

Computer Part-8

Chapter-1 Understanding Windows 7

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- a) a) Peak b) a) illuminated
- c) c) full d) c) single

3. Fill in the blanks:

- a) In Windows 7, users can position a permanent icon.
- b) Positioning permanent icon is called the 'pinning'.
- c) Window is the most popular PC operating system in world.
- d) After closing the program, the program icon vanishes away.

4. Answer the following questions:

- a) Docking Windows: Windows 7 includes a feature which allows it to be “snapped” or “docked” to the sides of Desktop covering up half screen. Window may be docked to left/right side of screen. To do this, drag Window to the side where we desire it to be docked. Unclick mouse when mouse pointer hits left/right side of screen. To undock a Window, drag it towards center of Desktop.
- b) Taskbar is located at bottom of Windows Desktop. By default, when an application opens, we view its icons on Taskbar. But when we close program, icon vanishes away. In Windows 7, users can position a permanent icon on Taskbar/Start Menu. This job is called 'Pinning'. To pin a program to Taskbar, right-click its icon once application is open and select Pin this program to Taskbar.
- c) Windows Defender is Microsoft's solution to protect system from Spyware which is a Malware that doesn't damage or infect a system directly, rather it monitors behaviour of logged on users and can definitely have unwanted effects on security, privacy and

system performance. It is significant to update definitions regularly and that Defender is configured to scan automatically.

- d) Aero Shake provides us option to minimize all opened Windows with exception of a single program. It can be done by clicking Title Bar of desired Window, holding left mouse button and shaking Window. All other Window are minimized to Taskbar. To restore all Windows back to Desktop, just shake Window again.
- e) Programming Software in MS Word 2007 is a wonderful word processing software with unique features. It is used to create and modify letters, reports, tables, charts, etc. Its main characteristics are:
 - ❖ It enables us to edit and format text.
 - ❖ It helps us check spelling and grammar in a document.
 - ❖ It enables us link and embed objects within a document.
 - ❖ It also enables us put information in a tabular form.
 - ❖ Clip Art, Movie Clip or Sound can also be inserted.
- f) System Software of Windows 7 is known as the most popular PC Operating System Software. It provides a Graphical User Interface (GUI) to the user to work on computer. It is most 'user-friendly' operating system.

Lab Activity:

Do it yourself

Chapter-2 Adobe Photoshop

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- a) c) current b) c) Top
- c) b) organizes d) d) preset

3. Fill in the blanks:

- a) The image comes up in its own window when a file is opened.
- b) Maximum major tools are found in the Toolbar for easy access.
- c) Photoshop offers the advantage of touching up photos that can be run otherwise.
- d) By default, palettes are stacked together in categories.

4. Answer the following questions:

- a) The Toolbox contains tools for working with images in Photoshop. Only one Tool is selected at a time. To select a Tool, click on its icon in Toolbox. There are mainly 4 groups of tools in Toolbox as follows:

(i) **Selection Tools** : These are 3 main type – Marquee Tool, Magic Wand Tool and Lasso Tool.

(ii) **Painting Tools** : Airbrush Tool, Paintbrush Tool, Rubber Stamp Tool, Eraser, etc.

(iii) **View Tools** : Hand Tool and Zoom Tool

(iv) Path, Text and Shape Tools

Apart from these, there are some other significant tools.

- b) By Selection Tools, we mean the different tools for selecting a piece of picture. These are mainly of 3 types – Marquee Tool, Magic Wand Tool and Lasso Tool. We have various selection tools to make selections in a specific manner such as punching shape out of an image or selecting all of the sky. Selection Tools provide us power to select a single pixel or whole picture.
- c) The Magnetic Lasso Tool is most widely used Tool. We drag it around any shape with a well-defined edge, it snaps to the edge. This tool is most effective on irregular objects which stand out from the background. It is used as follows:
 - ❖ Select an object by drawing a border which snaps to edges of defined area of object.

- ❖ Click on starting point on image, drag around area of image.
- ❖ It will make fastening points at edges.
- ❖ To finish selecting, drag border to starting point and click precisely on the point.

- d) By the Polygonal Lasso Tool, works in the same way as regular Lasso Tool. Only difference is that it makes irregular straight-edged selections. It is used when we need to make detailed selections as it can be controlled more easily. Rather than dragging a marquee line, as we do in regular Lasso, we can use Lasso Tool, click the Polygon Lasso Tool.

- e) Color, Swatches and Style are as follows:

Color Palette : It displays current foreground and background colours and RGB values. We use sliders to alter foreground and background colours in various colour modes. We also select a colour from spectrum of colours shown in Color Ramp at bottom of Palette.

Swatch Palette : It this, we choose foreground and background colour or add a customized colour to Library.

Style Palette : It allows us to view, select and apply present layer styles. By default, it replaces current layer style. We use styles in Palette or add our own with Create New Style Icon.

- f) The steps to use Polygonal Lasso Tool are:
 - ❖ Click on Lasso Tool and hold until you view Pop-up Menu.
 - ❖ Select Polygonal Lasso Tool.
 - ❖ Click once in canvas. Now move mouse. A line follows Polygonal Lasso Tool wherever you move it.

- ❖ Click again. It draws first line and sets another point from which you may drag.
- ❖ Now having 2 lines set, you have an option. You can either continue to select image or can double-click. It automatically completes selection.

Note : When cursor comes near starting point, a small circle gets appended to cursor. It signals that if you click, selection will be finished.

