (ii) The data source fill that contains data to be merged with the main document.

F. Long Answer Question:

1. The process of moving from one document to the other or form one document to a web page is called Following the link.
To follow a link point mouse to the hyperlinked text. You see a message "Ctrl + Click to follow link". Press Ctrl key and click on the link. The hyperlinked document or web page will be opened.
2. Following are the main steps to do a mail merge:
 - (i) Selecting the document type.

- (ii) Selecting the main document.
- (iii) Creating the data source.
- (iv) Adding recipient's information to main document.
- (v) Previewing the merged document.
- (vi) Completing the mail merge.

5. Giving life to the Presentation

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Slide master 2. text, object 3. visual 4. Entrance 5. Motion paths 6. Whooshing star 7. Preview

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. True 4. False 5. True 6. False

D. Read the clues and name the options:

1. F5 2. Rehearse Timing 3. Slide Show view 4. Slide Show tab 5. Transition 6. Action button.

E. Very Short Answer Question:

1. Slide Show view
2. Add Animation button.
3. S key
4. Custom Slide show button of Slide Show tab.
5. Subtle and Exciting
6. Insert Tab.

F. Short Answer Question:

1. The slide master view is the three panned view in which you work on the master slide and supporting layouts.
2. An animation is visual effects added to the objects on a slide including text, picture, shapes and so on or to the slide as a whole.
3. The preview button in the Animation tab help you to preview the applied animation.
4. Slide transition is animation like effects that occur when you move from one slide to the next slide during a slide show.
5. Animation tab is divided into four categories:
(i) Preview (ii) Animation (iii) Advanced Animation (iv) Timing
6. An action button is a built-in shape that a user can add to a presentation and then assign them an action which occurs when you click with mouse over the action button during a slide show.

G. Long Answer Question:

Transition	Animation
1. Slide transition is an animation effect which is applied to the entire slide.	1. Animation effect is applied to only objects such as text, shape, picture etc.
2. Only one transition effect can be applied to one slide.	2. Multiple animation effects can be applied to each object on the same slide.

2. Rehearse Timing is a useful feature that helps a user to practice presenting the slide show. Using this feature, we can save the most appropriate timings needed to go through each slide and animation in the presentation during a slide show. These timing can then be used to run the slide show automatically for the audience.
3. Entrance animation determines the manner in which an object appears on a slide; for example an object can move onto a slide, whereas Exit animation determines the manner in which an object would leave the slide; For example an object can move off a slide.
4. Following are the steps to apply a transition:
 - (i) Select the desired slide from the Slide Navigation pane.
 - (ii) Click the Transition tab, then locate the Transition to This slide group.
 - (iii) Click the More drop-down arrow to display all transitions.
 - (iv) Click a transition to apply it to the selected slide.

6. Working in MS-Excel

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Active 2. Name box 3. Editing 4. Formatting 5. Home

C. Write 'T' for true statements and 'F' for false statements :

1. True 2. True 3. False 4. True 5. False

E. Very Short Answer Question:

1. Ctrl+V
2. Click on the row header.
3. Click on the select All button placed at the top left corner of the worksheet.
4. Ctrl key
5. One row

F. Short Answer Question:

1. The highlighted cell or the cell in which the call pointer lies is called the active cell.
2. A file in MS Excel is known as a workbook, while the worksheet is a single page within that book. We enter all the data in worksheet.
3. To select on entire column click on the column header.
4. The main difference between copying and moving is that the copying makes a duplicate of data in another location without affecting the original content while moving transfers the original data to another location.

G. Long Answer Question:

1. Follow the given steps to select non-adjacent cells or cell ranges:
 - (i) Select the first cell or call range.
 - (ii) Hold down the ctrl key and select the second cell or range of cells.
 - (iii) Repeat these steps to select more cells or cell ranges if needed.
2. Following are the steps to increase the row height:
 - (i) Bring the mouse pointer over the bottom border of the required header. The mouse pointer changes shape to  icon.
 - (ii) Drag the bottom border down to increase the row height.

3. Following are the steps to insert a row in a worksheet:
- (i) Select the row above which you want to insert a blank row.
 - (ii) Open the Home tab. In the Cells group, click the Insert button.
 - (iii) From the drop down menu select Insert Sheet Rows.
A blank row will get inserted.

7. Introduction to Flash CS3

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Frame 2. Timeline 3. Keyframe 4. Selection 5. Erase lines mode 6. Rectangle

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. True 4. False 5. False

D. Read the clues and name the following:

- 1. Flash CS3
- 2. Stage
- 3. Tools panel
- 4. Selection tool
- 5. Property Inspector

E. Very Short Answer Question:

- 1. Flash CS3 is an animation software.
- 2. The major components of the Timeline are layers, Frames and the Play head.
- 3. The F5 key creates a frame, F6 creates a new keyframe and F7 creates a blank key frame.
- 4. By default the stage dimensions are 550 x 400 pixels.

F. Short Answer Question:

- 1. Flash is a powerful animation software package developed by Adobe systems. Flash provides a versatile and easy way to create animation that consists of images, sound and video with various effects.
- 2. Following are the three modes of pencil tool:
(i) Straighten (ii) Smooth (iii) Ink
- 3. Stroke refers to a line or outline of a drawing. Fill refers to something that is filled up inside a closed shape.
- 4. Timeline is a very important toolbar in Flash which is vertically divided into layers and horizontally into the frames. It organizes and controls the contents of a Flash document over time in layers and frames.

G. Long Answer Question:

- 1. **Frame:** Frame is a small bar on the timeline that represents a single step in an animation.

Keyframe: Keyframe is a frame which are occupied and marked by a black dot. It contains a vital step of information where some changes take place.

Blank keyframe: Blank keyframes are spaces which occupy empty space. These contains no elements.

2. Property inspector is used to show the properties of the currently opened document or any object or tool currently selected in the document. If the property inspector is not visible by default you can open it by clicking on Window → Properties or by pressing the Ctrl+F3 keys.
3. Selection tool is used to select anything drawn on the stage.
There are two commonly used selection tools in Flash:
 - (i) **Selection tool:** It is used to select rectangular shaped area.
 - (ii) **Lasso tool:** It is a free hand selection tool used to select irregular shaped areas of a drawings or a part of an object.

8. Conditional Statements in QBasic

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Constant 2. Relational 3. Let 4. Condition, False 5. F5 6. If

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. True 3. False 4. False 5. False

D. Very Short Answer Question:

1. String constants
2. Dollar (\$) sign
3. LET statement
4. .BAS
5. PRINT statement

E. Short Answer Question:

1. The fullform for BASIC is Beginner's All Purpose Symbolic Instruction Code.
2. Numeric constant- CONST PI = 22/7 and CONST g = 9.8.
Alphanumeric constant - CONST N\$="Ramesh" and CONST Place\$= "Kiertipur"
3. A variable is a quantity whose value can change as many times as required during the execution of a program.
4. IF--- THEN is a conditional statement that is used to test a single condition and passes the control of execution based on the result of the test condition.
5. The SELECT--- CASE statement is used to test multiple conditions. It allows an action to be selected from a list of alternative action based on the test results. IF the test result does not match with any of the given CASE values, then the statement in the CASE ELSE clause is executed.

F. Long Answer Question:

1. The key difference between a variable and a constant is: A variable is a quantity whose value can change during the execution of a program. A constant is a quantity whose value does not change during the execution of a program.
2. Conditional statement is a set of rules performed if a certain condition is met. Following are the conditional statements used in QBasic
(i) IF ...THEN (ii) IF ...THEN---ELSE (iii) IF...THEN...ELSEIF (iv) SELECT...CASE
Example: Write a program to input a number and print its square if it is less than 10.
CLS

```
INPUT "ENTER a number"; NUM
IF NUM < 10 THEN
PRINT NUM * NUM
ENDIF
END
```

3. Numeric variables contain only numbers and are suitable for numeric calculations and store numeric constants. For example. AGE=20, here AGE is a numeric variable which stores the constant value 20.

String variables may contain letters, numbers and other characters. Calculations can not be performed on string variables. String variables names should always end with a \$ sign. For example: Name\$ = "Anu".

4. The IF...THEN...ELSE statement is used to execute a statement or block of statement only when the condition listed with the IF keyword evaluates to True. The addition of the keyword ELSE to the IF...THEN statement allows the execution of an alternate statement/statement block when the given condition evaluates to False.

Syntax: IF condition THEN
Statement block-1
ELSE
Statement block-2
ENDIF

9. Internet Browsing and Email

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Capital 2. 1969 3. Email 4. Web browser 5. Attachment 6. Chat 7. Play store

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. True 3. False 4. True 5. False

D. Give the full form of following:

1. ISP : Internet Service Provider
2. VSNL: Videsh Sanchar Nigam Limited
3. WWW : World Wide Web
4. URL : Uniform Resource Locator
5. ARPANET : Advanced Research Projects Agency Network

E. Very Short Answer Question:

1. Facebook
2. Tim Berners-Lee
3. Use of capital letters
4. Reply
5. Compose button
6. Attachment icon

F. Short Answer Question:

1. Airtel, Reliance, Sift, and Tata are private Internet Service Provider.
2. Google Talk, Instant Messenger and Yahoo Messenger are popular chat programs.
3. Email, social networking and chatting are some popular Internet services.

