

CH-1 CONCEPT OF NETWORKING

Exercises

- A. 1. Network, 2. Area of Network, 3. PAN, 4. Tree, 5. Rights
- B. 1. True, 2. True, 3. True, 4. True, 5. False
- C. 1. (b), 2. (a), 3. (a), 4. (b), 5. (b)
- D. 1. **Importance of A Network**

Networks have made communication cheaper and faster and also help in saving resources. Let us understand the importance of network in our daily life.

Share and Save Resources: Computers on a network can share resources like printers, modems, scanners, plotters, CD drive, USB ports etc. This allows to cost serving.

Storage Media: When a computer network is created, one computer acts as the main computer or the server. This Server serves or distributes the software or hardware that the other networked computers would required.

Effective Backup: You can make two copies of important files and save them on another networked computer or the server. If one system faces hardware failure, the data will not lost, which ultimately is the most important.

Effective Means of communication:

A network builds a very effective means of communication, as it provides cheap and quick communication.

Sharing information: Information can be easily means of communication, as it provides cheap and quick communication.

Sharing Information: Information can be easily shared among the computers connected through a network.

Makes Administration Easy: The

person can sit at one place and still keep an eye on all the computers being used.

Effective Security Measure: The security of a network is managed through passwords and user names. Also, when all the important files are saved at one place, it is easier to protect them.

2. A network is made up of different parts or components are given below:

Network Interface Card (NIC): It is an important hardware device that differentiates between a networked computer and a stand-alone computer.

Communication Media: It can be wired or wireless.

3. **Wired Network:** Electrical cables such as (twisted pair coaxial cable or optical fibre) are used to carry signals from one end to other.

Wireless Network: They do not require cables rather than signals are transmitted using Bluetooth, Infrared, Microwave or Radiowave.

4. Following are the types of topologies:

Bus Topology: In this topology, a single cable, known as a backbone with multiple points is involved. All the computers, printers and other hardware are connected to this cable. Any electronic signal passed by any node can be received by all the nodes on this cable, as the signal can travel in both directions. The cable has terminators at its end so that the signals can be absorbed by them. They do not clutter the network line.

Star Topology: In this topology, all the computers are connected to a central hub/switch. All the computers are connected separately with individual wires to the central hub.

Ring Topology (Circular Topology):

This topology uses multiple links to form a loop of computers. Each computer is connected to the loop, thus forming a kind of a ring or a circle. A message or a token goes round the loop continuously. All the computers or the nodes are equipped with a Token Ring Adapter Card (TRAC), which helps them to read the token or the message that passes through the loop continuously.

Tree Topology: Tree topology is the combination of Bus topology and the Star topology. This type of network arrangement, can have multiple servers. This topology is used when there are a large number of computers to be connected and there are distinct branches of an organization that need to be connected. It needs a lot of cables to be used and the success of the Tree topology depends largely on the cables installed.

5.Security of Networks

When you installed a network, you enable a number of people to access and share important data stored in the computers on the network. For this purpose, the network requires to be secured. There are usually two ways in which a network can be secured. let us understand about both of these in a detail.

Login Security: Applying this security measure, all the users who want to access the data are provided unique user names and passwords. Only those people who have a username and a password can access the data.

Rights Security: Rights security is a step forward to login security. Applying this security measure, restricted access rights can be

provided to users. Depending on the username, the access rights are restricted to particular folders, where the user can access only particular folders pertaining to his/her own work.

- E. 1. Rahul use a local area Network is a type of network that is used to connect personal computers in a room, building or campus. A LAN is used broadly in offices as it allows its users to use resources such as printers, scanners, plotters, speakers, etc. on a common basis.
2. Mohit will use the PAN (Personal Area Networks). This may incorporate bluetooth enabled devices or infra-red enabled devices. PAN has connectivity range up to 10 meters. PAN may comprise wireless computer keyboard and mouse, bluetooth enabled headphones, wireless printers and TV remote.

My Activity

- a. SERVER, b. CONNECTOR, c. TOPOLOGY, d. CIRCULAR, e. LOGIN

CH-2 LOG ON TO MS ACCESS**Exercises**

- A. 1. MS Access, 2. Management, 3. Navigation, 4. Alpha Numeric, 5. Primarykey
- B. 1. True, 2. False, 3. False, 4. True, 5. True
- C. 1. (a), 2. (c), 3. (c), 4. (b), 5. (b)
- D. 1. (c), 2. (d), 3. (a), 4. (e), 5. (b)
- E. 1. **Components of Microsoft Access Window**

Title Bar**Title Bar**

It shows the name of currently opened database.

File Tab

It displays the backstage view of file commands, like New and Open.

Quick Access Toolbar

It shows quick access buttons to the

Save, Undo and Redo commands.

Ribbon

It displays groups of related commands in tabs. Each tab provides shortcut button to common tasks.

Database Object

An Access database has four main objects—Tables, Queries, Forms and Reports. These objects are displayed in the Navigation Pane.

Navigation Pane

It contains all available database objects.

Status Bar

It displays information about the current object or view.

Work Area

It differs according to database element selected.

2. A database is a collection of information that is organized so that it can be easily accessed managed and updated. For example, you must have a telephone directory in which you maintain all the contact details of your friends. The contact details would include the telephone numbers, addresses and the email addresses of your friends. This telephone directory can be called your database.

Advantages of Using Database

The main advantages of using database are as follows:

Minimum data redundancy: Database system stores data at one place in the database. The data is integrated into a single, logical structure. Different applications refer to the data from the centrally controlled location. The central storage of the data reduces data redundancy.

Minimum data inconsistency: It also helps us to minimize data inconsistency. Updating of data values is simple and there is no disagreement in the stored

values. For example, students home address is stored at a single location and gets updated centrally.

Improvement in data sharing: Data sharing refers to sharing the same data among more than one user. Each user has access to the same data, though they may use it for different purposes. The database is developed to support shared data. Authorised users are allowed to use the data from the database.

Improvement in data integrity: The database you have created is very important for you and it needs protection. The database is kept secured by limiting access to the database by authorised user.

Standardisation of data: Since the data is stored centrally, it is easy to enforce standards on the database. Standards could include naming conventions and standard for updating, accessing and protecting data.

3. A blank database comprises only a single blank table. After creating a blank database, you can add tables, forms, reports and other objects to it. To create a blank database, follow the steps given below:
 - ❖ Select Blank database option in the File tab.
 - ❖ Type a name for the database in the File Name box.
 - ❖ Click on Create.
4. To create a new table in Design View, follow the steps are given below:
 - ❖ Open the database and click on Create tab on the Ribbon.
 - ❖ The Table Tools tab will displays on the top of Title bar, Select Design tab.
 - ❖ In the Field Name column, enter the name of the first field for example Employee_ID.
 - ❖ Press the Tab key to move the

insertion point to the Data Type field.