- ❖ Click to complete the selection.
- g) Rectangular and Elliptical Marquee can be defined as follows:
Marquee Tools, both Rectangular and Elliptical, are in upper-left corner of Toolbox. To select Rectangular Marquee, click it or press letter M on keyboard. To select Elliptical Marquee, click and hold the Rectangular Marquee in Toolbox. When Pop-up Menu appears, choose Elliptical Marquee.
- ❖ Click Marquee Tool in Toolbox. As you move Tool over canvas, cursor comes up as a crosshair.
 - ❖ While cursor is over canvas, click and hold mouse button and drag out a marquee.
- h) The steps to crop with the Crop Tool are:
Open image you want to crop.
- ❖ Select Crop Tool from Toolbox.
 - ❖ Click on image once and drag mouse out to make a cropping border.
 - ❖ Resize border by dragging squares at corners and sides till you are satisfied with image looks.
 - ❖ Press Enter.

Lab Activity:

Do it yourself

Chapter-3 More on Photoshop

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- | | |
|-----------------|------------------|
| a) c) Photoshop | b) b) Diameters |
| c) a) Options | d) a) Background |

3. Fill in the blanks:

- a) Horizontal Type Tool is to create and edit and Vector Based Text in an isolated layer.
- b) The Pencil Tool is nothing more than a rip off from the Brush Tool.
- c) Color Picker Dialog Box appears by clicking on foreground Color Box in Toolbox.
- d) Brightness is known as amount of white found in an image.

4. Answer the following questions:

- a) The steps of Color Replacement Tool are as follows:
 - 1) Select Color Replacement Tool in Toolbox.
 - 2) Set brush size and style on Options Bar.
 - 3) In Options Bar, choose a sampling mode:
 - ❖ “Continuous” replaces all colours with foreground colour.
 - ❖ “Once” only permits to replace colour which you first click on. For example, if you begin with a stroke on a red area, the tool replaces only red pixels.
 - 4) “Background Swatch” only replaces pixels containing current background colour.
 - 5) On Options Bar, you can define blending mode, Tolerance (Tool's sensitivity) and Limits – the tool's range: all over image (Discontiguous), only neighbouring areas (Continugous) or pixels inside (Find Edges).
- b) The use of Horizontal Type Tool is to create and edit vector-based text in an isolated layer. The steps are as follows:
 - 1) Select Horizontal Type Tool in Toolbox.
 - 2) On Options Bar, set font options: family (style), colour, size and anti-aligning method.
 - 3) Click on your image and type.
 - 4) While typing, cursor looks like this. So, adjust typed text position without altering Tool.
 - 5) While typing, other Photoshop functions are not available. When completed, click

- on any tool in Toolbox or layer in Layers Palette to apply typing and return to standard editing mode.
- 6) To edit typed text, select Text Layer in Layers Palette or just select text with Type Tool and work like with a regular text editor.
- c) The steps of Path Selection Tool are as follows:
- 1) Select Path Selection Tool in Toolbox.
 - 2) Click on a path or shape component in Image Window to select it.
 - 3) Drag selected path component to move it.
 - 4) Press Delete to delete selected path or shape component.
 - 5) To select 2 or more components, shift-click (mouse-click holding [Shift] pressed) on every component.
 - 6) While multiple components are selected, you can combine or align them into a single path utilizing buttons on Options Bar (movie).
- d) The steps of Horizontal Type Tool are as follows:
- 1) Select Horizontal Type Tool in Toolbox.
 - 2) On Options Bar, set font options: family (style), colour, size and anti-aligning method.
 - 3) Click on your image and type.
 - 4) While typing, cursor looks like this. So, adjust typed text position without altering Tool.
 - 5) While typing, other Photoshop functions are not available. When completed, click on any tool in Toolbox or layer in Layers Palette to apply typing and return to standard editing mode.
 - 6) To edit typed text, select Text Layer in Layers Palette or just select text with Type Tool and work like with a regular text editor.
- e) We use Color Replace Tool to replace colour we paint on with foreground colour without painting over image details.

Lab Activity:

Do it yourself

Chapter-4 Log on to MS - Access

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- | | |
|------------|------------------|
| a) a) one | b) b) tables |
| c) b) flat | d) c) relational |

3. Fill in the blanks:

- a) Table is a collection of data regarding a particular topic.
- b) Data is everything which is not program code.
- c) A computerized database is the best solution for all kinds of database related problems.
- d) Data is often differentiated from programs.

4. Answer the following questions:

- a) The difference between Primary Key and Foreign Key is as follows:

Primary Key : It is a field or combination of fields that creates unique value of every record in a Table.

Foreign Key : It is the common field between two Tables that share a relationship.

- b) By Query, we mean a database that stores criteria to select records from one or more Tables based on the conditions we specify.
- c) A Table is a collection of data regarding a particular topic. Typically, there are many Tables within a database.
- d) The importance of a Report is that it is a database object that shows the information from one or more database tables or queries in a printed format.
- e) We will create a Table using Templates as follows:
 - ❖ Open database in which you wish to create a Table.
 - ❖ Click on Microsoft Office button and click Open to bring up Open Dialog Box. Select desired Database.
 - ❖ Select Create Tab and click on Table Templates Down Arrow in Tables Group. Select one template from shown list to

insert a new Table based on template you have selected. Note: Table contains fields suitable to that template.

- ❖ Enter table information instantly to start creating a database which will meet your needs.
- f) The components of MS-Access Window are:
 - (i) **Microsoft Office Button** : It is in upper-left corner of Access Window. When you click the button, Menu appears. Use Menu to create a new File, open an existing File, save a File and carry out several other tasks.
 - (ii) **Quick Access Toolbar** : It is next to Microsoft Office Button. It provides us access to commands used frequently used. By default, Save, Undo, Redo options can be seen on Quick Access Toolbar. Use Save to save an object, Undo to roll back an action you have taken and Redo to reapply an action you have rolled back.
 - (iii) **Title Bar** : It is at the top in centre of Access Window. It shows name of database on which you are working.
 - (iv) **Ribbon** : It is located near top of Access Window, below Quick Access Toolbar. At top of Ribbon, there are many tabs; clicking a tab shows related command groups. Each group have related command buttons. You can find Dialog Box Launcher in bottom right corner of a group. When you click it, it makes available additional commands.

