

**A HAND BOOK OF**

**TEACHER'S BOOK**

**8**



**SOUVENIR**

# ICT CONNECT – BOOK 8

## Chapter - 1

### A. Answer the following questions:

1. Pencil and Brush tools let you create artwork.
2. The two tools used for creating fills are the Brush tool and the Paint bucket tool.
3. With Free Transform tool, it is possible to rotate, scale, or distort the shape.
4. Selection and Zoom/Hand tools help you to modify or view your artwork.
5. Flash is a program that has been developed by Macromedia for creating interactive and animated online content

### B. Fill in the blanks:

1. Brush, paint bucket
2. Text
3. Pencil, Brush
4. line, Pencil
5. Ctrl+S
6. Ctrl+N

### Projects

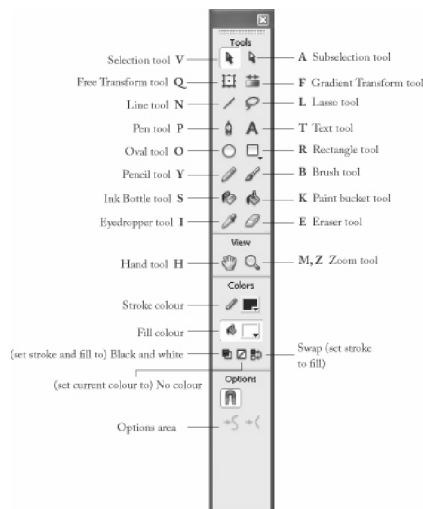
Do it yourself

### Lab Activity

Do it yourself

### Activity Time

Label any ten tools of your choice and write their keyboard shortcuts:



### A. Answer the following questions:

#### 1. Introduction to Flash

Whether you are making a website and want to show some text or picture movement on it or want to make an animation film, you can do all such kind of work using Flash which is the most popular animation software today.

2. a. Auto Kerning
- b. Character position
- c. Font size
- d. Style (bold/italic)
- e. Character

#### 3. Types of Symbols

There are three types of symbols:

- a. Graphic: Graphic is the simplest type of symbol. It allows you to convert static object into a graphic so that it may be reused.
  - b. Buttons: Buttons are used for navigating between the scenes or documents. They are the most important part in symbols. They are used in games, web pages, presentation etc.
  - c. Movie Clips: Movie Clips are the usable clips of animation. You may call movie clip as a mini movie inside a main movie which has sounds, controls of other clips.
- You may convert object over the stage of symbol.
  - Select Insert menu for new symbol.
- or
- Select new symbol from the Library options menu.
  - Create any object by using drawing tools.
  - After finishing, click the Back button at the left side over the information bar.

or

- Click the name of the scene in the information.

4. Symbols are reusable elements which you use with a document. Symbols may include graphics, video clips, sound files, buttons, movies or fonts. When you create a symbol, the symbol is stored in the file's library. Practically speaking, you will find that almost all that you find in a Flash movie may be defined as a symbol. When you place a symbol on the Stage by dragging it from the library, you simply create an instance of that particular symbol.

Symbols reduce file size because, irrespective of how many instances of a symbol you create, Flash stores the symbol in a file only once. It is a good idea to use animated symbols, or otherwise, for every element which appears in a document, more than once. Each instance may be modified in terms of position, brightness, alpha, rotation, scale, tint and blend plus all the filters. However, you may edit the master symbol and update all instances, all at once.

These symbols may also be moved across files, *i.e.* from one file library to another and all associated graphics, buttons, movies, video clips and sound, etc. move along. You need not have to move each of them individually.

5. Graphic symbols are used as static images for creating the pieces of animation that are tied to the Timeline of the main movie. Graphic symbols operate in sync with the movie's Timeline. Interactive controls and sounds won't work in a graphic symbol's animation sequence.
6. We use button symbols to create interactive

buttons in the movie that respond to mouse clicks, roll overs or other actions. You define the graphics associated with different button states, and then assign actions to a button instance, by using a language which is known as Action Script. We shall learn Action Script in the next class.