G. Long Answer Question:

1. Tim Berners-Lee is popularly known as the inventor of the World Wide Web. His invention is the reason why we are able to get information in just one click and how we are able to connect with other people in different parts of the world today.
2. Following are the differences between a web browser and search engine:
 1. A web browser is used to access websites and web pages whereas a search engine is used to search for a particular information.
 2. A web browser is used to access the Internet whereas in order to open a search engine you need a browser.
 3. Firefox, Safari and chrome are the most popular web browsers while Google and Yahoo are the most popular search engines.
3. Internet is very useful in field of education as students can seek for knowledge on a particular topic can learn something new on internet and can also ask from other on apps like brainly. Internet opens door-ways of a wealth of information, knowledge and educational resources, increasing opportunities for learning in and beyond the classroom. Teachers use online materials to prepare lessons, and students to extend their range of learning.
4. Following are some basic things we should keep in mind while communicating through e-mails:
 - (i) The use of capitals in e-mail messages is considered as impolite and equivalent of shouting in speech.
 - (ii) Never disclose your home address, school address or send your pictures to an unknown person. These can be misused.
 - (iii) Never open an attachment if the email has come from an unknown source. If you want to open it first scan it properly for viruses.

Assessment-1

Multiple Choice Questions

A. Tick (✓) the correct option:

1. (a) 2. (a) 3. (b) 4. (c) 5. (b) 6. (b) 7. (b) 8. (c)

B. Fill in the blanks with the help of given hints:

1. High level language 2. Binary 3. Slide master 4. Win+X 5. Event viewer
6. Applets 7. Layout 8. Review

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. False 4. False 5. True 6. True 7. True 8. True

D. Match the columns correctly:

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

E. Very Short Answer Question:

1. BASIC
2. Shape of a hand
3. Zero (0) and (1)
4. Two
5. Ctrl+ right arrow key
6. Ctrl+K
7. The final document of the mail merge is called merged document.
8. In slide show view

F. Short Answer Question:

1. The key difference between source program and object program is that source program is a human-readable program written by a programmer while object program is machine executable program created by compiling a source program.
2. The control panel is a collection of several applets that allow us to control the setting of the various software and hardware components of the computer system.
3. Following are the steps to select a column:
 - (i) Position the mouse pointer in the top boundary of the column that you want to select.
 - (ii) The pointer will change of (↓) icon. Click the mouse. The entire column will get selected.
4. Track changes is a feature which when turned on, highlights the changes made in document so that they can be accepted or rejected by an authorized user.
5. Mail merge is a feature that allows us to merge a document file containing standard text) with a data sources file (containing data like names and addresses of the recipients) to create multiple personalized copies.
6. A master slide is a special type of slide that stores information about the theme and slide layouts of a presentation inducing the background, color, fonts, effects placeholder size, positioning and soon.

G. Long Answer Question:

1. A programming language is a formal language, which comprises a set of instructions that produce various kinds of output. Programming languages are used in computer programming to implement algorithms. Most Programming languages consist of instructions for computers.
Machine language, Assembly language and High level language are examples of computer programming language.
2. The shut down or sign out option allows to shut down the computer directly form the desktop. On clicking it display a sub-menu with four options-Sign out, Sleep, Shut down and Restart. Clicking on the shut down option completely shuts down the computer.
3. Following are the steps to change the data and time of a computer system:
 - (i) Open the Control panel and click on the Clock, Language and Region category.
 - (ii) Click on the date and time link of open the Date and Time dialog box.
 - (iii) In the Date and Time dialog box, Click on the Change date and time to open the Date and Time settings dialog box,
 - (iv) Select the month and year as required.
 - (v) Select the required date form the month calendar.
 - (vi) Enter the required time.
 - (vii) Click on the OK button to close the dialog box.
 - (viii) Click on the OK button in the Date and Time dialog box to close it.

Assessment-2

Multiple Choice Questions

A. Tick (3) the correct option:

1. (a) 2. (b) 3. (b) 4. (c) 5. (c) 6. (c) 7. (c) 8. (a)

B. Fill in the blanks with the help of given hints:

1. Data selection 2. Conditions 3. World Wide Web 4. E-mails 5. Frame 6. Editing 7. Preview 8. Constant

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. False 4. True 5. False 6. True 7. False 8. True

D. Match the columns correctly:

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

E. Very Short Answer Question:

1. Compose Mail
2. The cell pointer in which the cell pointer lies.
3. 1,048,576 rows and 16,384 columns.
4. A scene is like a clip of a movie in flash.
5. Options section
6. String variables
7. INPUT command
8. Ray Tomlinson

F. Short Answer Question:

1. Adobe Flash, Flip Book, Blender, 3D Studio MAX and MAYA are some animation software.
2. The main difference between fill and stroke is stroke refers to a line or an outline of a drawing. Fill refers to something that is filled up inside a closed shape.
3. In Flash keyframe is a frame which is occupied and marked by a black dot.
4. SELECT...CASE statement allows to test multiple conditions. It allows an action to be selected from a list of alternative actions based on the test results.
5. AND operator is a logical operator that returns True only if both the relational expressions used in it are True. For examples:
If $A = 15$, $B = 20$ and $C = 25$ then expression $C > A \text{ AND } C > B$ returns true.
6. An ISP (Internet Service Provider) is a company that provides individuals and other companies access to the internet. Jio, Airtel and BSNL are Name of Internet Service Providers.

G. Long Answer Question:

1. **Frame:** Each layer is made up of a number of frames. These frames appear to the right of a layer as a row of cells. Timeline header above the frames displays the frame numbers. Each frame represents a single step in an animation.
Key frame: The keyframe is a frame which is occupied and marked by a black dot. It contains a vital step of animation where some changes take place.
2. An App is a small software designed to allow you to perform a specific task on your computer or mobile device. For example 'Whatsapp' application duplicated to instant messaging. There are two types of apps-Mobile apps and Desktop apps.
Ola Cabs app, Google play store and Flip board are examples of app.
3. Slide transitions are the effects with which a slide is introduced in a presentation during a slide show. Following are the steps to apply a slide transition:
 - (i) Select the desired slide from the slide navigation pane.
 - (ii) Click the transition tab, then locate the Transition to This slide group.
 - (iii) Click the More drop-Down arrow to display all transitions.
 - (iv) Click a transition to apply it to the selected slide.
4. Select the first cell and hold down the ctrl key. Now select the second cell. Repeat these steps to select more cells.

Icon-X 7

1. Exploring the Computer System

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Software 2. Hardware 3. Port 4. USB Port 5. Motherboard 6. ROM
7. Parallel

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. True 3. False 4. True 5. False

D. Very Short Answer Question:

1. USB port
2. Parallel Port
3. Basic Input/Output system

E. Short Answer Question:

1. The physical parts of a computer are called hardware. Printer, monitor, CPU and keyboard are examples of computer hardware.
2. Software is a set of instructions, data or programs used to operate computers and execute specific tasks. MS Word, MS PowerPoint, MS Excel are examples of computer software.
3. The main circuit board of the computer that lies inside the system unit is known as the motherboard.
4. Control unit (CU) and Arithmetic logic unit (ALU) are two main parts of the CPU.

F. Long Answer Question:

1. PS/2 ports are generally used for connecting a mouse and keyboard to the computer whereas a USB port is used to connect USB devices such as pen drive, USB mouse or keyboard.
2. Following are buttons/ports present in the front part of system unit:
(i) **Power Button:** It is used to power the computer ON and OFF.
(ii) **CD drive/DVD drive button:** It can be pressed to make the CD/DVD tray slide in and out.
(iii) **Audio ports:** It is used to connect speakers, headphones and microphones easily to the computer.
3. Following are buttons/ports present in the back side of system unit:
(i) **Ethernet Port:** It is used to connect the computer to a network or to the internet.
(ii) **Parallel port:** It is used to connect a printer to the system unit.
(iii) **USB port:** It is used to connect a pen drive, USB mouse or keyboard and other USB devices.
4. RAM (Random Access Memory) is the memory that the computer uses to process data and run programs. It can be directly accessed by the CPU. It is a temporary memory because everything stored in the RAM gets erased as soon as we switch the computer off.

2. Formulae, Functions and More in Excel

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Equal to (=)
2. Arithmetic
3. Sum
4. Min
5. Increasing
6. Sorting
7. Filter

C. Write 'T' for true statements and 'F' for false statements :

1. False
2. True
3. True
4. True
5. False
6. False

D. Very Short Answer Question:

1. (C₁:C 1,048576)
2. Home tab
3. Average () function.

E. Short Answer Question:

1. The Max() function is used to find out the maximum value from a given set of data. It returns the highest value from a given set of numeric values.
2. Sorting is the process of arranging data into a meaningful order (increasing or decreasing order) so that data can be analyzed more effectively.
3. Custom sorting

F. Long Answer Question:

1. Formulae is the expression that is used for doing calculations on the worksheet data. Every formulae begins with an equal to sign (=).

The "=" sign can be followed by a number, cell address, cell range, mathematical operation or function and so on.

Then following example contains the some basic elements :

=A1 + B1 * 7

Here = is equal to sign.

A1 and B1 are cell addresses.

+ and * are mathematical operators.

7 is number.

2. Relative referencing is the normal way of addressing the cells like A2, B2 C4 and so on. It allows us to change the cell addresses in formula when it is copied to some other row or column. The cell addresses change according to the row or column where the formula is copied.

For example, if the formula in D2 is = B2 + C2, when the formula is copied vertically down, the cell address in the formula had automatically changed.

3. At absolute referencing in Excel refers to a reference that is locked so that rows and columns would not change when copied. Unlike a relative reference, an absolute referencing refers to an actual fixed location on a worksheet. To create an absolute reference, add a dollar \$ sign before the row and column. For example, D2 is relative address, whereas \$D\$2 is an absolute reference.

4. A function is a predefined formula that allows us to perform a particular kind of compilations like adding and finding the sum of all values, finding the average of cell values and so on. A function also begins with an equal to (=) sign.

