



**[SAMPLE PAPER-1 \(Based on Database/Open source/Flash/Networking/HTML\)](#)**

**Database**

**1) Define the following term with example:**

Tuple	A record in a relation /Table is called tuple
Relation	Table in a database is called relation where data is organized in rows and columns
Cardinality	No of records /Rows in a Relation is called Cardinality
Degree	No of Fields /Attribute in a Relation is called Degree
Primary Key	The PRIMARY KEY constraint uniquely identifies each record in a table.  Primary keys must contain unique values.  A primary key column cannot contain NULL values.  Each table can have only ONE primary key.
Foreign Key	A foreign key is a field in a <u>relational table</u> that matches the primary key column of another table. The foreign key can be used to cross- <u>reference tables</u>
Alternate Key	An alternate key is similar to a primary key. It accepts null values; where as the primary key does not.
Candidate Key	A candidate key is a combination of attributes that can be uniquely used to identify a database record. Each table may have one or more candidate keys. One of these candidate keys is selected as the table primary key.
Composite Key	A composite key is any <u>database key</u> that consists of two or more columns/attributes.
relationship	Relationship is association between relations/tables of Database which is done through foreign key
DBMS	Database Management System A collection of <u>programs</u> that enables you to <u>store</u> , <u>modify</u> , and <u>extract</u> information from a <u>database</u> .
RDBMS	RDBMS stands for Relational Database Management System. RDBMS store the data into collection of tables, which might be related by common fields (database table columns). RDBMS also provide relational operators to manipulate the data stored into the database tables.
OLE	<b>Object Linking and Embedding (OLE)</b> is a technology developed by <u>Microsoft</u> that allows embedding and <u>linking</u> to <u>documents</u> and other objects <b>OLE Data type</b> is used to store sound , picture, file etc. to database

**2) Differentiate Between following**

- a) Text & Memo b) Number & Auto Number c) Tuple & Attribute d) Hiding & Freezing Access column  
 e) Datasheet & Design View f) Text & Number g) Currency & Date datatype

<b>Number</b>	<b>Auto Number</b>
The Number data type can be used for storing various kinds of numbers such as integers, decimals etc.	The Auto Number data type is used for storing only integer numbers.
These values are input by the user	These values are automatically generated when a record is added.
They need not be in sequence	The Auto Number data type is used or unique sequential (incrementing by 1) numbers
<b>Text</b>	<b>Memo</b>
1. Text fields may store up to a maximum of 255 characters 2. Text Field can be Sort	1. Memo fields can store up to 1 gigabyte of characters 2. Fields of memo data type cannot be grouped while filtering and it is not possible to sort them.
<b>Tuple</b>	<b>Attribute</b>
Record in a relation is called Tuple	Field /column in a Relation is called Attribute
Tuple provide information about one entity	Attribute provide data for particular
<b>Hiding Access column</b>	<b>Freezing Access column</b>
Hiding column makes the column disappear or hide for viewing	Freezing column means that particular column will not move when use try to scroll the column vertically.
<b>Datasheet View</b>	<b>Design View</b>
User can add delete modify the records we can add attribute in datasheet view <b>You can add attribute also in this view</b>	User can create a table structure by defining attribute and its data type <b>You cannot add records in this view</b>
<b>Currency</b>	<b>Date</b>
It allow to store monetary values with appropriate sign, commas and decimals	It allows to store Date values. It can't hold more than 8 digits. It can store system date, containing date and time information.
<b>Primary Key</b>	<b>Foreign Key</b>
Key which uniquely Identify a Record in Relation/table Cannot be left blank No duplicate values	It's a Primary key of one table present in second table .Key which is used to join two table Can be blank Duplicate values allowed
<b>Candidate Key</b>	<b>Alternate Key</b>
All keys which can be Primary Key are known as Candidate Key	After choosing Primary Key from Candidate Key left over keys are known as Alternate Keys
<b>One to One Relationship</b>	<b>One to Many Relationship</b>
Both Table have one matching record only Each Primary Key values relates to only record in the related table	There are more than one record for a linking value on one side of relationship One Related table values is assigned to many Primary Key Values

**3) Name the Following**

- i) An attribute which is capable of becoming a primary key. **Candidate key**
- ii) The view in which we can add, edit and view records in MS-Access. **Datasheet View**
- iii) A data type used for linking to an internet or another location in the database. **Hyperlink**
- iv) A built in set of rules Access uses to make sure that the relationship is valid . it can also prevent accidental deletion or editing of data. **Validation Rule**
- v) Alphanumeric characters upto 65,535 characters. **Memo**
- vi) The number of records in a relation. **Cardinality**
- vii) A data type used for logical value(true/false) in the database. **Boolean**
- viii) A key that does not allow Null values and must always have a unique value. **Primary Key**
- ix) The number of fields in a relation. **Degree**
- x) Key used to relate two tables. **Foreign key**
- xi) Any two data types used to store alphanumeric characters in Access. **Text and memo**
- xii) sound,picture, other data such as MS-Word /MS-Excel file can be store in this data type **OLE**
- xiii) A data type which can be used to automatically store monetary values with appropriate sign, commas and decimals **Auto number**
- xiv) Data type which can store Photograph of a person **OLE**
- xv) Extension of MS-Access Database file **.mdb or .Accdb**
- xvi) A part of the Microsoft Office suite that is used to create and manage databases **MS Access**
- xvii) Key which can uniquely identify the record but it is not be primary key **Alternate Key**
- xviii) Key which is made up of two or more attribute **Composite Key**

4) Study the following data and answer the questions given below :

**Table: Patient**

Name	P_no	Date_Admm	Doc_no
Mohan	P_101	21/03/2006	301
Priya	P_204	03/04/2006	134
Suraj	P_375	15/01/2006	204
Komal	P_424	24/06/2006	134

**Table: Doctor**

Doc_no	Doc_Name	Speciality
134	A.K. Sharma	Surgery
204	R. Khurana	Dentist
301	S. Shyam	Neurology
280	P.John	Dermatology

- i) Name the field, which can act as the primary key for the table **Patient** and the table **Doctor** respectively. Ans **P\_No, & Doc\_No**
- ii) Name the field, which can act as the foreign key for the table **Patient**. **Doc\_no**
- iii) What type of relationship exists between the table **Patient** and the table **Doctor** ?  
**One to Many**

5 Consider the following tables SENDER and RECIPIENT. Study the following data and answer the question given below :

**Table SENDER**

<b>SENDERID</b> Data Type Text	<b>NAME</b> Data Type Text	<b>ADDRESS</b> Data Type Text/Memo	<b>CITY</b> Data Type Text
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**Table : RECIPIENT**

<b>RECID</b> Data Type Text	<b>SENDERID</b> Data Type Text	<b>RECNAME</b> Data Type Text	<b>RECADRESS</b> Data Type Text/Memo	<b>RECCITY</b> Data Type Text
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- (i) Suggest data types that should be used for each of the fields in the table RECIPIENT.
- (ii) What type of relationship exists between the table SENDER and the table RECIPIENT? **One to One**
- (iii) Name the field that can be set as a foreign key in the table RECIPIENT. **SENDERID**

6) Study the following-data and answer the questions given below :

**Table: Customers**

Customer	Cust_No	Acct_CreateDt	Amount
ManishCNR_101		21/03/2001	450000
Rahul	CNR_204	03/04/2001	250000
Manpreet	CNR_375	15/01/2001	350000
Rajen	CNR_424	24/06/2001	650000

**Table: Transactions**

Trxn_ID	Cust_No	Trxn_Date	Withdrawal_Amt
2310201201	CNR_101	23/10/2012	14500
2410201202	CNR_101	24/10/2012	1500
2110201203	CNR_375	21/10/2012	12000
2410201204	CNR_424	12/10/2012	16000

- a. the primary key for the table **Customers: Cust\_No**, and the table **Transactions** respectively. **Trxn\_ID**
- b. foreign key for the table **Transactions. Cust\_No**
- c. Cardinality : **4** and Degree :**4**

7) Study the following data and answer the questions given below :

**Table : Pancard.mdb**

<b>Permanent Account Number</b> Data Type: Text	<b>Name</b> Data Type: Text	<b>Father Name</b> Data Type: Text	<b>Date Of Birth</b> Data Type: Date
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**Table: Moneytransaction .mdb**

<b>Permanent Account Number</b> Data Type: Text	<b>Debit</b> Data Type: Currency	<b>Credit</b> Data Type: Currency	<b>Balance</b> Data Type: Currency	<b>Transcation_ID</b> Data Type: Text
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- i. Suggest the data types that should be used for each of the fields in the pancard table .
- ii. Write the relationship between “pancard” and “moneytransaction” table. **One to Many**
- ii. Name the field that can act as a primary key in “pancard” table **Permanent Account Number** and name the foreign key of “moneytransaction” table **Transcation\_ID**

8 ) Suggest the data types for the following Teacher Table:

