

Sample Paper – 2014
Class – XII
Subject – Multimedia & Web Technology

#	Theory/Practical	Marks	Duration
1	Theory	70	3 Hours
2	Practical	30	3 Hours

#	Theory/Practical	Topics	Marks
1	Theory	COMPUTER SYSTEM	5
		WEB TECHNOLOGIES	10
		WEB DEVELOPMENT	40
		MULTIMEDIA AND AUTHORING	15
	Total Marks		70
2	Practical	HANDS ON EXPERIENCE	15
		PRACTICAL FILE	5
		PROJECTS	5
		VIVA VOCE	5
	Total		30

Study Notes-I

- Student can use this note for the quick preparation for Computer Science.
- Question and answer are based on CBSE 2013 Patters.
- All examples are based on CBSE Syllabus.

1. **SECTION-1 (COMPUTER & DATABASE SYSTEMS & OTHERS- 10/05 MARKS) :-**

1. What is a DBMS?

ANSWER-Q1.1:

DBMS is the database system where data, tables, views and other database objects are stored as tables. Its full form is **D**atabase **M**anagement **S**ystem.

2. What are the significances/advantages of a Database?

ANSWER-Q1.2:

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.

3. Give the full forms of the following abbreviations:

1. RDBMS
2. DBMD

ANSWER-Q1.3:

The full forms are:-

1. RDBMS: Relational Database Management System
2. DBMS: Database Management System

4. What are the use of Memo and Auto Data type?

ANSWER-Q1.4:

The Auto is used to create the sequence of an auto-generated numbers whereas Memo is used to store the binary data.

5. What is Degree of a Table?

ANSWER-Q1.5:

The number of the columns or attributes in a table is called Degree. A attribute is also called Column. So, it is also a count of the attributes.

6. What is a Cardinality of Relation?

ANSWER-Q1.6:

The number of tuples in a table is called Cardinality. A tuple is also called Row. So, it is also a count of the rows.

7. What are two the differences between Number and Date types?

ANSWER-Q1.7:

Two differences between Number and Date types are give below:-

Number	Date
It allows to store any numeric values.	It allows to store Date values. It can't hold more than 8 digits.
It can store only number type values and does not allow the character values.	It can store system date, containing date and time information.

8. What are two the different types of relations among the tables?

ANSWER-Q1.8:

Any two out of the following relations can exist between two tables:

1. One- To-One
2. One-To-Many
3. Many-To-Many

9. What are the three differences between Alternate and Foreign Keys?

ANSWER-Q1.9:

Three differences between Alternate and Foreign Keys are give below:-

Alternate key	Foreign key
It is a candidate key that is not the primary key.	It is key in table which is a primary key in another table. It is used to link the related table.
It is one out of the set of candidate keys.	It is always s primary key for the first table.
A key that can be used as a unique identifier for the record sets.	It does not uniquely identify the rows in the table.

10. What are the two differences between Candidate and Primary Keys?

ANSWER-Q1.10:

Two differences between Candidate and Primary are give below:-

Candidate Key	Primary key
The attributes or columns of a table that can serve as the Primary Key.	It is one or more than one attributes which can identify the unique records in a table.
It can't become a Foreign Key in another table.	It is the candidate for a Foreign Key in another table.

11. What is importance of Primary Key? Explain with a suitable example.

ANSWER-Q1.11:

A Primary Key of relation identifies the unique records in the relation. The relation is also called Table. A Primary Key is a set of one or more than one attributes in a table. No two values of in a table have same values if the column is Primary Key. A table can have multiple Candidate Keys but at most one Primary Key. A Primary Key column can't accept the duplicate values.

Let's consider a table named CUSTOMER_DETAILS consists of the following attributes:

1. CUST_ID
2. BOB_ID
3. PAN_NUMBER
4. AADHAR_NUMBER
5. CUST_NAME

Any one out of CUST_ID, BOD_UD , PAN_NUNBER and AADHAR_NUMBER can be used as the Primary Key and the remaining columns are called as Alternate Keys.