Lab Activity:

Do it yourself

Chapter-5 Working with Tables

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- a) a) two b) c) 64,000
- c) a) mathematical d) b) one

3. Fill in the blanks:

- a) A field with a data type of text can store 256 numbers and characters.

- b) Text stores upto 255 characters.
- c) Memo is used for lengthy texts and numbers.
- d) Auto number stores 4 bytes and stores 16 bytes for Replication ID.

4. Answer the following questions:

- a) A Primary Key is a field or set of fields that:
 - (i) have a unique value for every record.
 - (ii) is indexed.
 - (iii) identifies the record.

A Table can have only one Primary Key. We can add Primary Key from one Table to another Table to establish a relationship between them. In other table, it is known as a Foreign Key.

Example : Suppose you use Primary Key of Customers Table in the Order Table. In Orders Table, it would be a Foreign Key.

- b) Foreign Key, simply speaking, is next Table's Primary Key. The values in a Foreign Key field match values in Primary Key, signifying that two records are related. For example, a customer and order that one has placed. Unlike Primary Keys;
 - (i) A Foreign Key does not necessarily have unique values.
 - (ii) A Table can have more than one Foreign Key.
 - (iii) A Foreign Key cannot recognize with authenticity of particular record. For example; you cannot always tell which record you are seeing from Orders Table by looking at Customer ID.

We can create a Foreign Key while we use Look-up Wizard to create a field.

- c) We will remove the Primary Key as follows:
 - (i) See Table in Design View.
 - (ii) Select field(s) that contain Primary Key you wish to remove.
 - (iii) Choose Primary Key command in Tools Group on Design Tab.
- d) The steps to add a text field to an existing table are as follows:
 - (i) Click Microsoft Office Button and then click Open.
 - (ii) In Open Dialog Box, select and open the database.
 - (iii) In Navigation Pane, Double-click Table you wish to alter.
 - (iv) Access opens Table in Datasheet View.

- (v) If essential, scroll horizontally to the first blank field. By default, Access displays Add New Field in the header row of all new fields.
 - (vi) Double-click header row and type a name for new field.
 - (vii) Select first blank row under Header and type a block of text or a combination of texts and numbers. You can enter a maximum of 256 characters. Access signifies Text data type for field while entering text or a combination of texts and numbers, and you can't enter more than 256 characters. If you enter more than 256 characters, Access infers Memo Data Type.
- or-
- Enter up to 256 characters of text data into the first row.
- Save your changes.
- e) We will create a Table in Design View as follows:
- ❖ Open any Database.
 - ❖ Chose Table Design command in Tables Group under Create Tab.
 - ❖ Enter a Field Name in first cell in first row.
 - ❖ Press a Tab key.
 - ❖ Choose a Data Type from Data Type Drop-Down List.
 - ❖ Press Tab key twice.
 - ❖ Enter next Field Name.
 - ❖ Continue with steps 4 through 7 until all fields have been entered and properly assigned a data type.
 - ❖ Click Save on Quick Access Toolbar.
 - ❖ Enter a Table Name.
 - ❖ Click OK.
- f) We will specify fields to use as the Primary Key as follows:
- In Navigation Pane, right-click the Table for which you wish to set Primary Key.
- Click Design View on Shortcut Menu.
- ❖ Select field/fields you wish to use as Primary Key.
 - ❖ Click Primary Key on Design Tab in Tools Group.
- ❖ A key indicator comes up to the left of the field/fields which you specify as Primary Key.
 - ❖ Pres Ctrl + S to save Table Design from alteration.
- g) The steps to add a Text Field to a New Table are as follows:
- ❖ Click on Microsoft Office Button and click Open.
 - ❖ In Open Dialog Box, select and open Database.
 - ❖ On Create Tab in Tables Group, click Table.
 - ❖ Click on Save and in Save As Dialog Box, type a name for New Table.
 - ❖ Right-click on Document Tab for New Table and click Design View.
 - ❖ In Field Name column, select first blank row and enter a name for the field.
 - ❖ Select adjoining cell in Data Type column and select Text from List.
 - ❖ Save your changes.
- h) To move a field in Datasheet View, drag and drop field to the position you wish. We do it as follows:
- ❖ Click on Field Header for field you wish to move.
 - ❖ Move mouse in the area of Header.
 - ❖ When Cross with Arrows comes, hold down left mouse button.
 - ❖ With left mouse button still held down, move cursor to where you wish field to come up.
 - ❖ Release the mouse button and field comes up in its new position.

Lab Activity:

Do it yourself

Model Test Paper - I

1. Tick (✓) the correct option:

- | | |
|--------------------|------------------|
| a) iii) relational | b) i) background |
| c) ii) diameters | d) ii) preset |
| e) iii) full | f) ii) one |
| g) iii) tables | h) ii) peak |

2. Fill in the blanks:

- a) Data is everything which is not program code.

- b) Color Picker Dialog Box appears by clicking on foreground Color Box in Toolbox.
- c) Photoshop offers the advantage of touching up photos that can be run otherwise.
- d) Window is the most popular PC operating system in world.
- e) Text stores upto 255 characters.
- f) The Pencil Tool is nothing more than a rip off from the Brush Tool.
- g) After closing the program, the program icon vanishes away.
- h) Maximum major tools are found in the Toolbar for easy access.