7. We use Movie Clip symbols to create reusable pieces of animation. Movie clips have their own multi-frame Timeline that plays independently of the main movie's Timeline — think of them as mini-movies inside a main movie which may contain interactive controls, sounds, and even other movie clip instances. You may also place movie clip instances inside the Timeline of a button symbol for creating animated buttons.
8. Layers are used for placing graphics on top or below other graphics. Each layer is a concurrent Timeline where an animation may play. In Flash, layers provide a visual tool to control stacking order for Drawing Objects, groups, or symbols.

#### The True Purpose of Layers

In Flash, multiple layers are actually multiple Timelines. The drawing objects contained in the layers are stacked above or below other layers, but their primary purpose is to provide you with separate Timelines in which you may control animations independently. To create a new layer, select Insert > Timeline > Layer or click over the Insert Layer Button at the bottom left of the Timeline.

If you want multiple items to animate simultaneously, you have to put every object in its own layer.

9. Motion Tween displays the motion of an object between more than two keyframe.
10. You may create shape-tweened animations by using shape option from the tween panel of the properties inspector.
11. Frame-by-frame animation changes the contexts of each frame. For creating a frame-by-frame animation, you need to define every frame as a Keyframe.

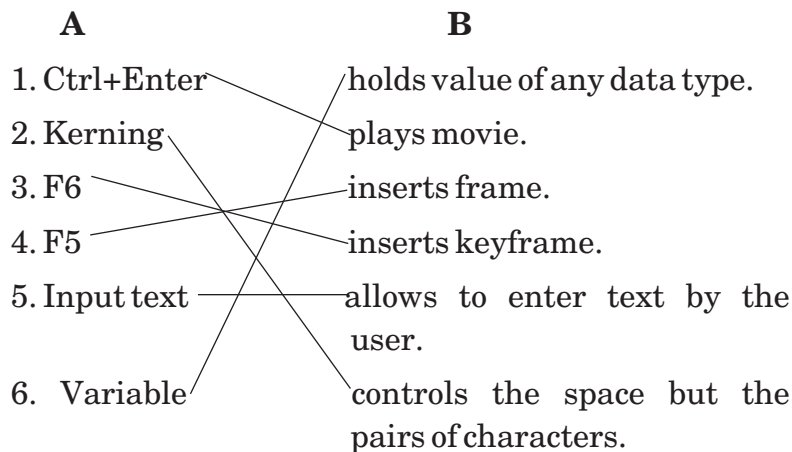
**B. Fill up the blanks:**

1. Timeline      2. stacking      3. layer
4. Symbols      5. F8              6. icon
7. Flash, library
8. library, instance
9. timeline

**C. Write true (T) or false (F):**

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

**D. Match the following:**



**E. Identify the symbols:**

- a. Brush    b. Paint Bucket    c. Zoom    d. Hand

**F. Identify the tools:**

- a. Selection                      b. Free transform

**G. Tick (✓) the correct option from the given choices:**

1. b      2. c      3. a      4. a      5. a      6. d      7. a  
8. b      9. b      10. a      11. c

**Project**

Do it you self

**Chapter - 3**

**A. Answer the following questions:**

1. A variable is a named memory location. They are programming elements that can change during program execution. Data that needs to be stored in memory and accessed at a later time are stored in variables. Instead of referring to the memory location by the actual memory address, you refer to it with a variable name.

Variables are declared as follows :

Dim a as Integer

They can also be initialized at the time of declaration as follows:

Dim a as Integer = 10

Constants are very similar to variables. The main difference is that the value contained in memory cannot be changed once the constant is declared. When you declare a constant, its value is also specified and this value cannot be changed during program execution.

2. A structure allows you to create your own custom data types and it contains one or more members that can be of different data types.

3. There are times when we may want a property to be read-only – such that it can't be changed. This is where read-only properties come into the picture. A Read Only property is one which includes only the get accessor, no set accessor.
4. Boxing is the implicit conversion of a value type to a reference type or to any interface type. This is possible due to the principle of type system unification where everything is an object.