- ❖ To alter the data type, click on the drop-down arrow and modify the data type as per your choice.
- ❖ Press the Tab key to bring the insertion point to the Description column. Enter your text as the description in Description column.
- ❖ Press the Tab key again to move to the Field Name column in the second row and enter the text in the column.
- ❖ You will notice the word 'Text' currently appeared in that field.
- ❖ Press Tab key to move the insertion point to Data type column.
- ❖ Press the Tab key to move the insertion point to Description column. Enter the text for the column.
- ❖ Repeat the steps to make the rest entries. The table is now complete.

5. To add records to a table, follow the steps given below:

- ❖ Double-click on table Personal detail in the Database window.
- ❖ Type the ID Number in the first Employee_ID field.
- ❖ Press the Tab key to complete other entries for the Employee_ID 1001. Type the following entries pressing the Tab key after each one to complete the record.
- ❖ After entering the last entry, contact number, press the Tab key. The insertion point comes to the ID field in the second row.
- ❖ Enter the remaining records follow the same steps as you used to add the first recording.
- ❖ When you complete entering data, click on Save button to save the changes. MS Access saves the table and you can see the name of the table

in the Navigation table.

6. Understanding Field Properties

Each field has a set of properties that signifies and controls it. These properties contain basics like its size and format, as well as rules for entries in it.

Properties Pane

When a field is selected in Design View, its properties displays in the lower pane.

General Tab

The General Tab comprises most of the properties you will work with.

Lookup Tab

The Lookup Tab is mainly used for setting up lookup lists.

Drop-down Lists

Some properties have drop-down lists. Click the arrow to open the drop-down lists.

Property Information

When the insertion point is in property's box, information about that property displays here.

Yes/No Properties

Some properties illustrate yes/no questions, these are typically already filled in for you with default values.

Setting Field Size Properties

The default field size for a field with a data type of text is 255 characters. You can modify this size in the range of 0-255 characters.

7. **Data Type:** Each field has a data type that specifies what you can store in it. Data entry is limited to valid entries for the type you select, which helps prevent data entry errors. For example, you cannot enter letters in a field set to Number, and you must enter valid dates or times in a Date/Time field.

Text: It enables to enter alpha-numeric characters. It has a limit of 255 characters and it cannot be used

for numeric calculations. For eg. telephone numbers and ZIP codes.

Memo: It has a limit of 63,999 characters are used for detailed, descriptive fields.

E. 1. Anmol is using a Data sheet view to add a table.

- ❖ Click on the Create tab on the Ribbon.
- ❖ Click on the Table option. MS Access will open a new table in Datasheet View.
- ❖ Double-click the column header to create a field name. Type a name for the field.
- ❖ Press Enter key from the keyboard.
- ❖ Click on the next column. The Data Type menu will display.
- ❖ Select the data type for the field, example select Text, if you want to add the Name to the field.
- ❖ Type a name for the field.
- ❖ Click inside the first field of the first row and type the data to enter the first records.
- ❖ Press Tab key.
- ❖ Type the next field's data.

When you reach the last field. You can press Enter to start a new record.

2. Mansi used Access to write the description for the field of the table by press. Press the Tab key to bring the insertion point to the Description column. Enter your text as the description in Description column.

CH-3 MORE FEATURES OF MS ACCESS

Exercises

- A. 1. Look, 2. Datasheet, 3. Foreign key, 4. Form Wizard, 5. Toggle Filter
- B. 1. True, 2. True, 3. True, 4. False, 5. False
- C. 1. (a), 2. (c), 3. (b), 4. (b), 5. (c)
- D. 1. Find and Replace commands are also useful in MS Access when you have to find and replace something in a large

database. Find enables you to quickly search tables, queries and form quickly for specified database task. Select a field to search through all records in the current field only.

2. To crate an AND criteria statement, follow the steps given below:

- ❖ Click on the Emp_Name field, click on the Name list arrow and select the name Rakesh Arora of Employee from the list.
- ❖ Click on the Toggle Filter option MS Access uses the filter and shows only those records whose Designation field equals "Graphic Designer" AND whose Name field equals "Rakesh Arora". Only one record meets the filter criteria.

3. In MS Access, we can sort records in a specific order, ascending or descending. You can change the order of records in a table. This can enable you find, categories and analyze data.

To sort the records, follow the Steps given below.

- ❖ Open the table where you want to sort records.
- ❖ Click on the column header for the field that to be sorted.
- ❖ Click on the Home tab on the Ribbon.
- ❖ Click on either of the Sort options.
- ❖ Click on Ascending to sort the records in ascending order.
- ❖ Click on Descending to sort the records in descending order.

4. To filter data using Filter by Form, follow the steps given below:

- ❖ Open the table if it is not already open.
- ❖ Click on Home tab on Ribbon.
- ❖ Click on Advanced option drop-down arrow located in Sort & Filter group.

- ❖ Click on Filter By Form.
- ❖ In the Filter by Form window.
- ❖ Select the field and value that to be used as criteria.
- ❖ Select Department field. Click on the Department drop-down arrow.
- ❖ Select "Sales" from the list. This will contain only records whose department comprises "Sales".

5. To add a new field, follow the steps given below.

- ❖ Right- click the name of the field that you want to be displayed after the new field. A menu will emerge.
- ❖ Click on Insert Field. A new field displays in the table. MS Access will assign a name to the new field as Field 1. Now, you can rename the field name and add information to it.

You can remove a field that is not required in a table.

To delete a field in the table, follow the steps given below:

- ❖ Right-click on the field that to be removed. A menu will display.
- ❖ Click on Delete Field. A prompt box displays.
- ❖ MS Access removes the field and record content for the field from the table.

6. Switch to Design View

To use Design View, follow the steps given below:

- ❖ Click on the Home tab on the Ribbon.
- ❖ Click on the View option drop-down arrow.
- ❖ Click on the Design View.
- ❖ MS Access will show the design of the table and display the field properties.

Switch to Datasheet View

To switch to Datasheet view, follow the steps given below:

- ❖ Click on the Home tab on the

Ribbon.

- ❖ Click on the View option drop-down arrow.
- ❖ Click on the Datasheet View. MS Access shows the default Datasheet view of the table.

E. 1. Filtering data by form allows you to filter by multiple fields and define criteria for as many fields as you like.

When you filter by form, you can merge the criteria using AND, OR or a amalgamation of the two. An AND combination finds records where both criteria are met; OR combination finds records where at least one criterion is met.

2. Switch to Design View

To use Design View, follow the steps give below:

- ❖ Click on the Home tab on the Ribbon.
- ❖ Click on the View option drop-down arrow.
- ❖ Click on the Design View.
- ❖ MS Access will show the design of the table and display the field properties.

CH-4 WORKING WITH QUERIES/FORMS/REPORTS

Exercises

A. 1. Query, 2. Criteria, 3. Sort, 4. Form, 5. Report

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

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

D. 1. A Query is a simple question that you ask to find a particular information from the database. Similarly in Access, when you create a query, you are defining particular search conditions. You can queries to view, change, summerize and analyses the particular data in different ways.

2. **Criteria:** It includes the condition on the basis of which the records will be filtered in the Query output. We identify

criteria in the Criteria row of the design grid. Define the criteria value in the Criteria row and the data will be filtered accordingly in the query output.