3. Answer the following questions:

- a) The importance of a Report is that it is a database object that shows the information from one or more database tables or queries in a printed format.
- b) The steps of Path Selection Tool are as follows:
 - 1) Select Path Selection Tool in Toolbox.
 - 2) Click on a path or shape component in Image Window to select it.
 - 3) Drag selected path component to move it.
 - 4) Press Delete to delete selected path or shape component.
 - 5) To select 2 or more components, shift-click (mouse-click holding [Shift] pressed) on every component.
 - 6) While multiple components are selected, you can combine or align them into a single path utilizing buttons on Options Bar (movie).
- c) Rectangular and Elliptical Marquee can be defined as follows:

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- ❖ Click Marquee Tool in Toolbox. As you move Tool over canvas, cursor comes up as a crosshair.

- ❖ While cursor is over canvas, click and hold mouse button and drag out a marquee.
- d) Programming Software in MS Word 2007 is a wonderful word processing software with unique features. It is used to create and modify letters, reports, tables, charts, etc. Its main characteristics are:
 - ❖ It enables us to edit and format text.
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 - ❖ It enables us link and embed objects within a document.
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 - ❖ Clip Art, Movie Clip or Sound can also be inserted.
- e) The use of Horizontal Type Tool is to create and edit vector-based text in an isolated layer. The steps are as follows:
 - 1) Select Horizontal Type Tool in Toolbox.
 - 2) On Options Bar, set font options: family (style), colour, size and anti-aligning method.
 - 3) Click on your image and type.
 - 4) While typing, cursor looks like this. So, adjust typed text position without altering Tool.
 - 5) While typing, other Photoshop functions are not available. When completed, click on any tool in Toolbox or layer in Layers Palette to apply typing and return to standard editing mode.
 - 6) To edit typed text, select Text Layer in Layers Palette or just select text with Type Tool and work like with a regular text editor.
- f) We will specify fields to use as the Primary Key as follows:
 - ❖ In Navigation Pane, right-click the Table for which you wish to set Primary Key.
 - ❖ Click Design View on Shortcut Menu.
 - ❖ Select field/fields you wish to use as Primary Key.
 - ❖ Click Primary Key on Design Tab in

Tools Group.

- ❖ A key indicator comes up to the left of the field/fields which you specify as Primary Key.
 - ❖ Press Ctrl + S to save Table Design from alteration.
- g) By Query, we mean a database that stores criteria to select records from one or more Tables based on the conditions we specify.
- h) Taskbar is located at bottom of Windows Desktop. By default, when an application opens, we view its icons on Taskbar. But when we close program, icon vanishes away. In Windows 7, users can position a permanent icon on Taskbar/Start Menu. This job is called 'Pinning'. To pin a program to Taskbar, right-click its icon once application is open and select Pin this program to Taskbar.

Activity:

Do it yourself

Chapter-6 Computer Networking

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- a) a) within b) c) powerful, sharing
c) b) physical d) a) networks

3. Fill in the blanks:

- a) Different means are used to carry the communication signals.
- b) The data can be easily shared in a network.
- c) A computer network provides a cheaper alternative by the provision of resource sharing.
- d) The facility of shared folders can also be used by family members.

4. Answer the following questions:

- a) Hubs are at the bottom of the networking food-chain. They are used in networks that utilize twisted-pair cabling to link devices. Hubs can also be connected together to create networks. Hubs are common devices that direct Data Packets to all devices linked to the Hub, irrespective of it, the Data Package is destined for the device. Apart from working

as a link point for network devices, Hubs and Switches can be linked to create bigger networks.

- b) Network components are listed as follows:

- 1) **Servers** : These are mainframes, minis and micros supporting different softwares, store and process information at a very high speed.
- 2) **Workstations** : They are user computers connected to a network.
- 3) **Hubs** : Hubs are at the bottom of the networking. They are used in networks that utilize twisted-pair cabling to link devices.
- 4) **Switches** : These are connectivity points of an Ethernet Network.
- 5) **Bridges** : These are used to divide bigger networks into smaller sections.
- 6) **Routers** : These are used to create bigger networks by joining two network segments.
- 7) **Gateways** : Any device that translates one data format to another is known as Gateway.
- 8) **Network Cards** : They are devices enabling computers to link to Network.
- 9) **Modems** : It is a device that changes digital signals into analog signals.
- 10) **Hubs and Switch Cabling** : Hubs and Switches can be linked to create bigger networks.

- c) Video Conferencing is useful to us as it is now possible through LAN and WAN. LAN and WAN have made it possible for business sectors and organizations to call the live video conferencing for important meetings and discussions.

- d) The difference between Gateways and Network Cards is as follows:

Gateways : Any device that translates one data format to another is known as Gateway. Examples are: (a) A Router translates data from one network protocol to another. (b) A Bridge that changes between 2 networking systems, etc.

Network Cards : They are devices enabling computers to link to Network. Network Interface Card (NIC) provides physical link between Computer and Network Station.

- e) The difference between Bridges and Routers is as follows:

Bridges : These are used to divide bigger networks into smaller sections. They do this by sitting between two physical network segments and manage flow of data between them.

Routers : It is a usual configuration, Routers are used to create bigger networks by joining two network segments. All modern network incorporate the functionality to work as a router.

- f) Switches, like Hubs, are connectivity points of Ethernet Network. The devices connect to Switches via twisted-pair cabling, one cable for every device. Switches forward Data only to the Port that links to destination device.

- g) The various kinds of networks are as follows:

1) **LAN :** It is Local Area Network. It operates within a small geographical area. Data transfer speed is upto 10 Mbps, and 1 Gbps with Gigabit Ethernet. It can reach 100 or even 1000 users.

2) **MAN :** It is Metropolitan Area Network. It operates within a dozen kilometer geographical area. Data transfer speed is very rapid. It is made from Routers or Switches linked to one another.

3) **WAN :** It is Wide Area Network. It links multiple LANs over long geographical distances. Data transfer speed depends

on cost of connections increasing with distance. It operates using Routers. Internet we use is most well-known WAN.