A function has two parts-the function home and the arguments that are included

within parenthesis (). The sum () function given below helps to understand the different parts of a function:

=SUM (A2 : E6)

Here SUM is the function name and A2 : E6 are arguments within the parenthesis.

5. **Sorting:** Sorting is used to arrange data in a particular order E.g. arranging a list in an alphabetical order or arranging data in increasing or decreasing order of numeric values.

Filtering: A filter allows to hides (filters out) unwanted data and displaying only the data you want to see.

6. Conditional formatting is a feature using which you can highlight selective data in a worksheet by formatting it in such a way that it stands out from the rest of the data.

Following are steps to perform conditional formatting:

- (i) Select the range for example A1 : A10.
- (ii) On the Home tab, in the Styles group, click conditional Formatting.
- (iii) Click Highlight cell rules, Greater Than.
- (iv) Enter the value 70 and select a formatting style.
- (v) Click OK. Excel highlights the cells that are greater than 70.

3. Creating Charts in MS-Excel

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Chart 2. Category axis 3. Y-axis 4. Title 5. Line chart 6. Dragging

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. False 4. True 5. False 6. True

D. Very Short Answer Question:

1. Insert group
2. Three=Design tab, layout tab and format tab.
3. (i) 2-D column chart (ii) 3-D column chart
4. Goal seek is a feature for fixing a specific result for one cell, by adjusting a value in another cell.

E. Short Answer Question:

1. Pie chart is used for showing data form one data series only.
2. X-axis is known as the category axis because it is used to display data categories.
3. A data series is a set of value on the worksheet that you want to plot in the form of a chart. Each data series is given a unique color or pattern in the chart that makes it easier to distinguish them visually.

F. Long Answer Question:

1. A chart is a graphical representation of data. Charts make it a lot more easier for us to analyze and interpret data. Charts can usually be read more quickly than the raw data. Comparisons and trends can also be shown at a glance with the help of charts. There are following advantages of using charts:

- Charts represent data and information in an attractive manner.
- Charts have a long lasting effect on the mind than a simple data statement.

2.

Column Chart	Bar Chart
1. Column chart is used to display data in the form of vertical bars.	1. Bar chart is used to display data in the form of horizontal bars.
2. In column chart categories are shown along the x-axis and values along the y-axis.	2. In a bar chart, categories are shown along the y-axis and values along the x-axis.

3. **Legend:** A legend is a key that identifies a data series. It describes a data series represented in a particular colour on the chart.
- Data series:** A data series is a set of values on the worksheet that you want to plot in the form of a chart. Each data series is given a unique color or pattern in the chart that makes it easier to distinguish between them visually.
4. Chart area includes chart and the entire element related to the chart. Plot area is the part of the chart area where data is actually plotted. It only includes the graphical representation of the chart. Chart area covers large space so, it is bigger in size.
5. Following are the steps to add a chart title:
- Select the chart to which you want to add the chart title.
 - Click on the layout tab under the chart tools.
 - Click on the Chart Title button. A drop down menu appears displaying options that specify how the chart title will be displayed on the chart.
 - Select an option (Above chart in this case). A text box containing the text 'Chart Title' will be added to the chart
 - Type to replace the text in the text box with the text of the chart title.
6. Chart element button helps to select a particular chart element. For this click on the drop down arrow and select an element from the list.

4. Computer Virus

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Computer virus 2. External 3. Trojan horse 4. CD, Pen drive 5. Antivirus
6. Update

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. True 4. True 5. True 6. False

D. Very Short Answer Question:

- Full form of VIRUS is Vital Information Resource Under Seize.
- Stand/Marijuana and Disk Killer are examples of boot sector virus.
- Sunday and Cascade are examples of program file virus.
- Norton, Kaspersky and McAfee are three antivirus software.

E. Short Answer Question:

- Computer virus is a program that is loaded on to a computer without the user's knowledge. It is a program that disrupts the normal operation of a computer. It self-replicates and infects a computer.

2. Following are the three types of computer virus:
 - (i) Boot sector virus spread by hiding itself in the boot sector of a Hard disk or Floppy disk.
 - (ii) Program file virus infects executable files, programs.
 - (iii) Macro virus use another application's macro programming language to distribute themselves.
3. (i) Trojan Horse is a simple program that pretends to be a useful application while it always does something distractive. Mostly it damages a computer, like erasing a disk. It is not self- replicating.
 - (ii) Spyware is a type of malware that is installed secretly on a computer to gather a person's information without his/her knowledge or consent. These programs secretly monitor the users computing.
 - (iii) Worm is a malicious program that duplicates itself by using computer networks and security flaws. They eventually fill up the disk space with copies of itself and thereby make a system to work very slow.
 - (iv) Malware is a type of software program designed to damage the data/computer system without the owner's knowledge or consent.
4. Macro viruses use another application's macro programming language to distribute themselves. This type of viruses infect data files. For example MS Words documents or MS Excel documents and template files are susceptible of macro virus attacks WM-Concept. A., W97M_ Mellissa .mp are examples of macro viruses.

F. Long Answer Question:

1. The difference between Boot sector virus and program file virus is that boot sector virus infects the start-up instructions whereas program file virus infects executable files programs.
 Boot sector virus is copied from the disk to computer's memory when a computer reads an infected floppy disk. This virus overwrites the original boot record with the infected one. While program file virus gets loaded in the computer's memory during execution. Program file virus becomes active in the computer memory by replicating itself and infecting files on the disk.
2. Following are the symptoms of a computer virus:
 - (i) Increasing the use of disk space and growth in file size as the virus gets attached itself to many files.
 - (ii) Corrupting the data or program files.
 - (iii) Interference with the display.
3. After infecting a system, a virus tries to take control of the system. Their main purpose is to irritate the computer users. Virus tries to attach itself to another program in order to spread. This process can happen so quickly that the user is not even aware of the presence of a virus in computer.
4. Antivirus software are computer programs which are designed to identify, prevent and remove viruses form a computer. They perform the following tasks in a computer.
 - (i) Scan the computer files to look for know viruses matching definitions in a virus dictionary.
 - (ii) Identify suspicious behavior form any computer program which might indicate infection.

5. Moving Ahead with Flash CS3

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. .fla 2. Free Transform 3. Property Inspector 4. Polystar 5. BreakApart
6. Symbol

C. Write 'T' for true statements and 'F' for false statements :

1. False 2. False 3. True 4. False 5. True 6. False

D. Very Short Answer Question:

1. Oval tool
2. Text tool
3. One layer
4. Displays the properties of the selected object.
5. Eyedropper tool
6. Ctrl+Shift+O

E. Short Answer Question:

1. A layer is the part of flash timeline. Layers are like transparent sheets that may contain objects related to the same scene. When a document opens, it contains only one layer by default.
2. A key frame is a frame that contains a key image in the animation where an object begins or ends an action (like moving, changing shape, fading, spinning and so on.)
3. The copy of a flash symbol is called its instance.
4. A symbol is a reusable graphic object (image, animation or a button) stored in Flash library.

F. Long Answer Question:

1. In the timeline, you work with the frames to organize and control the content of document. You place frames in the timeline in the order you want the objects in the frames to appear in your finished content. A keyframe is a frame where a new symbol instance appear in the timeline.
2. The main difference between motion tweening and shape tweening is that motion tweening works on groups and symbols, where shape tweening requires editable objects. You can change any of the objects properties- size, color, location in motion tween.
3. The free transform tool is used to resize, move or rotate an object drawn or imported on the stage. This tool allows you to scale, skew and change a shape in number of ways.
4. Following are the steps to convert an object drawn on stage into a symbol:
(i) Select the graphic drawn on the stage. Click on the Modify → Convert to Symbol option. The Convert to Symbol dialog box appears.
(ii) Type the name of symbol in the Name box.
(iii) Select either the Movie clip or the Graphic option to define your symbol type.
(iv) Click on the OK button.
The selected object will get converted to a symbol.

6. Introduction to Photoshop

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Editing 2. Bitmap 3. Pixels 4. Drawing 5. Magic Wand 6. Lasso

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. False 4. True 5. False 6. True

D. Very Short Answer Question:

1. Move tool
2. Crop tool
3. Move tool
4. Magic Wand tool
5. Feathering feature

E. Short Answer Question:

1. Full form of TIFF is Tagged Image File Format.
2. Following are the various types of view tools in Photoshop:
(i) Zoom tool (ii) Hand tool

Zoom tool lets you magnify areas of an image when you are performing close detailed work. Hand tool is used to move the image within the window, when you are zoomed in on an image.

3. Selection tools are used to select the whole or part of an image. Following are the selection tools:
(i) Marquee tool (Rectangular/Elliptical)
(ii) Move tool
(iii) Lasso tool (Lasso/Polygonal/Magnetic)
(iv) Quick selection tool/Magic wand tool
(v) Crop tool

F. Long Answer Question:

1. Adobe Photoshop is an image editing software developed by a leading software company named Adobe Crop for Windows and Mac OS. It was originally created in 1988 by Thomas and John Knoll. It is the most popular software package for creating and modifying images for various purposes including designing of web pages advertisement and book production and soon.
2. Marquee tool is used for selecting an image or part of an image in a rectangular way. After selecting on image, we can cut, copy, delete move or manipulate it in any other way.
3. The Magnetic Lasso tool draws a selection border that automatically shape to the edges of objects you drag over in the photo. This makes it easy to draw precise selection borders. The Magnetic Lasso tool is useful for quickly selecting objects with complex edges set against high-contrast backgrounds.
4. The Photoshop Magic Wand Tool is a quick and easy way to select and mask certain portions of on image, giving the ability to alter one part of image while leaving other parts intact. One of the most common use of this tool is to swap out or remove the background of a photo, leaving the subject of the image in place. It is also used to select adjacent areas of an image that are of the same color.

