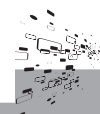




# 1. Fundamentals of Computer



## SUMMATIVE ASSESSMENT

### Objective Type Questions

#### 1. Answer following questions orally:

- Ans.** i. **Central Processing unit (CPU)** : It is the main part of computer, where the processing of data takes place. The CPU is made up of three units.  
 ii. Plotters are printer-like devices used for drawing pictures and graphs on large sheets of paper.  
 iii. System software is a set of programs designed to operate, control and execute an application program.

#### 2. Tick (✓) the correct option:

- Ans.** i. a.                      ii. a.                      iii. a.

#### 3. Fill in the blanks:

- Ans.** i. The number system used for codes in digital computers **Binary number system**.  
 ii. An 8-bite unit used to code digital data is called a **byte**.  
 iii. The unit normally used to measure computer clock speed is **GHz (Giga heartz)**.  
 iv. The two main components of a computer are **Hardware** and **software**.  
 v. In the CPU, mathematical calculations are carried out in the **ALU** unit.  
 vi. The language **COBOL** was developed for commercial programming, and the language **FORTRON** for scientific work.  
 vii. In the decimal system  $1 + 1 = 2$ , but in the binary system  $1 + 1 = 10$   
 viii. A **Laser** Printer prints out a full page at a time.  
 ix. Total number of unique digits in a hexadecimal number system is **16**.

#### 4. State whether true or false:

- Ans.** i. False                      ii. False                      iii. False  
 iv. False                      v. True                      vi. True

### Subjective Type questions

#### 1. Solve the following :

- Ans.** i.  $(7)_{10} \longrightarrow (111)_2$ ,  $(13)_{10} \longrightarrow (1101)_2$ ,  $(25)_{10} \longrightarrow (11001)_2$ ,  $(88)_{10} \longrightarrow (1011000)_2$ ,  
 $(121)_{10} \longrightarrow (1111001)_2$ ,  
 ii.  $(111)_2 \longrightarrow (7)_{10}$ ,  $(1011)_2 \longrightarrow (11)_{10}$ ,  $(111000)_2 \longrightarrow (56)_{10}$ ,  $(10101)_2 \longrightarrow (21)_{10}$ ,  
 iii.

#### 2. Explain the process of printing in the following:

- Ans.** i. A dot-matrix printer uses matrix of dots to make up a character. Each character is produced by printing the most appropriate dot combination.  
 ii. Inkjet printers operate on the **continuous-stream inkjet** approach. These printers have print heads that have tiny nozzles. These nozzles spray tiny



- ink droplets to form the characters.
- iii. A laser printer looks like a photocopier. Its principle of operation is also similar. A laser printer uses the signals sent to it by the computer to control a laser beam. The beam produces an image of the matter to be printed on a drum.

**3. Answer the following Questions:**

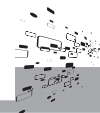
- Ans.**
- i. John Napier-Napier's bone.  
Blaise Pascal-Pascaline  
Charles Babbage-Babbage engine
  - ii. The CPU is made up of three units—
    - a. The control unit— It controls all the parts of the computer.
    - b. The Arithmetic and Logic Unit (ALU)— All mathematical calculations and logical function are carried out by ALU.
    - c. The Memory unit— It is used for storing temporary processing results. Instruction etc.
  - iii. CPU needs a storage area called the **buffer** where it sends all the information. Other devices then read from this buffer at their own speed, and the CPU continues with further processing, without waiting for the devices to complete their job.
  - iv. Secondary storage devices are permanent storage of computer. Hard drives, flash drives, optical disks, CD-ROMS and DVDs etc. are secondary storage devices. These are used to store files, instructions, programs and other things.
  - v. In impact printers the characters are printed by pressing characters, against an inked ribbon. These printers print one character at time. Daisy wheel printer, Line printer and dot matrix printers are impact printers. Inkjet printers and laser printers are non-impact printers. The print quality is very good in these printers because characters are formed by tiny ink dots, which are electronically charged.
  - vi. Machine language and Assembly language are low level language. These languages are not easy to learn and execute. FORTRAN, COBOL, C++, JAVA etc. are high level language. HLL are easy to learn and are most popularly used.
  - vii. Application software are specific purpose software which are designed to the need of user. MS Word, MS Excel, MS PowerPoint, Tally etc. are some application software. System software are designed to operate, control and execute an application program.
  - viii. Inkjet Printers operate on the continuous stream inkjet approach. These printers have print heads that have tiny nozzles. These nozzles spray tiny ink droplets to form the character. The tiny drops merge on the paper, and can not be separately seen as in a dot-matrix printer. This results in very good print quality.
  - ix. It is difficult to decide what to buy. Before you purchase a computer, you should identify your need. Your need greatly guides your choice.

## FORMATIVE ASSESSMENT

Do it yourself



# 2. Mail Merge is MS-Word



## SUMMATIVE ASSESSMENT

### Objective Type Questions

#### 1. Answer following questions orally:

- Ans.**
- Mail Merge is an important facility of MS word used to form multiple individual letters using a data list.
  - Third step allows you to select the data list of those to whom that letter has to be sent.
  - Step 1 : Open the document, select print option in the file menu.
    - Step 2 : Print dialog box is displayed.
    - Step 3 : Select the name of printer you are going to use for the hard output.
    - Step 4 : Under Page range section, select the pages to be printed.
    - Step 5 : Under the copies section, type how many copies of each page are required.
    - Step 6 : To take the multiple copies of document-page wise deselect the collate option.
    - Step 7 : Click OK button to Start printing Job.

#### 2. Tick (✓) the correct option:

- Ans.** i. a.            ii. c.            iii. c.            iv. a.            v. c.

#### 3. Check whether the following statements are True or false:

- Ans.** i. False    ii. True    iii. False    iv. True    v. False

#### 4. Match the following:

- Ans.**
- |                       |   |                               |
|-----------------------|---|-------------------------------|
| i. Main Document      | → | a. Viewing individual letters |
| ii. Address data list | → | b. Print under merge section  |
| iii. Preview letter   | → | c. Recipient                  |
| iv. Print the letter  | → | d. Body of letter             |

#### 5. Fill in the blanks:

- Ans.**
- Mail merge** is use to create multiple individual letters using a data list.
  - There are **6** steps in Mail Merge wizard.
  - Mail Merge Wizard option is available in **tools** menu.
  - Third step Mail Merge allows you to select or create **recipient** list.
  - Merged document can be printed by clicking **print** option in step 6.