- T\_Code** - Teacher's Code generated Automatically **Auto number**
- T\_Name** - Teacher's Name **Text**
- DOB** - Date of Birth **Date**
- Basic\_Sal** - Basic Salary **Currency**
- Qualification** -Qualification of a teacher (List should appear like- M.A., B.A, ....) **Text**
- Photo** -Photograph of a teacher **OLE**
- Bio-Data** -Ms-Word file. **OLE**
- Blog** -Teacher's Blog on Internet **Hyperlink**

9) Study the following data and answer the questions given below:

**Table: Video**

<b>Title</b> <b>Data Type:</b> <b>Text</b>	<b>Vid_No</b> <b>Data Type:</b> <b>Auto Number</b>	<b>Actor</b> <b>Data Type: Text</b>	<b>Price</b> <b>Data Type:</b> <b>Currency</b>
Troy	1001	Sunil Nehra	315.00
Men In Black	1002	Neha	125.70
Speed	1003	Shuhita	220.10
Spider Man	1004	Pawan	480.00

**Table: Issue**

<b>Member_No</b> <b>Data Type:</b> <b>Text</b>	<b>Issue_Date</b> <b>Data Type:</b> <b>Date</b>	<b>Return_Date</b> <b>Data Type:</b> <b>Date</b>	<b>Vid_No</b> <b>Data Type:</b> <b>Auto Number</b>
P123	07/12/2009	07/14/2009	1001
T102	09/30/2009	10/01/2009	1002
T096	10/08/2009	10/10/2009	1002
P103	10/03/2009	10/05/2009	1001
T089	09/30/2009	09/04/2009	1004
P037	04/05/2009	04/05/2009	1003

- 1) Suggest data types for each of the fields in the table Video
- 2) the primary keys for the table Video **Vid\_No** and the table Issue. **Member\_No**
- 3) What type of relationship exists between table Video and Issue. **One to Many**

10) What is the significance of database?

**The significances of a Database are:-**

1. It reduces the redundancy of data.
2. It gives a distributed data management system.
3. It avoids the inconsistency of data.
4. It maintains the data integrity

11) Write down any two disadvantages of using a database system.

12) What is RDBMS? Name two RDBMS

**Relational Database Management System.** It a Database software which use table to store data  
**Examples of RDBMS are MS Access/ MYSQL / Oracle**

13) What do you mean by Data Redundancy? How Ms-Access help to reduce it

**Data redundancy is a condition created within a database or data storage technology in which the same piece of data is held in two separate places. Whenever data is repeated, this basically constitutes data redundancy. Use of Primary key And foreign key helps in reducing Data Redundancy**

- 14) What is Validation Rule and Validation text in MS Access  
**A built in set of rules Access uses to make sure that the relationship is valid . it can also prevent accidental deletion or editing of data**
- 15) What is Input Mask? the data types that do not support this property  
**Input masks provide a set format for data entry in a field by using characters and symbols. When you apply an input mask to a field, anyone who inputs data in that field must follow the specific pattern defined by the input mask. MEMO/OLE/Yes/No(Boolean) does not support Input Mask**
- 16) What is Default Value  
**Value which is set to appear in field before inputting any value by user is called default value**
- 17) What is Sorting of Data  
**Sorting of Data is arranging data in ascending or descending order**
- 18) What is Query  
**Query is used to Extract data based on certain condition is called Query**
- 19) Explain Three Types of Relationship
- **One to One** : In a one-to-one relationship, a row in table A can have no more than one matching row in table B, and vice versa. A one-to-one relationship is created if both of the related columns are primary keys or have unique constraints
  - **One to Many**: A one-to-many relationship is the most common type of relationship. In this type of relationship, a row in table A can have many matching rows in table B, but a row in table B can have only one matching row in table A
  - **Many to Many**: In a many-to-many relationship, a row in table A can have many matching rows in table B, and vice versa. You create such a relationship by defining a third table, called a junction table, whose primary key consists of the foreign keys from both table A and table B.

Study the following data and answer the questions given below:

Table: **Item**

Item_Name	Item_Code	Price
Electric Iron	1002	525.00
Hand Mixie	1014	695.00
Electric Shaver	1001	350.00
Coffee Maker	1020	1275.00

Table: **Sales**

Cust_no	Bill_No	Sale_Date	Quantity	Item_Code
1432	10233	07/12/2003	2	1001
2042	10234	09/30/2003	3	1002
1245	10235	10/08/2003	1	1002
1432	10236	10/03/2003	2	1014
1324	10237	09/30/2003	1	1001
1565	10238	04/05/2003	3	1020

- i) Name the fields, which can act as the primary key and foreign key for the table **Item** and the table **Sales** respectively.
- ii) What type of relationship exists between table **Item** and table **Sales**?

**Question Based on Multimedia**

- 1) Write a short note on how multimedia is being used in healthcare.
- 2) Write a short note on Virtual Reality  
**Computer Generated Environment which stimulate the real world situation with the use of Multimedia. It is used in Video Gaming / Flight Simulation**
- 3) Write a short note on Video Conferencing  
**Video Conferencing is live interaction of people sitting far from each other using Computer System/ Webcam /Speaker /Headphone and conferencing software using network(internet /Intranet)**
- 4) Write a short note on how multimedia is being used in Education
- 5) What is Digital Library  
**Digital Library is a collection of Electronically /Digitized text /audio and video material available for use in the form of CD/DVD/Online on internet.**
- 6) .What is Information Kiosk  
**Information Kiosk is a Interactive Screen which provide information**
- 7) What is Video on Demand(VOD)  
**Video on Demand is a Interactive process to select video to watch over network on demand by paying.**
- 8) Write a short note on Different File formats:  
 i) GIF : ii)MPEG iii)AVI iv) JPEG v) BMP vi) MIDI vi) WAV vii) SWF viii) PSD ix) DAT x) PDF

#	Format	Full Form	
1	GIF	<b>Graphics Interchange Format</b>	It does not support high resolution and can take 8 bits color combination yielding only 255 colors.
2	JPEG/ JPG	<b>Joint Photographic Expert Group</b>	It supports high resolution and can take 24 bits color combinations yielding millions of colors.
3	BMP	<b>BITMAP Image File</b>	BMP files are Windows Bitmap files. They are usually 8-bit color images (256 colors) and can be viewed by many programs including Windows Paintbrush. BMP files can be used as backgrounds for the Windows desktop.
	MPEG	<b>Motion Picture Expert Group</b>	is another type of file format formed by ISO for the storing and transmission of audio and video contents.
4	AVI	<b>Audio Video Interleave</b>	AVI is supported by all computers running Windows, and by the most popular web browsers. It is a very common format on the Internet, but not always possible to play on non-Windows computers
5	PSD	<b>Photoshop Standard Document</b>	PSD signifies an Adobe Photoshop graphic file. They are open able on Pentium and Macintosh systems by Adobe Photoshop.
6	AIFF	<b>Audio Input File Format</b>	Its Audio file Format
7	MIDI	<b>Musical Instrument Digital Interface</b>	MIDI files can be played with the Windows MIDI sequencer. They are music files that conform to the MIDI standard. Play them with Media Player on the Pentium computers, or load them into MusicProse or Finale on a Macintosh.

8	WAV	<b>Waveform Audio File Format</b>	WAV (wave) files are Microsoft's native audio sound format. WAV files can include 8-bit or 16-bit sound, in mono or stereo. They can be played on Pentium computers with Media Player and wplany.
9	ASF	<b>Advanced Systems Format</b>	Formerly called Advanced Streaming Format, ASF is a proprietary digital audio/video container format from Microsoft, created for streaming media as part of the <a href="#">Windows Media</a> framework
10	TIFF	<b>Tagged Image File Format</b>	These files are uncompressed true color images. Most graphics programs allow you to store TIFFs with compression. These files can be opened by many graphics programs including xv, Lview, and Photoshon
11	PDF	<b>Portable Document Format</b>	It is created by Adobe Acrobat. An Enhancement of the Postscript language, PDF files contain all the same text and page layout information but can include many WWW features such as images, links, and heading references. PDF files can be viewed using Adobe Acrobat software.
12	FLA		The Adobe Flash animation source file that is used during development before being saved typically as an .SWF file. Flash video however, usually has the FLV of F4V extension and is considered it's own format separate from FLA.
	MP3		<b>MP3 (MPEG-1 Audio Layer III)</b> Part of the MPEG-1 video encoding format, able to store good quality audio into small files, by filtering out audio that most humans cannot hear. MP3 has become one of the most popular formats for buying and sharing digital music,
	SWF	<b>Small Web Format</b>	<b>SWF (Small Web Format)</b> Previously standing as an abbreviation for Shockwave Flash, SWF is a file format of a compiled FLA used by Adobe Flash. A SWF may contain vector graphics and rich media including images, audio, and video. It is widely adopted plugin for many desktop Internet browsers, although availability is more limited on mobile devices. It is more common for modern Flash video to have the FLV extension, however.
	WMV	<b>Windows Media Video</b>	<b>WMV (Windows Media Video)</b> A video compression format for several codecs by Microsoft, designed originally for streaming applications on the Internet. It has also become adopted as a video format compatible with Blu-Ray discs. It is often compared to MPEG-4 and H.264 in terms of video quality.



