Key to

ALL ABOUT COMPUTERS

8
1. COMPUTER NETWORKING

A. 1. PAN  
    2. Star topology  
    3. HTTP  
    4. MAN  
    5. NFC

B. 1. mesh  
    2. router  
    3. SMTP  
    4. Radio waves  
    5. WAN

C. 1. T  
    2. F  
    3. T  
    4. F  
    5. T

D. 1. A computer network is a collection of computers or other devices that are connected to each other in order to share data as well as hardware and software resources. Some advantages of computer networking are:

   (a) File sharing - Computer networks allow sharing of files and database among a large number of users. Users can easily access the files stored on various computers in a network. This helps the user to save their time and effort.

   (b) Resource sharing - Computer networks allow users to share resources such as peripherals (printers, scanners, etc. and memory. This reduces the overall cost of these devices for an organization or an individual.

   (c) Centralised software - Computer networks allow users to access and use multiuser software without the need to install them on their systems.

   (d) Reliability - Computer networks provide backup features for data and information. Multiple copies of data can be maintained at various locations in a network. Thus, failure of one computer does not cause loss of data.

2. Computer networks on the basis of geographical area covered are:

   (a) Personal Area Network (PAN) - It is a computer network organized within the environment of
an individual user. It covers an area of a few meters in radius. It is commonly used to transfer pictures, songs or small data files between the connected devices such as laptops, smartphones, tablets, MP3 players, and headphones. PANs can use wired media or wireless media.

(b) Local Area Network (LAN) - LAN is a computer network which is usually confined to a single room, building, or a group of buildings. It covers an area of a few kilometers in radius. LANs are commonly used in places such as schools, college campuses, hospitals and offices. LANs can be wired or wireless.

(c) Metropolitan Area Network (MAN). MAN is a network of computers within a city, covering an area of hundreds of kilometers in radius. MANs are formed by connecting multiple LANs together. Cable TV networks and networks between various branches of a school, bank, hotel and office within a city are examples of MANs. MANs can be wired or wireless.

(d) Wide Area Network (WAN). WAN is a very large network that connects computers over a country, continent or across the world. A WAN usually consists of multiple smaller networks. WANs use wireless technology. Internet, ATMs and international business organisations use WAN for their operations.

3. Network Topology is the physical arrangement in which computers and other network devices are connected to one another. Each independent device on a network is called a node.

Three topologies used in computer network are:

(a) Bus Topology - In bus topology, all the nodes are connected to a single cable called the backbone or bus. Data is transmitted from one end to the other through the bus cable. Each node accepts the data meant for it and uploads the data for
transmission to another node. The bus topology requires short cable lengths and is relatively less expensive. It is easy to install and manage. However, if there are breaks in the bus, the entire network shuts down.

(b) Ring Topology - In Ring Topology, each node is connected with two other nodes, forming a closed loop or ring. Data is transmitted through the ring in one direction only, either clockwise or anticlockwise. Ring topology is easy to install and manage. However, in case of a failure in any one cable or device, the entire network gets disabled.

(c) Star Topology - In Star Topology, all nodes are connected to a central node, called hub. The hub controls all communication between the nodes. Data is transmitted and received across the network through the hub. Star topology is easy to install and maintain but, if the central hub fails, the entire network becomes unusable.

4. Microwaves are electromagnetic waves that are unidirectional. They provide line-of-sight transmission which means there should not be any obstruction between the transmitter and receiver. They are used for transmitting radio and television signals and long distance communications. Microwaves are insecure and prone to the influence of weather conditions.

Radio waves are sound waves that are omnidirectional and travel long distances in all directions from the source. Antennas are used to transmit and receive radio signals. They can penetrate buildings easily and are widely used for indoor and outdoor communication. Radio waves are prone to interference from various electrical equipment.

5. Protocols is a set of rules that governs the communication among computer in a network. The computers in a network have to follow a common protocol in order to exchange data.

(a) IP (Internet Protocol) - IP is responsible for addressing
and routing packets from the source computer to the destination computer across the network.

(b) FTP (File transfer protocol) - FTP is used for sharing files between computers over a network.

(c) HTTP (Hypertext transfer protocol) - HTTP is used for transferring files on the World Wide Web.

(d) TCP (Transmission control Protocol) - TCP is responsible for breaking down data into small packets before they can be sent over a network, and for assembling the packets again when they arrive at the destination.

6. Network devices are used to connect various computers in a network.

(a) Modem is used to convert digital signals of a computer into analog signals which can be carried over telephone lines or cables to another computer. The modem at the receiving computer converts the analog signals into digital signals which a computer can understand.

(b) Switch is used to connect multiple computers in a network. A switch receives a data packet from a computer, determines which computer the packet is intended for, and sends it to that computer only.

(c) NIC or Network Interface Card is used for wired and wireless computers to exchange information over the network.

(d) RJ-45 is used to connect the NIC of a computer with a hub or a switch.

7. Some limitations of computer networks are:

(a) Security threats - Data and identity theft by hackers is a major threat to a network since a large number of users access information and data.

(b) Expensive maintenance - Setting up of networks and
maintaining them involves high cost of cabling, implementing security measures and constant up-gradation of network.

(c) Network failure - Breakdown of centralised servers or transmission media results in loss of network connectivity. This leads to loss of information, finances and access to network resources.

(d) Malware Infection - Viruses and other malware can easily spread from one computer to others. This may corrupt the data stored in a computer.

2. INTRODUCTION TO ACCESS 2016

A. 1. Table  2. Datasheet view  
    3. AutoNumber  4. Totals  
    5. Navigation Pane

B. 1. DBMS  2. data type  
    3. Relational  4. filter  
    5. Search Box

C. 1. T  2. F  3. T  
    4. T  5. F

D. 1. Database is a collection of processed information related to a particular topic or purpose so that it can be easily accessed, managed and updated. For example, a school maintains a database of students containing information about their admission number, name, date of birth, address, class, mode of transport and fee details.

Manual database is the simplest and most common type of database. It consists of paper records, folders and filing cabinets while computerized database is a soft copy of information in the form of electronic files stored on a hard disk or other storage media.
2. DBMS is a software that enables a user to create a database and add, modify, and delete data in it. It provides an interface that is both convenient and efficient to use. Advantages of DBMS are:

(a) Controls data redundancy - Data redundancy refers to the duplication of data. In a DBMS, all the data of an organisation is integrated into a single database file. Users access the centralised database and do not maintain duplicate copies on their computers.

(b) Facilitates data sharing - A DBMS stores data at a centralised location and facilitates sharing of data among multiple users, according to their requirements.

(c) Controls data inconsistency - Data inconsistency exists when different versions of the same data appear in different places. A DBMS controls the data inconsistency by updating the centralised data.

