Computer-7

1 Number System

Assessment

A. Multiple Choice Questions :

Ans. 1. c.   2. d.   3. a.   4. c.
5. d.   6. c.   7. c.

B. Fill in the blanks :

Ans.
1. The 0 and 1 is a **binary** code.
2. **Program** instructions and data are made up of a combination of the three types of characters alphabetic, numeric and special.
3. ASCII stands for **American Standard Code for Information Interchange**.
4. Each character is stored in one **byte of memory**.
5. The binary **number system** is used to represent the electronic status of the bits in main memory.
6. The **Decimal** number system is a base 10 number system.
7. Bi means **two**.

C. True and False :

Ans. 1. F   2. T   3. T   4. T
5. F   6. T   7. F

D. Answer the following questions :

Ans.
1. Programs and data are represented in memory in binary form.
2. The American Standard Code for Information Interchange is called ASCII, is the most widely used coding system to represent data.
3. The ASCII code is widely used on personal computers and many minicomputers. Another common coding scheme used primarily on mainframes is called the Extended Binary Coded Decimal Interchange Code or EBCDIC.
4. Number systems are used with computers. The binary number system is used to represent the electronic status of the bits in main memory. Another number system that is commonly used with computers is hexadecimal (base 16) shows how the decimal values 0 through 15 are represented in binary and hexadecimal.
5. The decimal number system is a base 10 number system (deci means ten). The base of a number system indicates how many symbols are used in it. Decimal uses 10 symbols, 0 through 9.
Binary is a box 2 number system (bi means two) and the symbols that are used are 0 and 1. In binary, the place values are successive powers of two 23, 22, 21, 20 or (8421).
6. Many computers use a base 16 number system called hexadecimal. The

hexadecimal number system uses 16 symbols to represent values. These include the symbols 0 through 9 and A through F.

E.   Convert the given into decimal number system :

Ans. 1.   0101$\overline{0101}$

Copy down the left most bit			0
Multiply by 2, add next bit	(2×0)	$+ \ 1 \ =$	1
Multiply by 2, add next bit	(2×1)	$+ \ 0 \ =$	2
Multiply by 2, add next bit	(2×2)	$+ \ 1 \ =$	5
Multiply by 2, add next bit	(2×5)	$+ \ 0 \ =$	10
Multiply by 2, add next bit	(2×10)	$+ \ 1 \ =$	21
Multiply by 2, add next bit	(2×21)	$+ \ 0 \ =$	42
Multiply by 2, add next bit	(2×42)	$+ \ 1 \ =$	85

$01010101_2 = 85_{10}$

2.   000$\overline{1010}$

Copy down the left most bit			0
Multiply by 2, add next bit	(2×0)	$+ \ 0 \ =$	0
Multiply by 2, add next bit	(2×0)	$+ \ 0 \ =$	0
Multiply by 2, add next bit	(2×0)	$+ \ 1 \ =$	1
Multiply by 2, add next bit	(2×1)	$+ \ 0 \ =$	2
Multiply by 2, add next bit	(2×2)	$+ \ 1 \ =$	5
Multiply by 2, add next bit	(2×5)	$+ \ 0 \ =$	10

$0001010_2 = 10_{10}$

3.   0000111

			0
	(2×0)	$+ \ 0 \ =$	0
	(2×0)	$+ \ 0 \ =$	0
	(2×0)	$+ \ 0 \ =$	0
	(2×0)	$+ \ 1 \ =$	1
	(2×1)	$+ \ 1 \ =$	3
	(2×3)	$+ \ 1 \ =$	7

$0000111_2 = 7_{10}$

4.   10101010

		$1 \ =$	1
	(2×1)	$+ \ 0 \ =$	2
	(2×2)	$+ \ 1 \ =$	5
	(2×5)	$+ \ 0 \ =$	10
	(2×10)	$+ \ 1 \ =$	21
	(2×21)	$+ \ 0 \ =$	42
	(2×42)	$+ \ 1 \ =$	85
	(2×85)	$+ \ 0 \ =$	170

$10101010_2 = 170_{10}$

5. 1110000

$$
\begin{aligned}
1 &= 1 \\
(2 \times 1) \ + \ 1 &= 3 \\
(2 \times 3) \ + \ 1 &= 7 \\
(2 \times 7) \ + \ 0 &= 14 \\
(2 \times 14) \ + \ 0 &= 28 \\
(2 \times 28) \ + \ 0 &= 56 \\
(2 \times 56) \ + \ 0 &= 112
\end{aligned}
$$