9) Define the following :

<b>FLOSS</b>	<b>Free/Libre/Open Source Software</b>	software that is liberally licensed to grant the right of users to study, change, and improve its design through the availability of its source code
<b>OSS</b>	<b>Open Source Software</b>	Open Source Software are distributed under License that meets the Open Source Definition or that is in the public domain license This permits users to use, change, and improve the software, and to redistribute it in modified or unmodified forms. It is very often developed in a public, collaborative manner.
<b>FSF</b>	<b>Free Software Foundation</b>	is a non-profit corporation founded by Richard Stallman to support the free software movement, a copy left-based movement which aims to promote the universal freedom to distribute and modify computer software.
<b>OSI</b>	<b>Open Source Initiative</b>	It is an organization dedicated to promoting open source software. is a development method for software that harnesses the power of distributed peer review and transparency of process.
<b>W3C</b>	<b>World Wide Web Custodian</b>	The <b>World Wide Web Consortium (W3C)</b> is the main international <a href="#">standards organization</a> for the <a href="#">World Wide Web</a> (abbreviated WWW or W3)
<b>GNU</b>		GNU is a computer operating system composed entirely of free software

10) Explain the following with example : I ) Freeware II) Shareware III) Proprietary Software

		Example
<b>Freeware</b>	Freeware (free software) is computer software that is available for use at no cost or for an optional fee. Software classified as freeware is normally fully functional for an unlimited time with no cost, monetary or otherwise. Freeware can be proprietary software available at no price.	Open Office
<b>Shareware</b>	term shareware refers to proprietary software that is provided to users without payment on a trial basis and is often limited by any combination of functionality, availability or convenience.	Winzip, System Mechanic 8.0, Easy Movie Splitter 2.5.3
<b>Proprietary Software</b>	The term "proprietary software" are copyright software by owner who can exercise control over what users can do with the software, in contrast to public domain. It is neither free nor open source.	MS Office Adobe Photoshop

Difference Between Freeware and Shareware

<b>Freeware</b>	<b>Shareware</b>
<b>Freeware</b> is <a href="#">copyrighted</a> computer <a href="#">software</a> which is made available for use free of charge, for an unlimited time.	The term <b>shareware</b> refers to commercial software that is copyrighted, made available for free of charge for limited period of time
All the features are free.	all features are not available, or have limited use.
Freeware programs can be distributed free of cost.	Shareware may or may not be distributed freely. In many cases, author's permission is needed, to distribute the shareware.
Example MSN Messenger Yahoo Messenger Google Talk,	Winzip, Cuteftp, Getright

11) What is localization of software

**Localization of Software means translating user interface of software in regional language for easy understanding of people living in that area.**

12) Give the full Form of following : a) PHP                      b) JSP                      c)ASP,                      D)ASCII  
e)ISCII

PHP	<b>Personal Home Page</b>	Hypertext Preprocessor, is a widely used, general-purpose scripting language that was originally designed for web development, to produce dynamic web pages.
JSP	<b>Java Server Page</b>	is a server side Java technology that allows software developers to create dynamically generated web pages, with HTML, XML, or other document types, in response to a Web client request to a Java Web Application container (server).
ASP	<b>Active Server Page</b>	is a server side Scripting technology that allows software developers to create dynamically generated web pages, with HTML, XML, or other document types, in response to a Web client request to a Web Server (IIS)
ASCII	<b>American Standard Code of Information Interchange</b>	
ISCII	<b>Indian Standard Code of Information Interchange</b>	
<b>Unicode</b>	<b>It is an industry standard whose goal is to provide means by which text of all forms and languages can be encoded for use by computers</b>	

13) Write short note on      a)MYSQL      b) Tomcat      c) Linux      d)Open Office      e) Python

MYSQL	MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Oracle Corporation.
Tomcat	It is an open Source web server Software. Tomcat is an <a href="#">application server</a> from the Apache Software Foundation that executes Java <a href="#">servlets</a> and renders Web pages that include <a href="#">Java Server Page</a> coding.
Linux	Linux is an <i>operating system</i> , software that manages a computer. It is similar to Microsoft Windows, but it is <b>entirely free</b> . The accurate name is <i>GNU/Linux</i> but "Linux" is used more often.
Open Office	open office is <b>Open source</b> Application software suit which is available <b>free of cost</b> . It is an alternative to Microsoft office
Python	Python is an interpreted, object-oriented, high-level programming language with dynamic semantics

14) What is Open Source Software Name three Website which promotes open source software

Open-source software is computer software with its source code made available in which the copyright holder provides the rights to study change and distribute the software to anyone and for any purpose.

[www.opensource.org](http://www.opensource.org);

[www.sourceforge.net](http://www.sourceforge.net)

[www.osalt.com](http://www.osalt.com)

[www.fsf.org](http://www.fsf.org) The Free Software Foundation (FSF) is a nonprofit with a worldwide mission to promote computer user freedom and to defend the rights of all free software users.

[www.gnu.org](http://www.gnu.org)

**Networking**

- 1) What is Network Give three Advantages of Network
  - 1 ) **Sharing hardware**
  - 2) **Sharing data and information**
  - 3) **Sharing software**
  - 4) **Facilitating communications**

- 2) Give 3 difference Between LAN/MAN/WAN

LAN / MAN	MAN	WAN
Area covered is restricted to room/Building	Area covered is around the city (10-20 KM)	Area covered has no limitation
Very faster – speed in Gbps	Relatively low – speed in Mbps	Relatively low – speed in Mbps
Owned by a single organization	Owned by multiple organization	Owned by multiple
School or Hospital Network	Cable TV network	Weather Forecasting /Railway/ Airways Reservation Network

- 3) Give Two Difference Between LAN & WLAN

LAN is Wired Network    WLAN is Wireless Network  
 LAN Area is Building (1-2 Km)                                      WLAN Are is Smaller than LAN restricted to room

- 4) Define the following Term a)Hub b)Switch c)Router d) Gateway e)bridge f)Repeater g)MODEM


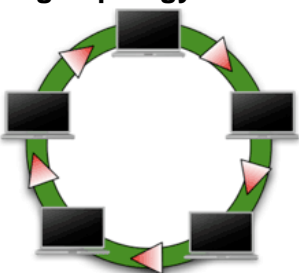
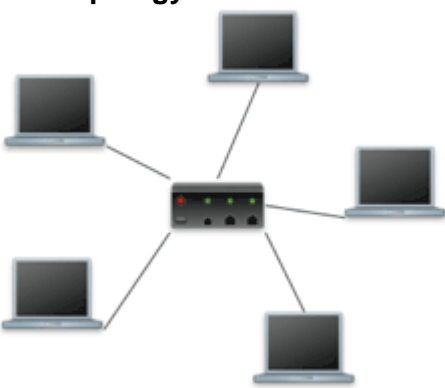
Hub	A hub is a device for connecting multiple twisted pair or fibre optic devices together and making them act as a single network segment.
Switch	A network switch is a small hardware device that joins multiple computers together within one local area network. Network switches are capable of inspecting data packets as they are received, determining the source and destination device of each packet
Router	A router is an electronic device that interconnects two or more dissimilar computer networks
Gateway	A gateway is a network point that acts as an entrance to another network It is used to connect heterogenous networks that use different protocols and have different network.
Bridge	Bridging is a forwarding technique used in packet-switched computer networks. It is device generally used to connect two or more similar network
Repeater	A network device used to regenerate or replicate a signal if the distance is more than 90m.
Modem	Modem (modulator-demodulator) is a device that modulates an analogue carrier signal to encode digital information, and also demodulates such a carrier signal to decode the transmitted information.