7. Loops in QBasic

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. GOTO 2. Looping 3. Counter 4. For...Next 5. Initial, Final 6. For... Next

C. Write 'T' for true statements and 'F' for false statements :

1. True 2. False 3. True 4. False 5. True

D. Very Short Answer Question:

1. Counter
2. Next
3. GoTo Statement
4. For...Next statement
5. WEND

E. Short Answer Question:

1. Looping means repeated execution of statements for a fixed number of times. Looping reduces the number of instructions and memory space.
2. An accumulator is a variable that stores the sum of the numbers entered during the execution of a loop.
3. The FOR...NEXT statement is used when a group of statements are to be executed a specific number of times. This also reduces the length of a program.
4. The use of FOR...NEXT statement within another FOR...NEXT statement is known as nested loop.
5. A do while loop is used where your loop should execute at least one time.

F. Long Answer Question:

1. A counter is a variable that keeps track of the number of times a particular instruction or set of instructions is executed within a loop. It is different from accumulator because it keeps track of the number of times instructions are executed whereas an accumulator stores the sum of the numbers entered during the execution of a loop.

2. **Loop:** A programming structure that repeats a set of instructions till a given condition holds true is called loop.

Nested Loop: A loop within another loop is called a nested loop.

3. The FOR...NEXT loop repeats the statements enclosed within the FOR and the NEXT keyword specified number of times.

The DO...WHILE looping statement repeats a block of statement when a condition is true. When the condition becomes false, the loop stops. Statements written in a DO...WHILE block are executed at least once.

4. The For statement specifies the counter variable and its start and end values. The next statement increments the counter variable by 1.

Using the Step keyword, you can increase or decrease the counter variable by the value you specify.

8. Graphics in QBasic

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Coordinates
2. LINE
3. PSET
4. SCREEN
5. Text, Graphics
6. 4

C. Write 'T' for true statements and 'F' for false statements:

1. True
2. True
3. False
4. True
5. False
6. True

D. Very Short Answer Question:

1. PAINT Statement
2. COLOR Statement
3. BEEP Statement
4. CIRCLE Statement
5. Aspect ratio
6. SCREEN 11 and SCREEN 12
7. Ten screen modes

E. Short Answer Question:

1. (a) The LINE Statement is used to draw a straight line between two points on screen. 'B' at the end of the LINE Statement draws a box outline and 'BF' draws a filled box.

Syntax: LINE (X1, Y1) - (X2, Y2), COLOR B/BF

Where (X, Y1) and (X2, Y2) represent the starting and ending co-ordinate of a line drawn in the specified color.

- (b) **CIRCLE:** The CIRCLE statement is used to draw circles, arcs and ellipses.

Syntax: CIRCLE (X, Y), R, C, START, END, ASPECT RATIO

Here (X, Y) are the co-ordinates of the center of the circle, R is the radius of the circle in pixels, C is the color code of the color used to draw circle. START and END are used only of draw Arcs. The ASPECT RATIO is used for drawing ellipses.

- (c) **DRAW:** The DRAW statement is used to draw a straight line in 8 different directions.

Syntax: DRAW "Direction String"

Here, the Direction string consists of one or more commands.

- (d) **BEEP:** The BEEP statement is used to add a beep sound in a program.

Syntax: BEEP

2. The screen command helps us to set any one of the nine graphics screen available in QBasic for displaying the graphic output.

Syntax: SCREEN < Mode Number >

Example: SCREEN 0 set the screen for the Text Mode.

3. LINE Statement has a COLOR attribute to add color to a line. Example:

LINE (16, 20) - (44, 20), 1 draws a blue color line.

The PAINT statement is used to color a circle.

PAINT (320, 240), 9, 5

Here g is the color to be filled in circle and 5 is the border color of the circle.

Line has a "BF" option that allows us to fill color in the boxes.

Example: LINE (330, 115) - (400, 320), 5, BF

- The SOUND statement generates a sound of a specific frequency for a specific duration from computer's speaker.

Syntax: SOUND Frequency, Duration

The Frequency of a sound is measured in Hertz. Its value ranges from 37 to 32, 767.

The value of the duration of sound ranges from 0 to 65,535. In terms of seconds, a duration of 18.2 is roughly equal to 1 second.

F. Long Answer Question:

- The Play statement is useful for playing musical notes. Musical notes specified with the Play statement are the same as actual musical notes we can create while playing music on a piano.

Syntax: PLAY string

Where the string consists of an octave with a letter form a to g.

- CIRCLE (160, 120), 100, 4

- PAINT statement is used for filling a graphic area with a specified color or pattern.

Syntax: PAINT (X, Y), Color, border color

Example: To paint a circle with Blue color.

```
SCREEN 12
```

```
CLS
```

```
CIRCLE (320, 240), 100, 5
```

```
PAINT (320, 240), 9, 5
```

```
END
```

The coordinates (320, 240) tell the PAINT statement where to start painting. The number 9 tells PAINT to use blue as the paint color. The number 5 tells paint to stop painting when it runs into a pixel of Magenta color (Color code 5).

- CIRCLE (240, 90), 40, 1,,, 5

Here the aspect ratio of ellipse is .5, i.e., less than 1 so horizontal ellipse is drawn.

```
CIRCLE (140, 90); 40, 1,,, 2
```

Here the aspect ratio of ellipse is 2, i.e., greater than 1, so a vertical ellipse is formed.

9. Internet Services and Applications

Multiple Choice Questions

A. Tick (3) the correct option:

- (a) 2. (c) 3. (a) 4. (c) 5. (c)

B. Fill in the blanks with the help of given hints:

- Blogs 2. Whatsapp 3. Facebook 4. Tweets, 140 5. Virtual lab 6. Simulation 7. Apps

C. Write 'T' for true statements and 'F' for false statements:

- True 2. False 3. False 4. True 5. True

D. Very Short Answer Question:

- Internet Forum
- YouTube and Netflix
- Twitter
- Facebook

5. WWW.blogadda.com
6. FOSS stands for Free and Open Source software.

E. Short Answer Question:

1. Twitter is a website that offers a social networking and microblogging service; enabling its users send and read messages called tweets.
2. A blog is like a virtual diary containing the logs or experience and thoughts of individuals or groups of people with common interests. A blog consists of a web-based signed and dated log of individual postings.
3. WWW.e.cards.com and WWW.hallmark.com are examples of E-greeting websites.
4. The websites where people meet online and exchange messages, comments, pictures and videos are known as social networking sites. Social networking sites function like an online community of internet users.
5. The term, forum refers to a discussion area in a web site where people with common interests can communicate in the form of posted messages.

F. Long Answer Question:

1. Following are the advantages of social networking sites:
 - (i) One of the major benefit of these sites is the diversity of people you get to meet as they give access to people from around the world.
 - (ii) You can communicate with your old friends who are members on the same social networking site
 - (iii) Not only you can make new friends, you can also learn about new cultures or even new languages.
 - (iv) These sites bring people with common interests under one roof and make communication much easier and prompt.
 - (v) These sites offers a great potential for education.
2. An app is a small self-contained computer program designed to run on mobile devices such as smartphones and tablet computer. It is generally used to perform one particular type of task.

We can also download apps suited to our particular needs from amongst the millions of apps available on various online app stores:

- (i) Google Play Store
 - (ii) Apple's App Store
 - (iii) Ovi Nokia
3. Cloud computing is a technology that uses the internet to store and maintain data and applications. The word cloud in cloud computing refers to the internet. The goal of cloud computing is to provide easy access of resources. For example, you can access our e-mail wherever and whenever you need it. This is because your e-mail is stored on the cloud. Cloud computing is device independent i.e., resource can be accessed from any type of computer.
 4. Following are the safety precautions that you will observe while using the social networking:
 - (i) Use a strong password (a combination of upper and lower case letters symbols and numbers).
 - (ii) Your personal information such as your full name, address, phone number and the routines you have set in your day-to-day life should not be posted on social networking sites.

(iii) While making a new friend, be very careful. This friend may be an innocent person who is very honest. But it could also, be a hacker looking for an opportunity to steal your identity or give your computer a virus.

Assessment-1

Multiple Choice Questions

A. Tick (✓) the correct option:

1. (b) 2. (b) 3. (b) 4. (a) 5. (c) 6. (c) 7. (c) 8. (b)

B. Fill in the blanks with the help of given hints:

1. ROM 2. Expansion 3. Min() 4. Filter 5. Legend 6. Doughnut 7. Self-replicating
8. Creeper virus

C. Match the columns correctly.

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

D. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. False 4. False 5. False

E. Very Short Answer Question:

1. ROM chip
2. Random Access Memory
3. Relative, Absolute and Mixed cell referencing
4. LEN() function
5. Function name and argument
6. Chart Title, Chart Area and Plot Area.
7. Insert tab
8. Antivirus software

F. Short Answer Question:

1. Hardware is the physical parts of the computer system that you can see and touch. A motherboard, CPU, keyboard and monitor are all items of hardware.
Software is a collection of instructions that can be run on a computer. These instructions tell the computer what to do. MS Word, MS Excel etc., are examples of software.
2. Sorting is the process of arranging data into a meaningful order so that we can analyze it more effectively. Excel allows us to sort data in following ways:
 - (i) Sorting textual data into alphabetical order.
 - (ii) Sorting numerical data.
 - (iii) Starting data date-wise.
 - (iv) Sorting data on the basis of multiple column/row through the sort dialog box.
3. Conditional formatting allows us to highlight only those cells that contain data that meets a given condition. For example, we can use a condition like, 'If the marks obtained is greater than 400, color the cell red' to highlight all the cells in the Marks obtained column given in a table.
4. Following are the different types of charts available in MS Excel:

(i) Column Chart	(ii) Bar Chart	(iii) Line Chart
(iv) Pie Chart	(v) Doughnut Chart	(vi) Area Chart

5. A legend is a key that identifies a data series. It describes a data series represented in a particular color on the chart.
6. Following are the three antivirus software:
 - (i) Norton antivirus
 - (ii) Kaspersky antivirus
 - (iii) McAfee antivirus

G. Long Answer Question:

1. The X-axis is known as category axis. It is the horizontal axis that bounds the plot area of a chart. It is generally used to display data categories and therefore also known as the category axis.
2. Boot sector virus spread by hiding itself in the boot sector of a hard disk or floppy disk and infects the start-up instructions which are required to boot the system. When your computer reads an infected floppy disk, the virus is copied from the disk to commuter's memory. A boot sector virus overwrites the original boot record with the infected one. The most common boot sector viruses are stand/Marijuana, Danish Boot Devi.941 and Dish killer.