The Simple Query Wizard screen displays as shown in the figure. Select the table that includes the data in the Tables/Queries list box.

Now, add the fields that you want to have in the query result.

4. A form is a piece of paper, on which a user fills the desired information in the particular fields. Similarly, in Microsoft Access 2016, Forms perform quite similar to it. Forms enable you to add and update data in one record at a time in a table. Although Access provides a Datasheet View, which is a suitable way of entering data, but it is not a convenient tool for every data entry situation.

To format a form using design tab, follow the steps given below:

- ❖ Click on Logo in the Header/Footer group. The Insert-Picture dialog box display. Select any picture and click OK.
- ❖ Click on Title in the Header/Footer group. Enter "Students Query as the Title for the Form.
- ❖ Click on Date and time in the Header/Footer group. The Date and Time dialog box will display. Choose the required format of the Date and Time and click OK.
- ❖ Click on Themes in the Themes group. Click on the desired theme from the drop-down menu.

5. Exporting A Report

- ❖ Click on the drop-down arrow of the View button on the Home tab and select Print Preview from the drop-down list of options.
- ❖ The report will be opened in the Print Preview layout and the ribbon will show

the commands associated with the Print Preview layout.

- ❖ On the Data group, click on the drop-down arrow of the More button and select Word.

- ❖ The Export-RTF File dialog box will display on the screen. Select the location where you want to save the report and give a suitable name to the report.

- ❖ Click OK.

- ❖ A final screen will display on the screen informing you about the successful completion of the exporting process.

- ❖ Click on the Close button.

- ❖ Find the word file where the report has been exported and open it.

E. 1. Madhu open the table that contain the information about percentage.

- ❖ Click on the Database Tools tab. Select the Relationships button from the Relationships group.

- ❖ The Show table dialog box emerges, select the desired table and click on the Add button. The selected table will display in the object Relationships window. Similarly, add another table to the Relationships window.

- ❖ You can start the 'Queries' tab if your relationships are based on queries, or Start ' Both' tab if relationships are based on both-Tables and Queries.

Click on the Close button to close the Show Table dialog box.

- ❖ Move the Primary key of the parent table (e.g., Students Table) and drop it over the same field in the child table (e.g., Marks Table). In our example, Roll No is the primary key.

- ❖ The Edit Relationships dialog box displays.

- ❖ Click on the Create button. Access creates the relationship between the tables.

❖ A line linking the two tables will appear denoting that both have been linked on the basis of the linked field.

❖ Click on the Save button on the Quick Access Toolbar to save the relationship and then close the Relationships window by clicking on the Close button on the Relationships group.

2. To make a form, select a table or query in the Navigation Pane that you want to use as the data source for the form.

❖ Click on the Create tab on the Ribbon. Select the Form option in the Forms group.

❖ A new form is created and opens in the Layout view, in which you can modify the look of form. You will observe that three new tabs: Design, Arrange and Format display on the Ribbon.

❖ If you want to modify or enter data in the form, click on the Home tab> View button> Form View.

❖ Use the Record Navigation Bar to move through the records in the form.

❖ After completing the data entry, save your work by clicking on the Save option in Quick Access Toolbar or the Save option in the File tab. You will notice that the Form object gets added in the Navigation Pane.

CH-5 USING LISTS AND TABLES IN HTML 5

Exercise

- A. 1. List, 2. Unordered, 3. Border-spacing, 4. Reversed, 5. Description
- B. 1. False, 2. True, 3. True, 4. False, 5. True
- C. 1. (a), 2. (b), 3. (a), 4. (b), 5. (c)
- D. 1. An unordered list is applied when the items are not to be displayed in any specific sequence. The list starts and ends with `` and `` tags respectively. It indents each item in the list and incorporates a bullet against each of them.

The ordered list is used to show the list of items in a particular order. The list starts and ends with `` and `` tags respectively. Ordered lists are generally used in situations where order of the items is important or where it is needed to keep a count of the number of items.

2. HTML supports different elements to create a list for displaying items in particular order. A list can be specified in different styles. The types of list that HTML provides are:

Unordered List, Ordered List, Description List

1. Unordered List: An unordered list is applied when the items are not to be displayed in any specific sequence. The list starts and ends with `` and `` tag respectively.

2. Ordered List: The ordered list is used to show the list of items in a particular order. An ordered list incises and gives a number to each item in the list that is why it is also called the Numbered list.

3. Description List: A description list comprises a term followed by its definition. It is used to present a glossary, list of terms or other name/value list. It begins and ends with `<dl>` and `</dl>` tag respectively.

3. Tables are very popular on the web since they are flexible and an effective way of presenting information in the form of rows and columns.

To make a tables in HTML, `<table>` tag is applied. Each table starts with a `<table>` tag and ends with `</table>` tag.

Each row in table starts with the `<tr>` table row tag and optionally end with the `</tr>` tag. Rows must be placed inside the `<table>` tag. The columns

consists of cells, each of which starts with the <td> table data tag and ends with </td>tag. <td>tag must always be present inside the row tags <tr>. To define a column heading, we apply the <th> tag that also ends with </th> tag. It creates the text bold. The <caption> tag is applied to define the title for the table.

4. (a) List-Style-Image:

You can define an image as the list item marker with this property.

SYNTAX: list-style=image:value

where value = url ("path of the image")|none

(b) **List-style:** This is the shorthand feature wherein all the list features can be defined in one declaration.

SYNTAX: list-style:value

Where value = value for list-style-type value for list-style-position value for list-style-image.

(c) **Empt-cells:** This property allows in defining whether or not the border and background are to be put around empty cells in a table.

SYNTAX: empty-cells:value

where value = show (default)|hide

E. 1. With this property one can define whether the table borders are to be collapsed into a single border or detached (as usual).

SYNTAX: border-collapse:value

Where value = separate|collapse

Example: border-collapse:collapse

2. Monika should use the list-style image property. In this property. She can define an image as the list item maker.

SYNTAX: list-style-image:value

Where value = url ("path of the image")|none

CH-6 IMAGE LINKS & FRAMES IN HTML5

Exercises

A. 1. , 2. ALT, 3. Hyperlinking, 4. internal, 5. Frames, 6. border-style

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

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

D. 1. The tag is applied to add images in an HTML web page. It is an empty tag and needs different features to be defined with it. These features for the tag indicates the browser how to layout the page so that text can flow appropriately around the image.

Attributes of an image elements:

Defining the Source of an Image

To add and specify the source of an image on a web page, the src feature is used.

SYNTAX: <img src = "Address or path of the image file"

While defining the image file, one should be well aware of its location i.e., where the file stays.

The HEIGHT feature defines height (in pixels) for an image either in the form of an integer or a percentage value.

The WIDTH feature defines width (in pixel) for an image either in the form of an integer or a percentage value.

To align an image to the right or left of a text, use the CSS property-float

Example: <p>

Image will display to the right of the text. </p>.