(d) Ensures data integrity - A DBMS supports database integrity. Data integrity means that the data updated in the database follows standard rules and formats for all users.

3. A database in Access is composed of six objects:

(a) Tables - A table organizes data in the form of rows and columns in a database.

(b) Query - A query searches and retrieves data from the database based on a set of selection criteria.

(c) Form - A form lets you enter and display the data in a customised format.

(d) Report - A report displays the data in a printable format.

(e) Macro - A macro automates the tasks that are performed more often in the database.

(f) Module - A module contains programming statements written in VBA (Visual Basic for Access) programming language.
4. Each field in a table has a data type associated with it. A data type specifies the type of values that the field can contain. Various data types available in Access 2016 are:
   (a) Short text
   (b) Long Text
   (c) Number
   (d) Date/Time
   (e) Currency
   (f) AutoNumber
   (g) Yes/No
   (h) OLE object
   (i) Hyperlink
   (j) Attachment
   (k) Calculated

5. Step to create a table using datasheet view with the help of an example:

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Data Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ModelNum</td>
<td>AutoNumber</td>
</tr>
<tr>
<td>CarName</td>
<td>Short Text</td>
</tr>
<tr>
<td>Company</td>
<td>Short Text</td>
</tr>
<tr>
<td>EngineDisplacement (cc)</td>
<td>Number</td>
</tr>
<tr>
<td>Mileage (km/l)</td>
<td>Number</td>
</tr>
</tbody>
</table>

(1) On the Create tab, in the Tables group, click Table. A new table with the field ID appears.
(2) Double-click the field name ID and change it to ModelNum.
(3) Click the down arrow next to Click to Add field. A drop-down list of data appears.
(4) Select Short Text
   Access adds a new field ‘Field 1’ in the table. Click to Add field is moved to the third column.
(5) Rename Field 1 as CarName.

(6) Repeat steps 3 to 5 to add remaining fields with the specified names and data types.

(7) Click the first cell under CarName and Type ‘Alto K10’.

The value 1 appears in the ModelNum field. A pencil icon appears in front of the row that indicates that the record is being edited.

(8) Press the Tab key to move to the next field.

(9) Type the values under the fields Company, Engine Displacement (cc) and Mileage (km/l) respectively.

(10) Press the Tab key. A new blank record is added to the table.

(11) Enter more records.

(12) Click the Save button on the Quick Access Toolbar. The Save As dialog box opens.

(13) Type the name ‘Cars’ in the Table name and text box and click the OK button.

Access saves the table in the database. Its name appears on the table tab as well as in the navigation pane under Tables.

6. To filter records in a table:

(1) Open the table in Datasheet view.

(2) Select a field on which you want to apply the filter.

(3) On the Home tab, in the Sort & Filter group, click the Filter button.

A menu with a checklist appears.

(4) Clear the Select All check box.

(5) Mark the check box for the value you want to see for the field in the Datasheet.
(6) Click the OK button
Access applies the filter and displays the record which satisfy the filter condition. A filter icon appears in the column heading of the field indicating that it has a filter applied.

7. To add a new field to a table:

(1) In the Navigation pane, double click the table name in which you want to add a field. The table opens in the Datasheet view in the Document window.

(2) Click the column header of the field to the right of which you want to add a field.

(3) On the Table Tools Fields tab, in the Add & Delete group, click the data type for the new field. Access adds a new field to the table.

(4) Type a name for the inserted field.

Think and Answer

1. Anuj should use the datatypes as under
   Name – Short Text
   Address – Short Text
   Contact Number – Number
   Date of Birth – Date/Time

2. Tanvi should use Filtering by Selection.

3. ACCESS 2016 : DESIGN VIEW

A. 1. Row Selector 2. Field Size
    3. Primary Key 4. Field Definition Grid
    5. Caption

B. 1. Design 2. Status Bar
    3. primary key 4. AutoNumber
    5. Short Text

C. 1. T 2. T 3. F
    4. F 5. T
D. 1. The design view screen consists of two parts:

(a) Field definition grid - Field definition grid present at the upper half of the screen, is used to specify the definitions for various fields in a table. It consists of following parts:-
   (i) Field Name
   (ii) Row Selector
   (iii) Data Type
   (iv) Description

(b) Field properties pane - Field properties pane present at the lower half of the design view screen, it is used to set various field properties that control the appearance and behaviour of data added to the field.

2. To create a table in design view:

(1) On the Create tab, in the Tables group, click Table Design.
   • A new table is inserted in the database and the table opens in Design view.

(2) Enter the name for a field in the Field Name column.

(3) Select a data type for the field from the Data Type drop-down list.

(4) Type a short description about the field in the Description column. (Optional)

(5) Set the various properties for the field in the Field Properties pane.

(6) Repeat steps 2 to 5 to add more fields if desired.

(7) Click the Save button on the Quick Access Toolbar. The Save As dialog box opens.

(8) Type an appropriate name for the table and click the OK button.
   • The table gets added to the Navigation Pane.

(9) On the Home tab, in the views group, click the View down arrow and select Datasheet view to add records in the table.
3. A primary key is a field or set of fields with values that are unique throughout a table. It is used to identify records in a table. A table can only have one primary key.

To set a primary key for a table:

(1) Click the Row Selector for the field you want to use as the Primary key.

(2) On the Table Tools Design tab, in the Tools group, click the Primary Key button.

   • Access sets the field as the primary key and a key indicator appears in the Row Selector.

4. Some field properties associated with different data types are :

<table>
<thead>
<tr>
<th>Property</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field size</td>
<td>Short text, Number, AutoNumber</td>
<td>Lets you specify the maximum size for data stored in a field.</td>
</tr>
<tr>
<td>New Values</td>
<td>AutoNumber</td>
<td>Lets you set whether AutoNumber field increments in sequence or uses random numbers.</td>
</tr>
<tr>
<td>Format</td>
<td>Short text, Long text, Number, Date/Time, Currency, AutoNumber, Yes/No, Hyperlink</td>
<td>Lets you specify the way values in a field appear when it is displayed or printed.</td>
</tr>
<tr>
<td>Decimal Places</td>
<td>Number, Currency</td>
<td>Lets you specify the number of decimal places to use when displaying numbers.</td>
</tr>
<tr>
<td>Input Mask</td>
<td>Short text, Date/time</td>
<td>Lets you specify the way data in entered in a field.</td>
</tr>
</tbody>
</table>

5. To add a new field to a table:

(1) Open a table in the Design view.
(2) Click the Row selector of the field above which you want to add a new field.

(3) On the Table Tools Design tab, in the Tools group, click the Insert Rows button.
   - Access adds a new field to the table.