Column Chart	Bar Chart
1. Column chart is used to display data in the form of vertical bars.	1. Bar chart is used to display data in the form of horizontal bars.
2. In column chart categories are shown along the x-axis and values along the y-axis.	2. In a bar chart, categories are shown along the y-axis and value along the x-axis.

4. Following are the steps to change the chart type:
 - (i) Click anywhere in the chart to select it.
 - (ii) Click on Design tab under Chart tools.
 - (iii) Click on the Change Chart Type button, the Change Chart Type dialog box opens.
 - (iv) In the left pane, select the Chart type and in the right pane, select the Chart subtype.
 - (v) Click on the OK button.
5. BIOS (Basic input/Output System) is a ROM chip found on motherboard that allows to access and set up computer system at the most basic level. It also manages data flow between the operating system of computer and attached devices such as the hard disk, keyboard mouse and printer. The first thing BIOS does is to initialize and test the system hardware components. When a user turn on the computer, BIOS instructions are initiated.
6. Formula to calculate the product of numbers entered in cell C4 and H6 is = Product (C4, H6)↵
7. Following are the precautions that you should take to protect your computer from a virus:
 - (i) Do not open any e-mail attachment that you think may have a computer virus.
 - (ii) Do not use the CD or the pen drive received from another person unless you are certain that the device dose not contain virus.
 - (iii) Do not use a floppy to boot the computer. If it is required to boot from a floppy, use a floppy that is virus free and write protected.
 - (iv) Do not download programs or other information from non-reputed sources on the internet.
 - (v) Do not install pirated software.
 - (vi) Scan the hard disk twice a month and take the back up of important files every day.

Assessment-2

Multiple Choice Questions

A. Tick (3) the correct option:

1. (c) 2. (a) 3. (b) 4. (c) 5. (c) 6. (c) 7. (b) 8. (c)

B. Fill in the blanks with the help of given hints:

1. Photoshop 2. PPI 3. Property inspector 4. Counter 5. Apps 6. Independent
7. Play 8. Paint

C. Match the columns correctly.

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

D. Write 'T' for true statements and 'F' for false statements:

1. False 2. True 3. False 4. False 5. True

E. Very Short Answer Question:

- (i) Tools section (ii) View section (iii) Color section (iv) Options section
- Move tool
- Rectangular marquee
- .PSD
- Zero
- Facebook
- PhpB forum
- BEEP statement

F. Short Answer Question:

- The area of the flash document window between the title bar and stage is known as the timeline. It controls and organizes the documents content overtime in layers and frames. It is used to create animation.
- A virtual laboratory (lab) is an interactive environment for conducting experiments in various branches of science. It provides various tools for learning including web resource, video lectures animated demonstrations and self-evaluation.
- Looping is an arrangement that repeats a set of statements till the given condition remains true.
- PAINT statement is used for filling a graphic area with a specified color or pattern
Syntax: PAINT (X, y), color, bordercolor
here x, y is the coordinates that tells QBASIC where to start. The color specifies the color to paint with, and bordercolor tells the PAINT command that it should not paint further when it encounters a pixel of that color.
- Following are the two characteristics of cloud computing:
(i) Cloud computing is device independent i.e., resource can be accessed from any type of computer.
(ii) There is no fixed cost of cloud computing. It depends on the usage.
- Following are the type of selection tools in Photoshop:
(i) Marquel tool (Rectangular/Elliptical)
(ii) Move tool
(iii) Lasso tool (Lasso/Polygonal/Magnetic)
(iv) Quic selection tool/Magic wand tool
(v) Crop tool

G. Long Answer Question:

1. The Magnetic Lasso tool draws a selection border that automatically snaps to the edges of objects you drag over in the photo. This makes it easy to draw precise selection borders. The magnetic lasso tool is useful for quickly selecting objects with complex edges set against high-contrast backgrounds.
2. The Magic Wand tool, known simply as the Magic Wand, is one of the oldest selection tools in Photoshop. Unlike other selection tools that select pixels in an image based on shapes or by detecting object edges, the Magic Wand selects pixels based on tone and color.
3. A counter is a variable that keeps track of the number of times a particular instruction or set of instructions have been executed during a loop. At the beginning of a loop, the value stored in a counter is generally 'zero' as no repetition has yet occurred. The value increases or decreases by a specified number called the 'increment value' each time the loop is executed.

Syntax: $CT = CT + \langle \text{Increment Value} \rangle$

Where CT is the counter variable. The increment value can be any non-zero integer.

An accumulator is a variable that stores the sum of the numbers entered during the execution of a loop. An accumulator should be initialized at the beginning of the loop to zero. An accumulator is used when we need to enter a number during each repetition of a loop and find the sum of all these numbers when the loop terminates.

Syntax: $\text{Sum} = \text{Sum} + n$

Where 'n' is the number that is entered during a repetition.

4. Following are the three precautions that one should take while using social networking sites:
 - (i) Use a strong password (a combination of upper and lower case letters, symbols and number).
 - (ii) Your personal information such as your full name address, phone number and the routines you have set in your day-to-day life should not be posted on social networking sites.
 - (iii) You should always have the permission of your family members and friends before you post anything about them.
5. The statement to draw a circle of radius = 100 pixels and color red is- `CIRCLE (160, 120), 100, 4`.
6. Cloud computing is a technology that uses the Internet to store and maintain data and applications. Cloud computing provides software, data access and storage services to the user as per the location of their preferences, duration of their linking and application of their choice.

The word 'cloud' in cloud computing refers to the Internet. The goal of cloud computing is to provide easy access of resources. For example you can access your e-mail wherever and whenever you need it.

Characteristics of cloud computing:

- (i) It is device, independent i.e., resource can be accessed from any type of computer.
- (ii) There is no fixed cost of cloud computing. It depends on the usage.
- (iii) Resources are always available whenever you need them.
- (iv) Resources can be shared with other person.
- (v) Capacity can be increased or decreased very easily.

Icon-X 8

1. Network Basics

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Infrared 2. Hub 3. NIC 4. MAN 5. Star 6. Wi-Fi

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. True 4. True 5. True 6. True

D. Write full forms of the following:

- (i) **Wi-Fi**- Wireless Fidelity (ii) **MAN**- Metropolitan Area Network
(iii) **NIC**- Network Interface Cord (iv) **WAN**- Wide Area Network
(v) **HTTP**- Hyper Text Transfer Protocol
(vi) **TCP/IP**- Transmission Control Protocol / Internet Protocol

E. Very Short Answer Question:

1. Router
2. Modem
3. Local Area Network (LAN) card
4. Internet

F. Short Answer Question:

1. Each computer in a network is called a node.
2. A network protocol defines rules for communication between network devices.
3. The art of connecting different computers in a network is known as topology.
4. Modem is an electronic device that is used to connect a computer to the Internet via a telephone line or wireless medium.
5. On the basis of geographical area there are three types of network:
(i) Local Area Network
(ii) Metropolitan Area Network
(iii) Wide Area Network
6. Infrared is a wireless technology that allows mobile phones, laptops and other digital devices to communicate with each other and transfer data over short distances.

G. Long Answer Question:

1. When multiple computers and other devices are connected through a wired or wireless medium to share data and other resources, it is called a computer network. The computers on a computer network may be linked through cables, telephone lines, radio waves, satellites, or infrared light beams. Each computer in a network is called a node. Following are the benefits of using computer network:
(i) It enhances communication and availability of information.
(ii) It allows for more convenient resource sharing.
2. Following are the differences between LAN and WAN:

LAN	WAN
1. LAN stands for Local Area Network.	1. WAN stands for Wide Area Network.

2. LAN covers small area i.e. within a room or building.	2. WAN covers large geographical area.
3. Data transmission speed is 10 Mbps to 100 Mbps.	3. The Data transmission speed is 1 Mbps.
4. LAN's design and maintenance is easy.	4. WAN's design and maintenance is difficult than LAN.
5. Networking in home, office is examples of LAN.	5. Internet is the example of WAN.

3. An Ethernet cable is one of the most popular type of network cable used in wired networks. It connect devices on local area networks such as computers, routers, hubs and switches and so on. Each end of an Ethernet cable has a jack with 8 pins, which plugs into the Ethernet port of two different devices to connect them. There are two types of Ethernet cables- Straight through cables and Crossover cables.

A straight through cable is used to connect a computer to a hub or switch. A crossover cable is used to connect two computers directly.

4. (a) Following are the advantages of **Bus Topology**:

- (i) It is easy to connect a computer or peripheral device.
- (ii) The cable requirement are relatively small, resulting in lower cost.
- (iii) Failure of one node does not affect the rest of network.

Following are the disadvantages of Bus Topology:

- (i) If the main cable breaks the entire network goes down.
- (ii) It offers limited flexibility for change.
- (iii) It is difficult to troubleshoot.