12. Write a short notes on DBMS.

ANSWER-Q1.12:

DBMS is a Software System that stores data in a tabular form. It is the software system that stores data, table, views and other database objects as tables. All system level information stored inside the special storage area and that is called Data Dictionary. Database Management System adds some significances and the important significances 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.

DBMS are provided by the product companies like Oracle and two example of FOSS DBMS are:

1. MySQL Database
2. Postgresql Database

13. Study the following-data and answer the questions given below :

Table: BOOK_INVENTORY

TITLE_ID	TITLE	AUTHOR	PUB_YEAR	MRP
2310201201	Revolution 2020	Chetan Bhagat	2011	140.00
2410201202	The Facebook Effect	D. Kirkpatrick	2010	399.00
2110201203	The Grand Design	S Hawking	2010	499.00
2110201204	Wine	Collin Gem	2009	320.00

Table: BOOK_SALES

TITLE_ID	ISBN_NO	SALE_DATE	DIS_PRICE
2310201201	978-81-291-1880-1	23/10/2012	120.00
2310201201	978-81-291-1880-2	24/10/2012	120.00
2110201203	978-81-291-1882-1	21/10/2010	450.00
2410201204	978-81-291-1883-1	12/10/2010	220.00

1. Name the field, which can act as the primary key for the table **BOOK_INVENTORY** and the table **BOOK_SALES** respectively.
2. Name the field, which can act as the foreign key for the table **BOOK_SALES**.
3. What kind of relations can exist between **BOOK_INVENTORY** and **BOOK_SALES**?

ANSWER-Q1.13.1:

TITLE_ID can act as Primary Key for BOOK_INVENTORY table.

ANSWER-Q1.13.2:

TITLE_ID is the Foreign Key for BOOK_SLAES table.

ANSWER-Q1.13.1:

Two types of relations can between them and they are:-

1. One-To-One
2. One-To-Many

2. **SECTION-2 (MULTIMEDIA AND MACROMEDIA FLASH-10/15 MARKS) :-**

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

ANSWER-Q2.1:

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

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

2. What are Symbols?

ANSWER-Q2.2:

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.

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

ANSWER-Q2.3:

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 Fhostoshop.

4. What is a Frame Buffer? What FPS?

ANSWER-Q2.4:

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

The number of change of a Frame per second is called Frame Per Second and it is also called Frame Rate. It is usefully used to control the speed of the animation or movie.

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

ANSWER-Q2.5:

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 Keyframe? What is the use of Stage?

ANSWER-Q2.6:

It is a frame in Photoshop 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 Photoshop 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?

ANSWER-Q2.7:

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?

ANSWER-Q2.8:

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).

ANSWER-Q2.9:

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 40th 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 40th 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. Differentiate between TIFF and MPEG ;

ANSWER-Q2.10:

TIFF(Tagged Image File Format) is type of file format meant for storing images, including photographs and other line arts. It is maintained and controlled by Adobe Systems.

MPEG(Moving Picture Experts Group) is another type of file format formed by ISO for the storing and transmission of audio and video contents.

11. What are the full forms of the abbreviation?

ANSWER-Q2.11:

#	Abbreviation	Full Form
1	GIF	Graphics Interchange Format
2	JPEG/JPG	Joint Photographic Expert Group
3	BMP	BITMAP Image File
4	AVI	Audio Video Interleave
5	PSD	Photoshop Standard Document
6	AIFF	Audio Input File Format
7	MIDI	Musical Instrument Digital Interface
8	WAV	Waveform Audio File Format
9	ASF	Advanced Systems Format
10	TIFF	Tagged Image File Format

3. **SECTION-3 (WEB DEVELOPMENT -HTML & WEB TECHNOLOGIES(I) -10/40 MARKS) :-**

1. Give the full forms of the following Abbreviations:

1. XML
2. FOSS

ANSWER-Q3.1:

Abbreviations	Full Forms
XML	Extensible Markup Language
FOSS	Free and Open Source Software

2. What are the two differences between JPEG and GIF:

ANSWER-Q3.2:

Two differences between JPEG and GIF are give below:-

JPEG	GIF
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 255 colors.