Think and Answer

1. The computer operator should use Attachment datatype to store Photographs of each teacher.

2. ArticleNum should be used as primary key as it can be used to identify records of articles.

**4. ACCESS 2016: QUERIES, FORMS AND REPORTS**

A. 1. Query 2. [ ] 3. Create
   4. File 5. Form Wizard

B. 1. Tables 2. Report Wizard
   3. query 4. Form Command
   5. report

C. 1. T 2. T 3. T
   4. T 5. F

D. 1. A query is used to extract information from one or more tables in a database. You can use a query to view specific data from a table or supply data to other database objects such as forms and reports. The data retrieved by a query is displayed in the datasheet view. A query can also be used to edit and analyse data in different ways.

To create a query using Query Design:

(1) On the Create tab, in the Queries group, click Query Design. The Show Table dialog box opens.

(2) Select the table to use for the query and click the Add button.

(3) Click the close button.
• The Query Design view opens. The Query Tools Design tab appears on the Ribbon.

(4) Select the fields to be included in the query by using one of the following ways:
• Double click a field name in the table box.
• Drag a field name from the table box and drop it in the required column in the grid.
• Click the down arrow in a column and select the required field from the list that opens.
• Type the required field name in the Field box in a column.

(5) Drag a column to as required position to change the order of fields in the query.

(6) Click the Sort box of the field on which you want to sort the result of the query, and choose Ascending or Descending option.

(7) Clear the check mark in the Show box of a field to hide it from display in the Datasheet view.

(8) Specify the condition for the query in the Criteria box of a desired field.

(9) On the Query Tools Design tab, in the Results group, click the Run button.
• The result of the query is displayed in the Datasheet view.

(10) Click the Save button on the Quick access toolbar. The Save As dialog box opens.

(11) Type a name for the query and click the OK button.
• Access saves the query and displays the query object in the Navigation Pane.

2. Form is a database object that provides a Windows-like interface to view and edit data easily in a table. To create a form using the form command:
(1) In the Navigation Pane, click the table for which you want to create the form.


(3) Click the Form Layout Tools Design tab and do any of the following:
   1. Set a logo for the form.
   2. Specify a title for the form.
   3. Display date and time on the form.
   4. Apply a theme to the form.

(4) Click the Form Layout Tools Format Tab and do any of the following:
   1. Format the form title.
   2. Specify a background color for the form.

(5) Click the Save button on the Quick Access Toolbar. The Save As dialog box opens.

(6) Type a name for the form and click the OK button.
   • Access saves the form and displays the form object in the Navigation Pane.

3. Report is a database object that lets you view data from a table or a query in printable format. You can modify a report’s design, but you cannot add or edit data to the report.

To create a report using report wizard:

(1) On the Create tab, in the Reports group, click the Report wizard button.
   • Report wizard screen appears.

(2) Click the Tables/Queries drop-down list arrow and select the required table.

(3) Add the desired fields to display in the report using the > and >> buttons.
(4) Click the Next button.
(5) Select the field on the basis of which you want to group the records.
(6) Click the Next button.
(7) Select the sort field and sorting order for the data in the report.
(8) Click the Next button.
(9) Select an option for the layout and orientation of the report.
(10) Click the Next button.
(11) Type a name for the report.
(12) Select Preview the Report Radio button and click the Finish button.
   • Access creates the report object and displays the report in Print Preview view.

4. To add a new record to a table using form:
   (1) Click the New (blank) Record button in the Record Navigation Bar.
       • A blank form is displayed.
   (2) Enter the required information in the corresponding text boxes.
   (3) Click the Save button on the Quick Access toolbar to save the changes.

5. To print a report:
   (1) In the Navigation Pane, double click a report to open it.
   (2) Click the File tab.
       • The Backstage view opens.
   (3) Click Print.
       • The print screen appears.
   (4) From the Print options, click Print.
       • The Print dialog box opens.
(5) Select the required options like printer, range of pages and number of copies to print, and click the OK button.
   • Access prints the report.

Think and Answer
1. Manvi should use query object to display details of all the products of a particular brand.
2. Roshan should create form using split form command.

5. LISTS AND IMAGES IN HTML5

A. 1. Ordered list 2. Description list
3. list-style-type 4. GIF
5. <img>

B. 1. Nested list 2. Description list
3. list-style-image 4. text-transform
5. PNG

C. 1. T 2. T 3. T
4. T 5. F

D. 1. An ordered list is a list of related items in which the order of items is important. It uses a number or an alphabet in front of each item in the list. Whereas, An unordered list is a list of related items in which the order of items is not important. It uses a bullet in front of each item in the list.

2. Description list is a list of terms along with a description of each term. Description lists are used for preparing an online catalogue, a dictionary or a glossary of terms.
   The <d1> and </d1> tags are used to create a description list. Each item in a description list consists of two parts: a term and a description. A term is specified within <dt> and </dt> tags, and a description is specified within <dd> and </dd> tags.

3. The image <img> tag is used to insert images in a web page. The image file formats supported by most web browsers are:
(a) **Joint Photographic Experts Group (JPEG)** - JPEG is the most used image format to display photographic and digital images. It is capable of displaying millions of colors at once. JPEG images usually use a .jpg filename extension.

(b) **Graphics Interchange Format (GIF)** - GIF format is used to display images created with a graphics software. GIF files have low display quality as they support up to 256 colors only and are smaller in size. A single GIF file can store multiple images and display them as an animation. GIF images use a .gif filename extension.

(c) **Portable Network Graphics (PNG)** - PNG format is best for images with transparent background or low color counts. At present, this format is widely used in web pages. PNG images use a .png filename extension.

4. The attributes of the `<img>` tag are described in the following table:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Value(s)</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>List-style-type</td>
<td>Lets you specify the type of list item marker</td>
<td>Decimal (default), lower-roman, upper-roman, lower-alpha, upper-alpha</td>
<td>List-style-type: lower-roman List-style-type: upper-alpha</td>
</tr>
<tr>
<td>List-style-position</td>
<td>Lets you specify the position of the list item marker</td>
<td>Inside Outside</td>
<td>List-style-position: inside List-style-position: outside</td>
</tr>
<tr>
<td>List-style</td>
<td>Lets you specify all list properties in one declaration</td>
<td>List-style-type list-style-position</td>
<td>List-style: upper-alpha inside</td>
</tr>
</tbody>
</table>