- (b) **Star Topology**: Following are the advantages of Star Topology:

- (i) It has low start up cost.
- (ii) It is each to add new nodes to the network.
- (iii) If one connection between a computer and switch fails, the other connections remain intact.

Following are the disadvantages of star topology:

- (i) The system crucially depends on the central switch. If it fails, the entire network goes down.
- (ii) Extra hardware is required (hubs or switches) which adds to cost.

- (c) **Ring Topology**: Following are the advantages of ring Topology:

- (i) It is easy to install and manage.
- (ii) If there is a problem in the network, it is easy to pin point which connection is defective.

Following are the disadvantages of Ring Topology:

- (i) It requires more complicated control software.
- (ii) Failure of one node results in the failure of the entire network.

5. A wireless network is a computer network that uses wireless data connections between network nodes i.e. in this network computers are not connected by cables of any kind. The use of a wireless network enables enterprises to avoid the costly process of introducing cables into building or as a connection between different equipment locations.

Network Interface card in a wired LAN is known as wired NIC. These are NICs that have input jacks made for cables. The most popular wired LAN technology is Ethernet.

Network interface card in a wireless LAN is known as wireless NICs. These are NICs that use an antenna to provide wireless reception through radio frequency waves. Wireless NICs are designed for connections.

2. Introduction to MS Access 2010

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. DBMS 2. RDBMS 3. Tables, Reports, Queries, Forms 4. Text 5. Memo
6. Primary key

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. True 3. False 4. False 5. False 6. False 7. True

D. Match the following:

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

E. Very Short Answer Question:

1. Each data entry in a cell of a table is called a data item.
2. Datasheet view and Design view.
3. Primary key.

F. Short Answer Question:

1. The full form of RDBMS is Relational Database Management System.
2. The rows in a table are called records. Record is a collection of related fields that contain complete information about an entity in a table.
3. A Primary key is a field that uniquely identifies a record in a table. It does not allow null values.

G. Long Answer Question:

1. **Table:** A table is a database object that stores data in the form of records (rows) and fields (columns). It is the building block of a database. All other elements of a database are created based on the data stored in the tables. The basic components of a table are records, fields and cell.

Data Item: The data that we enter in a table is called data item. Different table contains different type of data.

Record: The rows in a table are called records. Record is a collection of related fields that contain complete information about an entity in a table.

2. A database is an organized collection of data stored on a computer in such a way that it can be easily accessed updated and queried with the help of a software program. A database usually contains data pertaining to one particular entity or organization. For example, the database of a particular school contains data about its students, their academic co-curricular achievements, details of teachers and other administrative staff, and so on. Similarly the database of a library contains data about its all book, members, its various other activities and so on.

3. Following are the advantages of database:

- (i) Reduced data redundancy.
- (ii) Reduced updating errors and increased consistency.
- (iii) Greater data integrity and independence from applications programs.
- (iv) Improved data access to users through use of host and query languages.
- (v) Improved data security.
- (vi) Reduced data entry, storage and retrieval costs.
- (vii) Facilitated development of new applications program.
- (ix) Maintained data integrity.

3. Queries, Forms and Reports in MS Access 2010

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Form 2. Table 3. Two 4. Criteria 5. Report 6. Field

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. False 4. False 5. True 6. True 7. True

D. Very Short Answer Question:

- 1. Tables, queries, forms and reports are objects of MS Access.
- 2. Layout view.
- 3. Top pane and Bottom pane.

E. Short Answer Question:

- 1. A query is a database object that helps you to retrieve and view specific information from the tables in a database. There are four types of queries in MS Access- Select query, Update query, Crosstab query and Append query.
- 2. A Form is a graphical representation of a table. We can add and update records in our table by using a form. Although a form can have different name from the table, it is based on the both still manipulate the same information and the same extract of data. Hence, if we changes record in a form, it will be changed in the table as well.
- 3. A report is an effective way of presenting the data stored in a table or query in a printed format. The report objects allows to control the way the data is displayed when it is printed on paper. A Report can be created using the report wizard feature given on the report group under the Create tab.
- 4. In MS Access four types of queries can be created:
 - (i) Select query
 - (ii) Update query
 - (iii) Cross tab query
 - (iv) Append query
- 5. Following are the three views in which a form can be displayed:
 - (i) Form view
 - (ii) Layout view and Design view

F. Long Answer Question:

- 1. Criteria row in the Query design grid determines how the records will be filtered and displayed in the query output i.e., Criteria is a condition or a set of conditions that help to extract reflective data into a query.

2. Following are the differences between a query and a form:
 - (i) A Query is a database object that gives out a selective output based on certain criteria or conditions in the form of a query table, whereas a form is an interactive graphical object of a database that allows the user to enter, edit and view record from a table or query table.
 - (ii) Queries are always based on tables and other queries whereas a form is always based on a table or query table.
 - (iii) A query displays specific records from a table based on a given condition, whereas a form displays only a single record from a table or a query table, at a time.
3. Following are the navigation buttons given on a form window:
 - (i) **First record button:** This button is used to show the first record of the selected table in form window.
 - (ii) **Previous record button:** This button is used to show the previous record.
 - (iii) **Next record button:** This button is used to show the next record in the form window.
 - (iv) **Last Record:** This button is used to show the last record of the selected table in the form window
 - (v) **New record button:** This button is used to add a new record to the form.
4. **Query window:** The query window is divided into two panes- The top pane displays the tables selected for the query and the bottom pane display a design grid where you can add fields to the query and also specify the criteria. The design grid shows the following:

Field: The first row of the Design grid displays the selected field names from the table.

Table: It display the name of the existing table.

Sort: It is used to filter data in ascending or descending order. It is optional

Show: It displays a check mark which indicates that this field will be visible when the query is executed.

Criteria: It contains the condition on the basis of which the records will be filtered in the query output.

OR: This property is used to specify multiple criteria.

4. More on Photoshop CS3

Multiple Choice Questions

- A. Tick (3) the correct option:
 1. (c) 2. (c) 3. (c) 4. (b) 5. (c) 6. (b)
- B. Fill in the blanks with the help of given hints:
 1. Layers 2. Window menu, Layers 3. Vertical type 4. Burn 5. Dodge 6. Clone stamp
- C. Write 'T' for true statements and 'F' for false statements:
 1. False 2. True 3. False 4. False 5. True 6. False 7. True 8. True
- D. Name the tools you would use to do the following:
 1. Patch tool
 2. Spot Healing Brush tool → Red-eye tool

3. Filter
4. Background Eraser tool
5. Dodge tool

E. Very Short Answer Question:

1. Burn tool
2. Type tool
3. Magic Eraser tool
4. Spot Healing Brush tool
5. Brush Tool

F. Short Answer Question:

1. There are three types of Eraser tool:
(i) Eraser tool (ii) Background eraser tool (iii) Magic eraser tool
2. Warping of text means to position the letters or text in different shapes.
3. The Type tool is used to type text either horizontally or vertically in an image. The text typed using this tool is added to a separate layer known as type layer. There are two types of text tool- the Horizontal type tool types text from left to right and Vertical type tool types from top to bottom.
4. An image can be made of several layers. Each layer can be understood as a transparent sheet containing a part of the image. Several such layers stacked over one another make up the complete image.

G. Long Answer Question:

1. A layer is like transparent sheets that can have images and are stacked on top of each other. In Photoshop, an image can be made of several layers. To select a layer, open the layers palette and click on the icon of the layer you want to work with. The layer will get selected and its name will appear on the title bar.
2. In the layers palette, the lowermost layer on which other images are placed to make a collage are known as the background layer. There can only be one background layer in an image you can delete a background layer or create it duplicate but you cannot change its order in the layer hierarchy. The background layer is always locked (protected), meaning you cannot change its stacking order, blending mode or opacity unless you convert it into a regular layer.
3. The Retouching tools available in Photoshop are used for modifying the arrangement of pixels in an image to remove imperfections from the image and give it a better finish. Following are the retouching tools available in Photoshop:
(i) Healing Brush tool (ii) Patch tool (iii) Clone stamp tool
(iv) Smudge tool (v) Dodge tool
4. Following are the steps to rename a layer:
(a) Double click on the layer name. The layer name will get highlighted.
(b) Type the new name and press the enter key. The layer will get renamed.
5. The Dodge tool is used to lighting the area of an image. The burn tool is used to darken the areas of an image. Sponge tool saturates or desaturates an area.
6. At 0% opacity the brush color is transparent allowing anything we paint over to show through (effectively making the brush color invisible). A value between 0% and 100% will make the brush color semi-transparent with higher values making the color more opaque than lower values.

7. The healing brush tool is used to repair the defected or flowed areas in an image with the sampled pixels. The tool has been designed to match the texture, lighting, transparency and shading of the sampled pixels to give us the best results in repairing the flawed areas. By sampling the surrounding area or using a predefined pattern you can blend the imperfections into the rest of the image.