2. Many a times a browser on the user's computer does not show images due to some reasons (may be because of slow connection or error in the src attribute). In that case, you can display the text to

give a description about the ALT attribute allows you define the text as an alternate to the image. The only purpose of ALT feature is to give a description of the contents of an image file. It is usually applied when the user is having a text-based browser on his computer like Lynx. It also proves to be beneficial when the user is a blind surfer for whom the browser is programmed to read aloud the alternate text rather than displaying the image. In situations, people have the image display disabled on their browsers or use settings that do not support automatic loading of images. In such situations ALT feature is applied.

3. A websites comprises a number of web pages that provide you access to related information. HTML gives a powerful feature of linking these web pages together. This feature is called Hyperlinking. Applying these hyperlinks, one can open any linked web page on the Internet instantly. When you place the mouse pointer over a link, it will turn into a little hand.

Types of Linking

1.)InternalLinking 2.)External Linking

1.)**Internal Linking:** When one part of a web page is linked to another part on the same page, it is called internal linking.

2.)**External linking:** When one page is linked to another web page or website, it is called external linking.

4. **Inserting Audio:** HTML 5 specifies a new tag-<audio> tag that defines a standard way to place an audio file in a web page. It can be used for any file format like mp3, ogg, wav etc.

```
<html>
<head>
```

```
<title>Adding Audio Clip</title>
<style type = "text/css">
body{background-color:RGB(255,251,214)}
</style>
</head>
<body>
<h3 style = color:blue> we can't help
everyone, can help someone.</h3>
<audio controls
Src="C:\Users\User\Desktop\Kalimba.mp3">
Your browser does not support the
audio tag.
</audio> </body>
</html>
```

Place Video:

We can place video files in our HTML pages with the help of Video tag. Supported file formats include: .mp4, .webm, .ogg. The <video>tag are given below.

```
<html>
<head>
<title>Video</title>
<body>
<h1> A Video Clip</h1>
<video controls src =
"C:\Users\USer\Desktop\video1.mp4"
Width = "720" height = "540" autoplay>
Your browser does not support the
video tag.
</video>
</body>
</html>
```

5. Frames are a way of organizing your website. They allow the user to divide a page into number of rectangular segments for various purposes. Frames enable multiple HTML documents to be presented as independent window within one browser window. This gives greater flexibility to design and maintain your site than simply dumping everything

onto one page. Frames make your site interesting as you can incorporate the site theme (image, logo, banners, etc.). The navigation menu in frames is not to be downloaded each time when you visit a new page, only you have to change the contents of the page.

- E. 1. Rekha will use ALT attribute on the image element. The ALT attribute value should be less than 100 character and should be as concise as possible.

Images that convey information:

Images that convey information should not be defined as background images unless a text equivalent is provided in HTML code that can be seen in Windows High Contrast mode.

Active Images: If the image identifies a specific state, the alt text should also describe the state.

Large Images: Large images include charts, graphs, diagrams and even some photos. To make these images accessible provide a short all-text on the image and have information also presented in an alternative format such as-table, list or text so that non-visually users can get the same information.

2. Rohit will use these given tags to link an image.

```
<html>
<head>
<title> Adding Image link </title>
</head>
<body>
<img src = "Types of computer.jpg">
</body>
</html>
```

To placing video clip, Rohit will take following steps.

```
<html>
<head>
<title>video</title>
```

```
<body>
<h1> A video clip </h1>
<video controls src =
"C:\User\Desktop\Video1.mp4."
Width = "720" height = "540" auto play>
</video>
</body>
</html>
```

CH-7 INTRODUCTION TO VISUAL BASIC

Exercises

- A. 1. Instruction, 2. BASIC, 3. Top, 4. Caption, 5. flat

- B. 1. True, 2. True, 3. True, 4. True, 5. False

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

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

- E. 1. Visual basic different from the BASIC in many ways. Visual Basic (VB) is an object- oriented language. In BASIC, programming is performed in a text-only environment however in Visual Basic, programming is performed in a graphical environment. So, Visual Basic provides GUI (Graphical User Interface) features. In BASIC, if you have to write program code for graphical object, you need to define its position and other features by writing statements. However, in Visual Basic you just require to drag and drop any graphical object anywhere on the form and you can change its properties by using the Properties window.

2. **Properties:** Properties specify the name of the form or an object. The common properties of the form are given below.

Name: It defines the name of the form by which it is referred to in the code. The default name of the form is Form1.

Caption: It provides the title of the form.

Appearance: It can have different values. The values 0 creates the form look flat, while the value 1 creates the

form look three-dimensional.

Font: It is used to define the font type, font style and font size for the text.

Font Color: This property sets the colour of the form.

BackColor: This property sets background colour of the form.

Enabled: It can have True or False value. The value True allows the form respond to mouse and keyboard events, while the value False allows it unable to respond.

Visible: It can also have True or False value. The value True causes the form visible, while the value false causes it invisible.

Methods

Methods are the actions performed on the form or objects. The common methods of the form are given below.

Show: This method causes the form visible. It is the same as setting a form's visible property to True.

Hide: It makes the form invisible.

Print: It shows text string on the form.

Events:

An event is a message sent by an object denoting that something has occurred. The common events of the form are given below.

Form-Click: When the user clicks on the form, Form-click event is triggered.

Form-Load: When the form is loaded, Form-load event is triggered.

3. In Visual Basic, an application is created in the following three steps:

- ❖ Design the interface
- ❖ Set properties of the controls(Objects)
- ❖ Write the event procedures

4. The command button is applied to carry out commands. When the user clicks on the command button, it displays an illusion that the button is pressed. Some

important properties related to command button are given below.

Appearance: It can be 3D or flat in appearance.

Caption: It is the text displayed on the command button.

Visible: It can have the value True or False depending upon whether it is visible or not.

Enables: It can have the value True or False depending upon whether it responds to an event or not.

An event related to the command button is Clicked, which is triggered when it is selected by clicking on it.

5. To start Visual Basic, follow the steps given below.

- ❖ Click on the Start button.
- ❖ Select All Programs option from the Start menu.
- ❖ Click on the Microsoft Visual Studio 6.0 option.
- ❖ Select Standard. EXE option from the New tab of New Project window and click on the OK button.
- ❖ Microsoft Visual Basic Window will display on the screen.

E. Tarun should be used Microsoft Excel because Microsoft Excel useful in computing and managing grades. It has features like, calculate the total, percentage and grade etc.

CH-8 INTRODUCTION TO JAVA

Exercises

- A. 1. access, 2. Arithmetic, 3. Benefits, 4. Standard, 5. Java, 6. Objects, procedures, 7. Compiled, 8. Data, 9. Encapsulation
- B. 1. False, 2. True, 3. False, 4. True, 5. True
- C. 1.(a), 2.(c), 3. (b), 4. (c), 5. (b)
- D. 1.(a), 2. (e), 3. (d), 4. (c), 5. (b)
- E. 1. Java is a programming language that produces software for multiple platforms.

The basic features of Java are listed below.