5. The attributes of the `<img>` tag are described in the following table:
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
<th>Value(s)</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>src</td>
<td>Specifies the name of the image file</td>
<td>URL of the image file</td>
<td><code>&lt;img src=“computer.jpg”&gt;</code></td>
</tr>
<tr>
<td>alt</td>
<td>Specifies an alternate text for the image that is displayed if the image is not loaded in the web browser</td>
<td>text</td>
<td><code>&lt;img src=“computer.jpg” alt=“computer”&gt;</code></td>
</tr>
<tr>
<td>width</td>
<td>Specifies the width of the image</td>
<td>value in pixels</td>
<td><code>&lt;img src=“computer.jpg” width=100”&gt;</code></td>
</tr>
<tr>
<td>height</td>
<td>Specifies the height of the image.</td>
<td>value in pixels</td>
<td><code>&lt;img src=“computer.jpg” height=“200”&gt;</code></td>
</tr>
</tbody>
</table>

**Think and Answer**

1. Preeti can use Alt attribute of image `<img>` tag to do so.
2. Description List
3. (a) Ordered list
   (b) Unorderedlist
   (c) `<li> </li>`
      `<ol> </ol>`
      `<ul> </ul>`
   (d) list-style-type : Square

6. **TABLES, LINKS, AUDIO AND VIDEO, AND FRAMES IN HTML5**

   **A.**
   1. Mailto Link
   2. href
   3. `<td>...</td>`
   4. Active
   5. `<embed>`

   **B.**
   1. Padding
   2. `<a>...</a>`
   3. `<iframe>`
   4. autoplay
   5. hover
C. 1. T  2. F  3. T  
4. F  5. T

D. 1. Various tags used to create tables in an HTML document are:

<table>
<thead>
<tr>
<th>Tag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;table&gt;...&lt;/table&gt;</td>
<td>Lets you create a table in an HTML document.</td>
</tr>
<tr>
<td>&lt;tr&gt;...&lt;/tr&gt;</td>
<td>Lets you create a row in an HTML table.</td>
</tr>
<tr>
<td>&lt;th&gt;...&lt;/th&gt;</td>
<td>Lets you create a header cell in an HTML table.</td>
</tr>
<tr>
<td>&lt;td&gt;...&lt;/td&gt;</td>
<td>Lets you create a data cell in an HTML table.</td>
</tr>
<tr>
<td>&lt;caption&gt;...&lt;/caption&gt;</td>
<td>Lets you specify a title for an HTML table.</td>
</tr>
</tbody>
</table>

2. Four CSS properties associated with <table> tag are:

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
<th>Value(s)</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border-collapse</td>
<td>Lets you specify whether or not table borders should be collapsed.</td>
<td>Separate (default), collapse</td>
<td>Border-collapse: collapse</td>
</tr>
<tr>
<td>Border-spacing</td>
<td>Lets you specify the distance between the borders of the adjacent cells.</td>
<td>Length (specifies both the horizontal and vertical spacing.) length1 length2 (length1 specifies the horizontal spacing and length2 specifies the vertical spacing.)</td>
<td>Border-spacing: 10px border-spacing: 5px 15px</td>
</tr>
<tr>
<td>Caption-side</td>
<td>Lets you specify the placement of table caption.</td>
<td>Top (default), bottom</td>
<td>Caption-side: bottom</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------</td>
<td>----------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Empty-cells</td>
<td>Lets you specify whether or not to display borders and background for empty cells in a table.</td>
<td>Show (default), hide</td>
<td>Empty-cells: hide</td>
</tr>
</tbody>
</table>

3. A Hyperlink or link, is text or image that stores the address of a location on a web page or a website. It enables you to navigate from one topic to another on the same web page, or from one web page to another. Four states of links in a web page are:

   (a) Unvisited - The default state of a link on a web page that has not been visited yet. It can be styled by using the a:link property in CSS.

   (b) Hover - The state of a link with the mouse pointer over it. It can be styled by using the a:hover property in CSS.

   (c) Active - The state of a link when it is clicked. It can be styled by using the a:active property in CSS.

   (d) Visited - The state of a link after it has been visited. It can be styled by using the a:visited property in CSS.

4. An `<iframe>` tag is a container tag used to define a frame in a web page. Its various attributes are:

   (a) `src` - It specifies the URL of the web page to be displayed in the frame.

   (b) `height` - Specifies the height of the frame.

   (c) `width` - Specifies the width of the frame.
5. The `<video>` tag is used to insert a video file in a web page. Its various attributes are:
   (a) `src` - Specifies the URL of the video file.
   (b) `height` - Specifies the height of the video player in a web page.
   (c) `width` - Specifies the width of the video player in a web page.

**Think and Answer**

1. Jenny should use autoplay and loop attributes of audio tag.
2. Kabir should specify the colour of the various states of link while creating the links.
3. (a) `<iframe>` tag
   (b) `<iframe>`

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>src</code></td>
<td>Specifies the URL of the web page to be displayed in the frame</td>
</tr>
<tr>
<td><code>height</code></td>
<td>Specifies the height of the frame.</td>
</tr>
<tr>
<td><code>width</code></td>
<td>Specifies the width of the frame.</td>
</tr>
</tbody>
</table>

---

7. **MORE TOOLS IN ADOBE ANIMATE CC**

A. 1. 
   2. Pen Tool
   3. Ctrl + Shift + G
   4. Free Transform Tool
   5. Break apart

B. 1. anchor
   2. File
   3. Eyedropper Tool
   4. Shape
   5. Property Inspector

C. 1. T
   2. F
   3. T
   4. T
   5. T

D. 1. The pen tool is used to draw precise straight-line or curved paths. A path is made up of one or more straight or curved segments. The beginning and end of
each segment is called an anchor point. You can change the shape of a path by dragging its anchor points.  

To use pen tool to create a path:

1. Open an Animate document.
2. In the Tools panel, click the Pen tool. The pointer changes to a pen pointer.
3. Click at a location on the Stage to set the first anchor point.
4. Click at another location to draw a straight segment.  
   Or
   Click at another location and drag to draw a curved segment with the required slope.
5. Draw more segments are desired.
6. Click the first anchor point to close the path.  
   Or
   Press the Esc key to leave the path open.
   • Animate creates the desired path.

2. The Eyedropper tool is used to copy strokes and fill attributes from an object and apply the selected format to another object. 

To use the eyedropper tool:

1. In the Tools panel, click the Eyedropper tool.  
   • The pointer changes to an eyedropper pointer.
2. Move the pointer over a line or a fill.  
   • The pointer displays a white square near the eyedropper when it is over a line and displays a black square when it is over a fill.
3. Click the line or fill from which you want to copy the formatting.  
   • The pointer changes to a paint bucket pointer.
4. Click the line or fill to which you want to apply the selected formatting.  
   • Animate applies the selected formatting to the object.
3. (1) In the tools panel, select the Gradient Transform tool.
   (2) Click an area filled with a gradient.
       • A bounding box with editing handles appears.
   (a) To reposition the centre of the gradient fill:
       • Position the mouse pointer over the centre point handle of gradient.
       • The mouse pointer changes to a four-way arrow.
       • Click and drag the centre point.
   (b) To change the width of the gradient fill:
       • Position the mouse pointer over the width handle of the gradient. The mouse pointer changes to a double-ended arrow.
       • Click and drag the width handle to the left to decrease or right to increase the size of the gradient.