$1110000_2 = 112_{10}$

6. 10000001

$$
\begin{aligned}
1 &= 1 \\
(2 \times 1) \ + \ 0 &= 2 \\
(2 \times 2) \ + \ 0 &= 4 \\
(2 \times 4) \ + \ 0 &= 8 \\
(2 \times 8) \ + \ 0 &= 16 \\
(2 \times 16) \ + \ 0 &= 32 \\
(2 \times 32) \ + \ 0 &= 64 \\
(2 \times 64) \ + \ 1 &= 129
\end{aligned}
$$

$10000001_2 \ 129_{10}$

7. 1100011

$$
\begin{aligned}
1 &= 1 \\
(2 \times 1) \ + \ 1 &= 3 \\
(2 \times 3) \ + \ 0 &= 6 \\
(2 \times 6) \ + \ 0 &= 12 \\
(2 \times 12) \ + \ 0 &= 24 \\
(2 \times 24) \ + \ 1 &= 49 \\
(2 \times 49) \ + \ 1 &= 99
\end{aligned}
$$

$1100011_2 = 99_{10}$

8. 011111110

$$
\begin{aligned}
0 &= 0 \\
(2 \times 0) \ + \ 1 &= 1 \\
(2 \times 1) \ + \ 1 &= 3 \\
(2 \times 3) \ + \ 1 &= 7 \\
(2 \times 7) \ + \ 1 &= 15 \\
(2 \times 15) \ + \ 1 &= 31 \\
(2 \times 31) \ + \ 1 &= 63 \\
(2 \times 63) \ + \ 1 &= 127 \\
(2 \times 127 \ + \ 0 &= 254
\end{aligned}
$$

$011111110_2 = 254_{10}$

9. 1100000

$$
\begin{aligned}
1 &= 1 \\
(2 \times 1) \ + \ 1 &= 3 \\
(2 \times 3) \ + \ 0 &= 6
\end{aligned}
$$

$$(2 \times 6) \quad + \quad 0 \quad = \quad 12$$
$$(2 \times 12) \quad + \quad 0 \quad = \quad 24$$
$$(2 \times 24) \quad + \quad 0 \quad = \quad 48$$
$$(2 \times 48) \quad + \quad 0 \quad = \quad 96$$

$$1100000_2 = 96_{10}$$

10. 01000010

$$0 \quad = \quad 0$$
$$(2 \times 0) \quad + \quad 1 \quad = \quad 1$$
$$(2 \times 1) \quad + \quad 0 \quad = \quad 2$$
$$(2 \times 2) \quad + \quad 0 \quad = \quad 4$$
$$(2 \times 4) \quad + \quad 0 \quad = \quad 8$$
$$(2 \times 8) \quad + \quad 0 \quad = \quad 16$$
$$(2 \times 16) \quad + \quad 1 \quad = \quad 32$$
$$(2 \times 32) \quad + \quad 0 \quad = \quad 64$$

$$01000010_2 = 64_{10}$$

F. **Convert the given into binary number system :**

Ans. 1. 123

2	123	1
2	61	1
2	30	0
2	15	1
2	7	1
2	3	1
2	1	1
	0	

$$123_{10} = 1111011_2$$

2. 9123

2	9123	
2	4561	1
2	2280	1
2	1140	0
2	570	0
2	285	0
2	142	1
2	71	0
2	35	1
2	17	1
2	8	1
2	4	0
2	2	0
	1	0
	0	1

$$9123_{10} = 10001110100011_2$$

3. 876

2	876	
2	438	0
2	219	0
2	109	1
2	54	1
2	27	0
2	13	1
2	6	0
2	3	1
2	1	1
	0	

$$876_{10} = 1101101100_2$$

4. 1021

2	1021	
2	510	1
2	255	0
2	127	1
2	63	1
2	31	1
2	15	1
2	7	1
2	3	1
2	1	1
	0	1

$1021_{10} = 1111111101_2$

5. 571

2	571	
2	285	1
2	142	1
2	71	0
2	35	1
2	17	1
2	8	1
2	4	0
2	2	0
2	1	0
	0	1

$571_{10} = 1000111011_2$

6. 7328

2	7328	
2	3664	0
2	1832	0
2	916	0
2	458	0
2	229	0
2	114	1
2	57	0
2	28	1
2	14	0
2	7	0
2	3	1
2	1	1
	0	1