3. Write a HTML Code to generate the web page in the format shown below:



Darjeeling is beautiful hill station of West Bengal.
 Darjeeling is also know as the Queen Of Hills.
 St. Paul's School, one of the best, is also there.
 This year there was slight snowfall in the month of Dec.



Select Torist Spots:

Consider the following while writing the HTML code

1. Background color of the page should be “White”, text color should be “Magenta”.
2. Title of the page is “Darjeeling-Queen Of Hills”.
3. Text color of main heading on the page should be “Blue”.
4. Font face of text in the page should be “Verdana”.
5. Picture used in the page is the file “Darjeeling.jpeg”.
6. Use the concept of select list to display drop-box for selecting values of 'Tourist Spot'.
7. Pages linked to :
 - * None

ANSWER-Q3.3:

```
<html>
<head><title> Darjeeling</title></head>
<body>
<table>
<tr><td></td>
<td colspan=5>
Darjeeling is a beautiful hill station of West Bengal and Toy Train is its ornament. <br>
Darjeeling is also know as the Queen Of Hills. Darjeeling Tea is world famous. <br>
St. Paul's School, one of the best, is also located there. Barfi is being filmed on Darjeeling. <br>
During this winter season, there was a slight snowfall in the month of December. <br>
</td>
<td></td>
</table>
<br>
</tr>
<DIV align="center">
<b> Select Tourist Sports:</b>
<select name="select">
<option> PN Zoo</option>
<option> Rock Climbing</option>
</select>
</DIV>
</body>
</html>
```

4. **SECTION-4 (WEB DEVELOPMENT -ASP PROGRAMMING(II) 10/40 MARKS) :-**

1. What is a Web Server? What are the properties of ASP?

ANSWERS-Q4.1:

Web Server is a server engine. It provides the methods and properties that enables a ASP code to communicate with the engine. They include the following:

1. Request Object: It retrieves information from a client.
2. Response Object : It send the response information including html outputs to the client.
3. Application Object: It stores the information about the application or web pages.
4. Session Object : It stores the information about a particular client's session on the browser.
5. AspError Object: It is used to obtain the information about the error conditions that occur in an ASP.
6. Server Object: It is used to initialize the operations inside the web container. It includes reading a file.

The features of ASP are:

1. ASP contains server-side scripts, objects and components.
2. ASP adds dynamic contents to a web application or web pages.
3. It retrieves the information from the client.
4. ASP runs of web sever like MS IIS, Apache Web Server etc.

2. Differentiate between Procedure and Function.

ANSWERS-Q4.2:

Procedure is the code block that can be called anywhere in the program and it does not return any value to the calling block where as the functions are the block of the code that can be called anywhere in the program and it returns a value to the calling block or functions or procedure.

3. What is the use of Ad Rotator? What is SSI?

ANSWERS-Q4.3:

Ad Rotator component is used for controlling the rotations of the image in a ASP website.

SSI(Server Side Include) is a simple programing language and it also allows to include a file into the asp code. Example of including file into a ASP page is give below:

```
<!--#include virtual="/index.asp" →
```

4. Explain the use of the following ASP functions:

1. LTRIM()
2. RTRIM()
3. TRIM()
4. NOW()
5. DATE()
6. MONTHNAME()

ANSWERS-Q4.4:

The uses are given below:-

Functions	Use Details
LTRIM()	It is used to remove the blank space from the left side of a string.
RTRIM()	It is used to remove the blank space from the right side of a string.
TRIM()	It is used to remove the blank space from both sides of a string
NOW()	It is used to get the current system time with date part.
DATE()	It is used to get the current system date.
MONTHNAME()	It is used to get the month name for a give month number.