### Subjective Type questions

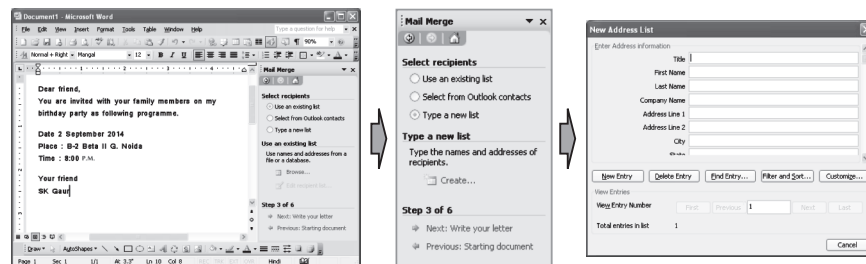
#### 1. Very short answer type questions:

- Ans.**
- MS word software has mail merge feature.
  - Mail merge feature is available in tools menu.
  - Letters and Envelops.



## 2. Short answer type questions:

- Ans. i. Mail Merge is an important facility of MS Word used to form multiple individual letters using a data list.
- ii. Mail Merge Wizard has 6 steps in it. These are:
- Select document type.
  - Select starting document.
  - Select recipients.
  - Write your letter.
  - Preview your letters.
  - Complete the merge.
- iii. a. To create data list of your friends, select the option 'Type a new list; under the 'Type a new list' section click create option.



- b. A 'New address list' dialog box will appear on the screen with entry fields like, Title, First Name, Last Name, Address Line 1, Address Line 2, etc. If you want to have only selected fields in your data list, then click customize button on the dialog box.
- iv. Step 1 : Open the document, select print option in the file menu.  
Step 2 : Print dialog box is displayed.  
Step 3 : Select the name of printer you are going to use for the hard output.  
Step 4 : Under Page range section, select the pages to be printed.  
Step 5 : Under the copies section, type how many copies of each page are required.  
Step 6 : To take the multiple copies of document-page wise deselect the collate option.  
Step 7 : Click OK button to Start printing Job.

## FORMATIVE ASSESSMENT

Do it yourself

### Formative Assessment-I

#### 1. Tick (✓) the correct option:

- Ans. i. a.                      ii. a.                      iii. c                      iv. a.                      v. c.

#### 2. Match the following:

- Ans. i. Main Document                      a. Body of letter  
ii. Address data list                      b. Recipient  
iii. Preview letter                      c. Viewing individual letters



iv. Print the letter

d. Print under merge section

**3. Solve the following:**

- Ans.** i.  $(7)_{10} \longrightarrow (111)_2$ ,  $(13)_{10} \longrightarrow (1101)_2$ ,  $(25)_{10} \longrightarrow (11001)_2$ ,  $(88)_{10} \longrightarrow (1011000)_2$ ,  
 $(121)_{10} \longrightarrow (1111001)_2$ ,  
ii.  $(111)_2 \longrightarrow (7)_{10}$ ,  $(1011)_2 \longrightarrow (11)_{10}$ ,  $(111000)_2 \longrightarrow (56)_{10}$ ,  $(10101)_2 \longrightarrow (21)_{10}$ ,  
iii.

**4. Identify the pictures :**

- Ans.** i. Scanner  
ii. Keyboard  
iii. LCD  
iv. Speaker  
v. Mouse

**5. Answer the following questions :**

- Ans.** i. Plotters are printer-like devices used for drawing pictures and graphs on large sheets of paper.  
ii. System software is a set of programs designed to operate, control and execute an application program.  
iii. Mail Merge is an important facility of MS Word used to form multiple individual letters using a data list.  
iv. Third step allows you to select the data list of those to whom that letter has to be sent.  
v. Step 1 : Open the document, select print option in the file menu.  
Step 2 : Print dialog box is displayed.  
Step 3 : Select the name of printer you are going to use for the hard output.  
Step 4 : Under Page range section, select the pages to be printed.  
Step 5 : Under the copies section, type how many copies of each page are required.  
Step 6 : To take the multiple copies of document-page wise deselect the collate option.  
Step 7 : Click OK button to Start printing Job.



## 3. MS Power Point



### SUMMATIVE ASSESSMENT

#### Objective Type Questions

**1. Answer following questions orally:**

- Ans.** i. There are three ways in which you can change the appearance of your slide making it more attractive and colourful. For this there is an option called **Slide Design** in the Format menu and which can also be selected from the **Standard Tool Bar**.




- ii. We can add bullets to text using the **Bullets and numbering** option from the Format menu or clicking on the icon for Bullets on the tool bar. Bullets in slides make the text more effective.
- iii. We can change the alignment either from the **formatting tool bar** buttons or by selecting **Alignment** option from the **format** menu. we can also press the following shortcut keys for the same :

**2. Tick (✓) the correct option:**

**Ans.** i. b.                      ii. b.                      iii. a.

**3. Fill in the blanks:**






- Ans.**
- i. **Clipart** is gallery of pictures available in Power Point.
  - ii. To select an image that you have on your hard disk but is not a part of power point art gallery, click on **import**.
  - iii.  Is the icon for **Word Art**.
  - iv. There are **three** techniques of changing the appearance of a slide.
  - v. A power point file is save with **ppt** extension name.
  - vi. you can choose bullets from a variety of symbols which appear when you click on the **custom** button.
  - vii. A text box can be **resized** by clicking on the right hand bottom corner and dragging it across the screen.
  - viii. The Header and Footer dialog box has **Notes** and **Handouts** tabs.
  - ix. The option **ungroup** is used to convert a picture into a MS office drawing object.
  - x. To play music from the beginning of a presentation till the end of presentation, select **Edit sound object** option from the **loop until stopped** option by right clicking on the sound file option.
  - xi. **Word Art** is a decorative style of text that can make your presentation appealing to the eye.
  - xii. **Slide Transition** is a special effect used to introduce a slide during a slide show.