- h) The advantages of Wireless Network are as follows:

(i) **Convenience :** Access network from any place within your wireless network's coverage area or from WiFi Hotspot.

(ii) **Mobility :** No need to get tied up to your desk. You and your employees can go online in Conference Room meetings.

(iii) **Productivity :** Wireless access assists the staff to get work done and motivates collaboration.

(iv) **Easy Set-up :** Need not to string cables. Installation can be instant and cost-effective.

(v) **Expandable :** We can expand wireless network with existing equipment.

(vi) **Security :** Advances in wireless networks provide very strong security protections.

(vii) **Cost :** Wireless networks reduce or eliminate wiring costs compared to wired networks.

Lab Activity:

Do it yourself

Chapter-7 Understanding HTML

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- | | |
|----------------|--------------|
| a) a) simple | b) c) two |
| c) b) internet | d) b) header |

3. Fill in the blanks:

- Creating an HTML Document is an easy task.
- Mark-up language explains how HTML functions.
- We utilize hypertext while clicking a link in a webpage.
- Notepad is the most fundamental concept of simple text editors.

4. Answer the following questions:

- HTML Basic Tags is that it must incorporate following minimum elements or tags:
 - ❖ `<html>` - The main container for HTML pages.
 - ❖ `<head>` - The container for Page Header information.
 - ❖ `<title>` - The title of the page.
 - ❖ `<body>` - The main body of the page.
- HTML Tags and elements are:
`<html>`, `<head>`, `<title>` and `<body>` are HTML elements or tags. Each tag has a name, sometimes followed by attributes, all placed between brackets (`< >`). Simplest Tag is `<head>` and `<i>`. Complicated tags have one/more attributes. Tag/Attribute names are not case-sensitive. All Tag/Attribute names are in lower case.
- By HTML Document, Structure, we mean as follows:
HTML Document starts and ends with `<html>` and `</html>` tags. These tags tell browser that complete document is composed in HTML. Inside these 2 tags, document is divided into 2 sections.
 - `<head> ... </head>` elements consisting information about Document like Title, Author of Document, etc. Information inside this tag does not display outside.
 - `<body> . . . </body>` elements consisting of actual content of Document which can be viewed on screen.
- The importance of the `<body>` element is that it comes up after `<head>` element consisting part of Webpage which we view in Main Browser Window. A `<body>` element

consists of anything from a couple of paragraphs under a Heading to more complicated Layouts of Forms & Tables. In this chapter, most of text is written between opening `<body>` and closing `</body>` tag.

Example:

```
<html>
<body>
<h1> This is heading 1 </h1>
<h2> This is heading 2 </h2>
<h3> This is heading 3 </h3>
<h4> This is heading 4 </h4>
<h5> This is heading 5 </h5>
<h6> This is heading 6 </h6>
<h1> This is heading 1 </h1>
<body>
```

- The difference between Background Colour and Font Colour is as follows:

Background Colour : It sets colour of Background. 3 main colours are Red, Blue and Green. For others, we need to give name of colour.

Syntax

```
<body bgcolor = "colour _ name/hex _ number/rgb _ number">
```

Attribute Value

colour_name : specifies colour such as "red"

hex_number : specifies colour with hex code as "#FF00FF"

rgb_number : specifies colour with rgb code as "rgb(255,0,0)"

Font Colour : Font Colour can be set utilizing Color Attribute. Colour can be specified by either Color Name or Hexadecimal Code for that colour.

Example:

```
<font color= "#FF00FF">This text is hexcolor #FF00FF</font>
```

```
<font color= "red"> This text is red </font>
```

- The difference between `<i>` and `<b>` is as follows:

<i> tag : This tag will bold the text inside the tag.

**** : This tag will italicize the text inside the tag.

g) We can create Paragraph – The <p> element as follows:

<p> element offers to structure the text. Each paragraph text must be between opening <p> and closing </p> tags.

Example:

```
<HTML>
```

```
<Body>
```

```
<p> Here is a first paragraph text. </p>
```

```
<p> Here is a 2nd paragraph text. </p>
```

```
<Body>
```

```
<HTML>
```

```
<p> Here is a 3rd paragraph text. </p>
```

It would generate following output:

We can utilize Align Attribute to align paragraphs.

```
<HTML>
```

```
<Body>
```

```
<p align="left"> This is left aligned. </p>
```

```
<p align="centre"> This is centre aligned. </p>
```

```
<p align="right"> This is right aligned. </p>
```

```
<p justify="left"> This is justify aligned. </p>
```

(Justify functions when we have multiple lines in paragraph)

```
<Body>
```

```
<HTML>
```

h) The difference between <body> and <title> is as follows:

<body> : <body> element comes up after <head> element consisting part of webpage which we view in Main Browser Window. A <body> element consists of anything from a couple of paragraphs under a Heading to more complicated Layouts of Forms & Tables. In this chapter, most of text is written between opening <body> and closing </body> tag.

Example:

```
<html>
```

```
<body>
```

```
<h1> This is heading 1 </h1>
```

```
<h2> This is heading 2 </h2>
```

```
<h3> This is heading 3 </h3>
```

```
<h4> This is heading 4 </h4>
```

```
<h5> This is heading 5 </h5>
```

```
<h6> This is heading 6 </h6>
```

```
<h1> This is heading 1 </h1>
```

```
<body>
```

<title> : The <title> element is to specify a title for each page we write inside <title> element. The <title> element is a child of <head> element. It is utilized in many ways as under:

- ❖ It is displayed at top of Browser Window.
- ❖ It is utilized as a default name for a Bookmark in Browsers like Netscape and IE.
- ❖ It is utilized by Search Engines that use its content to assist Index Pages.

The <title> element actually explains content of your site. It must consist of only text for Title and not any other element.