5. Give the outputs of the following statements:

1. Response.Write(RTRIM(" S-COMMERCE "))
2. Response.Write(DATENAME(DATENAME(8/2+1)))
3. Response.Write(UBOUND(SPLIT(" S-COMMERCE,M-COMMERCE ",",")))

ANSWER-Q5.3:

The outputs are:

1. S-COMERCE
2. May
3. 2

5. **SECTION-5 (WEB DEVELOPMENT-ASP PROGRAMMING(III) 10/40 MARKS) :-**

1. Give a difference between Read and ReadLine methods of the TextStream .

ANSWER-Q5.1:

Read is used to read the words but ReadLine is used to read the words from a line until the stream reaches the end of the file.

2. What is full form of ADO? What Global.asa?

ANSWER-Q5.2:

ADO: ActiveX Data Object. Global.asa is the file which contains the SCRIPTS to be execute inside the Web Server.

3. A e-Learning Company company ,Future Learning wishes to design an ASP coded web page with the following specifications:

1. To display a greeting message " Welcome to Virtual Classroom " if the user access the website.
2. With three hyperlinks pointing to AboutUs.asp, Activity.asp and ContactUs.asp ,below the greeting message.
3. Field to display the number of visitors.

ANSWER-Q5.3:

```
<HTML>
<TITLE>Future Learning</TITLE>
<BODY>
<P>
```

Welcome to Virtual Classroom . Click the links below to know more about us.

```
<P>
    <A HREF= "AboutUs.ASP"> About Us </A> <P>
    <A HREF= "Activity.ASP"> Activities </A> <P>
    <A HREF= "ConatctUs.ASP"> Contact Us </A> <P>
</P>
<%set pgCount = Server.Createobject("MSWC.PageCounter")%>
<%pgCount.PageHit%>
Visitors Count : <%=pgCount.Hits%>
</BODY>
</HTML>
```

4. Write the ASP code that will read the text file called TextFiles.txt, and displays the contents in upper case.

ANSWER-Q5.4:

```
<html>
<body>
<%
Set FS = Server.CreateObject("Scripting.FileSystemObject")
Set RS = FS.OpenTextFile(Server.MapPath("TextFiles") & "\TextFile.txt",1)
While not rs.AtEndOfStream
Dim lineRead
    lineRead=RS.ReadLine
    Response.Write("<br>")
    Response.Write UCASE(lineRead)
    Response.Write("<br>")
Wend
%>
</body>
</html>
```

5. Write the ASP code that will read the text file called TextFiles.txt, and counts the number of words inside the file.

ANSWER-Q5.5:

```
<html>
<body>
<%
wordCount=0
Set FS = Server.CreateObject("Scripting.FileSystemObject")
Set RS = FS.OpenTextFile(Server.MapPath("TextFiles") & "\TextFile.txt",1)

While not rs.AtEndOfStream
```

```

Dim lineRead
lineRead=RS.ReadLine
wordsCount= wordsCount+(Ubound( Split(lineRead , " ")) +1)-1
Wend
Response.Write("The number of Words:" & wordsCount)
%>
</body>
</html>

```

6. What are Connection String and DSN Connection?

ANSWER-Q5.6:

The connectivity to the Database Systems like MS Access or MySQL can be established in many ways and one of them is using Connection String inside the ASP Page. It uses the ADO object of ASP and makes the connection to the given database file residing inside the system whereas DSN uses external driver to create the connection to the database. To create a connection using DSN, a named DSN is created using ODBC interface and that named DSN is used to get connectivity to the Database file or Database System.

7. What is use of Record Set Object??

ANSWER-Q5.7:

A Record Set is a collection of records or data retrieved from a database. The database could be MS Access or MySQL. Before retrieving the records set, a connection to the database is opened using ADO object.