**4. State whether True or false:**

**Ans.**

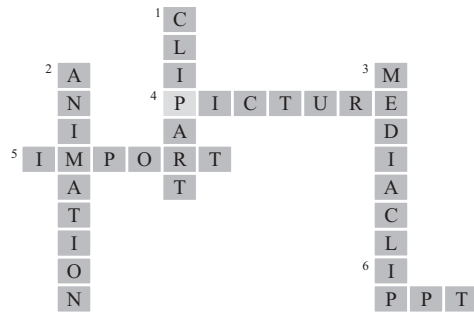
i. False	ii. True	iii. True	iv. True	v. True
vi. True	vii. True	viii. False	ix. False	x. True
xi. True	xii. False			

**5. Match the following:**

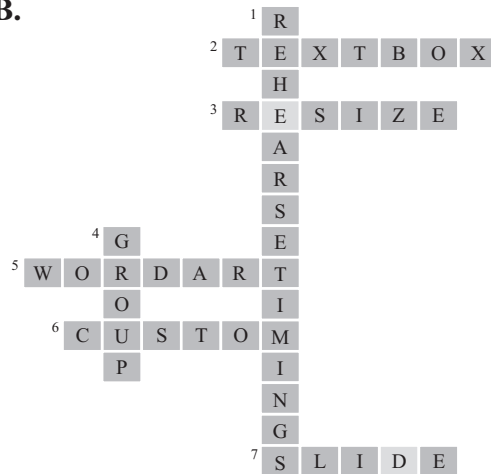
- Ans.**
- |  |                |
|--|----------------|
| i.    | Objects        |
| ii. Alt + F + S  | Saving a slide |
| iii.  | Video clip     |
| iv.   | Sound file     |
| v.    | Design         |
| vi.   | Text Layout    |

**6. Solve the Crossword:**

**A.**




**B.**



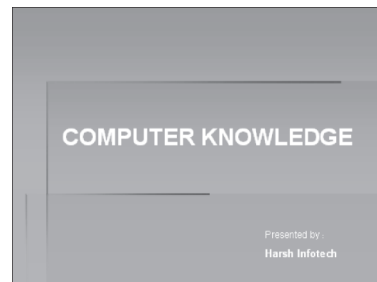
**Subjective Type questions**

**1. Answer the following questions:**

- Ans.**
- For **inserting clip Art** images, when we click on the clipart object, a gallery of power point clip images will appear as show in the figure. To choose an image from this gallery, simply double click on it or just select it and click on **OK**.
  - We can add bullets to text using the **Bullets and numbering** option from the format menu or clicking on the icon for Bullets on the tool bar. Bullets in slides make the text more effective.
  - For **inserting a diagram**, when we click on the object for a diagram a small dialog box will appear from where we can select the desired diagram that we want to insert in the slide.
  - Layout can be selected from slide layout in formatting tool bar. Slide layout are of two types-Text layout and content an text layout. To fill background colour. Use the Background option in Insert menu.
  - For **inserting a chart**, a sample Excel sheet will appear which will have figures and values that we can change as per your requirements.
  - Step 1 : choose the option Text Box from the Insert menu or click on the Text Box button  on the Drawing Tool bar to insert a text box. The pointer will acquire the shape of a+

Step 2 : Take the pointer to the place where you want to insert the Text Box

Step 3 : Drag the mouse while left clicking it and move it to the right hand side in downward motion.





Step 4 : Release the mouse where you think the size of the text box is appropriate as per your needs.

Step 5 : Enter the text in the text box.

- vii. For **inserting pictures** from our hard disk, when we click on appropriate object, a dialog box will appear for us to tell the path to where the pictures are located on our hard disk. The dialog box will also have a preview pane for us to view the image that we are selecting. We give the right path and click **insert** or press **Enter**.
- viii. A header and footer can be added by selecting the Header and Footer option from the View menu.
- ix. For inserting music from CD select insert → movies and sounds option → play CD Audio Track option.  
For inserting movies—  
select insert → movies and sound option → movie from gallery option.
- x. For **inserting tables**, when we click on the object it'll open a small dialog box asking us the number of rows and columns.

**2. How will you do the following:**

- Ans.**
- i. a. Click on **save** option in the **file** menu.  
or  
b. Select the tool bar button  for saving the file  
or  
c. Press **Alt** the **F** and then **s** in a sequence.
  - ii. a. Choose the **Print** option form the **file** menu.  
or  
b. Click on the  button on the **Standard Tool bar**.  
or  
c. Press **Ctrl** and **P** keys together.

**3. How do you :**

- Ans.**
- i. To apply ungrouping option to picture, select the picture by clicking on it and select the option by clicking on it and select the option ungroup from the Draw menu on the Drawing Tool Bar.  
For grouping an object—  
Select objects → click Draw menu in the Drawing Tool bar → select group.
  - ii. Just we can insert **Autoshapes** in a document of MS Word we insert All shapes in power point presentation. Using the **Drawing Toolbar** we can draw object, change colour and use different styles.

**4. Answer the following questions :**

- Ans.**
- i. Clipart is a collection of pictures available in Power point, Word and Excel. Adding images to a power point presentation makes the information more valuable and a lot more interesting for an audience.
  - ii. If you want music to be played while the slide show is running, insert the sound file in the first slide (by choosing the appropriate option form the



insert menu) because the music begins only where you insert the sound object.

- iii. For adding word Art, Click on the word Art icon on the Drawing Tool bar or select the word Art option from picture option of insert menu. Animation effect can be chosen by clicking format menu → slide Design → Animation Scheme.
- iv. Transition is a special effect used to introduce a slide during a slide show. To introduce transition effect in a slide show. Select the slide you want to subject to transition. Select slide transition option from the slide show menu.
- v. By using this feature of slide show, each slide will appear for particular time duration and disappear for the next to appear.
- vi. The difference between an animation effect and transition effect is that in Animation effect, the contents of the slide are introduced with special effect whereas in a transition effect, the complete slide is introduced with a special effect.