4. To import a picture from a computer on the stage:
   (1) On the Application bar, click File.
       • The File menu appears.
   (2) Click Import and select Import to Stage...option.
       • The Import dialog box opens.
   (3) Select the picture you want to import and click the Open button.
       • The selected picture is inserted as an object on the stage.

5. To convert text into shape:
   (1) Select the text you want to convert into a shape.
   (2) On the Application bar, click Modify and select Break Apart. The characters in the text block are divided into individual blocks.
   (3) On the Application Bar, click Modify and select Break Apart again. The characters are converted into shapes. They are not treated as text anymore.
(4) Click the converted text to deselect the shapes.

Think and Answer

1. Vinaya should group the outline & fill and then move it.
2. Kanan should convert the text into shapes and then animate the shapes as required.

8. ADVANCED ANIMATIONS IN ANIMATE

A. 1. [ ] 2. Timeline 3. mask layer 4. text 5. filters


D. 1. Layers can be imagined as multiple transparent sheets stacked on top of one another. Layers help you organize objects, animations and other elements in an Animate document.

To change the order of layers:

(1) Select a layer and drag it up or down. A black line indicates the new position of the layer.

(2) Drop the layer at the required position.

2. Masking layer is a special type of layer, in Animate CC to selectively reveal portions of a picture or graphic on the underlying layer. It enables you to control the contents that audience can see when the movie is played.

To convert a layer into a masking layer:

(1) Create a new animate document.

(2) From the Properties panel, change the background color of the Stage to black.
3. Select the Text tool and choose the desired font, font size, font style and color in the Property Inspector.

4. Type the text ‘Knowledge is Power’.

5. Rename Layer 1 as text.

6. Click Insert layer at the bottom of the Timeline to insert a new layer and rename it as Mask.

7. Click frame 1 of the Mask layer and draw a circle with white fill slightly larger than the height of text in the Text layer.

8. Convert the circle into a symbol.

9. Click the Text layer and insert a keyframe at frame 60.

10. Click the Mask layer and select the frame 1.

11. On the Application bar, click Insert and select Motion Tween.

12. Drag the motion tween span to frame 59.

13. Insert a keyframe at frame 60 and drag the circle to the far end of the text.

14. Right click the Mask layer and select the Mask option from the shortcut menu.

   • The Mask layer and the Text layer get locked together. The content of the Text layer gets hidden under the Mask layer. The icon of the layers in the timeline also change.

15. Save the document.

16. Press Ctrl + Enter to play the movie.

   • The circle moves across the stage and displays the text behind it.

3. Filters let you add enriching visual effects to text, buttons and movie clips. Animate provide different types of filters such as bevel, glow, gradient glow, etc.

To apply filters in animate:
(1) Create a new Animate document.

(2) Select the Text tool and type the desired text on the Stage.

(3) In the Filters section of the property inspector, click the Add Filter button and select the Drop Shadow filter from the menu.
   • The Filter section displays various settings for the Drop Shadow filter.

(4) Edit the Drop Shadow filter settings as desired.

(5) On the Application bar, click Insert and select Motion Tween.

(6) Increase the tween span upto frame 39.

(7) Insert a keyframe at frame 40 and drag the text to a new position on the stage.

(8) In the Filters section of the Property Inspector, click the Remove filter button to remove the drop shadow filter.

(9) Add the glow filter and edit its settings.

(10) Save the document.

(11) Press Ctrl + Enter to play the movie.

4. To import a sound file in Animate:
   (1) Open the Animate file in which you want to add the sound.

(2) On the Application Bar, click File.
   • A menu appears.

(3) Select Import and then click the Import to Library… option.
   • The import to Library dialog box opens.

(4) Select the sound file and click the Open button. The selected sound file is added to the Library pane.

(5) Click the Play button in the upper right corner of the Library preview window to play the sound.
To place a sound on the timeline:
- Insert a new layer in the timeline and rename it as sound.
- Select the first keyframe in the sound layer.
- Drag the sound file in the Library onto the Stage. The sound file gets added to the waveform of the sound appears on the timeline.

Think and Answer
1. (a) Sound File
   (b) Motion Tween
   (c) Masking

9. INTRODUCTION TO PHOTOSHOP CC

A. 1. Status Bar 2. black
    3. Rectangular Marquee Tool
    4. Magnetic Lasso Tool
    5. Painting Tools
B. 1. Options bar 2. Crop Tool 3. Custom Shape
    4. soft-edged 5. Gradient
C. 1. T 2. F 3. T
    4. F 5. F
    5. Single column Marquee Tool
E. 1. Adobe photoshop CC is a powerful graphics editing software. It lets you create, edit, optimize and organise digital images. Some uses of Adobe Photoshop are:
   (a) It is used to improve quality of an image.
   (b) It is used to add, remove and replace objects from the image.
It enables you to create professional images for posters, books, magazines, banners, flyers, websites, newsletters.

2. To create a new file in Photoshop:
   (1) On the Application bar, in the File menu, click New…
   • The new document dialog box opens. It displays various Blank Document presets grouped under different categories. Each preset has its own size, orientation, resolution and color mode.

(2) Select a category and click a required preset.

(3) In the Preset Details panel, do the following:
   • Specify the Width and Height for the file.
   • Specify the Orientation - portrait or landscape for the file.
   • Specify the Resolution for the file.
   • Specify a Color Mode for the file.
   • Specify the Background Contents for the file.

(4) Click the Create button.
   • A new blank file with the specified options opens in the Workspace.

3. The tools panel contains a collection of tools that enables you to create, edit and enhance the images. Various tools in the Tools panel can be grouped into the following categories:

   (1) Selection Tools
   (2) Crop and slice Tools
   (3) Measuring Tools
   (4) Retouching Tools
   (5) Painting Tools
   (6) Drawing and Type Tools
   (7) Navigation Tools

4. To change the foreground or background colour:
(1) Click the foreground or background color selection box in the Tools panel.

• The Color Picker dialog box opens.

(2) Drag the Color Slider to choose a color.

(3) Click in the Color selection box to choose the shade of the selected color.

(4) Click the OK button.

• Photoshop sets the selected color for the foreground or background.

5. Drawing tools are used to draw different kinds of shapes. Some drawing tools in Photoshop CC are shape tools and custom shape tool.

**Shape tools** are used to draw geometrical shapes in an image.

**Custom shape** tool is used to make customized shapes such as stars, flowers, leaves and arrows.

6. (a) The Marquee tools are used to make rectangular, elliptical, single row and single column selections in an image while the Lasso tools are used to make freehand, polygonal or magnetic selections in an image.