8. What are the difference between

2. Request and Response Object?

3. Flush Method and End Method?

ANSWER-Q5.8:

The difference between Request and Response Objects are given below:

Request object	Response object
It sends the request data from client's browser.	It sends the response information from the server to the client's browser.
Form() and QueryString() are two of its methods.	Write and Flush are two of its methods.

The difference between Request and Response Objects are given below:

Flush method	End method
It sends the previously buffered outputs to the client.	It sends the buffered output.
Use of this methods does not stop the processing of the scripts further.	It causes the server to stop processing the scripts further.

9. Write the ASP code that will read the values from a table using DSN and displays them into a ASP Page.

ANSWER-Q5.9:

```
<%
Dim Connection
Dim Recordset
Dim SQL
SQL = "SELECT * FROM BOOK_MASTER"
Set Connection = Server.CreateObject("ADODB.Connection")
Set Recordset = Server.CreateObject("ADODB.Recordset")
Connection.Open "DSN=dsn_name"
Recordset.Open SQL,Connection
If Recordset.EOF Then
Response.Write("No records returned.")
Else
    Do While NOT Recordset.EOF
        Response.write Recordset("ISBN_NO")
        Response.write Recordset("AUTHOR")
        Response.write Recordset("PRICE")
        Response.write "<br>"
        Recordset.MoveNext
    Loop
End If
Recordset.Close
Set Recordset=nothing
Connection.Close
Set Connection=nothing
%>
```

10. Write the ASP code that will read the text file called TextFiles.txt, and counts the number of spaces inside the file.

ANSWER-Q5.10:

```
<%
dim FS, RS, words, count
Set FS = Server.CreateObject("Scripting.FileSystemObject")
Set RS = FS.OpenTextFile(Server.MapPath("TextFiles") & "\TextFile.txt",1)
while not RS.atendofstream
    words= RS.read(1)
    if words = " " then
        count = count + 1
    end if
wend
```

```
response.write("total number of space=" , count)
myfile.close
%>
```

6. **SECTION-6 (WEB DEVELOPMENT-HTML AND VBSCRIPTS (IV) -10/40 MARKS) :-**

1. What are the differences between Local and Global Variables?

ANSWER-Q6.1:

The difference between Local and Global Variables are give below:

Local variable	Global
It is declared inside a procedure.	It is declared outside a procedure.
It can be accessed only inside a particular procedure.	It is valid for all the procedure function.

2. Differentiate between Client-Scripts and Server-Side Scripts:

ANSWER-Q6.2:

The Client Side Scripts are the scripts that are executed in a browser environment and responsible for sending the requests to the web server where as Server-Side Scripts are those scripts which are executed inside a web-server environment. VBScript is client side Script and ASP is the Server-Side Script.

3. Rewrite the following code using DO WHILE instead of FOR LOOP without affecting the output:

```
<SCRIPT LANGUAGE = "VBScript" >
  DIM A, B, C, Count
  A = 0
  B = 1
  FOR Count = 3 TO 10 STEP 2
    C = A+B
    Document.Write ("FOR" & C & " ")
    A = B
    B = C
  NEXT
</SCRIPT>
```

ANSWER-Q6.3:

```
<SCRIPT LANGUAGE = "VBScript" >
  DIM A, B, C, Count
  A = 0
  B = 1
  Count = 3
  DO WHILE Count < 10
    C=A+B
    Document. Write ("DO-WHILE"& C & " ")
    A = B
```

```
B = C
Count=Count+2
LOOP
</SCRIPT>
```

4. Write HTML code to take two number inputs and to check whether the first one is divisible by second one or not. Display the result in a message box.