- ❖ Java is strongly type programming language. For example, the types of used variables must be pre-defined and conversion to other objects is relatively strict.
- ❖ Java is an object-oriented language providing features such as inheritance, polymorphism and abstraction.
- ❖ Java programs can access data both from local machines and the web.
- ❖ Java can be used to develop distributed applications across the networks and the Internet.
- ❖ Data in Java is specified as objects and procedures.
- ❖ Java programs can be carried out on any platform that have Java-enabled Internet browser.

2. Object means a real world entity such as pen, chair, table etc. Object-oriented programming is a methodology to design a program using classes and objects. In object-oriented programming, a problem is viewed not as sequence of steps to be done but as a collection of different units (called objects) that model the real world things.

Let's know about the basic terminology used in object-oriented programming (OOP).

Object: The fundamental idea behind OOP is to store the data and functions operating on-that data into a single unit called an object. An object may represent a person, a student, an employee, an account, an examination or any item that closely resembles the objects of real world.

Class: A class is a collection of similar objects. For example, different kinds of fish come under the category of class.

Encapsulation: Binding (or wrapping) code and data together into a single unit is known as encapsulation. For example, capsule. It is wrapped with different medicines.

Data Hiding: Data hiding is the important feature of objects, by which data are not made accessible for other functions outside the objects.

Data Abstraction: In java, hiding internal details and showing functionality is know as abstraction. Classes use this concept and represent essential properties of the objects.

Inheritance: When an object of one class (base class) can inherit the properties of another class (derived class) by a process called inheritance. For example, petrol vehicle is a class that inherits the properties of another class, vehicle.

Polymorphism: When one task is performed by different way i.e known as polymorphism. For example, to convince the customer differently to draw something e.g shape or rectangle etc.

Reusability of the code is the major benefit of object-oriented programming.

3. In order to develop applications on Java, we first need to install Java Development Kit (JDK ver. 1.5 or 1.6) in our computer. Then, we follow the three-step procedure to develop applications.

- ❖ Enter the program in Notepad.
- ❖ Compile the program with Java Compiler (javac).
- ❖ Run the program in Java.

Entering the Java Program

Java program is entered into the computer using a text editor such as Notepad. To enter the program using Notepad, follow the steps given below.

- ❖ Click Start → All programs →

Accessories → Notepad menu options to load Notepad.

- ❖ Type the program in the New Document.
- ❖ Choose File Save menu option in the Notepad to save the program.
- ❖ Click All Files option in the Save As type box of the Save As dialog box and type the name of the file with extension name java in File name box.
- ❖ Then, click on the Save button.

Compiling the Java Program

Java program is compiled at the DOS prompt. So, you need to go to the Command prompt in order to compile your program. Now, to compile the Java program, follow the steps given below.

- ❖ Click Start All Programs Accessories Command Prompt menu options for accessing the DOS prompt.
- ❖ In DOS prompt, change to that directory (folder) where your program is saved by typing the DOS command, cd <folder name>.
- ❖ To compile the program, type Java < file name with extension>. The program will be compiled.

Running the Java Program

In order to run the compiled Java program, type the command, java < file name without extension>. The program will run and you will get the output.

4. It refers to the type of data that can be used in a program. There are two kinds of data types in Java-Standard and Derived. Standard data types are built into the Java language, which includes the following data types.
- ❖ Byte: 8 bit byte-length integer data type with range - 128 to 128 (signed) and 0 to 255 (unsigned)
 - ❖ Short: 16 bit short integer data type with range - 2^{15} to 2^{15-1}

- ❖ Int: 32 bit integer data type with range - 2^{31} to 2^{31-1}
- ❖ Long: 64 bit long integer data type with range - 2^{63} to 2^{63-1}
- ❖ Float: 32 bit single precision floating point data type with range up to 10^{39}
- ❖ Double: 64 bit double-precision floating point data type with range up to 10^{317}
- ❖ Char: 16 bit single-character data type.
- ❖ Boolean: 1 bit Boolean data type with True/False value

Derived data types are based on standard data types. For example, a string which is based on char data type. Can store alphabets, digits and other characters including space.

5. Operators are the symbols such as +, *, ++, --, etc. used for different purposes in a program code. There are many types of operators used in Java. Following are the common types of operators given below.
- ❖ Relational Operators
 - ❖ Arithmetic Operators
 - ❖ Increment and Decrement Operators
 - ❖ Logical Operators

Relational Operators

Relational operators are used to compare the values of two variables. Following are the operators which they include.

- ❖ > : Is used to find whether the first number is greater than the second, for example num1 > num2
- ❖ < : Is used to find whether two numbers are equal, for example, num1 < num 2
- ❖ = = : Is used to find whether two numbers are equal, for example, num = = num 2
- ❖ ! = : Is used to find whether two

numbers are not equal, for example, num1 != num2

- ❖ **>=** : Is used to find whether the first number is greater than or equal to the second, for example, num1 >= num2
- ❖ **<=** : Is used to find whether the first number is less than or equal to the second, for example, num1 <= num2

Arithmetic Operators

Arithmetic operators are used for various arithmetic calculations. They include the following operators.

- ❖ **+** : Is used to add two numbers, for example, num1 + num2
- ❖ **-** : Is used to subtract two numbers, for example, num1 - num2
- ❖ ***** : Is used to multiply two numbers, for example, num1 * num2
- ❖ **/** : Is used to divide two numbers, for example, num1/num2
- ❖ **%** : Is used to calculate the remainder on dividing two numbers, for example, num1 % num2

Increment and Decrement Operators

Increment operator ++ is used to add 1 to the value of a variable, while decrement operator -- is used to subtract 1 from the value of a variable. For example, num++ will add 1 to the value of a variable num and num-- will subtract 1 from the value of a variable num.

Increment and decrement operators + and - can also be placed before the name of variables (such as ++ num and - num), but they may give different outputs depending upon the logic of a program.

Logical Operators

Logical operators are used to find whether one or both the conditions are

true or false. Following are the operators which they include.

- ❖ **&&** : Is used to find whether both the conditions are true, for example, num1 && num2
- ❖ **!!** : Is used to find whether one of the two conditions is true, for example, num1 !! num2
- ❖ **!** : Is used to find whether the condition is false, for example, !num

6. (a) **Main () method**: It is the method that is always executed first.

Print ln() method: It shows the output on the screen.

(b) **System Class** : It contains all that are methods that are required to run a java program .It provides a standard interface to common system resources

(c) **Out Object**: It represents the standard output device.

7. **For loop statement**: It contains the statements that are repeated based on the increment or decrement condition as illustrated in the following example.

```
for (i=0, i<=5; i++)
```

```
{  
    System.out.println(i);  
}
```

The above code will display the numbers from 1 to 5.