- 5) Give the Full Form of Following a) FTP                      b) IMAP                      c)PPP d)HHTP                      e)SMTP

FTP	File Transfer protocol- It is a primary method to transfer files over the Internet. FTP transfers files to and from a remote server
IMAP	<b>Internet Message Access Protocol</b> is an Application Layer Internet protocol that allows an e-mail client to access e-mail on a remote mail server.
SMTP	<b>Simple Mail Transfer Protocol (SMTP)</b> is an Internet standard for electronic mail (e-mail) transmission across Internet Protocol (IP) networks
VOIP	<b>Voice over Internet Protocol (Voice over IP, VoIP)</b> is a communication protocols and transmission technologies for delivery of voice communications and multimedia sessions over Internet

<b>HHTP</b>	<b>Hypertext Transfer Protocol (HTTP)</b> is a networking protocol for distributed, collaborative, hypermedia information systems. HTTP functions as a request-response protocol in the client-server computing model.
<b>PPP</b>	<b>PPP (Point-to-Point Protocol)</b> :In networking, the Point-to-Point Protocol, or PPP, is a data link protocol commonly used in establishing a direct connection between two networking node

6) What is topology? Difference Between Star / BUS /Ring topology

<p><b>Bus Topology</b></p> 	<p>All of the computers are linked to a <i>single central cable</i>.</p> <ul style="list-style-type: none"> <li>★ All data passes through one central cable</li> <li>★ this means that the network has a <i>single point of failure</i></li> <li>★ Not <i>fault tolerant</i>, if the central cable breaks the entire network fails</li> <li>★ Cheap and simple to set-up</li> </ul>
<p><b>Ring Topology</b></p> 	<p>Each networked computer is connected to two others in a closed ring. Sometimes two rings are used to increase the <i>fault tolerance</i></p> <ul style="list-style-type: none"> <li>★ Ring topologies are more expensive than bus</li> <li>★ Hardware to control data transmission is more expensive</li> <li>★ the actual ring shape is often not immediately obvious</li> <li>★ The ring can be within a central box with each computer connected the same as in a star topology</li> </ul>
<p><b>Star Topology</b></p> 	<p>This is a very common topology.</p> <ul style="list-style-type: none"> <li>★ Each computer is connected to a single central hub</li> <li>★ When a computer sends data the hub transmits it to all of the computers on the network</li> <li>★ A break in a cable only affects the computer it connects to all others remain unaffected</li> <li>★ More fault tolerant</li> <li>★ High cabling costs compared to bus topology</li> </ul>

7) Name the following :

- i) the transmission media that can be used in
  - a) Sparsely populated areas **Radio Link/ b) Unidirectional Fiber optics**
  - i) A general purpose client-server internet facility that facilitates remote login. **Telnet**
- ii) Software categories that has restriction on using and copying software and enforces a license fee. **Proprietary Software**
- iii) Name the transmission media that use electromagnetic waves ranging in frequencies between 3 KHz and 1 GHz **Radio Frequency** ii) 1 GHz and 300 GHz **Microwave**

8) Explain the following :

<b>Firewall</b>	A system designed to prevent unauthorized access to or from a private network. Firewalls can be implemented in both hardware and software, or a combination of both
<b>Cracker</b>	The people who break and enter a computer/network without having authorised access and with malicious intent like steal data, delete files, corrupt files, phishing and farming
<b>Hacker</b>	The people who break and enter a computer/network without having authorised access and with no malicious intent
<b>GSM</b>	<b>GSM</b> (Global System For Mbile Communication) GSM is a digital mobile telephony system that digitizes and compresses data, then sends it down a channel with two other streams of user data, each in its own time slot.
<b>CDMA</b>	<b>CDMA</b> (Code Division Multiple Access) :CDMA refers to any of several protocols used in so-called second-generation (2G) and third-generation (3G) wireless communications.
<b>GRPS</b>	<b>GPRS</b> General packet radio service (GPRS) is a packet oriented mobile data service on the 2G and 3G cellular communication systems global system for mobile communications (GSM).
<b>intranet</b>	It is a local collection of interconnected network of computer device, govern by the local authority. A privately owned network is termed as intranet
<b>Interspace</b>	It is a vision of what the internet will become, where users correlates information in multiple ways from multiple sources
<b>SMS</b>	SMS(Short Message Service) is type messaging service meant for exchanging short text messages on phone, web or mobile Communication system
<b>Computer Virus:</b>	The type of Malware which destroys a targeted program on a computer devices like personal Computer, Laptop etc. Sometimes, it destroys the whole device itself once it transmits to it from another infected host.
<b>Malware</b>	The program or scripts which are harmful to the computing devices and can destroy the communication and computing devices are called Malware
<b>Spyware</b>	It tracks the different types of activities like user activities, scheduled tasks, operating system health check activities etc .It can be scripts, programs, cookies etc.
<b>Cyber Law:</b>	The Information Acts and Rules articulated to regulate and control the illegal practices on Internet or in any 'electronic devices' connected through internet are called Cyber Laws

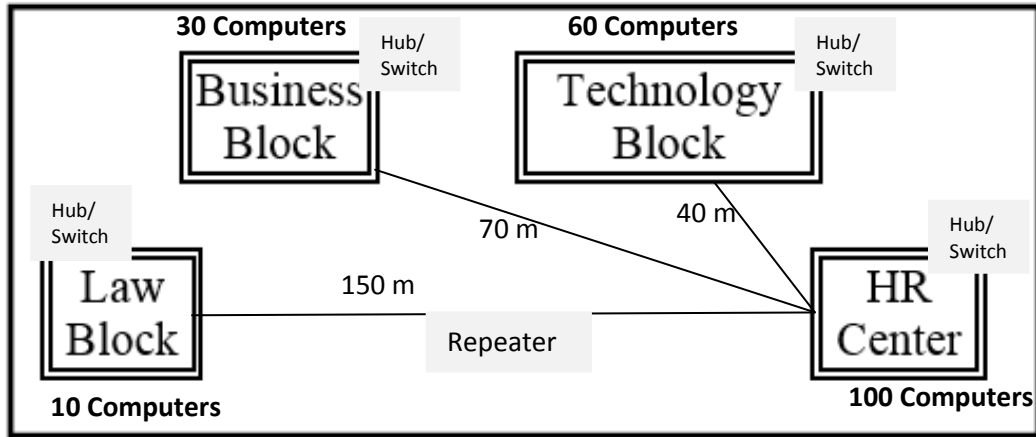
9) Difference between Twisted pair /Co-axial / Fiber-Optics cable

Twisted pair	Co-axial	Fiber-Optics
it has adequate performance It is one of the cheapest media of transmission It is more prone to pick up noise signals	It has more system performance than twisted pair It is expensive than Twisted Pair It is less prone to noise signals	High System Performance It is Expensive Low Signal Loss More fragile than electrical cable Immune to Noise

10) Name three wireless channel of communication  
Radio Wave Satellite Infrared Bluetooth

**Point to remember for 4 Marks Networking Question**

**Layout – Diagrammatically show Bus Topology & Star Topology**



**Location of Server**

The most suitable place / block to house the server of this organisation would be the **Block that contains the maximum number of computers**

**Justification:**

As it decreases the cabling cost for most of the computers as well as increasing the efficiency of the maximum computers in the network.

**Location of Repeater**

Repeater will be placed where the distance between two blocks 90 meters or more

**Justification**

As the signal loss will take place after 90 meters, Repeater would ideally be needed along their path to avoid loss of signals during the course of data flow in these routes.

**Location of Hub/Switch**

Hub/Switch will be placed in **every block**

**Justification**

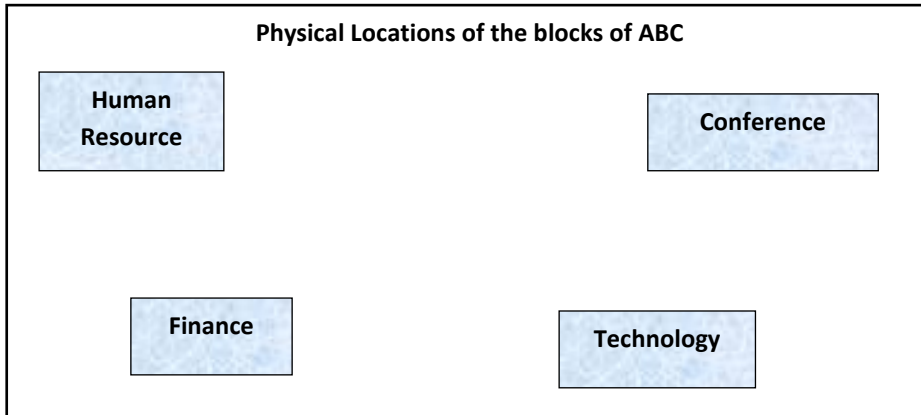
To interconnect the group of cables from the different computers in each block

**Radio wave transmission** as it is the most **economic** option with to connect it with a reasonable **high speed**

**TCP/IP Dial Up** as it is the most **economic** option with a **reasonable speed. Non Economic where Cost is not in consideration**

**Fiber Optics /Satellite**

- c) ABC Corporation (TTC) is a professional consultancy company. The company is planning to set up their new offices in India with its hub at Hyderabad. As a network adviser, you have to understand their requirement and suggest them the best available solutions. Their queries are mentioned in i) to iv).



Block to Block distances (in Meters)

Number of computers in each block/center

FROM	TO	Distance	Block / Center	Computers
Human Resource	Conference	110	Human Resource	25
Human Resource	Finance	40	Finance	120
Conference	Finance	80	Conference	90
Technology	Finance	95	Technology	75

- i) What will be the most appropriate block, where TTC should plan to install the server?
- ii) Draw a cable layout connecting the blocks for most efficient communication. Also suggest a topology for the network.
- iii) What will be the best possible connectivity (out of **Satellite Link, Infrared, Ethernet cable**) you will suggest to connect the new offices in Bangalore with its London based office?
- iv) Which of the devices (**Switch, Modem, Gateway**) will be suggested by you to connect each computer in each of the buildings.
- c) Which type of network (out of **LAN, PAN, MAN**) is formed
- i) When four computers are networked using twisted pair cable?
- ii) Using mobile's Bluetooth to share files among friends inside a room?