$7328_{10} = 1110010\ 100000_2$

7. 2312

2	2312	
2	1156	0
2	578	0
2	489	0
2	244	1
2	122	0
2	61	0
2	30	1
2	15	0
2	7	1
2	3	1
2	1	1
	0	1

$2312_{10} = 1111\ 01001000_2$

8. 271521

2	271521	
2	135760	1
2	67880	0
2	33940	0
2	16970	0
2	8485	0
2	4242	1
2	2121	0
2	1060	1
2	530	0
2	265	0
2	132	1
2	66	0
2	33	0
2	16	1
2	8	0
2	4	0
2	2	0
2	1	0
	0	1

$271521_{10} = 1000001001001010000 1_2$

9. 1871

2	1871	
2	935	1
2	467	1
2	233	1
2	166	1
2	83	0
2	41	1
2	20	1
2	10	0
2	5	0
2	2	1
2	1	0
	0	1

$1871_{10} = 10101010 1111_2$

10. 101572

2	101572	
2	50786	0
2	25393	0
2	12696	1
2	6348	0
2	3174	0
2	1087	0
2	543	1
2	271	1
2	135	1
2	62	1
2	31	0
2	15	1
2	7	1
2	3	1
	1	1
	0	1

$101572_{10} = 11111011110001 0 0_2$

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G. **Convert the given into hexadecimal number system :**

Ans. 1. $\overline{11}\,\overline{1010}$ = 3A   2. $\overline{1000}\overline{1}$ = 11

3. $111\overline{1111}$ = 7F   4. $11\overline{1000}$ = 38

5. $10\overline{0001}$ = 21   6. $\overline{0011}$ = 03

7. $1\overline{0000}$ = 10   8. $100\overline{1010}$ = 4A

9. $\overline{0000}\overline{1}$ = 01   10. $10\overline{1010}$ = 2A

Activity

Ans. Do yourself

2 More On Windows-10

Assessment

A. **Multiple Choice Questions :**

Ans. 1. b.   2. c.   3. a.   4. b.   5. d.   6. b.

B. **Fill in the blanks :**

Ans. 1. Three ways in which you can remove an unwanted application : **start menu, setting windows** and **control panel**.

2. The third way to uninstall an application is more traditional, because it uses the popular **control panel window**.

3. New Windows shortcuts use the **window key** combined with other keys to perform several actions.

4. Other useful shortcuts introduced in Windows 10 are the ones used for Windows **snapping**.

5. The **system tray** alerts from your computer like your Internet connection, or the volume level.

6. New Windows versions also include the **groove music app** previously known as Xbox Music.

C. **True and False :**

Ans. 1. F   2. F   3. T   4. T   5. F   6. T

D. **Answer the following questions :**

Ans. 1. There are three ways in which you can remove an unwanted application :
   • From the Start Menu
   • From the Settings window
   • From the Control Panel

2. Windows 10 features the new Mail app to help you handle your e-mails. You can access the Mail app directly from the Start Menu.
   If you are connected to Windows with a mail account, the Mail app will automatically configure itself to present you your e-mails. But, if you are using a local account, the Mail app will ask you to configure it.

3. Snapping windows was introduced in Windows 7 and allows you to automatically arrange your windows making it easier to work with multiple applications at the same time.

Although you can do this with your mouse by dragging the windows to each side of the screen, Windows 10 introduced shortcuts to perform this task.

4. The System Tray is another name given to the Notification Area, which we can find in the right-side of the Windows Taskbar. The System Tray features different types of notifications and alerts from your computer like your Internet connection, or the volume level.

5. Windows 10 offers multiple ways to work with your media files (music and videos). Some of the features needed to handle these files have been integrated into Windows to facilitate the way you access them.

6. Although you can have multiple media programs in your computer, Windows 10 includes several options for you to use.

   For music files, Windows includes the traditional Windows Media Player. However, new Windows versions also include the Groove Music app (previously known as Xbox Music).

7. To "pin" your favorite settings to the Start Menu, follow these steps :

   Step 1 : Open the Settings window from the Start Menu.

   Step 2 : In the Settings window, point to your favorite settings and right-click.