The syntax of for loop statement is as follows.

```
for (initial-value; termination-condition;  
increment/decrement value)
```

- ❖ **While loop statement**: It contains the statements that are repeated until the conditional expression is true as illustrated in the following example.

```
while (1 <= 5)  
{  
    System.out.println(i);  
    i++
```

```

}
The above code will also display the
numbers from 1 to 5. The syntax of
while loop statement is as follows.
while (condition)
{
    statements
}

```

8. Gross salary is the final salary computed after the additions of DA, HRA and other allowances. The formula for DA and HRA is:
- ```

#include <studio.h>
int main ()
{
float basic, gross, da, hra;
/* Input basic salary of employee */
printf ("*Enter basic salary of an
employee:");
scanf ("%f", &basic);
/* calculate D.A and H.R.A according
to specified conditions */
if (basic <= 10000)
{
 da = basic * 0.8;
 hra = basic * 0.2;
}
else if (basic <= 20000)
{
 da = basic * 0.9;
 hra = basic * 0.25;
}
else
{
 da = basic * 0.95;
 hra = basic * 0.3;
}
/* calculate gross salary */
gross = basic + hra + da;
printf ("Gross salary of employee = %
2fgross return O;
}

```

- E. Ananya should use the Java in preparing result of her class

```

{
public static void main(String arg [])
{
int marks = 50;
if (marks >= 30);
System.out.println ("Your marks
are"+marks+ "and you are passed"); else
System.out.println ("Your marks
are"+marks+"and you are failed"); }

```

## CH-9 WINDOWS INSTALLATION AND TROUBLESHOOTING

### Exercises

- A. 1. Drivers, 2. User Support, 3. Trouble Shooting, 4. System, 5. Dick Partitioning
- B. 1. True, 2. True, 3. False, 4. True, 5. True
- C. 1(b), 2. (a), 3. (a), 4. (b), 5. (b)
- D. 1. Troubleshooting refers to problem solving, which is often applied to repairing products, processes or systems. In computer terminology, troubleshooting often involves the process of determining and resolving any problem related with computer hardware and/or software. So, troubleshooting is a systematic approach to problem solving.
- If you know the-process of troubleshooting, you can find and resolve many of the hardware and software problems yourself. Before discussing this process, let's first discuss what are various types troubleshooting.
2. The process of Windows 7 upgrade installation is described in the following steps.
- ❖ Insert the Microsoft Windows 7 DVD in the DVD drive of your computer. The Setup exp program will launch automatically and the Setup files will be loaded in the hard disk.
  - ❖ Now, choose your language, time



and currency format, keyboard or input method and click on the Next button as shown.

- ❖ The next screen will show. Click on the Install Now button.
  - ❖ Now, you will see the Microsoft Software License Terms screen. Check 'I accept the license terms' box and click on the Next button.
  - ❖ In the next screen, click on the Custom (advance) option to install a fresh copy of Windows 7 as shown below.
  - ❖ Now, choose the drive where you want to install Windows 7 and click on the Next button.
  - ❖ During the fifth step, the computer will restart and installation will continue. This is the most time consuming step.
  - ❖ The computer will restart again and the setup will continue to prepare your computer for first time use and check the video performance.
  - ❖ After the fifth step, type your desired username and click on the Next button. If you want to set a password, type in the text boxes and click on the Next button.
  - ❖ Now, you need to enter your product key. Enter the key and click on the Next button.
  - ❖ In the next screen, choose your desired option for windows update.
  - ❖ Now, choose your time zone and enter the correct date and time in the next screen. Click on the Next button to continue.
  - ❖ In the last step of Windows 7 installation the set up will finalize the various setting and prepare the desktop as shown below.
3. There are two forms of installation- Upgrade Installation and Custom

(Advanced) Installation.

### **Upgrade Installation versus Custom Installation.**

- ❖ Where you simply start the installation inside of your existing operating system. It recognizes that an OS already exists, and it upgrades to the newest version of this operating system and makes sure that it keeps all your applications in place, and all of your files exactly the way they are.
  - ❖ When you wish to retain your existing files or system configuration settings, you should upgrade your existing Windows Operating System by replacing the current windows files. Such an installation of Windows 7 is called Custom (Advanced) Installation.
4. Following are the basic steps of trouble shooting.
- ❖ **Determine the Problem:** In order to troubleshoot your PC, first you should analyze the nature of the problem such as:
    - ❖ What messages is your system showing on the screen?
    - ❖ Are you able to boot your PC?
    - ❖ Are the power indicators of monitor and CPU on?
    - ❖ Why has the problem occurred? Have you shifted your computer recently or loaded some software into it?
  - ❖ **Categorize the Problem:** After analyzing you can categorize the problem into one of the five types of support - User, Software, Hardware, Operating System and Networking.
  - ❖ **Action Plan:** During the action plan, first of all decide whether the problem can be fixed by the user or it needs a

technician. If the problem is relate with windows, you can go to the control Panel from the Start menu and fix the problem yourself. So, it is better to document your action plan and proceed further.

- ❖ **Implement the Plan:** If you have decided to resolve the problem yourself, proceed with the implementation of the plan. For software or operating system troubleshooting, you should follow the basic guidelines as given below.
- ❖ Always take backup of your data if you are able to boot your system before fixing the problem.
- ❖ If you are unable to boot your system, check all the cable connections and try to reboot the computer.
- ❖ If you have recently installed any software that could have caused windows to stop loading, try the windows recovery procedure through System Restore option from the Control Panel.
- ❖ Most of the software problems occur because of virus attack. So scan your system for viruses using an antivirus.
- ❖ **Run and Test the System:** The last step in troubleshooting is to operate the computer for hours and text it properly to make sure that the problem has been resolved.

5. Sometimes, you need to remove unwanted files/programs stored on the hard disk. You can delete unwanted files and programs from your system by choosing any or both of these methods.

E. Sheena should use the software is cloud. It stores all the photos and videos in the

computer and run a windows task to copy all the photos to another computer in home on a nightly basis for backup purposes. It essential to keep a set of all pictures online in the cloud.

Uploading photos to the cloud has a couple of advantages over storing them all locally.

1. It can easily share the albus with others.
2. It provides a backup of all your photos in case something happens to your local copy.

## CH-10 INTERNET APPS

### Exercises

- A.** 1. gadgets, 2. Skype, 3. Group Screen Sharing, 4. Internet, 5. ARPA, 6. Plugin, 7. Blogs
- B.** 1. True, 2. True, 3. True, 4. True, 5. False, 6. False
- C.** 1. (a), 2. (c), 3. (b), 4. (a), 5. (c), 6. (a)
- D.** 1. **Internet:** The Internet, sometimes called simply 'the Net' is a worldwide system of computer networks-a network of networks in which users at any one computer can get information from any other computers (and sometimes talk directly to users at other computers. It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPA Net.
2. **Multimedia:** Multimedia is a term used to describe how multiple means of media like, text, audio, graphics, animation, video and interactivity are used to communicate with information. It is also often used to describe any computer media. This helps us to understand information at a faster way.
3. **RSS:** RSS(Rich Site Summary), often called (Really Simple Syndication) is a type of web feed which allow a user to access updates to online content in a standardized format. For example:

Allow a user to keep track of many different web sites in a single news aggregator. News and blog sites, medical websites, religious organization information pages. Checking such website repeatedly for updating is a difficult job. RSS proves to be helpful in such cases.