## Flash

### 1. What is a Layer? Give three properties of a Layer.

It is a type of frame that is placed one after another to create the animation or a movie. It's the important component of Timeline. The properties of a Layer are:

1. Layer Name
2. Show and Lock
3. Type

### 2. What are Symbols? How is it different from instance

The Symbols are the reusable media elements such as graphics, buttons, movie clips etc. that can be used in a movie. They are saved inside the library file and remain accessible as the global resources.

**Instance** It is a copy of master Symbol but any change we make in instance will not be updated or reflected in symbol in the library.

### 3. What is a Frame? What are Frame Buffer and Frame Rate?

It is a segment of a movie that is mainly used for creating and storing the objects. It is one of the important components of Timeline in Flash.

### 4. What is a Frame Buffer? What FPS?

The way of storing a movie or animation before displaying it is called **Frame Buffer**.

**Frame per Second or Frame rate** is the number of animation frames displayed per second. It increases or decreases the speed with which the movie is displayed on the screen

### 5. What is publishing? What are two formats which support movie files?

Publishing means delivering a complete movie or a animation to the viewers. The two formats in which a movie can be published are .SWF and .AVI.

### 6. What is a Key frame? What is the use of Stage?

It is a frame in flash that allows the users to define a change for an animation or to include the frame actions to modify a movie.

**Stage** is the actual canvas in flash where all the objects to be included in a movie or animation are placed. It allows to the draw the graphics and preview the movie in design time.

### 7. What is Timeline?

The Timeline is used to organize and control the contents of a movie over time in the layers and frames so that each movie instance can occur at the correct time. The major components of the Timeline are layers, frames and the play-head.

### 8. What is Tweening? Name any two types of Tweening?

The Tweening is the way of creating the effects on a movie or an animation. The two types of Tweening are:-

1. Shape Tweening
2. Motion Tweening

### 9. Explain the steps to create a Tweening(Shape Tweening).

The following are the steps for Shape Tweening:-

1. Draw a shape, let's say Sun on the first frame in Flash Studio/Photoshop.
2. Place the Playhead at the 40<sup>th</sup> frame and insert a Keyframe.
3. Drag the object by using the Selection Tool, select both stroke and the fill options.
4. Place it on the right hand side of the Stage.
5. At the 40<sup>th</sup> frame, delete the Sun shape and draw another shape, let's say Cloudy Rain.
6. Place the Playhead at the first frame and right click over it.
7. Select Panels and then Frame. In Tween Option, select the shape and in blend option select "Distributive"
8. Publish it to preview the animation or the movie.



**10 Hiding a Layer & Locking A Layer**

**Hiding a layer** means that the contents of that layer are not visible done using Eye icon on Layer

**Locking a layer** means that the contents of that layer cannot be edited done by using Ped lock icon on Layer

**11. What is Publishing. Name different format on which the flash movie can be published**

Publishing a Flash Movie means delivering a completed movie to an audience by converting the Flash .FLA file to another format for playback. 2

File formats in which a Flash movie can be published are: .SWF, .HTML, .GIF, .JPEG,.PNG, .EXE, .HQX, .MOV, .SMIL.

**12. Explain the concept of Scenes in Flash**

A scene is a clip of a movie which can be treated as an entire single unit all on its own and arranged around other clips. The advantage of breaking the movie into scenes is that every scene can be accessed individually an thus the sequence or order of scenes can be changed.

**13. Differentiate between**

<b>.FLA file</b>	<b>.SWF file</b>
.FLA is the extension of the flash source file.	.SWF is the extension of the flash publish file.
.FLA file can be opened and edited at any point of time	.SWF file cannot be edited, it can only be viewed.
<b>TIFF</b>	<b>MPEG</b>
Tagged Image File Format	Moving Picture Experts Group
It is type of file format meant for storing images, including photographs and other line arts.	is another type of file format formed by ISO for the storing and transmission of audio and video contents.
<b>JPEG</b>	<b>GIF</b>
Its full form is Joint Photographic Engineering Group.	Its full form is Graphics Interchange Format.
It supports high resolution and can take 24 bits color combinations yielding millions of colors.	It does not support high resolution and can take 8 bits color combination yielding only 8 colors.
<b>Graphic Symbol</b>	<b>Movie Clip Symbol</b>
Graphic symbol is a still or static image/Object	Movie Clip Symbol is an Animated Image or motion object
Graphic symbol operate in sync with the main time line	Movie clip is independent of the main timeline
Graphic symbol don't have its own time line	Movie Clip have its own time line for its animation
<b>Symbol</b>	<b>Instance</b>
Reusable Object that can be used in flash movies	It is occurrence of Symbol placed on stage
Stored in Library	Instance is placed on stage
Change in Symbol will change all instance of symbol	Any change in Instance will not change in Symbol

Guide layer	Mask layer
Guide layer is used to assign an animation path that links to an object on another layer during motion tweening, we can use the drawing tools in the toolbox to draw the guide path.	Mask layer is used to create a hole through which the contents of one or more underlying layers are visible.
Key frame	Blank Key frame
A key frame is a frame in which the user can define a change in an animation or include frame actions to modify a movie.	1. A blank key frame is one which is empty and is waiting to be filled.
Key Frame is denoted by Dark filled black circle	Blank frame is denoted by hollow circle
Shape tweening	Motion tweening
Shape tweening refers to making one shape appear to change into another shape over time.	Motion tweening refers to changing the position of an object over time.
It is not done on Symbol	It can be done on Symbol Only
Denoted by Light Green Color on Time line	Denoted by Purple color on Timeline

#### 14. How to Add sound in Flash timeline

Choose *File > Import > Import to Library* from the menu. Open file dialogue box appear Find and select sound file and click Open. The file now appears in the Library.

Drag the required file from Library and place it on frame form where you want sound to start

#### 15. What is the use of the onion skinning feature?

The onion-skinning feature allows the designer to see multiple frames and how their movements relate to the current frame. When creating an animation, this feature can be a great help to see what the objects in the preceding and succeeding frames look like.

#### 16. What is the use of the Publish Preview option?

The Publish Preview option allows one to preview the movie in a browser before publishing to see if the movie is appearing fine.

#### 17. How Graphic symbol is different from Button Symbol

**Graphic Symbol** are used for static image and to create reusable piece of animation that are tied up with main timeline.

**Button Symbols** are used to create interactive buttons that respond to mouse clicks, rollover or other action

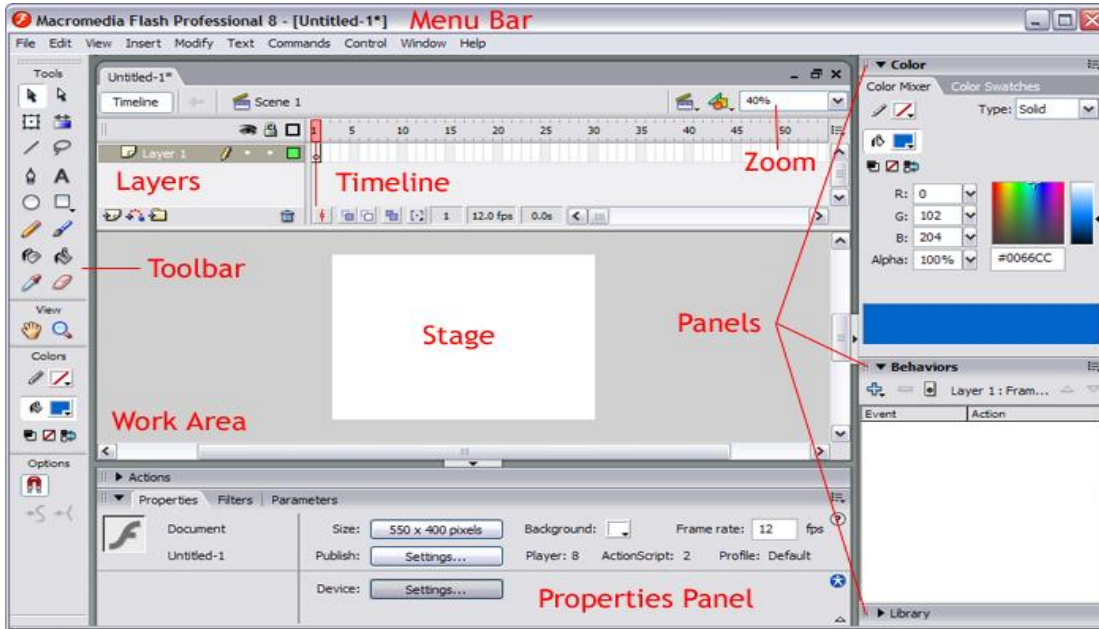
#### 18. What do you understand by alpha value?