5. Introduction to HTML

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Container 2. .html 3. Web browser 4. Tags 5. Colour 6. <SUB>

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. True 3. False 4. False 5. False 6. False

D. Name the HTML tags for the following effects:

1. <P> tag
2.
 tag
3. <PONT> tag
4. <HN> tag
5. <l> tag

E. Given one point of distinction between the following:

1. **<HEAD> and <BODY> tag:** <HEAD> tag encloses the header section of the HTML page. This section contains introduction to the content of the page, whereas <BODY> tag encloses all the text and images that make up the web page. All the elements of web are specified within the <BODY> </BODY> tags.
2. **
 and <HR> tag:** The
 tag is used for adding a single line break without making a new paragraph i.e., the text / image following the tag will be moved to the next line. While <HR> tag is used to insert horizontal line that can divide the information into sections or separating content from one another.
3. **<TITLE> and <HR> tag:** <TITLE> tag is a container tag that contains the document's title. The title specified inside the <TITLE> and </TITLE> tag appears in the browser's title bar. It accepts only plain text. <HR> tag stands for horizontal rule and is used to insert horizontal line that can divide the information into sections or separating content from one another.
4. **Container and Empty tag:** HTML container tags require a starting as well as an ending tag. For eg: <HTML> </HTML>, <HEAD> </HEAD>, etc., while HTML empty tags require just a starting tag and not an ending tag. For example., <P>,
, <HR> etc

F. Very Short Answer Question:

1. Tim Berners-Lee
2. Text editor
3.
 tag
4. Container tag and empty tag

G. Short Answer Question:

1. HTML code is the text to create a web page: HTML code has its own elements for formatting a web page. HTML code is written in the text editor and saved with .html extension.

2. <TITLE> tag is a container tag that contains the documents title. The title specified inside the <TITLE> and </TITLE> tag appears in the browser's title bar. The <TITLE> tag accepts only plain text. It does not accept any additional formatting.
3. Make text bold
4. Tag attributes are the properties of the tags which provide additional features to a web page. Attributes are always written in the start tag. We can write more than one attribute with a tag.
5. The Bgcolor attribute is used to set the background color of an paragraph, table or any other part of the HTML.

H. Long Answer Question:

1. The full form of HTML is Hyper Text Markup Language. HTML was created by Sir Tim Bener-Lee in late 1991 but was not released officially, which was published in 1995 as HTML 2.0. HTML is very evolving markup language and has evolved with various versions updating.
2. **Container tag:** It contains text or other tags. It consists of a Start tag and an End tag. The Start tag indicates the beginning of a command and the End tag indicates the end of a command. An end tag is always preceded by a forward slash (/).
For eg: <TITLE> First Web Page </TITLE>
Empty Tag: It does not contain text or any other tag. It only has a Start tag. It does not have an End tag.
For eg:
, <HR>
3. A comment is the text that is written into the HTML code, but is ignored by the browser and hence, not displayed. There are two ways of adding comments:
 - (i) Using <COMMENT> tag
 - (ii) Using <!-- and -->
 <COMMENT> is container tag.
4. Following are the attributes of <BODY> tag:

Attribute	Attribute Value	Effect
TEXT	Color name like red, green, blue etc.	Specifies color of the text in a document.
BGCOLOR	Color name like red, green, blue etc.	Specifies background color of a document.
BACKGROUND	The Path of images (with jpeg, gif format).	Specifies background image for a document.

5. Heading is a title for a new section of the document. In HTML, headings are given to a document using the Heading tag. There are six levels of heading, i.e., <Hn> where 'n' is a number, ranging from 1 to 6. In heading number range 1 is the largest size and 6 is the smallest size. Heading tag is a container tag, i.e., it must have start tag <Hn> and an end tag </Hn>.

6. Using Lists and Creating Tables in HTML

Multiple Choice Questions

A. Tick (3) the correct option:

1. (b) 2. (b) 3. (b) 4. (c) 5. (c) 6. (a) 7. (c) 8. (c)

B. Fill in the blanks with the help of given hints:

1. <TR> 2. border 3. 4. Caption 5. , 6. cell padding

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. False 3. True 4. False 5. False 6. True

D. Very Short Answer Question:

- tag
- <TD> tag
- BORDER attribute
- Default value of Type attribute is numbers (1, 2, 3,)
There is no default value of Start attribute.

E. Short Answer Question:

- An ordered list is a list where all items are numbered. The numbers can be replaced with Roman numbers or with the letters of English alphabet whereas an unordered list is a bulleted list. Unordered lists are used when the items in a list are not required to be in a specific order.
- <UL Type="Value">
- The <CENTER> tag is a container element and is used to align text or images in the center of the web page. This tag is especially useful for center aligning images because we cannot do it using the tag.
- There are five basic. Table tags in HTML:
(i) <TABLE> (ii) <TR> (iii) <TD>
(iv) <TH> (v) <CAPTION>
- In a table, the distance between two adjacent cells is called cellspacing while the distance between the cells boundary and its contents is known as cell padding.

F. Long Answer Question:

- tag is used to insert an image in a web page. It is an empty tag. It has following attributes:
 - <SRC> attribute identifies the location of the image file. Image should be in .bmp, .gif or .jpeg format.
 - <ALIGN> attribute Specifies the alignment of the image vertically and horizontally.
 - <BORDER> attribute gives border to an image. The thickness of the border ranges from 1 to 10 pixels.
 - <HEIGHT> attribute specifies the height of the image in pixels.
- A list is a set of items usually written one below the other. A list makes thing appear simpler and more organized. The most common HTML list are:
 - Ordered list
 - Unordered list

Ordered list: An ordered list is a list where all items are numbered. The numbers can be replaced with Roman numbers or with the letters of English alphabet. The tag is used to create an ordered list, that is a container tag.

Unordered list: An unordered list is a bulleted list. Unordered lists are used when the items in a list are not required to be in a specific order. The tag is used to create an unordered list that is a container tag.
- A marquee is a text moving on a background that we see scrolling across a web page while surfing the Internet. We can also add a marquee to our web page by using the <MARQUEE> tag.

Syntax : <MARQUEE> Text to be made into a marquee </MARQUEE>

Ex <HTML>

<HEAD>

<TITLE> Using Marquee </TITLE>

</HEAD>

<BODY>

<MARQUEE Behaviour = "Scroll" direction = "down" > Welcome to the information super highway </MARQUEE>

</BODY>

</HTML>

4. = "Automobiles .bmp">

7. Programming in Visual Basic

Multiple Choice Questions

A. Tick (3) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. Event Driven 2. Form 3. .Vbp 4. Properties 5. Event 6. .frm 7. Label
8. Command

C. Write 'T' for true statements and 'F' for false statements:

1. False 2. False 3. False 4. True 5. True 6. False

D. Very Short Answer Question:

1. Form, Control and Event code.
2. Design time
3. Code window
4. Text box

E. Short Answer Question:

1. A form is the primary element of a Visual Basic application, It is a container element for all the controls that make up a user-interface.
2. How an object responds to an event is called the method of the object. The method of an object consists of a piece of programming code written for that object which gets executed when a user triggers an event.
3. A control is a graphical element such as a text box, label, list box etc that is added to a form to allow a user to input data or give commands to the application/program.

F. Long Answer Question:

1. Visual Basic is an event driven programming language from Microsoft developed in May, 1991. It provides a graphical user interface (GUI) which allows programmers to modify code by simply dragging and dropping objects and defining their behavior and appearance.
2. Event driven programming is a programming technique, where a program code is written for different. Objects like is command button, a text box or a group of option buttons to handle the events triggered by the user. Whenever a user clicks on an object, the code associated with it gets executed and an action is performed in response to the event.

3. A property is a value or characteristic held by a Visual Basic object such as Caption or Four-color. Properties can be set at design time by using the Properties window or at run time by using statements in the program code.

Following are the steps to set the properties of a control:

- (i) Click on the required property to select it. The description of the selected property will appear in the Description box.
 - (ii) Read the description to understand what this property stands for.
 - (iii) A cursor, a down arrowhead icon or a dialog box icon will appear in the value box next to the property.
 - (a) If a cursor appears, change the property by deleting the existing values and typing the new values as desired by you.
 - (b) Required value for the property from the drop down list.
 - (c) If a dialog box appears, click on it to open the dialog box and select the required property values from it.
4. Label control is used to display a static text on the form such as title. It is used to display the text that is not to be changed by the user during run-time where as a command button control allows a user to trigger some event to perform an action by pointing, clicking, double clicking and so on.
5. Following are the steps to save a Visual Basic Project:
- (i) Click on File → Save project. The Save File as dialog box opens.
 - (ii) Enter a Name for the form.
 - (iii) Click on the 'Save' button. This will open a Save Project As dialog box.
 - (iv) Enter a name for your project.
 - (v) Click on the 'Save' button.
- Your project will be saved by the given name.

8. Internet Applications and Cyber Safety

Multiple Choice Questions

A. Tick (✓) the correct option:

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

B. Fill in the blanks with the help of given hints:

1. News 2. Cloud 3. Sky drive 4. Amazon.com 5. Dictionary

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. False 3. True 4. False 5. True

D. Very Short Answer Question:

1. E-commerce means buying and selling of goods and services online.
2. RSS stands for Rich Site Summary.
3. Skype

E. Short Answer Question:

1. Following are the E-commerce websites:
 - (i) ebay.com
 - (ii) jabong.com
 - (iii) flipkart.com
 - (iv) amazon.in
2. Cloud storage refers to online space that we can use to store data and access it from anywhere, anytime, cloud storage provides a secure way or remotely storing important data. Drop box, Google Drive are some famous cloud storage services.

3. Following are the websites which provide online news facility:
www.ndtv.com, www.hindustantimes.com and www.kidnews.com
4. Following are the modes of e-commerce:
 - (i) Business to Business
 - (ii) Business to Consumer
 - (iii) Consumer to Consumer
 - (iv) Digital middle persons
5. ShabdKosh.com is an online Hindi to English and English to Hindi dictionary.