(b) Move tool is used to move selections in an image while the Crop tool is used to remove unwanted parts from an image.

7. To apply a gradient fill to an object:

   (1) Open an image.

   (2) Select the area of the image where you want to apply the gradient.

   (3) In the Tools panel, click the Gradient tool.

   (4) In the Options Bar, do the following:

   (a) Click a Gradient Type button - linear, radial, angle, reflected and diamond.
(b) Click the Gradient Sample bar - The Gradient Editor dialog box opens.

• Choose a gradient from the presets lists or create a new gradient using the gradient bar.

• Click the OK button.

(5) Click and drag the pointer in the selected area of the image. Photoshop fills the area with the selected gradient in the direction of the drag.

Think and Answer

1. Lasso Tool & Move Tool
2. Paint Bucket Tool

10. MORE ON ADOBE PHOTOSHOP CC

A. 1. Background layer 2. Retouching tools
   3. Diffusion
   4. Background layer 5. Layer Style

B. 1. active 2. Warping 3. Vertical
   4. Flattening 5. Layers panel

C. 1. T 2. T 3. F
   4. F 5. T

D. 1. Sharpen Tool 2. Blur Tool
   3. Eraser Tool 4. Pattern Stamp Tool
   5. Burn Tool

E. 1. Retouching tools are used to enhance the quality or overall appearance of the images.

   Some Retouching tools in Photoshop are :-

   (a) Spot Healing Brush Tool - It is used to remove blemishes and imperfections in the image.

   (b) Healing Brush Tool - It paints with pixels sampled from an image or pattern to repair imperfections in an image. It matches the texture, lighting, transparency and shading of the sampled pixels.
and applies them to the pixels that are being healed.

(c) Clone Stamp Tool - It paints with a sample of an image. It uses pixels from one part of an image to replace the pixels in another part of the image.

(d) Pattern Stamp Tool - It paints areas of an image with a pattern. Photoshop CC provides several preset patterns. You can select a preset or create your own pattern.

2. Layers can be imagined as multiple transparent sheets stacked on top of one another. Layers let you work with one element of an image without affecting the other elements.

To apply layer effects to a layer:

(1) Select a layer in the Layers panel.

(2) Click the Layer Styles button at the bottom of Layers Panel and select an effect from the list.

   Or

   Click Layer in the Application bar, and then click Layer Style and select an effect from the sub-menu that appears.

   • The Layer Style dialog box opens.

(3) Choose an effect by clicking the corresponding check box on the left side of the dialog box.

(4) Set appropriate options for the selected effect on the right side of the dialog box.

(5) Click the OK button.

   • Photoshop applies the selected effect to the selected layer. The fx icon appears to the right of the layer name in the Layers panel.

3. Wrapping allows you to distort text into a variety of shapes such as arc, wave or twist. When you wrap text, it applies to all characters in a text layer. You cannot wrap individual characters in a text layer.
To wrap text:

1. Open an image.
2. In the Layers panel, select the Type layer.
3. In the Tools panel, select the Type tool.
4. In the Options bar, click the Create Wraped Text button.
   • The Wrap Text dialog box opens.
5. Click the Style down arrow and select a wrap style.
6. Select the Horizontal or Vertical orientation for the wrap.
7. If required, set the values for Bend, Horizontal Distortion and Vertical Distortion.
8. Click the OK button.
   • Photoshop wraps the text as per your selection.

4. Photoshop CC provides a variety of filters to change the appearance of images. You can use filters to clean up or retouch your images or apply special effects to the images.

To apply a filter using the filter gallery:

1. Open an image.
2. Select the layer or a particular portion of a layer on which you want to apply the filter.
4. Click a filter to add it to the image. You may need to click the inverted triangle next to the filter category to see the complete list of filters.
   • The Preview window displays the effect of the filter on the image. The name of the filter appears in the applied filter list at the lower right corner of the Filter Gallery dialog box.
5. Specify values or select options for the filter you have selected.
(6) To apply another filter, click the New Effect layer icon and select the filter you want to apply.

• Repeat this step to apply more filters.

(7) To remove an applied filter, select a filter in the applied filter list and click the Delete Effect Layer icon.

(8) After applying the filter, click the OK button.

• Photoshop CC applies the selected filters to the image.

5. (a) Spot Healing Brush Tool removes blemishes and other imperfections from the image. It paints with pixels sampled from an image or pattern, and matches texture, lighting, transparency, and shading of the sampled pixels to the pixels being healed. While Healing Brush Tool paints with pixels sampled from an image or pattern to repair imperfections in an image. It matches the texture, lighting, transparency and shading of the sampled pixels and applies them to the pixels that are being healed.

(b) The dodge tool lightens the area of an image while the burn tool darkens the areas of an image.

(c) The clone stamp tool paints with a sample of an image. It uses pixels from one part of an image to replace the pixels in another part of the image while Pattern Stamp Tool paints areas of an image with a pattern.

Think and Answer

1. Mazic Wand Tool and Brush Tool
2. Spot Healing Brush Tool

11. INTRODUCTION TO DREAMWEAVER CC

A. 1. Property Inspector 2. Split view

C. 1. F 2. F 3. T
4. F 5. T

D. 1. Various components of the Dreamweaver CC workspace are:

(a) Application Bar - The Application Bar, present at the top of the Dreamweaver CC window, provides menus such as File, Edit, View, Insert and Tools to perform various tasks in Dreamweaver. It also contains control buttons to minimize, maximise and close the window.

(b) Document Window - The Document Window, present at the centre of the Dreamweaver CC workspace, displays the document you are currently working on.

(c) Document Toolbar - The Document Toolbar, present below the application bar, provides buttons to switch between different views – Live, Design, Code and Split of the Document Window.

(d) Toolbar - The toolbar, present on the left side of the document window, provides a variety of tools for working with code and HTML elements in different views of a document.

(e) Panels - Panels, present on the right side of the document window, help you monitor and modify your work.

(f) Status Bar - The status bar, present on the bottom of the Document Window, displays information about the current document. It contains the Tag selector to the output panel and the real-time preview button.

2. To create a new local version of a website in Dreamweaver:

(1) On the Application Bar, in the Site menu, click New Site...

• The Site Setup dialog box opens with the Site category selected.
(2) In the Site Name text box, type the name for your website.

(3) Click the Browse for Folder button.
   - The Choose Root Folder dialog box opens.

(4) Select the local folder where you want to store all of your site files and click the Select Folder button.

(5) Click Save to close the Site Setup dialog box.
   - Dreamweaver creates the new local website and displays it in the files panel.