RSS Feed is refers to a list of items presented in an order from newest to oldest. Each item usually consists of a simple title briefly describing the updated content along with a complete description and a link to a web page with the actual information being described.

4. Live cams are another aspect of the multimedia available on the web. Live cams are video cameras that send their data in real-time to a web server.
5. **Skype:** Skype is an IP telephony service provider that offers free calling between subscribes and low-cost calling to people who don't use the service. It includes telephone calls, Skype enables file transfer, texting video chart and video conferencing. This service is available for desktop computers, notebook, tablet, computers and mobile phone.

#### **Features of Skype**

- ❖ The Group Video Call feature of Skype enables you to make video calls that can involves as many as 25 people at the same time.
  - ❖ Video Messaging Feature lets you capture and share any moment of your day with your family and friends.
6. The real-time communication tools include:  
**Chat:** Text message in real-time.  
**Audio:** Conduct a telephone conversation on web.

**Video:** View your audience.

**File transfer:** Send files back and forth among participants.

**Document/application sharing:** View and use a program on another's desktop machine.

7. Blogs are refer to a series of entries posted to a single page in reverse order. Blogs generally represents the personality of the author or reflect the purpose of the website that hosts the blog. The topic of the blog can be an anything from personal to professional. A blog is what you make of it. Blogging can be an interactive activity. Readers can add comments to blogger's postings, other persons, other persons can respond, and a conversation issues. Lately bloggers have become well-known commentators on the political scene, but blogging can encompass any topic or no topic at all.
- E. 1. Ankit should use the skype to share his poem with the word using Internet. He will create a blog using given steps:
- ❖ Open the site [www.blogger.com](http://www.blogger.com). The Blogger site will open. Click on the CREATE YOUR BLOG option.
  - ❖ To create a blog with the blogger site, you must have your account (e-mail) in Gmail. Else, you will have to create a new Gmail account.
  - ❖ Sign in by applying your Gmail user name and password.
  - ❖ The display page gives you two options to create your profile, i.e., a Google + profile or a Blogger profile. Click on the Create a limited Blogger profile button.
  - ❖ Applying a name in the Display Name text box as shown on the screen. This name will appear as your signature in the articles you will post on this blog. Click on the

Continue to Blogger button and select the New blog option from the left pane.

- ❖ A dialog box appears, give a title for your blog, say 'My poems' in the Title text box. The title will appear at the top of every page of your blog. The title should reflect the contents of your blog.
  - ❖ Applying the URL (address) of your blog in the Address: text box, say bhaskarips. blogspot.com. Your blog address (URL) will be your identity on the web and it will be used to read and link to your blog.
  - ❖ Different templates for your blog will be displayed in the same window under the Template section.
  - ❖ Click the template of your choice. Click on the Create blog! Button.
  - ❖ Your blog has been created.
2. Harshit should use the skype to make a video call for conference. Follow the given steps to calling on Skype.
- ❖ To make a call on the Skype, select the person you wish to call from the Contacts tab.
  - ❖ The information of the selected contact appears on the right pane.
  - ❖ Click on the Call button if you wish to have voice call. Clicking the Video call button allows you to have voice as well as video calling.
  - ❖ After using any of the selected facility, click the Skype > Sign Out option to close your account.

### Model Test Paper- 1

- A. 1. (a), 2. (b), 3. (a), 4. (a), 5. (a), 6. (a)  
B. 1. Tree, 2. Navigation, 3. Look, 4. Datasheet, 5. MS Access  
C. 1. False, 2. True, 3. True, 4. True, 5. False  
D. 1. **Wired Network:** Electrical cables such as (twisted pair coaxial cable or optical

fibre) are used to carry signals from one end to other.

**Wireless Network:** They do not require cables rather than signals are transmitted using Bluetooth, Infrared, Microwave or Radiowave.

2. **Data Type:** Each field has a data type that specifies what you can store in it. Data entry is limited to valid entries for the type you select, which helps prevent data entry errors. For example, you cannot enter letters in a field set to Number and you must enter valid dates or times in a Date/Time field.

**Text:** It enables to enter alpha-numeric characters. It has a limit of 255 characters and it cannot be used for numeric calculations. For eg. telephone numbers and ZIP codes.

**Memo:** It has a limit of 63,999 characters are used for detailed, descriptive fields.

3. A data base is a collection of information that is organized so that it can be easily accessed, managed and updated. For example, you must have a telephone directory in which you maintain all the contact details of your friends. The contact details would include the telephone numbers, addresses and the email addresses of your friends. This telephone directory can be called your database.

### Advantages of Using Database

The main advantages of using database are as follows:

**Minimum data redundancy:** Database system stores data at one place in the data base. The data is integrated into a single, logical structure. Different applications refer to the data from the centrally controlled location. The central storage of the data reduces data redundancy.

**Minimum data inconsistency:** It also helps us to minimise data inconsistency.

Updating of data values is simple and there is no disagreement in the stored values. For example, students home address is stored at a single location and gets updated centrally.

**Improvement in data sharing:** Data sharing refers to sharing the same data among more than one user. Each user has access to the same data, through they may use it for different purposes. The database is develop to support shared data. Authorised users are allowed to use the data from the data base.

**Improvement in data integrity:** The database you have created is very important for you and it needs protection. The database is kept secured by limiting access to the database by authorised user.

**Standardization of data:** Since the data is stored centrally, it is easy to enforce standards on the database. Standards could include naming conventions and standard for updating, accessing and protecting data.

4. To add a new field, follow the steps given below.

- ❖ Right- click the name of the field that you want to be displayed after the new field. A menu will emerge.
- ❖ Click on Insert Field. A new field displays in the table. MS Access will assign a name to the new field as Field 1. Now, you can rename the field name and add information to it.
- ❖ Delete a Field in the table.
- ❖ You can remove a field that is not required in a table.

To delete a field in the table, follow the steps given below:

- ❖ Right-click on the field that to be removed. A menu will display.
- ❖ Click on Delete Field. A prompt box

displays.

- ❖ MS Access removes the field and record content for the field from the table.

5. Find and Replace commands are also useful in MS Access when you have to find and replace something in a large database. Find enables you to quickly search tables, queries and form quickly for specified database task. Select a field to search through all records in the current field only.

E. 1. **Effective Backup:** In information technology, a backup, or the process of backing up, refers to the copying and archiving of computer data so it may be used to restore the original after a data loss event.

2. **Ribbon:** In computer interface design, a ribbon is a graphical control element in the form of a set of toolbars placed on several tabs. ... However, in 2007, Microsoft Office 2007 used the term to refer to its own implementation of tabbed toolbars bearing heterogeneous controls, which Microsoft calls "The Fluent UI".

3. **Alpha-Numeric:** The definition of alphanumeric is something that contains letters and numbers. A password that requires both letters and numbers is an example of an alphanumeric password. A computer keyboard is an example of an alphanumeric keyboard.

4. **Modifying Table:** Create or modify tables or indexes by using a data-definition query. Applies To: Access 2010. You can create and modify tables, constraints, indexes and relationships by writing data-definition queries in SQL view.