**B. Fill in the blanks:**

- |            |               |              |
|------------|---------------|--------------|
| 1. myriad  | 2. variable   | 3. variables |
| 4. scoping | 5. boolean    | 6. heap      |
| 7. classes | 8. properties |              |

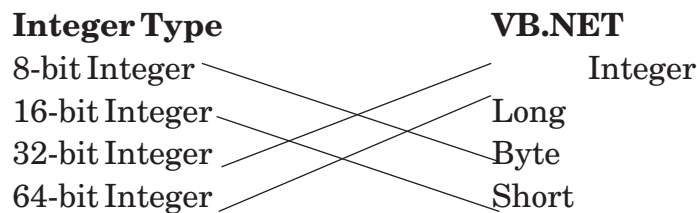
**C. Write T for True and F for False:**

- |      |      |      |      |
|------|------|------|------|
| 1. T | 2. T | 3. T | 4. F |
| 5. T | 6. T | 7. T | 8. T |

**D. Tick or Cross:**

- |      |      |      |      |      |
|------|------|------|------|------|
| 1. ✓ | 2. ✓ | 3. ✓ | 4. ✓ | 5. ✓ |
|------|------|------|------|------|

**E. Match the following:**



**Project**

Write short notes on the following:

- (i) **Object Type** Object type or reference type variables are those, which are allocated storage space in the heap. Reference type objects can be null.
- (ii) **Class Type** Custom data types are available in .NET framework in the form of classes or class type. It is nothing but a set of data and related behavior that is defined by the developer.
- (iii) **Overriding** Class inheritance causes the meth-



ods and properties present in the base class also to be derived into the derived class. There might arise a situation wherein you would like to change the functionality of an inherited method or property.

**(iv) Get Accessor** The execution of the get accessor is equivalent to reading the value of the field. The following is a get accessor that returns the value of a private field name:

## Chapter - 4

### A. Answer the following questions:

1. To actually execute Java programs, they developed Java interpreters that ran on various machines and under various operating systems. Thus, Java became a language that would execute on a number of systems and now has implementations for virtually all common computers and operating systems.
2. A Java applet is a program designed to be embedded in a Web page. Applets can be quite complex; they are not limited to simple animations or single windows.
3. By contrast, Java applications are full-featured programs that run on your computer and have full access to its resources. They can read, write, create, and delete files and access any other computer on the network.
4. The advantages of Java are substantial for both simple applications and for complex server code.
  1. Java is object oriented. Java requires that you write 100 percent object-oriented code. As we will see, object-oriented (OO) programs are easier to write and easier to maintain than the spaghetti code that is often the result of programming in other languages.

2. Java works on most platforms. While C/C++ programs are platform specific, Java binary byte code runs identically on most Unix machines, Macintoshes, and PC's running Windows and Linux.
3. Java is network-enabled. It is trivially simple to write codes in Java that work across networks. The use of URLs, TCP sockets, and remote classes is essentially built into the language.
5. When Java was first released in 1996, it was called Version 1.0. The following year, Java 1.1 was introduced which provided a more sophisticated and flexible way of processing user events. In 1999, Java 1.2 was released, and dubbed "Java 2". Since then, additions to Java have focused on various additional packages for the enterprise, the micro device and so forth.
6. All Java source files have the .java extension. Note that since this is a 4-character extension, this qualifies as a long filename under Windows , and all of the tools you use for handling Java programs must be able to deal with long filenames.  
When you compile a Java program, it produces one or more files having the ".class" extension which you can then operate on either directly with the java interpreter or with the applet viewer program.

**B. Fill in the blanks:**

1. java
2. operating systems
3. web pages
4. embedded
5. memory

**C. Write T for True and F for False:**

- 1.T    2.T    3.T    4.T    5.T    6.T

**D. Match the following:**

<b>Data Types</b>	<b>Contents</b>
1. boolean	32-bit integer
2. byte signed	32-bit floating point
3. short	16-bit integer
4. int	64-bit integer
5. long	8-bit integer
6. float	16-bit characters
7. double	True or false
8. char	64-bit floating point
9. String	16-bit character

**Activity Time**

Write the functions of the following characters in

Java:

- '\n' = new line
- '\r' = carriage return
- '\t' = tab character
- '\b' = back space
- '\f' = from feed
- '\0' = null character
- '\"' = double quote
- '\"' = single quote
- '\\' = back slash

**Chapter - 5**

**A. Answer the following questions:**

1. The <meta> tag information is not directly displayed when the page is rendered on the browser. Rather, this is used for the author of the HTML page to record information related to this page.