ANSWER-Q6.4:

```
<HTML>
<HEAD><TITLE>DIVISIBILITY CHECK</TITLE>
<SCRIPT LANGUAGE="VBScript">
SUB btn1_OnClick
    Dim A, B
    A = myFORM.TXT1.VALUE
    B = myFORM.TXT2.VALUE
    IF A MOD B = 0 THEN
    MSGBOX (A & " Is Divisible by " & B)
    Else
    MSGBOX (A & " Is Not Divisible by " & B)
    END IF
END SUB
</SCRIPT>
</HEAD>
<BODY>
<FORM NAME = "myFORM">
<P>INPUT NUMBER <INPUT TYPE = "TEXT" NAME = "TXT1">
<P>CHECK DIVISIBILITY BY <INPUT TYPE = "TEXT" NAME = "TXT2">
<P>
<INPUT TYPE = "Button" VALUE = "Check Divisibility " NAME="btn1">
</FORM>
</BODY>
</HTML>
```

5. Write HTML code to take the two number inputs and to calculate the sum of these two numbers. Display the result in a message box.

ANSWER-Q6.5:

```
<HTML>
<HEAD><TITLE>SUM OF INPUTS</TITLE>
<SCRIPT LANGUAGE="VBScript">
SUB btn1_OnClick
    Dim A, B, SUM
```

```
A = myFORM.TXT1.VALUE
B = myFORM.TXT2.VALUE
SUM=CINT(A)+CINT(B)
MSGBOX("Sum of " & A & "and " & B & "is " & SUM)
END SUB
</SCRIPT>
</HEAD>
<BODY>
<FORM NAME = "myFORM">
<P>FIRST NUMBER :<INPUT TYPE = "TEXT" NAME = "TXT1">
<P>SECOND NUMBER: <INPUT TYPE = "TEXT" NAME = "TXT2">
<P>
<INPUT TYPE = "Button" VALUE = "Calculate SUM " NAME="btn1">
</FORM>
</BODY>
</HTML>
```

7. SECTION-7 (NETWORKING & OPEN SOURCE SOFTWARE-10/10 MARKS) :-

1. What are intranet and Interspace?

ANSWER-Q7.1:

It is a local collection of interconnected network of computer device, govern by the local authority. A privately owned network is termed as intranet

It is a vision of what the internet will become, where users correlates information in multiple ways from multiple sources.

2. What is URL? What are different types of URL?

ANSWER-Q7.2:

URL is an addressing scheme to indicate the location of a website. In World Wide Web, an unique location of a web site is required to view that web page / site in a browser. This unique address of the web site of application is called URL. Its full form is Uniform Resource Locator.

The following are the types of URL(Uniform Resource Locator):

1. Absolute URL: It is a complete internet address to give the location of a page or site. For example , <http://www.facebook.com/index>
2. Relative URL: It only designates the file name and it is always relative the actual location.
3. Fragmented URL: The name attribute of an <A> element creates an anchor and URL created by this attribute is called fragment URL.

3. What is Firewall? What is the use of FTP?

ANSWER-Q6.3:

Firewall is an electronic blocking mechanism or software that will not allow unauthorized intruders or system to get the access of any resources in computer device.

FTP, File Transfer Protocol is used to transfer the data file from one system to another one.

4. Define Crackers.

ANSWER-Q6.4:

It is a group of the people who can enter into a computer network without an authorized access and can do the malicious activities.

5. What are the depending factors of Networking Layouts?

ANSWER-Q7.5:

The layout of computer networks depends on the following factors:

1. Repeater is used to boost the speed of the signals and only used if the length of coaxial cable is more than 60m.
2. It is used in each pair of wing or building where the distance if more than 60 m and the cable used is coaxial.
3. Server is placed in the wing/building with the maximum number of Computers.
4. Twisted Paired is the most economic type of cables .
5. Coaxial is suitable in the place where the economic factor is not the concern.

6. Write a short note on following:

1. SMS
2. Computer Virus
3. Malware
4. Cyber Law
5. Modem
6. Information Kiosk

ANSWER-Q7.6:

1. **SMS :**

SMS(Short Message Service) is type messaging service meant for exchanging short text messages. It is the text messaging service component of phone,web or mobile communication systems using standardized communication protocols that allows to exchange short text between fixed lines, web or mobile phone platforms. SMS is compatible in GSM(Global System for Mobile) and CDMA(Code Division Multiple Access) networks.