Example: Here is example of using title tag:

```
<head>
```

```
<title> HTML Basic tags </title>
```

```
</head>
```

Lab Activity:

Do it yourself

Chapter-8 More on HTML

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- | | |
|-------------|----------------|
| a) starting | b) traditional |
| c) one | d) three |

3. Fill in the blanks:

- a) An unordered list is a collection of related items without any specific order.
- b) will list items with a bullet.
- c) HTML provides various kinds of lists.
- d) The most usual unordered list on the web is a collection of hyperlinks to other documents.

4. Answer the following questions:

- a) Table Heading – the <th> element is as follows:

Table Heading is defined with <th> element. It is used to replace <td> tag which is used to represent real data. Normally, we put top row as Table Heading shown below, otherwise we use <th> element elsewhere.

```
<HTML>
<Body>
<table border="1">
<tr>
<th> Name </th>
<th> Salary </th>
</tr>
<tr>
<td> Ramesh Gupta </td>
<td> 5000 </td>
</tr>
<tr>
<td> Kunal Goyal </td>
<td> 7000 </td>
</tr>
</table>
<Body>
<HTML>
```

This will generate the output. We can view its making heading as a remit bold one.

- b) We will define Table Background as follows:

We set Table Background with the help of following:

- ❖ **Using bgcolor attribute** : We set Background Colour for one cell/whole table.
- ❖ **Using background attribute** : We set Background Image for one cell/whole table.

Example:

```
<HTML>
<Body>
<table border="5" border color="green"
background colour="gray">
<tr>
<th> Column 1 </th>
```

```
<th> Column 2 </th>
```

```
<th> Column 3 </th>
```

```
</tr>
```

```
<tr> <td rowspan="2"> Row 1 Cell 1 </td>
```

```
<td bgcolor="red" > Row 1 Cell 2 </td> Row 1
Cell 3 </td> </tr>
```

```
<tr> <td> Row 2 Cell 2 </td> Row 2 Cell 3 </td>
</tr>
```

```
<tr> <td colspan="3"> Row 3 Cell 1 </td> </tr>
```

```
</table>
```

```
</Body>
```

```
</HTML>
```

This will generate the output.

- c) By Column-span and Row-span Attributes, we mean as follows:

Column-span Attribute is to merge 2 or more Columns into a Single Column.

Row-span Attribute is to merge 2 or more Rows into a Single Row.

Example:

```
<HTML>
```

```
<Body>
```

```
<table border="1">
```

```
<tr>
```

```
<th> Column 1 </th>
```

```
<th> Column 2 </th>
```

```
<th> Column 3 </th>
```

```
</tr>
```

```
<tr> <td rowspan="2"> Row 1 Cell 1 </td>
```

```
<td> Row 1 Cell 2 </td> <td> Row 1 Cell 3 </td>
</tr>
```

```
<tr> <td> Row 2 Cell 2 </td> <td> Row 2 Cell 3
</td> </tr>
```

```
<tr> <td colspan="3"> Row 3 Cell 1 </td> </tr>
```

```
</table>
```

```
</HTML>
```

```
</Body>
```

This will generate the output.

- d) The difference between Cell-Padding and Cell-Spacing is as follows:

Cell-Padding and Cell-Spacing are 2 attributes to adjust White Space in Table Cell.

Cell-Spacing represents Width of Border.

Cell-Padding represents Distance between Cell Borders and content within.

Example:

```
<HTML>
<Body>
<table border= "1" Cell-Padding= "5" Cell-
Spacing="5">
<tr>
<th> Name </th>
<th> Salary </th>
</tr>
<tr>
<td> Ramesh Gupta </td>
<td> 5000 </td>
</tr>
<tr>
<td> Manish Kumar </td>
<td> 7000 </td>
</tr>
</table>
</Body>
</HTML>
```

This will generate the output.

e) SRC is defined as "Source". This is an Attribute, a command inside a command. It directs Browser to go to find the image.

f) Table Height and Width is as follows:

Table Height and Width are set using Height and Width Attributes. They are specified percentage-wise or integer value-wise within available screen area.

Example:

```
<HTML>
<Body>
<table border="1" width="400" height="150">
<tr>
<td> Row 1, Column 1 </td>
<td> Row 1, Column 2 </td>
</tr>
<tr>
<td> Row 2, Column 1 </td>
```

```
<td> Row 2, Column 2 </td>
</tr>
</table>
</Body>
</HTML>
```

This will generate the output.

g) By Insert Image – The element, we mean that the images are extremely significant to beautify and to depict many concepts well on your webpage. One single image is worth than thousands of words. Therefore, as a Web Developer, one must have clear understanding on how to apply tag. Simple Syntax is given below to utilize this tag.

< IMG SRC = "C:/Users?Sony/Desktop? Sachin.gif"

ALT= "some text" WIDTH=32 HEIGHT= 32 >

- ❖ **IMG** signifies "image". It tells Browser that an image will be here on the page. The image will pop up right where you write in image tag.
- ❖ **SRC** signifies "Source". This is an Attribute, a command inside a command. It directs Browser to go to find the image.
- ❖ **Image.gif** is name of image. Note it follows same format as HTML Document.
- ❖ **ALT** signifies "alternate text". It tells Browser that if it can't find image, just display this text. It also tells anyone who can't view image what the image is all about.
- ❖ **"some text"** is where you place the text describing the image.
- ❖ **WIDTH** signifies width of image in pixels. It can range from 1 pixel to just any number, but within width limit of Web Browser.
- ❖ **HEIGHT** signifies height of image in pixels. It can range to any number, but within height of Web Browser.

h) The importance of image.gif is that it is the name of an image. Note it follows same format as HTML Document.