   Step 3 : On the small menu that appears, select Pin to Start.

   Step 4 : Click Yes on the screen to confirm the action. After this, you will see the Network & Internet app directly in the Start Menu.

   Unpin your Favorite Settings

   Alternatively, you can remove any pinned app from the Start Menu just by right-clicking on it and choosing Unpin from Start.

8. In Windows 10, a shortcut is simply an icon that directs you to an item (a document, application, or picture) that is located somewhere else in your computer. As the name implies, shortcuts make it easier for you to access that item by being more accessible (usually on the Desktop). Shortcuts are identified by a small arrow in the corner of the icon.

Activity
Ans. Do yourself

3 Formatting Cell

Assessment

A. Multiple Choice Questions :

Ans. 1. a.   2. d.   3. c.   4. b.

5. c.   6. b.   7. c.   8. b.

B. Fill in the blanks :

Ans. 1. MS Excel Cell can hold different types of data like **numbers**, **currency**, **dates**, etc.

2. By default, Excel aligns numbers to the **right** and text to the **left.**

3. **Data bars** opens a palette with different color data bars that you can apply to the cell.
4. **Color scales** opens a palette with different three- and two-colored scales that you can apply to the cell.
5. **Icon sets** opens a palette with different sets of icons that you can apply to the cell.
6. **New rule** opens the New Formatting Rule dialog box, where you define a custom conditional formatting.
7. **Clear rules** is used to remove the conditional formatting rules for the cell.
8. **Freezing panes** keeps the headings visible while you're scrolling through the worksheet.

C.   True and False :

Ans. 1. T   2. T   3. F   4. F
          5. T   6. F   7. T   8. F

D.   Answer the following questions :

Ans. 1.   MS Excel Cell can hold different types of data like Numbers, Currency, Dates, etc. You can set the cell type in various ways.

2.   Below are the various cell formats.
      General : This is the default cell format of cell.
      Number : This displays cell as number with separator.
      Currency : This displays cell as currency i.e., with currency sign.
      Accounting : Similar to currency, used for accounting purpose.
      Date : Various date formats are available under this like 17-09-2013, 17th-Sep-2013, etc.
      Time : Various Time formats are available under this, like 1.30PM, 13.30, etc.
      Percentage : This displays cell as percentage with decimal places like 50.00%.
      Fraction : This displays cell as fraction like 1/4, 1/2 etc.
      Scientific : This displays cell as exponential like 5.6E+01.

3.   **Alignment Options**
      1.   **Horizontal Alignment :** You can set horizontal alignment to Left, Centre, Right, etc.
      2.   **Vertical Alignment :** You can set Vertical alignment to top, Middle, bottom, etc.

4.   MS Excel enables you to merge two or more cells. When you merge cells, you don't combine the contents of the cells. Rather, you combine a group of cells into a single cell that occupies the same space.

5.   **Wrap Text and Shrink to Fit**
      If the text is too wide to fit the column width but don't want that text to spill over into adjacent cells, you can use either the Wrap Text option or the Shrink to Fit option to accommodate that text.

6.   If you set up a worksheet with row or column headings, these headings

will not be visible when you scroll down or to the right. MS Excel provides a handy solution to this problem with freezing panes. Freezing panes keeps the headings visible while you're scrolling through the worksheet.

7. MS Excel 2010 Conditional Formatting feature enables you to format a range of values so that the values outside certain limits, are automatically formatted.

8. **The various Conditional Formatting options are.**

Highlight Cells Rules	Top/Bottom Rules
Data Bars	Color Scales
Icon Sets	New Rule
Clear Rule	Manage Rule

Activity
Ans. Do yourself

4 Creating Formulas in Excel 2010

Assessment

A.   Multiple Choice Questions :
Ans. 1. c.   2. c.   3. a.   4. b.
       5. a.   6. b.   7. c.

B.   Fill in the blanks :
Ans. 1.   Without **formula**, worksheet will be just simple tabular representation of data.
       2.   For creating a formula you need to type in the **formula bar**.
       3.   In **Mixed cell reference** only one of the address parts is absolute (for example, $A5 or A$5).
       4.   An **Absolute Reference** uses two dollar signs in its address: one for the column letter and one for the row number.
       5.   **LEFT** returns a specified number of characters from the start of a supplied text string.
       6.   **COUNTIF** returns the number of cells that satisfies a given criteria.
       7.   **ABS** returns the absolute value of a supplied number.