F. Long Answer Question:

1. Microsoft OneDrive is a service that provides 5 GB of free cloud storage to any body who has a Microsoft account. OneDrive offers users a simple way to store, sync and share various types of files, with other people and devices on the Internet. Earlier Microsoft oneDrive is known as skydrive.
2. E-governance is the use of modern Information and Communication Technologies (such as Internet, LAN, Smartphone etc) by the government to improve its effectiveness, efficiency, service delivery and to promote democracy.
Following are the benefits of E-governance:
 - (i) It allows direct interaction between government and citizens and provides information speedily to all citizens.
 - (ii) It improves delivery of public services such as transportation, power health, water, security and municipal services.
3. Following are the ways to keep yourself safe while working on the internet:
 - (i) Before entering username and password in a website to logon, always check the URL of the website. If it is a fake web page it will be showing a different URL.
 - (ii) Never store your password in an email account as these are most often broken into.
 - (iii) Keep your broadband connection off when not in use and close the cover of your laptop when not in use to avoid misuse of its webcam.
4. RSS stands for Rich Site Summary. RSS is about getting live web feeds directly to your computer. RSS takes the latest headlines from different websites and downloads them to your computer for quick scanning. RSS feeds can be read by user with a software called RSS reader.

Assessment-1

Multiple Choice Questions

A. Tick (3) the correct option:

1. (c) 2. (b) 3. (c) 4. (a) 5. (b) 6. (a) 7. (a) 8. (a) 9. (c) 10. (b)

B. Fill in the blanks with the help of given hints:

1. Local Area Network Card 2. Gateways 3. Protocol 4. Patch 5. Type
6. Primary 7. Paint bucket 8. Design 9. .acddb 10. Sort

C. Match the columns correctly.

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

D. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. True 4. True 5. False 6. True 7. True 8. False

E. Write the full form of following:

1. TCP: Transmission Control Protocol
2. IP: Internet Protocol
3. WAN: Wide Area Network
4. PAN: Personal Area Network
5. RDBMS: Relational Databases Management System

F. Find the odd one out.

1. HTML
2. Node
3. MAN
4. MS Excel
5. Field

G. Very Short Answer Question:

1. Modem
2. Star topology
3. Lasso Tool
4. Rectangle tool and line tool
5. Number data type
6. Layout view

H. Short Answer Question:

1. Following are the differences between LAN and WAN:

LAN	WAN
1. LAN stands for Local Area Network.	1. WAN stands for Wide Area Network.
2. LAN covers small area i.e. within a room or building.	2. WAN covers large geographical area.
3. Data transmission speed is 10 Mbps to 100 Mbps.	3. The Data transmission speed is 1 Mbps.

2. Name the various hardware parts required to establish a network:

- (i) Network Interface Card
- (ii) Network cable
- (iii) Hub
- (iv) Switch
- (v) Router
- (vi) Modem

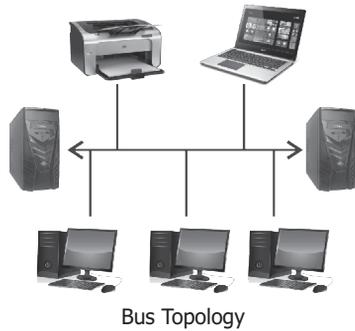
3. A relational data base is a special type of database where data is stored in a number of separate but linked tables. The software system that is used to create, maintain and query a relational database is called a Relational Database Management System.
4. A Primary key is a field that uniquely identifies a record in a table. A primary key does not allow null values and must always have a unique value.
5. The Dodge tool is used to lighten the area of an image.

I. Long Answer Question:

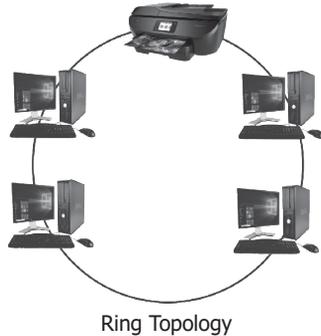
1. The layout pattern of the interconnection between computer in a network is called network topology.

Following are network topologies:

(i) Bus Topology: User's one main cable called bus to which all nodes are directly connected. In bus topology, a bus is a single continuous cable. Transmission from any node travels the length of the bus in both directions and can be received by all the other nodes in the network. The bus has terminators at either ends which absorbs the signal, removing it from the bus.



(ii) Ring Topology: In ring topology, the computers in the network are connected in a closed ring and the data travels in one direction. Each computer is directly connected to the next computer, forming a single pathway for signals through the network.



2. A form is an interactive graphical object of a database that allows the user to enter, edit and view records from a table or query table. A form focuses on one record at a time. A form is always based on a table or query table.

Following are the steps to create a form in MS Access:

- (i) Select a table or a query in the Navigation pane that you want to use as the data source for the form.
 - (ii) Click on the Create tab. In the Forms group select the Form button. A new form will open up in the Layout view.
 - (iii) Click on the required fields and drag them to change their position on the Form.
 - (iv) Click on the Save button on the Quick Access toolbar and save the form by any name as you like.
3. After defining the relationship between two tables we can create a query by taking fields from both the tables. The steps are as follows:
- (i) Ensure that the tables have a defined relationship in the Relationships window.
 - (ii) On the Create tab, in the queries group, click Query Wizard.
 - (iii) In the New Query dialog box, select the Simple Query Wizard option and then click OK.
 - (iv) In the Tables / Queries combo box, click the table that contains the basic information you want included in your query.
 - (v) Select all the required fields from the Available Fields section and transfer them to the Selected Fields section by clicking on the (>) button one by one.
 - (vi) In the Tables / Queries combo box, click the table that contains the related data you want to use to enhance your query results.

- (vii) Similarly Add the fields that you want to use to enhance your query results to the Selected fields list and then click Next.
 - (viii) Under Would you like a detail or summary query? Click either detail or summary and click Next.
 - (ix) Click Finish to view the results.
4. Layer are like transparent sheet that can have images and are stacked on top of each other. An image can be made of several layers.
Following are the steps to delete a layer:
- (i) Select the layer by clicking on it.
 - (ii) Click on the Delete layer icon on the layers patella.
 - (iii) Click the 'Yes' button in the confirmation box that appose.

Assessment-2

Multiple Choice Questions

A. Tick (3) the correct option:

1. (c) 2. (c) 3. (a) 4. (c) 5. (b) 6. (a) 7. (c) 8. (a)

B. Fill in the blanks with the help of given hints:

1. .VBP 2. Code window 3. ShabdKosh.com 4. Direction 5. Internet telephony
6. container, empty 7. Visual Basic 8. Type 9. <BODY> 10 <P>

C. Write 'T' for true statements and 'F' for false statements:

1. True 2. True 3. True 4. True 5. True 6. True

D. Match the columns correctly:

1. .FRM 2. .VBP 3. .HTML 4. Marquee 5. <U>

E. Write the full form of following:

1. GUI: Graphical User Interface.
2. SGML: Standard Generalized Markup Language
3. HTML: Hypertext Markup Language
4. VOIP: Voice Over Internet Protocol
5. RSS: Rich Site Summary
6. EFT: Electronic Fund Transfer

F. Find the odd one out:

1. Excel
2. Name
3. Rectangle
4. C

G. Very Short Answer Question:

1. F5 key
2. Form
3. Visible property
4. tag

5. Cellspacing

6. E-commerce means the buying and selling of goods and services online

H. Short Answer Question:

1. A command button control allows a user to trigger some event to perform an action by pointing, clicking, double clicking and so on it.
2. A control is a graphical element such as a text box, list box etc, that is added to a form to allow a user to input data or give commands to the program/application. Controls reside in the toolbox and can be added to a form.
3. Cellspacing specifies the amount of space between the adjacent cells/columns of a table whereas cellpadding specifies the amount of space between the border and content of a cell/column.
4. Attributes define additional characteristics or properties of the element such as width and height of an image. Attributes are always specified in the start tag and usually consists of name/value pairs like name = "Value". Attribute values should always be enclosed in quotation marks.
5. Following are the e-commerce website:
 - (i) ebay.com
 - (ii) flipKart.com
 - (iii) amazon.in

6. <HTML>

<HEAD>

<TITLE> Use of Font color tag </TITLE>

</HEAD>

<BODY>

Here we are changing the font color.

</BODY>

I. Long Answer Question:

1. and tags are used for creating an ordered list.

Ordered list tag (): It is a container tag having a start tag () and an End tag () denoting the start and end of an ordered list.

List Item tag (): It is also a container tag but it can be used without an End tag (). Each item in an ordered list is marked by the list item tag (). It is used for adding items in a list.

2. A property is a value or characteristic held by a visual Basic object such as caption or ForeColor. Properties can be set at design time by using the Properties window or at run time by using statements in the program code.

Following are the steps to set the properties of a control:

- (i) Click on the required property to select it. The description of the selected property will appear in the Description box.
- (ii) Read the description to understand what this property stands for.

- (iii) A cursor, a down arrowhead icon or a dialog box icon will appear in the value box next to the property.
 - (a) If a cursor appears, change the property by deleting the existing values and typing the new values as desired by you.
 - (b) If a down arrowhead icon appear, click on it and select a required value for the property from the dropdown list.
 - (c) If a dialog box appears, click on it to open the dialog box and select the required property value from it.
 - 3. Labels are one of the most frequently used Visual Basic control. A label control lets you place descriptive text where the text does not need to be changed by the user. The most common use for a label control is to identify controls that do not have a caption property, such as the textbox control.
 - 4. BORDER COLOR is the attribute of Table tag which is used to specify the color of the table border whereas BGCOLOR attribute of table tag is used to set the background color for the complete table, row, or a table cells.
 - 5. Cyber safety means safe and responsible use of internet services to make sure that we do not cause harm to either ourselves or others, while using the Internet.
Following precautions you should take while using the Internet:
 - (i) Before entering username and password in a website to logon, always check the URL of the website. If it is a fake web page it will be showing a different URL.
 - (ii) If you think a website is unsafe, you can check it on the webpage by entering the URL safeweb.norton.com in your browser's webpage.
 - (iii) Never store your passwords in an email account as these are most often broken into.
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