#### FORMATIVE ASSESSMENT

Do it yourself



## 4. QBASIC Programming Statements



#### SUMMATIVE ASSESSMENT

##### Objective Type Questions

##### 1. Answer following questions orally:

- Ans. i. STEP statement is given to specify the step value. If not specified, STEP defaults to one.
- ii. A counter variable is used to control execution of a Do WHILE.....LOOP.
- iii. Exit command is used to come out of a loop before the expected number of executions. EXIT command is used followed by either FOR or DO.

##### 2. Tick (✓) the correct option:

- Ans. i. b.            ii. a.            iii. b.

##### 3. Fill in the blanks:

- Ans. i. FOR.....NEXT is **repetitive** type of QBASIC statement.
- ii. **LOOP** is used to end DO loop
- iii. **While.....Wend** works similar to DO.....WHILE.
- iv. **Step value** is used to repeat certain steps a fixed number of times.
- v. The DO.....LOOP can be used either with WHILE statements or **wend** statement.

##### Subjective Type questions

##### 1. Find out the errors in the following programs:

- Ans. i. CLS



```

For A= 1 to 10 STEP 1
PRINT A
NEXT A

```

- ii. CLS  
 For X= 10 to 1 STEP - 1  
 PRINT X  
 NEXT X

**2. Give the output of the following programs:**

- Ans.** i. Output-  
 1  
 5  
 10  
 15  
 20  
 25  
 30  
 35  
 40  
 45  
 50
- ii. Output-  
 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9

**3. Answer the following questions:**

- Ans.** i. Sometimes there is a need to repeat a set of statements more than once based on a certain condition. This process of repetition is called loop or iteration in programming.

The following are the loops available in QBASIC

Do WHILE.....LOOP

FOR.....NEXT

WHILE.....WEND

- ii. FOR.....NEXT structure is used when we want to perform a loop a specific number of times it uses a counter variable which is incremented or incremented with each repetition of the loop.

**Example-** To print numbers from 1 to 5

Input-	CLS	Output-	1
	FOR A= 1 to 5		2
	PRINT A		3
	NEXT A		4
			5

- iii. The purpose of Do.....LOOP and WHILE.....WEND is similar except for the syntax. if the condition is placed at the end of loop, the end of loop is executed at least once.

**Sample Program:** To generate multiples of 5 from 5 to 50

Input-	CLS	Output-	5
	LET NUM = 5		10
	WHILE NUM <= 50		15
	PRINT NUM		20

```

NUM=NUM+5
WEND
25
30
35
40
45
50

```

- iv. A Do WHILE.....LOOP is performed as long as the condition being tested is true. A DO.....UNTIL LOOP executes the statements until the condition is true.
- v. Exit command is used to come out of a loop before the expected number of executions. EXIT command is used followed by either FOR or DO.

**Sample Program:** To exit after 3 while printing 1 to 5

```

Input-   CLS
          FORM = 1 to 5
          PRINT M
          IF M = 3 THEN EXIT FOR
          NEXT M
          Output:- 1
                  2
                  3

```

#### FORMATIVE ASSESSMENT






Do it yourself

#### Formative Assessment-II

##### 1. Tick (✓) the correct option:

Ans. i. b.      ii. a.      iii. b.      iv. a.      v. b.

##### 2. Match the following:

- Ans. i.  Objects
- ii. Alt + F + S      Saving a slide
- iii.  Video clip
- iv.  Sound file
- v.  Design
- vi.  Text Layout

##### 3. Find out the errors in the following programs:

- Ans. i. CLS  
FORA = 1 to 10 STEP = 1  
PRINT A  
NEXT A
- ii. CLS  
For X = 10 to 1 STEP -1  
PRINT X  
NEXT X



**4. Identify the pictures :**

- Ans.** i. Insert Table ii. Flow Diagram  
iii. FONT iv. Bullets and Numbering  
v. Line Spacing

**5. Answer the following questions :**

- Ans.** i. We can add bullets to text using the **Bullets and numbering** option from the format menu or clicking on the icon for Bullets on the tool bar. Bullets in slides make the text more effective.  
ii. We can change the alignment either from the **formatting tool bar** buttons or by selecting **Alignment** option from the **Format** menu. We can also press the following shortcut keys for the same.  
iii. STEP statement is given to specify the step Value. If not specified, STEP defaults to one.  
iv. A counter variable is used to control execution of a DO WHILE.....LOOP.  
v. Exit command is used to come out of a loop before the expected number of executions. EXIT command is used followed by either FOR or DO.

**Summative Assessment-I**

**1. Fill in the blanks :**

- Ans.** i. An 8-bit unit used to code digital data is called **Byte**.  
ii. Mail Merge Wizard option is available in **Tools** menu.  
iii. **Clipart** is a gallery of pictures available in Power Point.  
iv. A **Laser** printer prints out a full page at a time.  
v. **LOOP** is used to end DO loop.

**2. Write true or False:**

- Ans.** i. False ii. False iii. False iv. True v. True

**3. Explain the process of printing in the following:**

- Ans.** i. A dot-matrix printer uses matrix of dots to make up a character. Each character is produced by printing the most appropriate dot combination.  
ii. Inkjet printers operate on the **continuous-steam inkjet** approach. These printers have print heads that have tiny nozzles. These nozzles spray tiny ink droplets to form the character.  
iii. A laser printer looks like a photocopier. Its principle of operation is also similar. A laser printer uses the signals sent to it by the computer to control a laser beam. The beam produces an image of the matter to be printed on a drum.