C.   True and False :
Ans. 1. F   2. T   3. T   4. T
       5. T   6. T   7. F

D.   Answer the following questions :
Ans. 1.   Formulas are the bread and butter of worksheet. Without formula, worksheet will be just simple tabular representation of data. A formula consists of special code, which is entered into a cell. It performs some calculations and returns a result, which is displayed in the cell.
       2.   **Elements of Formulas**
            A formula can consist of any of these elements :

- Mathematical operators, such as + (for addition) and * (for multiplication)

  Example : = A1+A2 Adds the values in cells A1 and A2.
- Values or text

Example : = 200*0.5 Multiplies 200 times 0.5.

This formula uses only values, and it always returns the same result as 100.
- Cell references (including named cells and ranges)

  Example : = A1 = C12 Compares cell A1 with cell C12.

If the cells are identical, the formula returns TRUE; otherwise, it returns FALSE.
- Worksheet functions (such as SUM or AVERAGE)

  Example : = SUM(A1:A12) Adds the values in the range A1:A12.

3. **Functions in Formula**

Many formulas you create use available worksheet functions. These functions enable you to greatly enhance the power of your formulas and perform calculations that are difficult if you use only the operators. For example, you can use the LOG or SIN function to calculate the Logarithm or Sin ratio. You can't do this complicated calculation by using the mathematical operators alone.

4. Using the Pointing method to supply the cell addresses for formulas is often easier and more powerful method of formula building. When you are using built-in functions, you click the cell or drag through the cell range that you want to use when defining the function's arguments in the Function Arguments dialog box.

5. Most formulas you create include references to cells or ranges. These references enable your formulas to work dynamically with the data contained in those cells or ranges.

6. **Relative Cell References**

The row and column references can change when you copy the formula to another cell because the references are actually offsets from the current row and column. By default, Excel creates relative cell references in formulas.

Absolute Cell References

The row and column references do not change when you copy the formula because the reference is to an actual cell address. An absolute reference uses two dollar signs in its address: one for the column letter and one for the row number (for example, A5).

7. **Mixed Cell References**

Both the row or column reference is relative and the other is absolute. Only one of the address parts is absolute (for example, $A5 or A$5).

8. **Built In Functions**

MS Excel has many built in functions, which we can use in our formula. To see all the functions by category, choose Formulas Tab » Insert Function. Then Insert function Dialog appears from which we can choose the function.

9. **TRIM :** Removes duplicate spaces, and spaces at the start and end of a text string.

   CONCATENATE : Joins together two or more text strings.

   LEFT : Returns a specified number of characters from the start of a supplied text string.

   MID : Returns a specified number of characters from the middle of a supplied text string

   RIGHT : Returns a specified number of characters from the end of a supplied text string.

   LEN : Returns the length of a supplied text string

   COUNTIF : Returns the number of cells (of a supplied range), that satisfies a given criteria.

10. **Math & Trig**

    ABS : Returns the absolute value (i.e. the modulus) of a supplied number.

    SIGN : Returns the sign (+1, -1 or 0) of a supplied number.

    SQRT : Returns the positive square root of a given number.

    MOD : Returns the remainder from a division between two supplied numbers.

Activity

Ans. Do yourself

5 Advanced Features of Excel-2010

Assessment

A. Multiple Choice Questions :

Ans. 1. c. 2. c. 3. d. 4. a.
5. d. 6. a. 7. c.

B. Fill in the blanks :

Ans. 1. **Fittening data** in MS Excel refers to displaying only the rows that meet certain conditions.

2. **Named Styles** make it very easy to apply a set of predefined formatting options to a cell or range.

3. MS Excel supports various types of graphic objects like **Shapes Gallery**, **Smart Art**, **Text Box**, and **Word Art**.

4. **Charts** (also known as graphs) have been an integral part of spreadsheets.

5. An **Area** chart emphasizes the magnitude of change over time.

6. An **XY Scatter** chart shows the relationships among the numeric values in several data series.

C. True and False :

Ans. 1. T 2. T 3. F 4. T 5. F 6. T

D. Answer the following questions :

Ans. 1. Filtering data in MS Excel refers to displaying only the rows that meet certain conditions. (The other rows gets hidden.)