3. The various views in Dreamweaver are:
   (a) Code View - Code view displays the HTML code for the current web page and lets you edit it.
   (b) Design View - Design view displays a fully editable, visual representation of a web page and lets you design and edit the web page using various HTML elements.
   (c) Live View - Live view displays a preview of the web page as it appears in a web browser and lets you interact with various elements, such as links and buttons, in the page.
   (d) Split View - Split view displays a combination of two views of a web page in the Document window. Any changes made in either view are updated in the other view instantly.

4. To insert a table in a webpage:
   (1) Click at the location in the Document window where you want to insert the table.
   (2) In the Insert panel, click the Table button.
      - The table dialog box opens.
   (3) Specify the number of rows and columns you want in the table in the Rows and Column text boxes respectively.
   (4) In Table width box, specify the overall width of the
table in pixels or as a percentage of the browser window.

(5) In the Border thickness box, specify the thickness of the border in pixels.

(6) In the Cell padding box, specify the space between a cell’s border and its contents in pixels.

(7) In the Cell spacing box, specify the space between adjacent table cells in pixels.

(8) Under Header, select a desired heading option – None, Left, Top or both.

(9) In the Caption box, specify a title for the table.

(10) Click the OK button.

(11) Click inside a cell of the table and type the desired text or insert any other object such as image or hyperlink.

5. To create a text hyperlink in a web page:

(1) Click at a location in the document window where you want to place the hyperlink.

(2) In the Insert panel, click the Hyperlink button.
   • The Hyperlink dialog box opens.

(3) In the Text box, type the text for the link.

(4) Click the Folder icon to browse to the file you want to link to.
   • The Select File dialog box opens.

(5) Select the document you wish to link and click the OK button.

(6) Click the target box down arrow and select the window in which the file should open:
   • _blank
   • New
   • _parent
   • _self
   • _top
(7) In the Title box, type a title for the link.
(8) Click the OK button.
   • Dreamweaver inserts the text as a link in the document.

Think and Answer

1. Vidushi should Click the Real time preview in the status bar.
2. To format text in a web page Joseph should follow the given steps:
   (1) Select the text to format.
   (2) In the Property Inspector, do the following:
       (a) Click HTML and select a format – Paragraph or Heading, and style B or I for the text.
       (b) Click CSS and specify a font family, font style, alignment, font size and color for text.
       • Dreamweaver formats the text in your web page as per the specified option.

12. INTRODUCTION TO VISUAL BASIC

    4. Form Designer Window 5. Val( )

    4. Project 5. Assignment

C. 1. T 2. F 3. T
    4. F 5. T

D. 1. Button Control 2. Text Box Control
    3. Label Control

E. 1.(a) Solution Explorer - It is present on the right side of the window. It displays all files and components contained within the current project.

    (b) Code Editor Window - It is used to enter or edit code for an application. A separate code editor window is created for each form in your application.
(c) Form designer - It is the primary window where you design the interface of your application. You add controls, graphics and pictures to a form to create the look you want for the application. Each form in the application has its own form designer window.

(d) Properties Window - It is present below the solution explorer. It lets you view and modify various properties for different objects used in a Visual Basic application. The properties may be displayed alphabetically or by category.

(e) Toolbox - The toolbox provides various controls that you can place on a form to create an application.

2. The four main steps to develop an application in Visual Basic are:

(1) Create a project.
(2) Place controls on the form.
(3) Set properties for the controls and the form.
(4) Add code to the controls.

3. To place a control on the form:

**Method 1**

(1) In the Toolbox, double click the required control.
   • The control appears at the top-left corner of the form.
(2) Drag and drop the control to a desired location on the form.
(3) Click and drag a sizing handle around the control to resize it.

**Method 2**

(1) In the Toolbox, click the required control and drag it to a desired location on the form.
(2) Release the control to place it on the form.

4. A control is an object that can be placed on a form to create the interface for the application.
Various properties and events associated with Textbox control are:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Name</td>
<td>(a) Click</td>
</tr>
<tr>
<td>(b) MaxLength</td>
<td>(b) DoubleClick</td>
</tr>
<tr>
<td>(c) Enabled</td>
<td>(c) TextChanged</td>
</tr>
<tr>
<td>(d) Font</td>
<td></td>
</tr>
<tr>
<td>(e) Text</td>
<td></td>
</tr>
<tr>
<td>(f) PasswordChar</td>
<td></td>
</tr>
</tbody>
</table>

Various properties and events associated with Label control are:

<table>
<thead>
<tr>
<th>Properties</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Name</td>
<td>(a) Click</td>
</tr>
<tr>
<td>(b) BackColor</td>
<td>(b) DoubleClick</td>
</tr>
<tr>
<td>(c) BorderStyle</td>
<td>(c) MouseMove</td>
</tr>
<tr>
<td>(d) ForeColor</td>
<td></td>
</tr>
<tr>
<td>(e) Font</td>
<td></td>
</tr>
<tr>
<td>(f) Text</td>
<td></td>
</tr>
</tbody>
</table>

5. Various arithmetic operators in Visual Basic are:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Addition</td>
</tr>
<tr>
<td>−</td>
<td>Subtraction</td>
</tr>
<tr>
<td>*</td>
<td>Multiplication</td>
</tr>
<tr>
<td>/</td>
<td>Division</td>
</tr>
<tr>
<td>^</td>
<td>Exponentiation</td>
</tr>
</tbody>
</table>
Mod
\ 
| Modulus arithmetic (Divides two numbers and returns the remainder) | Integer Division (divides two numbers and returns an integer quotient) |

(a) 1
(b) 11.2
(c) 11
(d) 50,000,000

6. A variable is a location in the computer’s memory that has a name and stores data temporarily. Rules to name a variable in Visual Basic are:
   (a) A variable name must be less than 255 characters.
   (b) It should not contain spaces or period (.) signs.
   (c) It must not begin with a digit.

7. A variable is declared by using the Dim statement. The syntax of the Dim statement is:
   Dim <variable name> As <data type>

For Example:
Dim Candidate_name As String
Dim Age As Integer

Multiple variables can also be declared in the same line, each separated by a comma. For Example,
Dim Name As String, Class As Integer, Marks As Single.

Declare multiple variables of same data type can be declared in one statement. For example,
Dim Marks1, Marks2, Marks3 As Single

ASSESSMENT SHEET – 1

1. (a) Table (b) Primary Key  (c) Create
   (d) GIF  (e) <embed>
2. (a) Active (b) List-style-type (c) Tables
    (d) Short text (e) Mesh

3. AutoNumber, Date/Time, Long text, Currency, Yes/No, Currency

4. (a) T (b) T (c) F
    (d) T (e) F

5. (a) Router (b) Long Text
    (c) Input Mask (d) Query (e) <iframe>

6. (a) Network Topology is the physical arrangement in which computers and other network devices are connected to one another. Each independent device on a network is called a node.