**4. Give the output of the following programs:**

- |                       |           |
|-----------------------|-----------|
| <b>Ans.</b> 1. Output | 2. Output |
| 1                     | 1         |
| 5                     | 2         |
| 10                    | 3         |
| 15                    | 4         |
| 20                    | 5         |



25	6
30	7
35	8
40	9
45	
50	

**5. Answer the following questions :**

- Ans.**
- Secondary storage devices are permanent storage of computer. Hard drive, Flash drives, optical disks, CD-ROMs and DVDs etc. are secondary storage devices. These are used to store files, instructions, programs and other things.
  - Mail Merge is an important facility of MS Word used to form multiple individual letters using a data list.
  - Sometimes there is a need to repeat a set of statements more than once based on a certain condition. This process of repetition is called loop or iteration in programming. The following are the loops available in QBASIC  
DO WHILE.....LOOP  
FOR.....NEXT  
WHILE.....WEND
  - CPU needs a storage area called the **buffer** where it sends all the information. Other devices then read from this buffer at their own speed, and the CPU continues with further processing, without waiting for the devices to complete their job.
  - For adding word Art, Click on the word Art icon on the drawing tool Bar or select the word art option from picture option of insert menu. Animation effect can be chosen by clicking—  
FORMAT MENU → SLIDE DESIGN → ANIMATION SCHEME



## 5. QBASIC—Graphics and Sound



### SUMMATIVE ASSESSMENT

#### Objective Type Questions

**1. Answer following questions orally:**

- Ans.**
- Resolution of the screen or the image displayed is measured in terms of the pixels present horizontally and vertically on a screen. For example, resolution 320X200 for an image would mean 320 pixels in a horizontal direction and 200 pixels in vertical direction.
  - The different screen modes allow different types of display. The two types of modes are **text mode** and **graphics mode**.
  - The PSET command is used to display pixels on the screen PSET command is effective only after you have given SCREEN command



**2. Tick (✓) the correct option:**

**Ans.** i. a.                      ii. d.                      iii. a.

**3. Match the following:**

**Ans.** i. SCREEN 0                      e. Changes to text mode  
ii. COLOR 4                      c. Sets the colour to red  
iii. PSET command                      b. Sets the colour of the pixel  
iv. SOUND 20, 5                      a. Produces sound  
v. LNE command                      d. draws a box or line

**4. Fill in the blanks:**

**Ans.** i. **Text** and **Graphics** are the two modes of screen in QBASIC.  
ii. There are a total of **16** colours to be used with COLOR command.  
iii. **Sound** command produces sound of a specific frequency for a specific duration from the PC speaker.  
iv. **Square** and **rectangle** can be drawn by using LINE command.  
v. **Frequency** and **ticks** are the two parametres used with **SOUND** command.

**Subjective Type questions**

**1. What do the following commands do? Write an example of each. Can these be used with the SCREEN mode 0:**

**Ans.** i. The BEEP command produces a beep sound that lasts for about half second.

**Example-** PRINT "You should be courageous in actions"

BEEP

PRINT "However, You must also be wise"

BEEP

ii. LINE command is used to draw a line between two specified coordinates.

**Example-** to display a red line on the screen starting from the (10, 22) coordinates to (35, 30) coordinates.

SCREEN 9

LINE (10, 22) - (35, 30), 4

iii. COLOR Command is used to change the colour of the screen and the text.

**Example:** Input-

CLS

COLOR 2

PRINT "PLANT MORE TREES"

**Output-** The screen will appear black and the text will appear green.

iv. Sound command produces sound of a specific frequency for a specific duration from the PC Speaker.

**Example:** Sound 500, 25

v. The PSET command is used to display pixels on the screen. PSET command is effective only after we have given SCREEN Command.

**Example-** To display a pixel at the coordinates (50, 15) in colour number 2, i.e., Dark Green colour.

**Command-** SCREEN 10

PEST (50, 15), 2

vi. PAINT command is used to paint a particular point with the specified colour. The command has coordinates that tells Q BASIC where to start.



**Example-** To display a circle the screen starting from the (160, 100) coordinates radius 20 with border colour cyan–

SCREEN 1

CIRCLE (160, 100), 20

PAINT (160, 100), 2, 3

**2. Answer the following questions:**

- Ans.** i. QBASIC is not a graphic-oriented programming language. It was meant to be a learner's language for basic programming techniques. However, with the help of some of its functions, we can achieve some level of graphic quality while keeping in mind the language's power.
- ii. The SCREEN command is used to set the screen attributes. The screen attributes is always a number.
- iii. COLOR command is used to change the colour of the screen and the text. You have to specify a colour number which will be followed by the text in the PRINT statement.
- Syntax  
COLOR [number]  
Where number ranges from 1 to 15 for a specific colour.
- iv. The Computer screen that you see consists of hundreds of picture elements known as pixels. In other words, a **pixel** is the smallest possible element of an image of the screen.
- v. Line command is used to draw a line between two specified coordinates. we can also draw a square or a rectangle by taking the diagonal coordinates.

**Example-** To make a box with white color.

SCREEN 1

LINE (10, 20) - (100, 50) B, 15, B

CIRCLE command is used to draw a circle of a specific radius at given coordinates. This command will be effective only after using the SCREEN command to get the display graphics mode.

**Example-** To display a blue circle at the 20, 25 coordinates with radius 5

SCREEN 1

CIRCLE (20, 25), 5, 1

**FORMATIVE ASSESSMENT**

Do it yourself



## 6. Internet and WWW



**SUMMATIVE ASSESSMENT**

**Objective Type Questions**

**1. Answer following questions orally:**

- Ans.** i. A Web browser is software which understand HTML code or instructions written in an HTML document and displays parts of a Web Page.



ii. A URL is the Internet address for a web document or other file. A typical URL looks like this:

http://www.yahoo.com

iii. A website consist fo a main page called the Homepage.

**2. Tick (✓) the correct option:**

Ans. i. b. ii. a. iii. a.


**3. Fill in the blanks:**

Ans. i. Every website has a **URL** address.  
 ii. The **WWW** is a collection of websites.  
 iii. **Web Browser** allows you to view web pages.  
 iv. **HTTP** is an acronym for Hyper Text Transfer Protocol.  
 v. **Internet Explorer** and **Fire Fox** are the two famous internet Browsers.

**4. Write true of False:**

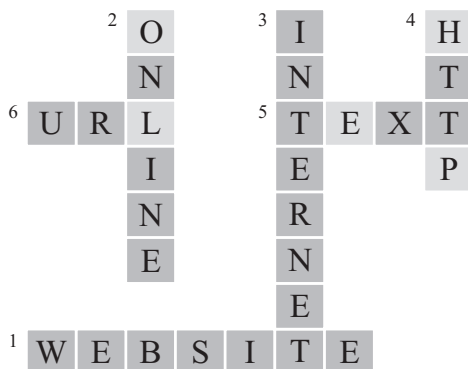
Ans. i. True ii. False iii. True iv. True v. False

**5. Match the following:**

Ans. i.  a. Link to other pages  
 ii. Websites b. Lycos, Google  
 iii. Index c. Web Browser  
 iv. Hyperlink d. Home Page  
 v. Search Engines e. A combination of web pages

**6. Solve the crossword:**

Ans.