2. **Using Multiple Filters**
   You can filter the records by multiple conditions i.e., by multiple column values. Suppose after size 36 is filtered, you need to have the filter where color is equal to coffee. After setting filter for Shoe Size, choose Color column and then set filter for color.

3. Sorting data in MS Excel rearranges the rows based on the contents of a particular column. You may want to sort a table to put names in alphabetical order. Or, may be you want to sort data by Amount from smallest to largest or largest to smallest.

4. With MS Excel 2010 Named styles make it very easy to apply a set of predefined formatting options to a cell or range. It saves time as well as make sure that look of the cells are consistent.

5. A Style can consist of settings for up to six different attributes :
   • Number format
   • Font (type, size, and color)
   • Alignment (vertical and horizontal)
   • Borders
   • Pattern
   • Protection (locked and hidden)

6. **Creating Custom Style in MS Excel**
   We can create new custom style in Excel 2010. To create a new style, follow these steps :
   • Select a cell and click on Cell styles from Home Tab.
   • Click on New Cell Style and give style name.
   • Click on Format to apply formatting to the cell.

7. Smart Art allows users to add text to predefined art designs. Each component of the smart Art can be edited individually. Word Art is a list of pre-defined word Art styles that can be applied to the selected Text.

8. **Charts**
   A chart is a visual representation of numeric values. Charts (also known as graphs) have been an integral part of spreadsheets. Charts generated by early spreadsheet products were quite crude, but they have improved significantly over the years.

9. **Column :** Column chart shows data changes over a period of time or illustrates comparisons among items.
   Bar : A bar chart illustrates comparisons among individual items.

10. **Pie :** A pie chart shows the size of items that make up a data series, proportional to the sum of the items. It always shows only one data series and is useful when you want to emphasize a significant element in the data.
    Doughnut : Like a pie chart, a doughnut chart shows the relationship of parts to a whole; however, it can contain more than one data series.

Activity
Ans. Do yourself

Assessment

A. Multiple Choice Questions :

Ans. 1. b. 2. d. 3. c. 4. d. 5. d. 6. d.

B. Fill in the blanks :

Ans.
1. There are two parts to the Flash workspace which is at the centre of the screen: **stage area** and **paste board**.
2. Only objects within the **stage area** are included in a movie.
3. The **drawing** tools are the standard drawing tools that most graphics programs provide.
4. **Animation** that involve objects orbiting around a point can be done using fixed points.
5. **Timeline** effects allow you to add effects to your animations to make them look more lifelike.

C. True and False :

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

D. Answer the following questions :

Ans.
1. Stage area is the white area in flash where objects are included in a movie.
2. • The **PASTEBOARD** which is the grey area that surrounds the stage.
   • The **PASTEBOARD** is mainly used to allow objects to move onto the stage then off.
3. **The Properties Inspector**
   The PROPERTIES INSPECTOR is one of the most used sections of the FLASH screen.
4. **The Panels**
   Flash provides all the tools needed to create animations in a series of panels that are displayed around the stage and work areas. There are basically five different panel sections.
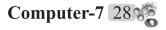5. Motion guides allow you to set the path that an object takes in an animation. To illustrate this a beetle race animation will be created. The race track and the beetles have been prepared for you.
6. Timeline effects allow you to add effects to your animations to make them look more lifelike.
   Some examples include added a drop shadow, fade in or out, or a blur effect.
7. All 3-dimensional objects cast a shadow. Timeline effects allow you to easily add a shadow to an object.
8. Transform effects allow you to add some motion as well as applying an effect. Let's move the beetle across the screen and make it fade to give the impression that it is moving away from the race track.

Activity

Ans. Do yourself

7　More On Flash

Assessment

A.　Multiple Choice Questions :

Ans. 1. d.　　　2. d.　　　3. d.　　　4. c.　　　5. b.

B.　Fill in the blanks :

Ans. 1.　The portion of layer being covered can only be seen though whatever shape is drawn in the mask layer is called **masking**.

2.　Movie clips do not have to be **key frame** animations.

3.　You can also **Right + Click** on the layer name and select MASK from the SHORTCUTS menu.

4.　You can use the shape tools such as the **Oval** and **Rectangle tools** to be the mask shape.

5.　The **Image** is indented under the MASK layer to indicated that it is masked by the MASK layer.

C.　True and False :

Ans. 1. F　　　2. T　　　3. F　　　4. T　　　5. T

D.　Answer the following questions :

Ans. 1.　Movie clips are an important feature of Flash. You can create an animated movie clip and use it many times within other animations without affecting the size of the file.