2. The <body> tag includes the HTML body of the document. Everything inside the <body> tag (other than those within the <script> tag) is displayed on the browser inside the main browser window.
3. You may be wondering why heading tags are necessary at all since you could achieve the same effect by specifying a larger font or defining a css class. The main reasons are:

Heading tags will be recognised by browsers which don't recognise style sheets (or use a user-defined style sheet).

Heading tags are used by search engines for identifying words which are more important than the rest of the page text. The theory is that headings will sum up the topic of the page, so they are counted as important keywords.
4. By entering <br> in the middle of text skips the proceeding text to the start of the next line.
5. With the base font tag, you will be able to set the default font for your web page. We highly recommend specifying a basefont if you plan to use any font with HTML.
6. URL of any image file available at particular place, could be used as background.
7. A definition list provides a list of terms and definitions. Definition lists require three elements to construct:
8. (What you see is what you get)

**B. Fill up the blanks:**

- |          |             |            |
|----------|-------------|------------|
| 1. copy  | 2. web page | 3. HTML    |
| 4. Media | 5. BR       | 6. in HTML |

**C. Write T for True and F for False:**

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

**D. Tick the correct option from the given choices:**

- 1.d        2.a    3.b    4.a    5.a    6.a    7.a  
8.d        9.a    10.a    11.a    12.a    13.a    14.c  
15.d        16.b    17.a    18.c    19.b    20.a    21.a

## Chapter - 6

**A. Answer the following questions:**

1. A small set of information becomes data; this set of information helps make a decision. Data is always some useful information.
2. Database management system
3. DBMS is a program that stores, retrieves and modifies data in the database on request.

**Types of DBMS**

DBMS types are based upon their management of database structures. Types of DBMS are entirely dependent upon how the database is structured by that particular DBMS.

1. Hierarchical
2. Network
3. Relational
4. Types of Relationships

1. **One to One:** One department is headed by one person. Only one person can head a department.

- 2. One to Many:** One salesman can serve in only one city but a city can have many salesmen.
- 3. Many to Many:** A teacher can teach many students and a student can many teachers.
5. A table is a collection of rows and columns. It has two dimensional structures with rows and columns. A table is also called as an entity. A column is also called an attribute or a field. A row is also called a record or a tuple. A cell is the intersection of a row and a column.
6. A. Object-based logical model  
Important object-based logical models are
1. Entity relationship model
- B. Record-based logical model  
Important record-based logical models are
1. Hierarchical data model  
Example for Record-based data model – Hierarchical data model
  2. Network data model  
Example for Record-based data model – Network data model
  3. Relational data model  
In relational data model, data exists in two-dimensional tables known as relations. A relation (table) consists of unique attributes (columns) and tuples (rows).
7. The software application that enables users to store the data is known as a database. In database architecture, there are different implementations and theories in order to store physical data. The

database which stores data in the tables that have relationships with other tables in the database is called RDBMS or Relational Database Management System. However, in DBMS or Database Management System, there are no relationships among tables.

**B. Fill in the blanks:**

1. data
2. column
3. Database, mini world
4. as foreign key
5. two

**C. Tick the correct option from the given choices:**

- 1.a    2. a    3.b    4.c    5.a  
6.a    7.a    8.b    9.a

**Activity Time**

Do it yourself

**Lab Activity**

Do it yourself

**Chapter - 7**

**A. Answer the following questions:**

1. Self
2. Network management means different things to different people. In some cases, it involves a solitary network consultant monitoring network activity with an outdated protocol analyzer. In other cases, network management involves a distributed database, autopolling of network devices, and high-end workstations generating

real-time graphical views of network topology changes and traffic. In general, network management is a service that employs a variety of tools, applications, and devices to assist human network managers in monitoring and maintaining networks.