**Subjective Type QUESTIONS**

**1. Differentiate between:**

Ans. i. A web page is an interactive document that stores information and can be viewed on the internet. A website is a collection of web pages. A website may consist of a single web page or may comprise multiple interconnected web pages.  
 ii. HTTP means Hyper Text Transfer protocol. HTTP is simply a procedure used to transfer information from a WWW page. users of the web retrieve documents from servers. FTP means file transfer protocol. FTP allows us to download a file and transfer it to our hard disk.  
 iii. A hyperlink connects the web pages with each other. Some hyperlinks connect pages on website to pages on other websites. A website consists





of a main page called Home page. It is usually the first page on website and consists of an index which links us to other pages.

**2. Answer the following questions:**

**Ans.** i. A web browser is software which understands HTML code or instructions written in on HTML document and displays parts of web pages.

**Example-** Internet Explorer, Mozilla Firefox.

ii. Search Engines are used to access the websites by typing in key words. Google, yahoo, MSN etc are some common search engines Google is the most popular search engine.

iii. WWW-World Wide Web is a collection of websites. Webserver- A webserver is the heart of internet. It stores information that we browse on the internet.

URL- Uniform resource Locator is the internet address of a website.

Search Engine- Access a search Engine which lets us access sites by typing in keywords.

HTML- Hyper Text Mark up Language is the computer's language used to create web pages.

iv. a. While logged on to the web, type <http://www.google.co.in> (for example) in the URL entry field. Press ENTER on the keyboard.

b. Type one or more words pertaining to information you'd like to locate on the web. For example, you want to find information on the temples of India. So you will type India+ Temples in the text box.

c. Click on the SEARCH button to the right of the entry field, or press ENTER on the keyboard.

d. After a few seconds, google will show a list of website links that match your search criteria.

e. Scroll down the page and select the website link to a page that you'd like to explore and click on the hyperlink.

**FORMATIVE ASSESSMENT**

Do it yourself

**Formative Assessment-III**

**1. Tick (✓) the correct option:**

**Ans.** i. d.      ii. a.      iii. b.      iv. a.      v. a.

**2. Differentiate between:**

**Ans.** i. A web page is an interactive document that stores information and can be viewed on the internet. A website is a collection of web pages. A website may consist of a single web page or may comprise multiple interconnected web pages.

ii. HTTP means Hyper Text Transfer protocol. HTTP is simply a procedure used to transfer information from a WWW page. users of the web retrieve documents from servers. FTP means File Transfer protocol. FTP allows



us to download a file and transfer it to our hard disk.

- iii. A Hyperlink connects the web pages with each other. Some hyperlinks connect pages on website to pages on other websites. A website consists of a main page called Home page. It is usually the first page on website and consists of an index which links us to other pages.

**3. Match the following :**

- |                         |                                 |
|-------------------------|---------------------------------|
| <b>Ans.</b> i. SCREEN 0 | e. Changes to text mode         |
| ii. COLOR 4             | c. Sets the colour to red       |
| iii. PSET command       | b. Sets the colour of the pixel |
| iv. SOUND 20, 5         | a. Produces sound               |
| v. LNE command          | d. draws a box or line          |

**4. Identify the pictures :**

- Ans.** i. Wikipedia  
ii. 'Save' the web page  
iii. Ted Nilson  
iv. Tim Burners  
v. PRINT the web page

**5. Answer the following questions :**

- Ans.** i. The different screen modes allow different types of display. The two types of modes are **text mode** and **graphics mode**.
- ii. The PSET command is used to display pixels on the screen PSET command is effective only after you have given SCREEN command.
- iii. A web browser is software which understands HTML code or instructions written in an HTML document and displays parts of a web page.
- iv. A URL is the internet address for a web document or other file. A typical URL looks like this:  
<http://www.yahoo.com>
- v. A website consists of a main page called the Homepage.



## 7

## HTML-The Language of Web Pages



### SUMMATIVE ASSESSMENT

#### Objective Type Questions

**1. Answer following questions orally:**

- Ans.** i. Commands in HTML are called tags.
- ii. The files stored on the servers, which can be accessed by the internet users are called web sites.
- iii. The text attributes is used to set the colour of the text in the document.

**2. Tick (✓) the correct option:**

- Ans.** i. a.                      ii. c.                      iii. a.

**3. Fill in the blanks:**

- Ans.** i. HTML stands for **Hyper text mark up language**.



- ii. HTML elements that include both on ON tag and on OFF tag are called **container** elements.
- iii. HTML elements that include only on ON tag and no OFF tag are called **empty** tag.
- iv. An HTML document can have **htm** or **html** as its extension.
- v. HTML documents have two distinct parts, **Title** and **Body**.
- vi. The **bg colour** attributes allows you to specify a colour to be used as background in the Web page.

**4. State the following Statements as True or False:**

- Ans.** i. True                      ii. True                      iii. True                      iv. False  
v. False                      vi. True                      vii. True                      viii. True

**Subjective Type questions**

**1. Answer the following questions:**

- Ans.** i. HTML is the acronym for Hyper text Mark up language. It is a computer language that is used for creating Web pages. HTML is scripting language (or mark up language) which differs completely from programming languages.
- ii. Web pages are text documents having HTML commands. HTML defines a set of common styles for web pages. HTML is a cross-plat form language, i.e., HTML documents can be used on any type of computer or platform like Macintosh computer, IBM computer, Unix, Windows etc.
- iii. The elements that contain both the ON and OFF tags (also known as opening and closing tags) are container Elements.

**Example-** <TITLE> My First page </TITLE> Empty elements have only an UN tag and no off tag.

Empty elements have only an on tag and no off tag.