Alpha Value determine the transparency of color or layer

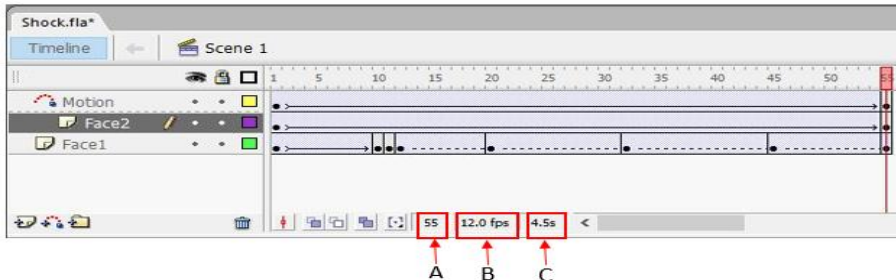
#### 19. Explain the usage onion skin feature

**Onion Skin feature display frame by frame movement of animation with reference to current frame**

**20. Identify the different Part of Flash Interface**



**21. Study the figure given below and answer the questions that follow:**



- (i) Name the guide layer in the above scenario. Ans Motion
- (ii) Given the above settings, will the contents of the layer Motion be displayed in the final movie? Justify. ANs Yes
- (iii) Given the above settings, name the active layer. Ans Face 2
- (iv) What does the number 55 in the area labelled as A signify in the above scenario?  
Ans Current Active Frame where Play head is positioned
- (v) What does the number 12.0 fps in the area labelled as B signify in the above scenario? Ans Frame rate
- (vi) What does the number 4.5 s in the area labelled as C signify in the above scenario?  
Ans: Time of animation already played

22. Observe the figure given bellow and do as directed :



- The text “learn flash 5.0 in three days” shows the position and size in frame 1.
- The solid circle image shows the position and size of the image for mask layer.

Write the procedure and property settings for animating the above scenario.

### Steps for Masking

1. At Frame 1 of layer 1, draw a text box and write “learn flash 5.0 in 3 days” in it using text tool.
2. Go to Frame 50 and insert a keyframe.
3. Insert a new layer and convert it to mask layer and right clicking on Layer and choosing Mask Layer.
4. At Frame 1 of Mask layer, draw a circle and keep it at its initial position in the animation (at the start of text box).
5. Insert a keyframe at Frame 50 of Mask layer and place the circle at its final position in the animation (at the end of text box).
6. Select any frame from frame 1 to frame 50.
7. Select Create Motion Tween.

23. Consider the figure given below and do as directed:



- The circle on the left hand side shows the position and size of the image for frame 1. The colour of the image is red.
- The circle on the right hand side shows the position and size of the image for frame 20. The colour of the image is yellow.
- The circle on frame 1 moves and transforms into a semicircle on frame 20.

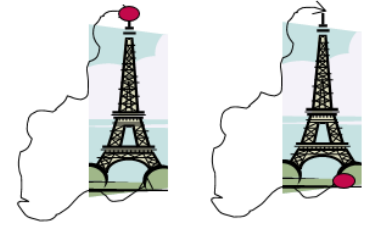
Write the procedure and property settings for animating the above scenario.

The **following** steps have to be followed to animate the given scenario:

- (i) Select frame 1 from the timeline and select Insert → New Symbol → Graphic
- (ii) Create the red coloured figure given on the left hand side.
- (iii) Insert an instance of this symbol in frame 1 by dragging it from the library window.
- (iv) Select frame 20 from the timeline and Select Insert → Keyframe
- (v) Change the size and shape of the image using Free Transform tool
- (vi) Change the colour of the object by selecting Tint option from the Effect palette and selecting the new colour.
- (vii) Select any frame between 1 and 20
- (viii) Select Create motion tween .

**24. Observe the figure given below and do as directed:**

- The first image shows the position and size of the image for frame 1.
- The second image shows the position and size of the image for frame 40.
- The curved line shows the path of motion of the ball.



Write the procedure and property settings for animating the above scenario.

The **following** steps have to be followed to animate the given scenario:

- Select frame 1 from the timeline and drag the image of tower from the library to the stage.
- Select Frame 40 from the Timeline and select Insert Keyframe.
- Insert a new layer, name it circle.
- On the Circle layer, and draw the desired circle using the Oval tool and then convert it into a Graphic symbol by selecting 'Convert to Symbol'.
- Select frame 40 on circle layer and select Insert Keyframe.
- Select any frame between 1 and 40 on the circle layer and select Create Motion Tween.
- Click on Insert and select Guide layer.
- Draw the required path on the Guide layer using the Pencil tool.
- Click on Circle layer and align the circle with the path at both ends.
- Run the movie.

**25. Observe the figure given below and do as directed:**



- The graphic on the left hand side shows the position and size for frame 1.
- The graphic on the right hand side shows the position and size for frame 30.
- The triangle graphic used in the animation is saved in the flash library.

Write the procedure and property settings for animating the above scenario assuming that the color of the object remains the same.

The **following** steps have to be followed to animate the given scenario:

- Select frame 1 from the Timeline and drag an instance of the oval graphic from the oval from the library on the stage.
- Using the selection tool select the image and place it on the left hand side and make its colour as orange.
- Select frame 30 from the Timeline and select Insert→Keyframe.
- Using the selection tool, select the image and position it to the right hand side of the stage at the desired location.
- Using the Free Transform tool, select the image and then resize it and rotate it as given.
- Using the Selection tool, select the image and change its colour to green.
- Select any frame from 1 to 29.
- Right click the mouse button and select Create Motion Tween.

## HTML

**1. What is HTML**

Hyper Text Markup Language is a computer based language used to create WebPages.

**2. What is the use of HEAD element?**

It is used to provide information about the page.

**3. Explain <BASEFONT>.**

It is a non-container tag used to specify the font and its features for the entire webpage.

**4. What is the use of Title tag?**

It is used to provide the name of the webpage as can be seen on the title bar of the browser or tab header.

**5. Name three Attributes used with <BODY> tag.**

They are:

**Bgcolor** : Background colour

**Link**: Specifies colour of all links that appear on the page

**Alink**: Specifies colour of links when clicked

**Vlink**: Specifies colour of links after it is visited by clicking

**Background**: Location of picture to be used as background for the page

**Text** : Default color of Webpage text

**6. How can we give comments in HTML?**

Using <!--.....-->

Where ..... represents the comment to be entered.

**7. What is the use of <FONT> tag in HTML and give three attributes which we use with it?**

The <FONT> tag is the formatting of a specified word or sentence.

Three attributes are:

**Face**: Decides type of font e.g. Arial

**Size**: Decides the size of the font

**Color**: Decides the colour of the font

**8. What are the purpose of <h1> ...</h1>,.....,<h6>...</h6>?**

They are used to specify headings of pre-determined sizes.

<h1>...</h1> is the largest and <h6>...</h6> is the smallest.

**9. How <BR> tag is different from <P> tag?**

 	<P>
It is a non-container tag.	It is a container tag.
It creates a line break for every time it is repeated.	It doesn't creates a line break for every time it is repeated.
It creates one line break.	It creates a link break before and after the entered text.

**10. How <BR> tag is different from <HR> tag?**

 	<HR>
It creates a line break.	It creates a line.
It does not have attribute	It has Attribute like color, size, width

**11. What is the purpose of Type attribute used in List?**

It helps in the formatting of the list item marker.

For e.g. :

```
<ol type="I">
```

.....

```
</ol>
```

The above would result in a list where the item markers are Roman Numerals.

**12. What is the purpose of Start attribute with the List?**

It helps in deciding the starting position of the list which can only be used in Ordered lists.

For e.g.:

```
<ol start="5" type="a">
```

.....

```
</ol>
```

This would result in a list where the first list marker is 'e.'

**13. Which HTML tag is used to insert image in HTML?**

The tag used is the <IMG> tag.

**Which attribute is used to show text instead of Image if browser do not support image?**

The attribute used is display text instead of image if browser does not support image

```

```

This would result in a blank box with 'Imagename' written inside it if the image doesn't load.

**14. How can we create a link to image?**

By using the following code:

```
<a href="a"></a>
```

Where a is the URL and b is the image location.

**15. What is the use of <CAPTION> tag?**

It is the tag used to give a caption for a table.

**16. What do you understand by COLSPAN & ROWSPAN?**

They are both attributes used in the <TD> & <TH> tag.

**COLSPAN:** Specifies the no. of columns that the table data covers

**ROWSPAN:** Specifies the no. of rows that the table data covers

**17. What is Cell padding and Cell spacing?**

They are both attributes used in the <TABLE> tag.

**Cell padding:** It is used to decide the space between the table data and the walls of the cell.

**Cell spacing:** It is used to decide the space between neighboring cells and the space between the cell and the table borders.