Lab Activity:

Do it yourself

Chapter-9 Visual Basic

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- | | |
|-----------|-------------|
| a) c) EXE | b) a) Event |
| c) b) Own | d) a) High |

3. Fill in the blanks:

- a) The Codes look a bit like English language.
- b) Visual Basic Program is made up of several sub-programs.
- c) Visual Basic is known as a Visual and Events driven programming language.
- d) A Project is a collection of Files that make up our application.

4. Answer the following questions:

- a) Visual Basic is divided in three parts:
 - (i) Forms
 - (ii) Components
 - (iii) Events
- b) Toolbox contains various icons like Painter, Label, Frame, Check Box, Combo Box, H Scroll Bar, Timer, DIR List Box, Shape, Image, OLE, Picture Box, Text Box, Command and Option Button, etc. We can select and use them as per our requirement.
- c) Form Window is preliminary work area where visual development of application is modified or created. Form Window includes the background of application, although it appears small relative to rest of the screen. Form Window displays main body of application. The form can be resized to take up width of screen.
- d) The Code Window holds the program's interactive objects. To view the Code for the Form Window or any object, you can select < View | Code >. The Code Window is little more than a Text Editor with which we write programming statements which tie application together.

Another option to view Code Window is to double-click anywhere on Form Window or object and view Code Window for that

specific object. The diagram displays Code Window for the Form.

- e) The Project Explorer Window provides us a tree-structured view of all files in application. Project Explorer Window shows Forms, Modules – Files which hold supporting code for application, Classes – advanced Modules, etc.
- f) Property Window represents an objects associated properties. Every property of a control like a Label, Command button, etc. has its own unique set of properties. Property Window contains various lists which come up in it each time we click over a various Form window object. Property Window explains properties (functional and descriptive information) regarding Form and its Controls. Several properties exist for almost each object in Visual Basic.
- g) Following Controls are commonly used:

1) LabelControl : It is mainly used to show information on a Form. Any Label positioned on Form is known as Label 1 (Label 2, 3, 4, etc.). A Label is positioned on Form by selecting Label from Toolbox. Label contains its own properties associated with Object Label Control. Properties of a Label are given below:

- (i) **Property Description :** It is also called Caption Property and is to hold textual appearance of object.
- (ii) **Text Box :** It is used to permit user to enter some input.

2) Command Buttons : These are different from Labels and Text Boxes. These are used in the event of user responses to accept responses or navigate through Forms.

3) Picture Box : It is used to handle graphics. We can load a picture during designing phase by clicking on Picture Item in Properties Window and selecting picture from selected Folder. Picture can also be loaded by Load Picture Method.

4) Image Box : It is another control handling pictures and images. It acts almost identically to Picture Box. But Picture in Image Box is stretchable and can be resized

while it cannot be done in Picture Box.

- h) Command Buttons are different from Labels and Text Boxes. These are used in the event of user responses to accept responses or navigate through Forms. The most usually Event Procedure connected with Command Button is Click Event.

A Command Button is positioned on Form and reason for this is that once use has completed entering their name, they can Click on Command Button is to give control back to application.

Lab Activity:

Do it yourself

Chapter-10 Internet

Oral Skills

1. Do it yourself

Writing Skills

Multiple Choice Questions:

2. Tick (✓) the correct option:

- | | |
|---------------|----------------|
| a) a) plain | b) a) language |
| c) b) mark-up | d) c) unique |

3. Fill in the blanks:

- a) The WWW Consortium is founded by a big number of corporate members.
- b) Computer connections exist for the sake of independent information sharing.
- c) Hypertext connects the resources together.
- d) World Wide Web is a network of electronic files.

4. Answer the following questions:

- a) A blog is derived from word **weblog**. A blog generally contains text, pictures, web-pages, links and other materials related to a particular topic. Examples are: Personal Blog, Moblog, Corporate Blog, etc. Personal blog is most frequently used blog.

Advantages:

- ❖ Blog is used to share opinions and thoughts.
- ❖ It is a cost effective form of advertisement.
- ❖ Blog allows people to interact directly with each other.

- ❖ Blog is a very convenient passage to get general feedback.
 - ❖ Blog makes education and participation easy and accessible.
 - ❖ Blog builds profile of writer, showcasing his/her talent and experience.
- b) Blogging Provider appeals to us
- c) By HTML Tags, we mean as follows:
- ❖ HTML mark-up tags are generally known as HTML tags.
 - ❖ HTML tags are keywords (tag names) surrounded by angular brackets like <html>.
 - ❖ HTML tags come in pairs like and .
 - ❖ 1st tag in a pair is Start Tag, 2nd is End Tag.
 - ❖ End Tag is written as Start Tag with a Forward Slash preceding tag name.
 - ❖ Start and End tags are also known as Opening and Closing tags.
- d) Multimedia comes in various formats. It can be text, pictures, sound, music, records, videos, animations, films, etc. On Internet, we find Multimedia elements embedded in web-pages. Web Browsers have support for various Multimedia formats.
- Multimedia elements such as sounds or videos are stored in Media Files. Most common way to find media type is to look at file extension. The extension .html signifies file is an HTML page. The extension .xml signifies file is XML file. Picture formats are identified by .gif and .jpg. Multimedia elements also contain their own extensions as .swf, .wmv .mp3 and .mp4.
- e) We create a Blog for the following reasons:
- 1) In order to speak up on a particular topic and focus attention about that topic.
 - 2) To create a name and think about what our Blog's focus is and then think of some names that would let others find us or would be memorable enough so that they may remember it later.
- f) Communication is a very significant aspect of human activity. The primary object of Internet is communication which is out through E-Mails, Video Conferencing, etc.