5. **Wireless:** A wireless modem is a modem that bypasses the telephone

system and connects directly to a wireless network, through which it can directly access the Internet connectivity provided by an Internet service provider (ISP).

### Model Test paper-2

- A. 1. (c), 2. (b), 3. (b), 4. (b), 5. (c), 6. (c)
- B. 1. Internal, 2. Unordered, 3. Form, 4. Border Spacing, 5. Report
- C. 1. False, 2. True, 3. False, 4. True, 5. True
- D. 1. A Query is a simple question that you ask to find a particular information from the database. Similarly in Access, when you create a query, you are defining particular search conditions. You can queries to view, change, summarise and analyse the particular data in different ways.
2. Tables are very popular on the web since they are flexible and an effective way of presenting information in the form of rows and columns.

❖ To make a table in HTML, <table> tag is applied. Each table starts with a <table> tag and ends with </table> tag.

### Types of Linking

Internal Linking External Linking

**Internal Linking:** When one part of a web page is linked to another part on the same page, it is called internal linking.

External linking: When one page is linked to another web page or website, it is called external linking.

- E. 1. **Flash Memory:** Flash memory is a non-volatile memory chip used for storage and for transferring data between a personal computer (PC) and digital devices. It has the ability to be electronically reprogrammed and erased. It is often found in USB flash drives, MP3 players, digital cameras and solid-state drives.

2. **Markup Language:** Markup languages are designed for the processing, definition and presentation of text. The language specifies code for formatting, both the layout and style, within a text file. The code used to specify the formatting are called tags. HTML is an example of a widely known and used markup language.

3. **QBASIC:** QBasic short form of Quick Beginners All purpose Symbolic Instruction Code is an IDE and interpreter for a variety of the BASIC programming language which is based on Quick BASIC. Code entered into the IDE is compiled to an intermediate representation, and this IR is immediately interpreted on demand with in the IDE.

4. **Link Break:** On the Data tab, in the Connections group, click Edit Links. ... In the Source list, click the link that you want to break. To select multiple linked objects, hold down Ctrl, and then click each linked object.

5. **Mask Layer flash:** Masking is a way for you to control the content that your audience sees. For example, you can make a circular mask and allow your audience to only see through the circular area, so that you get a keyhole or spotlight effect. In Flash, you put a mask on one layer and the content that is masked in a layer below it.

### Model Test Paper-3

- A. 1 (c), 2. (a), 3. (a), 4. (b), 5. (c), 6. (b)
- B. 1. Objects, Procedures 2. Group Screen Sharing, 3. Disk Partitioning 4. Flat, 5.

Data

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

D. 1. **Properties:** Properties specify the name of the form or an object. The common properties of the form are given below.

**Name:** It defines the name of the form by which it is referred to in the code. The default name of the form is Form1.

**Caption:** It provides the title of the form.

**Appearance:** It can have different values. The value 0 creates the form look flat, while the value 1 creates the form look three-dimensional.

**Font:** It is used to define the font type, font style and font size for the text.

**Font Color:** This property sets the colour of the form.

**BackColor:** This property sets background colour of the form.

**Enabled:** It can have True or False value. The value True allows the form respond to mouse and keyboard events, while the value False allows it unable to respond.

**Visible:** It can also have True or False value. The value True causes the form visible, while the value false causes it invisible.

#### Methods:

Methods are the actions performed on the form or objects. The common methods of the form are given below.

**Show:** This method causes the form visible. It is the same as setting a form's visible property to True.

**Hide:** It makes the form invisible.

**Print:** It shows text string on the form.

**Events:** An event is a message sent by an object denoting that something has occurred. The common events of the form are given below.

**Form-Click:** When the user clicks on the form, Form-click event is triggered.

**Form-load:** When the form is loaded, Form-load event is triggered.

2. Sometimes, you need to remove unwanted files/programs stored on the hard disk. You can delete unwanted files and programs from your system by choosing any or both of these methods.

3. In order to develop applications on Java, we first need to install Java Development Kit (JDK ver. 1.5 or 1.6) in our computer. Then, we follow the three-step procedure to develop applications.

- ❖ Enter the program in Notepad.

- ❖ Compile the program with Java Compiler (javac).

- ❖ Run the program in Java.

- ❖ Entering the Java Program

Java program is entered into the computer using a text editor such as Notepad. To enter the program using Notepad, follow the steps given below.

- ❖ Click Start → All programs → Accessories → Notepad menu options to load Notepad.

- ❖ Type the program in the New Document.

- ❖ Choose File Save menu option in the Notepad to save the program.

- ❖ Click All Files option in the Save As

type box of the Save As dialog box and type the name of the file with extension name java in File name box.

- ❖ Then, click on the Save button.
- ❖ Compiling the Java Program

Java program is compiled at the DOS prompt. So, you need to go to the Command prompt in order to compile your program. Now, to compile the Java program, follow the steps given below.

- ❖ Click Start All Programs Accessories Command Prompt menu options for accessing the DOS prompt.
  - ❖ In DOS prompt, change to that directory (folder) where your program is saved by typing the DOS command, `cd <folder name>`.
  - ❖ To compile the program, type Java `< file name with extension>`. The program will be compiled.
  - ❖ Running the Java Program
  - ❖ In order to run the compiled Java program, type the command, `java < file name without extension>`. The program will run and you will get the output.
5. There are two forms of installation- Upgrade Installation and Custom (Advanced) Installation.

#### **Upgrade Installation versus Custom Installation:**

Where you simply start the installation inside of your existing operating system. It recognizes that an OS already exists, and it upgrades to the

newest version of this operating system and makes sure that it keeps all your applications in place, and all of your files exactly the way they are.

When you wish to retain your existing files or system configuration settings, you should upgrade your existing Windows Operating System by replacing the current windows files. Such an installation of Windows 7 is called Custom (Advanced) Installation.

- E. **1. Forms in Access:** A form in Access is a database object that you can use to create a user interface for a database application. A "bound" form is one that is directly connected to a data source such as a table or query, and can be used to enter, edit, or display data from that data source.
- 2. Ordered List:** Use the HTML `<ol>` element to define an ordered list. Use the HTML type attribute to define the numbering type. Use the HTML `<li>` element to define a list item. Use the HTML `<dl>` element to define a description list. Use the HTML `<dt>` element to define the description term.
- 3. Report in Microsoft Access:** A report is an object in Microsoft Access that is used to display and print your data in an organized manner. The Navigation Pane is where you can find all of the saved reports in the database. To view your reports, make sure that all objects are visible in the Navigation Pane.
- 4. Img HTML:** The `<img>` tag defines an image in an HTML page. The `<img>` tag has two required attributes: `src` and `alt`. Note: Images are not technically



inserted into an HTML page, images are linked to HTML pages. ... Tip: To link an image to another document, simply nest the <img> tag inside <a> tags.

**5. Border in excel:** By Vangie Beal In the Microsoft Excel program, "borders" is a built-in tool that lets users access predefined border styles to add a border around two or more cells on a spreadsheet. You can also use the borders tool to create your own custom border.