   Some topologies used in computer network are:-

   (1) Bus Topology - In bus topology, all the nodes are connected to a single cable called the backbone or bus. Data is transmitted from one end to the other through the bus cable. Each node accepts the data meant for it and uploads the data for transmission to another node. The bus topology requires short cable lengths and is relatively less expensive. It is easy to install and manage. However, if there are breaks in the bus, the entire network shuts down.

   (2) Ring Topology - In Ring Topology, each node is connected with two other nodes, forming a closed loop or ring. Data is transmitted through the ring in one direction only, either clockwise or anticlockwise. Ring topology is easy to install and manage. However, in case of a failure in any one cable or device, the entire network gets disabled.
(b) A database in Access is composed of six objects:

1. Tables - A table organizes data in the form of rows and columns in a database.
2. Query - A query searches and retrieves data from the database based on a set of selection criteria.
3. Form - A form lets you enter and display the data in a customised format.
4. Report - A report displays the data in a printable format.
5. Macro - A macro automates the tasks that are performed more often in the database.

(c) A primary key is a field or set of fields with values that are unique throughout a table. It is used to identify records in a table. A table can only have one primary key. To set a primary key for a table:

1. Click the Row Selector for the field you want to use as the Primary Key.
2. On the Table Tools Design tab, in the Tools group, click the Primary key button.
   - Access sets the field as the primary key and a key indicator appears in the Row Selector.

(d) Description list is a list of terms along with a description of each term. Description lists are used for preparing an online catalogue, a dictionary or a glossary of terms.

The <dl> and </dl> tags are used to create a description list. Each item in a description list consists of two parts: a term and a description. A term is specified within <dt> and </dt> tags, and a description is specified within <dd> and </dd> tags.
(e) A Hyperlink or link, is text or image that stores the address of a location on a web page or a website. It enables you to navigate from one topic to another on the same web page, or from one web page to another. Four states of links in a web page are:

1. Unvisited - The default state of a link on a web page that has not been visited yet.
2. Hover - The state of a link with the mouse pointer over it.
3. Active - The state of a link when it is clicked.
4. Visited - The state of a link after it has been visited.

7. (a) `<title> </title>, <h1> </h1> <audio Src = " " autoplay " " controls " ">

(b) 1. **src** - Specifies the URL of the audio file.
2. **Autoplay** - Plays the audio file automatically as the web page loads in the web browser.
3. **Controls** - Display controls in the web page to control the audio playback.

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**ASSESSMENT SHEET – 2**

1. (a) Magnetic Selection Tool
   (b) Reduce the size of file
   (d) layers
   (c) Ordered list
   (e) **Val()**

2. (a) Variable
   (b) Free Transform tool
   (c) Magic Wand Tool
   (d) Status bar
   (e) Clone Stamp Tool

3. (a) A - Label
   B - Button
   C - Text box
   D - Form
(b) Label control is used to display non-editable text on a form while the Text box control is used to accept alphanumeric values from the user.

4. (a) F (b) F (c) T (d) T (e) F

5. (a) Layers can be imagined as multiple transparent sheets stacked on top of one another. Layers let you work with one element of an image without affecting the other elements.

The background layer is the default layer that appears when you create a new image. An image can have only one background layer. It is the bottommost layer of an image. You cannot change the order of the background layer, its blending mode or its opacity. However, you can convert a background layer into a regular layer, and then change any of these attributes.

(b) Retouching tools are used to enhance the quality or overall appearance of the images.

Some Retouching tools in photoshop are:-

(1) Spot Healing Brush Tool - It is used to remove blemishes and imperfections from the image.

(2) Healing Brush Tool - It paints with pixels sampled from an image or pattern to repair imperfections in an image. It matches the texture, lighting, transparency and shading of the sampled pixels and applies them to the pixels that are being healed.

(3) Clone Stamp Tool - It paints with a sample of an image. It uses pixels from one part of an image to replace the pixels in another part of the image.

(4) Pattern Stamp Tool - It paints areas of an image with a pattern. Photoshop CC provides several preset patterns. You can select a preset or create your own pattern.
(5) Eraser Tool - The eraser erases unwanted areas of an image. It changes pixels to either the background color or transparent.

(c) Masking layer is a special type of layer in Animate CC that selectively reveal portions of a picture or graphic on the underlying layer. It enables you to control the contents that audience can see when the movie is played.

To convert a layer into a masking layer:

(1) Create a new animate document.

(2) From the Properties panel, change the background color of the Stage to black.

(3) Select the Text tool and choose the desired font, font size, font style and color in the Property Inspector.

(4) Type the text ‘Knowledge is Power’.

(5) Rename Layer 1 as text.

(6) Click Insert layer at the bottom of the Timeline to insert a new layer and rename it as Mask.

(7) Click frame 1 of the Mask layer and draw a circle with white fill slightly larger than the height of text in the Text layer.

(8) Convert the circle into a symbol.

(9) Click the Text layer and insert a keyframe at frame 60.

(10) Click the Mask layer and select the frame 1.

(11) On the Application bar, click Insert and select Motion Tween.

(12) Drag the motion tween span to frame 59.

(13) Insert a keyframe at frame 60 and drag the circle to the far end of the text.

(14) Right click the mask layer and select the mask option from the shortcut menu.
The Mask layer and the Text layer get locked together. The content of the Text layer gets hidden under the Mask layer. The icon of the layers in the timeline also change.

(15) Save the document.

(16) Press Ctrl + Enter to play the movie.

The circle moves across the stage and displays the text behind it.

(d) To create a text hyperlink in a web page:

(1) Click at a location in the document window where you want to place the hyperlink.

(2) In the Insert panel, click the Hyperlink button. The Hyperlink dialog box opens.

(3) In the Text box, type the text for the link.

(4) Click the Folder icon to browse to the file you want to link to.

The Select File dialog box opens.

(5) Select the document you wish to link and click the OK button.

(6) Click the target box down arrow and select the window in which the file should open:

• _blank
• New
• _parent
• _self
• _top

(7) In the Title box, type a title for the link.

(8) Click the OK button.

• Dreamweaver inserts the text as a link in the document.
(e) (1) Control - A control is an object that can be placed on a form to create the interface for the application.

(2) Event - An event is a user-generated action performed on an object such as Click, Right-click or Double click.

(3) Method - A method is an action that can be performed on an object.

(4) IDE - Visual Basic provides an Integrated Development Environment that consolidates all tools required by a user, to create an application easily and quickly, in one screen.

6. (a) Type Tool
   (b) Five layers
   (b) Clone Stamp Tool
   (c) Magnetic Lasso Tool