**18. Differentiate between <input type="Text"> & <textarea>.**

<input type="text">	<textarea>
Used for information of usually one line	Used for information of usually more than one line
It is a non-container tag.	It is a container tag.
Eg. <html> <body> <form name="f1"> Name: <input type="text" name="t1" value=""> </form> </body> </html>	Eg. <html> <body> <form name="f1"> Describe yourself: <textarea name="txt1" cols="5" rows="10" value=""></textarea> </form> </body> </html>

**19. How is External linking is different from Internal linking?**

External	Internal
Linking done between 2 different websites.	Linking done between 2 different webpages of the same site or between 2 different parts.
Eg. <html> <body> <a href="www.wikipedia.org"> Wikipedia </a> </body> </html>	Eg. <html> <body> <a href="1.html"> Wikipedia </a> </body> </html>

**20. Explain with an example how interlinking is done.**

```

Eg.
<html>
<body>
<a href="www.wikipedia.org">
Wikipedia
</a>
</body>
</html>
    
```

**21. What are the two Attributes used for Bookmarking (Intralinking)**

```

<html>
<body>
<a name="top">
Wikipedia
</a>
<br>.....<br>
<a href="#top">Go to Top</a>
</body>
</html>
    
```

Therefore the 2 attributes used in the <A> are **name** and **href**.



**22. How to align Image to Center/Right/Left?**

```
<html>
<body>

</body>
</html>
```

Where position refers to center or right or left.

**23. What is radio button how is it different from checkbox?**

Radio	Checkbox
It used in the case of selection of one option out of possible many.	It used in the case of selection of one or more options out of possible many.
Eg. <html> <body> <form name="f1"> Choose sport: Football <input type="radio" name="r1" value=""> Basketball <input type="radio" name="r1" value=""> </form> </body> </html>	Eg. <html> <body> <form name="f1"> Choose favourite sport/sports: Football <input type="checkbox" name="r1" value=""> Basketball <input type="checkbox" name="r1" value=""> </form> </body> </html>

**24. Name the tag which is used to set checkbox as selected by default.**

It is checked.

```
<html>
<body>
<form name= "f1">
Choose favourite sport/sports:
Football :<input type="checkbox" name="r1" checked>
Basketball: <input type="checkbox" name="r1">
</form>
</body>
</html>
```

**25. What is the use of Action attribute in form?**

The action attribute decides where the form data goes.

**26. Differentiate between Text & password interface elements of form.**

Text	Password
It is a textbox which allows viewing of the entered data.	It is a textbox which allows viewing of the entered data in the form of a common character such as *
<form name="f1"> Name: <input type="text" name="t1" value=""> </form>	<form name="f1"> Password: <input type="password" name="p1" value=""> </form>

**27. What is the use of Maxlength attributes with <input> tag?**

The maxlength attribute decides the maximum number of characters that can entered.

**28. What is the difference between Submit & Reset Button?**

Submit	Reset
It submits the form data to give a pre-specified location.	It resets the form allowing for the re-entering of data.
Eg. <html> <body> <form name="f1"> <input type="submit" name="b1" value="Submit"> </form> </body> </html>	Eg. <html> <body> <form name="f1"> <input type="reset" name="b2" value="Cancel"> </form> </body> </html>

**29. Write the name of tag and attribute used to have 3 pixels thick horizontal line centralized across 50%**

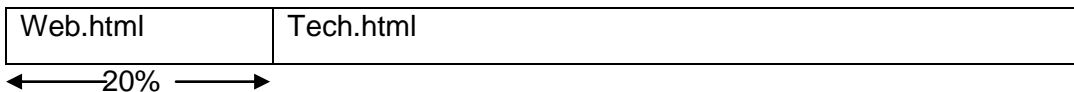
<Hr Align= Center Width =50% Size=3px>

**30. Insert an email link to image (MapleLeaf.jpg) with the width and height both set to 400 px Specify the tag and attributes to Send a form to the email address [mymail@emailaccount.com](mailto:mymail@emailaccount.com).**

<A Href= "mailto: [mymail@emailaccount.com](mailto:mymail@emailaccount.com)" ><img src= "MapleLeaf.jpg" width =400 height=400></A>

**31. Write the HTML code to generate a Web Page in the format given below :**

- i) Write a HTML code to create a framed webpage in the following
  - The Page is divided into two frame vertically
  - The left frame is 20% of the page width and display file " Web.html"
  - The right frame is 80% of the page width and displays file "tech.html"



```
<HTML>
<Frameset cols= "20%,80%"
<Frame Src= "Web.html">
<frame src= "tech.html">
</Frameset>
</Html>
```

**32. Name the TAG and ATTRIBUTE to be used in the following situation**

- i) To give the color of the border of a frame  
`<frame src="headercolor.htm" bordercolor="blue">`
- ii) To display the cell content at the bottom of the cell of a table  
`<td valign="bottom">`
- iii) To sets the top/bottom margin of the web page.  
`<body topmargin=2 bottommargin=0>`
- iv) Text colour of main heading on the page should be "Red".  
`<h1 color="red"> Heading </h1>`
- v) Background colour of the page should be "black", text color should be "white" and link colour should be "Green".  
`<body bgcolor="black" text="white" link="green">`
- vi) Font face of text in the page should be "Arial".  
`<font face="arial">`
- vii) Image used in the page is the file "earth.jpg" of size 200 x 200 right aligned on page.  
``
- viii) The table should have a border of 3 pixels and the background color "Yellow"  
`<table border=3 bgcolor="yellow">`
- ix) first row of table should be "Aqua" in color  
`<tr bgcolor="aqua">`
- x) The bottom message should be of size 2 and the text "mail to us" is an E-mail link to the e-mail address saveEarth@who.info .  
`<font size=2><A href=mailto:saveEarth@who.info>E-Mail</A></font>`
- xi) Image used at the bottom is notice1.jpg and it acts as a link to notice.html  
`<A Href="Notice.html"> <img src=notice1.jpg"></A>`
- xii) To create a textbox which can accept maximum of 20 characters with a *default value* "Enter Name"  
`<input type="Text" Maxlength=20,value="Enter Name">`.
- xiii) Specify the *tag* and *attributes* to create a *TextArea* with 5 rows and 20 columns.  
`<TextArea rows=5 cols=20></TextArea>`

**33. What is the purpose of select tag . or how to create list box/drop down list**

Select Tag is used to create drop down list

```
<select name="cars">
<option value="volvo">Volvo</option>
<option value="saab">Saab</option>
<option value="opel">Opel</option>
<option value="audi">Audi</option>
</select>
```

**34. Name the tag and attribute used to set a target frame in HTML.**

**Base Target** Tag is used inside the head tag to set the target frame in HTML

It will make the html page to open in selected frame only.

```
<head>
<base target="frame_name">
</head>
```

**35. What is the use of the ALT attribute of an <IMG> tag?**

Specifies an alternate text for an image, it will be displayed if browser does not support image <<  


**36. What is the use of <EMBED> tag? Write any three attributes of <EMBED> tag.**

The <embed> tag defines a container for an external application or interactive content (a plug-in). We can use this tag to add sound movies or flash file  
Attribute are **src, height, width & type**

**37. Write a HTML code line to print the following chemical formulae  $\text{Na}_2\text{SO}_4$**   
**Na<sub>2</sub>SO<sub>4</sub><sup>-2</sup>****38. What is the use of # sign in intra file linking in HTML?**

# is used to provide reference to Anchor Name in Bookmark

<A Name=Top>

<A Href="#Top"> Top</A>

**39. Name the tag and attribute used to set a checkbox as selected by default.**

**<Input Type= "Checkbox" value="Car" Checked>**

Code	Output
<pre>&lt;form action="demo_form.asp" method="get"&gt; &lt;input type="checkbox" name="Ch1" &gt;Bike&lt;br&gt; &lt;input type="checkbox" name="Ch2" checked&gt;Car&lt;br&gt; &lt;input type="submit" value="Submit"&gt; &lt;/form&gt;</pre>	<p><input type="checkbox"/> Bike</p> <p><input checked="" type="checkbox"/> Car</p> <p><input type="submit" value="Submit"/></p>

**40. Explain the Definition List with a suitable example**

Definition lists create a list with two parts to each entry: the name or term to be defined and the definition. This creates lists similar to a dictionary or glossary. There are three tags associated with the definition list: 1) <dl> to define the list 2) <dt> to define the definition term 3 <dd> to define the definition of the term

Code	Output
<pre>&lt;dl&gt; &lt;dt&gt;Coffee&lt;/dt&gt; &lt;dd&gt;Black hot drink&lt;/dd&gt; &lt;dt&gt;Milk&lt;/dt&gt; &lt;dd&gt;White cold drink&lt;/dd&gt; &lt;/dl&gt;</pre>	<p>Coffee</p> <p>Black hot drink</p> <p>Milk</p> <p>White cold drink</p>

41 Write a code to create table given in fig  
 Table border is red cell of first two rows should have different color use spacing and padding accordingly shown in fig