2.　The LIBRARY panel can be used as a zoom of the symbol as you are creating it. Click on the BIRD symbol to see it. If the LIBRARY panel is not open press CTRL+L to open it.

3.　The ONION SKIN image is just a watermark on the screen. It cannot be altered.

4.　Motion tween is an animation for moving an object from one place to another.

5.　Some interesting and effective animations can be created using a layer to cover (or mask) part of another layer. The portion of layer being covered can only be seen though whatever shape is drawn in the mask layer. The process is called MASKING.

Activity

Ans. Do yourself

8　Introduction to Photoshop

Assessment

A.　Multiple Choice Questions :

Ans. 1. c.　　　2. d.　　　3. d.　　　4. d.　　　5. c.　　　6. d.

B.　Fill in the blanks :

Ans. 1.　**Adobe photoshop** is an advanced photo editing and graphics program that allows you to create or edit photo quality images

2.　The **palette** can be displayed as a single column or with the tools in two columns.

3. When you select the EDIT MARQUEE tool you can press SHIFT+M to toggle between the **Rectangle Marquee** and the **Elliptical Marque**.
4. The **Lasso tool** allows you to select freehand areas of a sketch.
5. The **Polygon Lasso tool** allows you to select sections of an image by dragging straight lines to form a polygon.
6. There are three LASSO tools. The normal **Lasso tool**, **Polygon Lasso** and the **Magnetic Lasso tool**.

C. True and False :

Ans. 1. T   2. T   3. F   4. T
5. F   6. T   7. T

D. Answer the following questions :

Ans. 1. Adobe Photoshop is an advanced photo editing and graphics program that allows you to create or edit photo quality images.
2. **The Tools Palette**
The TOOLS palette at the left of the screen provides general drawing and photo adjustment tools. The palette can be displayed as a single column or with the tools in two columns.
3. Brush tool is used to create free hand drawing.
4. Custom shape tool are in built object/shape to use them simple select and drag a shape on the screen.
5. **The Palette Group**
At the right of the screen are a series of palettes that contain many of Photoshop's operating tools and features. Some of these palettes are open, some behind the opened palettes and some are collapsed.
6. Swatches palette is used to select different colours.
7. Rectangular marquee tool works is used to select an image in Rectangle box form.
8. Elliptical marquee tool is used to select an image in oval form.
9. The LASSO tools allow you to make more detailed area selections. There are three LASSO tools. The normal LASSO TOOL that you may have used in paint programs before, the POLYGON LASSO TOOL and the MAGNETIC LASSO TOOL.
10. The POLYGON LASSO TOOL allows you to select sections of an image by dragging straight lines to form a polygon.

Activity

Ans. Do yourself

9 Using Photoshop

Assessment

A. Multiple Choice Questions :

Ans. 1. d.   2. d.   3. a.   4. a.   5. a.

B. Fill in the blanks :

Ans. 1. The **Sharpen** tool sharpens soft edges to increase the clarity or focus.
2. The **Smudge** tool picks up the colour where your cursor is and pushes it in

the direction that you drag so that colours run into one another.

3. The **Sponge** tool changes the saturation or vividness of colours.

4. You can increase the flow if you want the **Sponge** effect to be more pronounced.

5. Photoshop offers a range of tools that allow you to adjust the **colour** and **texture** of images and photographs.

C. True and False :

Ans. 1. T   2. T   3. F   4. T

D. Answer the following questions :

Ans. 1. The LIQUIFY tool allows you to modify the appearance of an object.

2. **The Forward Warp Tool**

The FORWARD WARP TOOL pushes pixels (screen units) forward as you drag the mouse.

3. The RECONSTRUCTION TOOL gradually rebuilds parts of your image back to its original state. It is very handy if you change the image more than you intended and you just want sections to be a little less pronounced.

4. You can spin part of an image either clockwise or counter clockwise.

5. **The Blur Tool**

The BLUR TOOL softens hard edges in an image to reduce its details.

6. **The Sharpen Tool**

The SHARPEN TOOL has the opposite effect to the BLUR tool. It sharpens soft edges to increase the clarity or focus.