**Example-** <HR> Welcome in HTML.

- iv. Document tags are needed for every HTML document. These tags are used to describe the over all structure of the page and also provide the heard information. An HTML document is divided into two sections- the Head section and the Body section. HTML, Head, Title an Body are four basic document tag.
- v. Some tags have attributes that further proved options for the tag, e.g., the font tag has a colour attribute that allows you specify a colour for the particular text. The Body element can have the following five attributes—
- a. background, b. bg color, c. text, d. link, e. alink

**Exmaple-**

```
<HTML>
<HEAD>
<TITLE> WELCOME TO HTML </TITLE>
</HEAD>
<BODY bg color = "Aqua" text = "Red">
This is a web page. </BODY>
</HTML>
```

**FORMATIVE ASSESSMENT**

Do it yourself





## 8. Continue With HTML



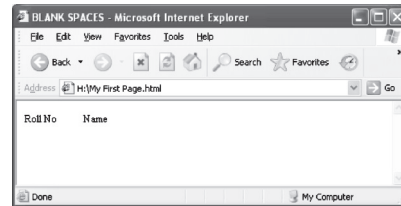
### SUMMATIVE ASSESSMENT

#### Objective Type Questions

1. Answer following questions orally:

Ans. i. To insert a blank space special HTML code `nbsp` has to be added to the document.

```
<HTML>
<HEAD>
<TITLE> BLANK SPACES </TITLE>
<BODY>
Roll No &nbsp; &nbsp; &nbsp; &nbsp; Name
</BODY>
</HTML>
```



ii. To Start a new line without starting a new paragraph, the empty element **Break tag** or `<BR>` is used. Like any other empty tag this also does not act on a block of text. It simply breaks the text wherever it is encountered and starts the remaining text at the left margin in the next line.

iii. Text in a page is divided with the help of headings and subheadings to make it easy to understand and follow. **Heading tag** or `<H?>` tag is used to display headings in your Web page.

2. Tick (✓) the correct option:

Ans. i. a.            ii. c.            iii. a.

3. Fill in the blanks:

Ans. i. The full form of HTML is **Hyper text Mark up language**.

ii. There are **six** different levels of headings in HTML.

iii. The align attributes can be added to the **Heading** tag to center, left or right align the heading.

iv. Blank spaces can be added in the text by using the **&nbsp;** code.

v. To start a new line, the empty element `<BR>` is used.

4. State the following Statements as True or False:

Ans. i. True    ii. False    iii. True    iv. True    v. True    vi. False

#### Subjective Type questions

1. Answer the following questions:

Ans. i. **Syntax :** `<H? align = label>.....</H?>`  
Where label can take the values left, center or right.

**Example:** `<HTML>`  
`<HEAD>`  
`<TITLE> HEADING </TITLE>`  
`</HEAD>`  
`<BODY>`



```

<H1 align=right> WELCOME </H1>
<H1 align=center> WELCOME </H1>
<H1 align=left> WELCOME </H1>
</BODY>
</HTML>

```

- ii. a. The font of text can be changed by using the container element <FONT>. The <FONT> tag can take the attributes face and size.

**syntax-** <FONT Face = name>

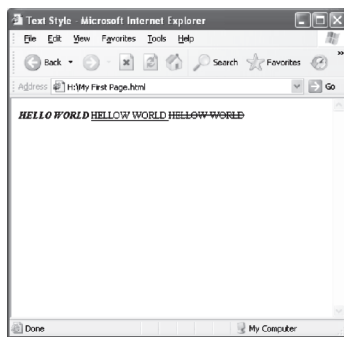
Where name stands for the name of a font.

- b. **syntax -** <FONT size = val>

Where 'Val' stands for the value that the size attribute can take.

- iii. To bolden italicize, underline or strike though text, the container elements <B>, <I>, <U> or <Strike> can be used.

**Example:**



```

<HTML>
<HEAD>
<TITLE> Text style </TITLE> </HEAD>
<BODY>
<B> <I> HELLO WORLD </U>
<STRIKE> HELLO WORLD </STRIKE>
</BODY>
</HTML>

```

- iv. Text can be made to appear in the center by using the container element <CENTER>

**Syntax :** <CENTER>.....</CENTER>

**Example:**

```

<HTML>
<HEAD>
<TITLE> CENTER TEXT </TITLE></HEAD>
<BODY>
<H1>
<CENTER> WELCOME TO HTML
</CENTER>
</H1>
<BODY>
</HTML>

```



## FORMATIVE ASSESSMENT

Do it yourself





## 9. Introduction to Photoshop



### SUMMATIVE ASSESSMENT

#### Objective Type Questions

1. Tick (✓) the correct option:

Ans. i. c.            ii. b.            iii. c.            iv. b.            v. c.            vi. c

2. State the following Statements as True or False:

Ans. i. False            ii. True            iii. True            iv. False  
v. True            vi. True            vii. False

#### Subjective Type questions

1. Differentiate between:

Ans. i. The smudge tool spreads colour pixels across the area of an image. The Blur tool is used to blur the hard areas of an image.  
ii. The paint brush tool is used for applying brush strokes of an image. The Air brush tool is used to soften the edges of an image.  
iii. A regular Lasso tool makes a free-hand selection of any shape. The polygonal Lasso tool makes irregular geometric selections.

2. Answer these questions in brief:

Ans. i. Pixels are dots of colour arranged on a regular grid in a pattern representing the form to be displayed  
ii. Resolution refers to the number of coloured dots-per-inch (dpi) or pixels-per-inch. This value determines the quality of the output obtained. An image with a higher resolution is of a better quality.  
iii. The **Lasso** tool allows us to make free-had selections. This tool also has three options- the Simple, the polygonal and the magnetic lasso. The Simple Lasso is a free-hand selection tool with only straight lines. This doesn't have any key nodes. The Polygonal Lasso has a both straight and curved line selections. This also allows us to specify the key nodes. The Magnetic Lasso attracts the outline of the Image and specifies the key nodes automatically. We can also specify our own key nodes.  
iv. The Magic Wand is a different kind of selection tool. Adjacent pixels having similar colour values will be selected by this tool. This enables us to cut or copy the foreground objects, (for example, the duck) from the background (the water and leaves).  
v. In Photoshop, we can work in different layers. Every object we create in the image is made in a different layer. If we want to modify any part of the image. We can simply select that layer and make the changes, without affecting the rest of the image. The layer menu has options to create, modify and manipulate layers.  
vi. a. **TIFF (.tif)** : The full form of TIFF is Tag Image File Format. This file format gives us a high-quality image but has a much bigger file size.  
b. **GIF (.gif)** : The full form of GIF is Graphical Interchange Format. It is one of the three most common graphic formats used for web publishing.  
c. **PDF (.pdf)** : Documents created in this kind of format can be read



across, different programs. The full form of PDF is portable Document Format, and is an Adobe Acrobat file.