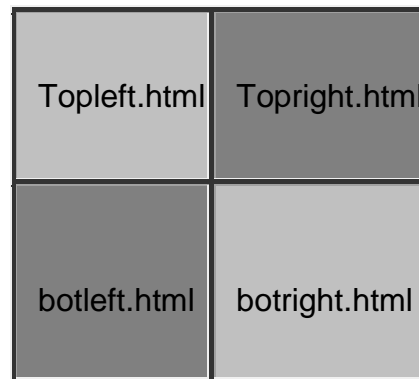
Class	Section	Marks	
		English	Maths
XII	A	90	80
XII	B	80	90

Code

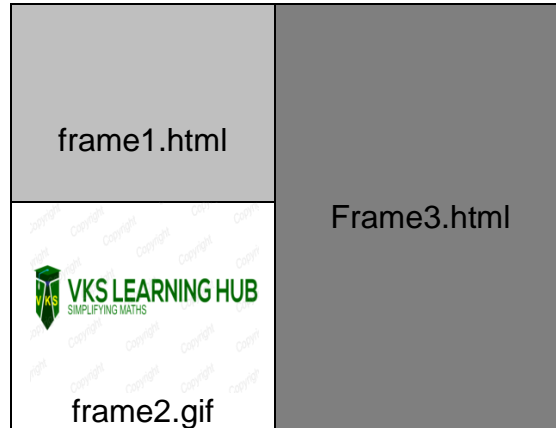
```
<html>
<body>
<table cellspacing=5 cellpadding =5 border=2 bordercolor="red">
<tr>
<td bgcolor="yellow" rowspan=2>Class</td>
<td bgcolor="pink" rowspan=2>Section</td>
<td colspan=2 bgcolor="Green"> Marks</td> </tr>
<tr>
<td colspan="1" bgcolor="purple">English</td><td colspan="1" bgcolor="blue">Maths</td> </tr>
<tr>
<td> XII </td><td> A </td><td> 90</td><td> 80 </td> </tr>
<tr>
<td> XII </td><td>B</td><td> 80</td><td> 90 </td> </tr>
</Table>
</Body>
</Html>
```

Code	Display
<pre>&lt;frameset rows="16%,84%"&gt; &lt;frame src="top.htm" name="top"&gt;  &lt;frame src="bottom.htm" name="bottom"&gt; &lt;/frameset&gt;</pre>	
<pre>&lt;frameset rows="16%,84%"&gt; &lt;frameset cols="50%,50%"&gt; &lt;frame src="topleft.html" name="tl"&gt; &lt;frame src="topright.html" name="tr"&gt; &lt;/frameset&gt; &lt;frame src="bottom.html" name="bottom"&gt; &lt;/frameset&gt;</pre>	
<pre>&lt;frameset rows="16%,84%"&gt; &lt;frame src="top.htm" name="top"&gt; &lt;frameset cols="50%,50%"&gt; &lt;frame src="left.htm" name="left"&gt; &lt;frame src="right.htm" name="right"&gt; &lt;/frameset&gt; &lt;/frameset&gt;</pre>	

```
<frameset rows="50%,50%"
cols="50%,50%">
<frame src="topleft.htm" name="topleft">
<frame src="topright.htm"
name="topright">
<frame src="botleft.htm" name="botleft">
<frame src="botright.htm"
name="botright">
</frameset>
```



```
<FRAMESET cols="20%, 80%">
<FRAMESET rows="100, 200">
<FRAME src=" frame1.html">
<FRAME src=" frame2.gif">
</FRAMESET>
<FRAME src=" frame3.html">
<NOFRAMES>
<P>This frameset document contains:
<UL>
<LI><A href="frame1.html">
Some neat contents</A>
<LI><IMG src=" frame2.gif" alt="A
neat image">
<LI><A href="frame3.html">
Some other neat contents</A>
</UL>
</NOFRAMES>
</FRAMESET>
```



**<NOFRAME> Tag contain the html content which will be displayed if browser does not support frame document. It's a container tag. Closed by </noframe>**

**If we don't use <NoFrame> Tag and Browser does not support Frames, in that case Error page will be displayed by the browser**

**<NOFRAME> TAG basically helps stopping the error page instead displayed the content which is basically a link to a non frame page**

**<Base Target= " Target Frame name">** Tag is used to link a frame/Window where the hyperlinked webpage of other frame will be displayed . **<Base target = "">** is used to open all link document to be open in particular frame of frameset/ Window.

**<Base Target= " Target Frame name"> is always declared in <head > tag of HTML Webpage Page**



Prime Minister on 26 October 2011 declared the birthday of the great mathematician Srinivasa Ramanujan, 22 December as National Mathematics Day. PM also declared 2012 as the national mathematical year.

The Ramanujan Mathematical Society will hold a series of activities in 2012 to mark the 125th birth anniversary of the mathematician.

The activities involve different sections like:

- School goers
- College students
- Research Fellows

#### Programme Details

Event	Details
Opening Ceremony	Prime Minister inaugurates the year long celebrations at the Madras University Auditorium
Activities	Talks and activities would focus on helping students get rid of their fear of the subject and improve their skills
Closing ceremony	International Conference of Mathematicians in New Delhi in december 2012

For enquiries mail us at [RMS@xyz.com](mailto:RMS@xyz.com)

Consider the following points while writing the HTML code:

1. The title of the web page is Mathematics Year.
2. The style of the page is Trebuchet MS.
3. The image used is Maths1.jpg
4. The table has a red colored border that is 5 pixels thick.
5. The space between cells is 5 pixels.
6. Use the concept of lists to create the given lists.
7. The link at the bottom is an e\_mail link to the address [RMS@xyz.com](mailto:RMS@xyz.com)

1. 

```
<html>
<head> <title>Mathematics Year</title> </head>
<body>
<font face = "Trebuchet MS">
<center></center>
<P>
Prime Minister on 26 October 2011 declared the birthday of the great mathematician Srinivasa Ramanujan, 22 December as National Mathematics Day. PM also declared 2012 as the national mathematical year.
<p>
The Ramanujan Mathematical Society will hold a series of activities in 2012 to mark the 125th birth anniversary of the mathematician.
```

<P>

<ul>The activities involve different sections like:

<li>School goers

<li>College students

<li>Research Fellows

</ul>

<hr>

<table border=5 bordercolor=red cellpadding=5>

<caption>Programme Details</caption>

<tr>

<th>Event

<th>Details

</tr>

<tr>

<td>Opening Ceremony

<td>Prime Minister inaugurates the yearlong celebrations at the Madras University Auditorium

</tr>

<tr>

<td>Activities

<td>Talks and activities would focus on helping students get rid of their fear of the subject and improve their skills

</tr>

<tr>

<td>Closing ceremony

<td>International Conference of Mathematicians in New Delhi in December 2012

</tr>

</table>

<font size = 2>For enquiries mail us at

<a href = "mailto:RMS@xyz.com">RMS@xyz.com</a>

</body>

</html>



## Save girl child, educate girl child

Save girl child, educate girl child (Beti Bachao, Beti Padhao) is a Government of India scheme that aims to generate awareness and improving the efficiency of welfare services meant for women.



Project Implementation

1. [At the National level](#)
2. [At the State level](#)
3. [At the District level](#)

The objectives of this initiative are:

Prevention of gender biased sex selective elimination	Ensuring survival & protection of the girl child	Ensuring education and participation of the girl child
---	--	--

[For Further Enquiries](#)

Consider the following while writing the HTML code

1. Title of the page should be "Save Girl Child"
2. Link colour should be "Maroon", visited link colour should be "Red".
3. Heading of page is "violet"
4. Picture used in the page is the file "savegirl.jpg"
5. Table should have a border of width 1, border of table should be "green".
6. Background of first row is "yellow" and of second row is "cyan"
7. Pages linked to :
  - At the National level as "national.html"
  - At the State level as "state.html"
  - At the District level as "district.html"
8. Bottom message is of size 2 is linked to email-id [savegirl@abc.com](mailto:savegirl@abc.com)

```
2. <html>
<head> <title>Save Girl Child</title> </head>
<body LINK="maroon" VLINK="red" >
<h1 align="center">Save girl child, educate girl child</h1>
<hr>

<strong>Save girl child, educate girl child (BetiBachao, Beti Padhao) </strong>is a Government of
India scheme that aims to generate awareness and improving the efficiency of welfare services
meant for women.</p>
Project Implementation
<ol>
<li><a href="national.html">At the National level</a></li>
<li> <a href="state.html">At the State level</a></li>
<li> <a href="district.html">At the District level</a></li>
</ol>
```

```
<table width="300" border="1" bordercolor="green" >
<tr bgcolor=yellow>
<td colspan=3><center>The objectives of this initiative are:
</center></td>
</tr>
<tr bgcolor=cyan >
<td width="100">Prevention of gender biased sex selective
elimination</td>
<td width="100">Ensuring survival protection of the girl
child</td>
<td width="100">Ensuring education and participation of the girl
child</td>
</tr>
</table>
<hr>
<FONT SIZE=2 > <p align="center"><a href="mailto:savegirl@abc.com">For Further
Enquiries</a></p></font>
</body>
</html>
```