7. **The Smudge Tool**

The SMUDGE TOOL picks up the colour where your cursor is and pushes it in the direction that you drag so that colours run into one another.

8. **The Sponge Tool**

The SPONGE TOOL changes the saturation or vividness of colours.

Activity

Ans. Do yourself

10 Internet

Assessment

A. Multiple Choice Questions :

Ans. 1. b.   2. d.   3. c.   4. d.   5. b.

6. d.   7. c.   8. c.   9. d.

B. Fill in the blanks :

Ans. 1. **Gopher** is used to search, retrieve, and display documents on remote sites.

2. **WWW** offers a way to access documents spread over the several servers over the internet.

3. **Video conferencing** is a method of communicating by two-way video and audio transmission with help of telecommunication technologies.

4. **Hosting Isps** offers e-mail, and other web hosting services such as virtual

machines, clouds etc.

5. Dial-up connection uses either of the following protocols : **SLIP** and **PPP**.
6. There are two techniques to deliver ISDN services : **BRI** and **PRI**.
7. **DSL** is a form of broadband connection as it provides connection over ordinary telephone lines.
8. **Wireless Increment** connection makes use of radio frequency bands to connect to the internet and offers a very high speed.
9. There are two types of satellite internet connection : **one way connection** or **two way connection**.

C. True and False :

Ans. 1. T   2. T   3. T   4. T   5. T
       6. T   7. T   8. T   9. T

D. Answer the following questions :

Ans. 1. Internet is defined as an Information super Highway, to access information over the web.
   • Internet is a world-wide global system of interconnected computer networks.

2. • The origin of Internet devised from the concept of Advanced Research Project Agency Network (ARPANET).
   • ARPANET was developed by United States Department of Defense.
   • Basic purpose of ARPANET was to provide communication among the various bodies of government.

3. **Advantages :** Internet allows us to communicate with the people sitting at remote locations.
   • One can surf for any kind of information over the internet.
   • Internet provides concept of electronic commerce.

4. **Information Retrieval Services**
   There exist several information retrieval services offering easy access to information present on the internet.
   File Transfer Protocol (FTP)
   Enable the users to transfer files.
   Archie
   It's updated database of public FTP sites and their content. It helps to search a file by its name.
   Gopher
   Used to search, retrieve, and display documents on remote sites.

5. **World Wide Web (WWW)**
   WWW is also known as W3. It offers a way to access documents spread over the several servers over the internet. These documents may contain texts, graphics, audio, video, hyperlinks. The hyperlinks allow the users to navigate between the documents.

6. **Video Conferencing**
   Video conferencing or Video teleconferencing is a method of communicating by two-way video and audio transmission with help of telecommunication technologies.

7. **Internet Service Providers (ISP)**

   Internet Service Provider (ISP) is a company offering access to internet. They offer various services:
   - Internet Access
   - Domain name registration
   - Dial-up access
   - Leased line access

   ISP Types are : Access Providers, Mailbox Provider, Hosting Isps, Virtual Isps, Free Isps, Connection Types.

8. **Dial-up Connection**

   Dial-up connection uses telephone line to connect PC to the internet. It requires a modem to setup dial-up connection. This modem works as an interface between PC and the telephone line.

9. **ISDN**

   ISDN is acronym of Integrated Services Digital Network. It establishes the connection using the phone lines which carry digital signals instead of analog signals.

   DSL

   DSL is acronym of Digital Subscriber Line. It is a form of broadband connection as it provides connection over ordinary telephone lines.

10. **Cable TV Internet Connection**

    Cable TV Internet connection is provided through Cable TV lines. It uses coaxial cable which is capable of transferring data at much higher speed than common telephone line.

11. **Satellite Internet Connection**

    Satellite Internet connection offers high speed connection to the internet. There are two types of satellite internet connection: one way connection or two way connection.

12. **Wireless Internet Connection**

    Wireless Internet Connection makes use of radio frequency bands to connect to the internet and offers a very high speed. The wireless internet connection can be obtained by either WiFi or Bluetooth.

Activity

Find the words in the maze :

Ans.

G	O	O	G	L	E	W	A
I	N	T	E	R	N	E	T
A	L	S	M	B	G	B	Y
S	I	U	A	I	C	S	A
D	N	Y	I	N	H	I	H
W	E	B	L	G	A	T	O
M	E	D	I	A	T	E	O