### FORMATIVE ASSESSMENT

Do it yourself

### Formative Assessment-IV

**1. Tick (✓) the correct option:**

**Ans.** i. c.                      ii. a.                      iii. a.                      iv. c.                      v. a.

**2. Give the syntax for the following:**

**Ans.** i. `<FONT face = name> .....</FONT>`  
ii. `<FONT size = val> .....</FONT>`

**3. Identify the pictures :**

**Ans.** i. `<BR>` tag for New line                      ii. Back ground colour  
iii. Open HTML file                      iv. Heading and Alignment  
v. To save HTML file

**4. Answer the following questions :**

**Ans.** i. Website is collection of web pages.  
ii. The next attributes is used to set the colour of the text in the document.  
iii. To insert a blank space special HTML code `enbsp` has to be added to the document.

**Example:** `<HTML>`

`<HEAD>`

`<TITLE> BLANK SPACES </TITLE>`

`<BODY>`

Roll No `enbsp`; `enbsp`; `enbsp` Name

`</BODY>`

`</HTML>`

- iv. To start a new line without starting a new paragraph, the empty element **Break tag** or `<BR>` is used. Like any other empty tag this tag also does not act on a block of text. It simply breaks the text wherever it is encountered and starts the remaining text at the left margin in the next line.
- v. Text in a page is divided with the help of headings and subheadings to make it easy to understand and follow. **Heading tag** or `<H?>` tag is used to display headings in your Web page.

### Summative Assessment-II

**1. Fill in the blanks :**

**Ans.** i. **Text** and **Graphics** are the two modes of screen in QBASIC.  
ii. There are a total of **16** colours to be used with `COLOR` command.  
iii. Every Website has a **unique** address.  
iv. HTML stands for **Hyper text Mark up language**.  
v. To start a new line, the empty element `<BR>` is used.





**2. Write true or False:**

**Ans.** i. True      ii. False      iii. False      iv. True      v. False

**3. Differentiate between:**

**Ans.** i. HTTP means Hyper Text Transfer protocol. HTTP is simply a procedure used to transfer information from a WWW page. users of the web retrieve documents from servers. FTP means file transfer protocol. FTP allows us to download a file and transfer it to our hard disk.

ii. A hyperlink connects the web pages with each other. Some hyperlinks connect pages on website to pages on other websites. A website consists of a main page called Home page. It is usually the first page on website and consists of an index which links us to other pages.

iii. The smudge tool spreads colour pixels across the area of an image. The Blur tool is used to blur the hard areas of an image.

iv. The paint brush tool is used for applying brush strokes of an image. The Air brush tool is used to soften the edges of an image.

v. A regular Lasso tool makes a free-hand selection of any shape. The polygonal Lasso tool makes irregular geometric selections.

**4. Define the following file formats:**

**Ans.** i. **TIFF (.tif)** : The full form of TIFF is Tag Image File Format. This file format gives us a high-quality image but has a much bigger file size.

ii. **GIF (.gif)** : The full form of GIF is Graphical Interchange Format. It is one of the three most common graphic formats used for web publishing.

iii. **PDF (.pdf)** : Documents created in this kind of format can be read across, different programs. The full form of PDF is portable Document Format, and is an Adobe Acrobat file.

**5. What do the following commands do :**

**Ans.** i. The BEEP command produces a beep sound that lasts for about half second.

**Example-** PRINT "You should be courageous in actions"  
BEEP  
PRINT "However, You must also be wise"  
BEEP

ii. The PSET command is used to display pixels on the screen. PSET command is effective only after we have given SCREEN Command.

**Example-** To display a pixel at the coordinates (50, 15) in colour number 2, i.e., Dark Green colour.

**Command-** SCREEN 10  
PSET (50, 15), 2

**6. Answer the following questions :**

**Ans.** i. The Computer screen that you see consists of hundreds of picture elements known as pixels. In other words, a **pixel** is the smallest possible element of an image of the screen.

ii. a. While logged on to the web, type <http://www.google.co.in> (for example) in the URL entry field. Press ENTER on the keyboard.

b. Type one or more words pertaining to information you'd like to locate on the web. For example, you want to find information on the temples





- of India. So you will type India+ Temples in the text box.
- Click on the SEARCH button to the right of the entry field, or press ENTER on the keyboard.
  - After a few seconds, google will show a list of website links that match your search criteria.
  - Scroll down the page and select the website link to a page that you'd like to explore and click on the hyperlink.
- Web Pages are text documents having HTML commands. HTML defines a set of common styles for web pages. HTML is a cross plat form language, i.e., HTML documents can be used on any type of computer or plat form like Macintosh computer, IBM Computer, Unix, Windows etc.
  - To bolden italicize, underline or strike though text, the container elements **<B>**, **<I>**, **<U>** or **<Strike>** can be used.

**Example:**



```
<HTML>
<HEAD>
<TITLE> Text style </TITLE> </HEAD>
<BODY>
<B> <I> HELLO WORLD </U>
<STRIKE> HELLO WORLD </STRIKE>
</BODY>
</HTML>
```

- Text can be made to appear in the center by using the container element **<CENTER>**

**Syntax :** `<CENTER>.....</CENTER>`

**Example:**

```
<HTML>
<HEAD>
<TITLE> CENTER TEXT </TITLE></HEAD>
<BODY>
<H1>
<CENTER> WELCOME TO HTML
</CENTER>
</H1>
<BODY>
</HTML>
```