3. self

4. In the past, Internet safety generally referred to threats to computer hardware or identity theft, but now with the Internet becoming more and more social, privacy has become a significant safety concern. Privacy violations can especially affect our mental and physical well-being, thus creating distress or harm from the following:

- Undesired advertisements that can be annoying
- Embarrassing or humiliating photos or videos
- Legal entanglements from libelous posts
- Cyber-harassment or cyber-stalking
- Identity theft
- Offline or real-world crimes

5. Self

6. The best defense against Internet threats is good antivirus software, or anti-malware as it is sometimes known. Antivirus software can protect you from infected email attachments, corrupt websites, Internet worms, and spyware. There are a ton of antivirus products on the market, so figuring out what you need, can become confusing and overwhelming. Therefore, we will outline the things you need to consider to give you a better idea of what you should be looking for in an antivirus program.

The protection you obtain should include the following three components :

Antivirus : Specifically protects against viruses.

Anti-spyware : Protects against malicious software that may be gathering your information



without your knowledge.

Firewall : Screens out threats that try to reach your computer over the Internet. Some security suites offer a lot of additional protections, but these are the three main components you will need.

7. Self
8. Self
9. Self
10. Before sending any sensitive or financial information online, you want to know that you are communicating with a secure site. Secure sites make sure all information you send is encrypted, or protected, as it travels across the Internet. The https address heading and your browser's security symbol are two signs indicating you are on a secure site.

**B. Fill up the blanks:**

- |              |                   |
|--------------|-------------------|
| 1. phishing  | 2. internet       |
| 3. different | 4. network        |
| 5. LAN       | 6. 256            |
| 7. IT, cost  | 8. VPDN, customer |

**C. Write true (T) or false (F):**

1. T    2. T    3. T    4. T    5. T

**D. Tick the correct option from the given choices:**

1. a    2. a    3. b    4. b    5. a    6. a    7. a

**Activity Time**

Do it yourself

### A. Answer the following questions:

1. The familiar Start menu is back, with some improvements, including a space you can personalize with your favourite apps, programs, people and websites.

To get to the Start menu, select Start in the lower-left corner of the taskbar. You can also open the Start menu by pressing the Start button located on your keyboard or device.

2. Click on your account name to change your account picture, lock your device or sign out of your account.
3. Click Power to sleep, shut down or restart your device
4. Click All Apps to see all your apps and programs listed alphabetically. Are you looking for a specific app? Just type it in the search box.
5. Search across your device, your cloud storage on OneDrive, and across the Web at the same time. Simply open the Start menu and type in the search box — Windows search will do the rest. You can also open search directly from the taskbar; click Search and start typing.

### B. Fill up the blanks:

1. interact
2. desktop
3. two
4. feedback
5. space
6. app

## Multiple Choice Question

### Task-1

- |       |       |       |       |
|-------|-------|-------|-------|
| 1. a  | 2. d  | 3. a  | 4. a  |
| 5. a  | 6. a  | 7. c  | 8. b  |
| 9. b  | 10. a | 11. b | 12. b |
| 13. a | 14. a | 15. a | 16. a |
| 17. b | 18. a | 19. b | 20. a |
| 21. c | 22. a | 23. c | 24. c |
| 25. b | 26. b | 27. a | 28. b |
| 29. b | 30. a |       |       |

### Task-2

- |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 1. a  | 2. c  | 3. b  | 4. d  | 5. a  | 6. b  | 7. b  |
| 8. a  | 9. b  | 10. b | 11. a | 12. b | 13. c | 14. b |
| 15. a | 16. a | 17. a | 18. b | 19. b | 20. a | 21. b |
| 22. a | 23. a | 24. b | 25. c | 26. c | 27. b | 28. d |
| 29. a | 30. a | 31. b | 32. a |       |       |       |



National Cyber Olympiad

- |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|
| 1. c  | 2. d  | 3. c  | 4. b  | 5. c  | 6. c  | 7. b  |
| 8. d  | 9. a  | 10. a | 11. d | 12. a | 13. a | 14. a |
| 15. a | 16. a | 17. c | 18. a |       |       |       |