We may contact a person who is physically present thousand miles away within a fraction of second. Communication over Internet is done in the form of:

- 1) **E-Mails** : E-mails are sent and received from sites such as gmail.com, hahoo.com.
 - 2) **Online Chatting** : This is an instantaneous transmission of text messages from sender to receiver with the help of a chatting service e.g. gtalk, yahoo instant messenger.
 - 3) Blogs are websites where people explain their opinions on different topics. They are updated by bloggers e.g. twitter.
 - 4) Social Networking sites enable people to stay linked and share interests, ideas and activities e.g. Myspace, Facebook, Google+.
- g) We publish and promote our Blog by sending URL to our friends, publish URL on our website and add URL to posts. We promote it on our Facebook Page and use Twitter to tweet about every new post that you make. We visit blogs that are relevant to our topic.
- h) When we select our Theme, we are presented with a number of Theme alternatives. We take some time, look at them and imagine our Blog topic being on those pages. We don't worry about it too much if we find a better looking Theme later on. It is a simple matter to switch Themes at any time.

Lab Activity:

Do it yourself

Model Test Paper - II

1. Tick (✓) the correct option:

- | | |
|----------------|-----------------|
| a) i) Within | b) iii) EXE |
| c) i) language | d) ii) header |
| e) i) networks | f) i) simple |
| g) ii) own | h) ii) starting |

2. Fill in the blanks:

- a) A Project is a collection of Files that make up our application.

- b) Mark-up language explains how HTML functions.
- c) A computer network provides a cheaper alternative by the provision of resource sharing.
- d) Computer connections exist for the sake of independent information sharing.
- e) Different means are used to carry the communication signals.
- f) Notepad is the most fundamental concept of simple text editors.
- g) Visual Basic Program is made up of several sub-programs.
- h) The most usual unordered list on the web is a collection of hyperlinks to other documents.

3. Answer the following questions:

- a) Property Window represents an objects associated properties. Every property of a control like a Label, Command button, etc. has its own unique set of properties.

Property Window contains various lists which come up in it each time we click over a various Form window object. Property Window explains properties (functional and descriptive information) regarding Form and its Controls. Several properties exist for almost each object in Visual Basic.

- b) The importance of the <body> element is that it comes up after <head> element consisting part of Webpage which we view in Main Browser Window. A <body> element consists of anything from a couple of paragraphs under a Heading to more complicated Layouts of Forms & Tables. In this chapter, most of text is written between opening <body> and closing </body> tag.

Example:

```
<html>
<body>
<h1> This is heading 1</h1>
<h2> This is heading 2</h2>
<h3> This is heading 3</h3>
<h4> This is heading 4</h4>
<h5> This is heading 5</h5>
```

<h6> This is heading 6</h6>

<h1> This is heading 1</h1>

<body>

c) Network components are listed as follows:

- 1) **Servers** : These are mainframes, minis and micros supporting different softwares, store and process information at a very high speed.
- 2) **Workstations** : They are user computers connected to a network.
- 3) **Hubs** : Hubs are at the bottom of the networking. They are used in networks that utilize twisted-pair cabling to link devices.
- 4) **Switches** : These are connectivity points of an Ethernet Network.
- 5) **Bridges** : These are used to divide bigger networks into smaller sections.
- 6) **Routers** : These are used to create bigger networks by joining two network segments.
- 7) **Gateways** : Any device that translates one data format to another is known as Gateway.
- 8) **Network Cards** : They are devices enabling computers to link to Network.
- 9) **Modems** : It is a device that changes digital signals into analog signals.
- 10) **Hubs and Switch Cabling** : Hubs and Switches can be linked to create bigger networks.

d) The advantages of Wireless Network are as follows:

- (i) **Convenience** : Access network from any place within your wireless network's coverage area or from WiFi Hotspot.
- (ii) **Mobility** : No need to get tied up to your desk. You and your employees can go online in Conference Room meetings.
- (iii) **Productivity** : Wireless access assists the staff to get work done and motivates collaboration.
- (iv) **Easy Set-up** : Need not to string cables. Installation can be instant and cost-

effective.

(v) **Expandable** : We can expand wireless network with existing equipment.

(vi) **Security** : Advances in wireless networks provide very strong security protections.

(vii) **Cost** : Wireless networks reduce or eliminate wiring costs compared to wired networks.

e) HTML Tags and elements are:

<html>, <head>, <title> and <body> are HTML elements or tags. Each tag has a name, sometimes followed by attributes, all placed between brackets (< >). Simplest Tag is <head> and <i>. Complicated tags have one/more attributes. Tag/Attribute names are not case-sensitive. All Tag/Attribute names are in lower case.

f) Visual Basic is divided in three parts:

(iv) Forms

(v) Components

(vi) Events

g) Table Height and Width is as follows:

Table Height and Width are set using Height and Width Attributes. They are specified percentage-wise or integer value-wise within available screen area.

Example:

<HTML>

<Body>

<table border="1" width="400" height="150">

<tr>

<td> Row 1, Column 1 </td>

<td> Row 1, Column 2 </td>

</tr>

<tr>

<td> Row 2, Column 1 </td>

<td> Row 2, Column 2 </td>

</tr>

</table>

</Body>

</HTML>

This will generate the output.

h) By Column-span and Row-span Attributes, we mean as follows:

- ❖ Column-span Attribute is to merge 2 or more Columns into a Single Column.
- ❖ Row-span Attribute is to merge 2 or more Rows into a Single Row.

Example:

```
<HTML>
<Body>
<table border="1">
<tr>
<th> Column 1 </th>
<th> Column 2 </th>
<th> Column 3 </th>
</tr>
```

```
<tr><td rowspan="2"> Row 1 Cell 1 </td>
<td> Row 1 Cell 2 </td><td> Row 1 Cell 3 </td>
</tr>
<tr><td> Row 2 Cell 2 </td><td> Row 2 Cell 3
</td></tr>
<tr><td colspan="3"> Row 3 Cell 1 </td></tr>
</table>
</HTML>
</Body>
```

This will generate the output.

Activity:

Do it yourself

Project Work:

Do it yourself