2. **Computer Virus:**

The type of Malware which destroys a targeted program on a computer devices like personal Computer, Laptop, Ultrabook etc. Sometimes, it destroys the whole device itself once it transmits to it from another infected host.

Strog is LINUX Virus and there are many viruses for Windows.

3. **Malware**

The program or scripts which are harmful to the computing devices and can destroy the communication and computing devices are called Malware. Some of the important types of Malware are:-

1. **Worms :**

The type of Malware which destroys a targeted program on a computing devices devices like Personal Computer, Laptop, Ultrabook etc .Sometimes it destroys the whole device itself once it replicates on it from another system.

2. **Trojan Horses**

The type of Malware which destroys a targeted program on a computer devices like Personal Computer, Laptop, Ultrabook etc. It installs itself in the target devices unknowingly.

3. **Spyware**

The type of Malware which tracks the different types of activities on a computer devices once it transmits itself from another hostile host. 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.

4. **AdWare**

The type of Malware which opens a site for an advertisement or installs another program loaded with an advertisement on a computer devices like Personal Computer, Laptop, Ultrabook etc. It may or may transmit itself.

4. **Cyber Law:**

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. Indian IT Act was formed in the year of 2000 and some amendments were added in 2008 and 2011. There 23 Indian IT Rules which are also the part of Indian Cyber Laws.

5. **Modem:**

It is a device to connect a computer system like Personal PC, Laptop, Phablets etc. into internet. There are two types of Modem to connect to internet and first one is Wired Modem and another one is Wireless Modem.

6. **Information Kiosk:**

Information Kiosk is the interactive platform for various types of functions and utility offered on many kiosks in marketplace or business zones. Generally, the functions are exposed through the touch screen based interface to give the access to product information, utility services, company services, printouts of tickets and forms.

7. Give the full forms of the following abbreviations.

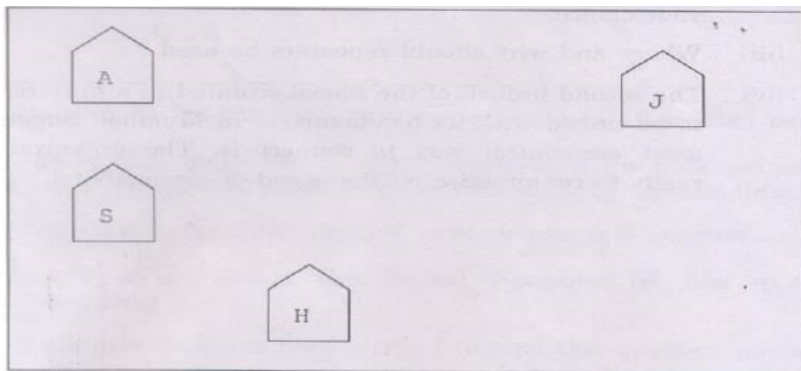
1. ARPANET
2. LAN
3. WAN
4. MAN

5. GSM
6. CDMA
7. WLL

ANSWER-Q7.6:

#	Abbreviation	Full Form
1	ARPANET	Advanced Research Projects Agency Network
2	LAN	Local Area Network
3	WAN	Wide Area Network
4	MAN	Metropolitan Area Network
5	GSM	Global System for Mobile
6	CDMA	Code Division Multiple Access
7	WLL	Wireless Local Loop

8. MyGrahak, an Indian Commence company wants to open a new regional office at Siliguri and they are setting up the computer network between its offices or wings. There are 4 wings named as SALES(S), LOGISTICS(J), ADMIN(A), and COLDSTORAGE(H).



Distance between various wings are given below:

Wing A to Wing S	100m
Wing A to Wing J	200m
Wing A to Wing H	400m
Wing S to Wing J	300m
Wing S to Wing H	100m
Wing J to Wing H	450m

Number of computers in each wing is as given below:

Wing A	10
Wing S	200
Wing J	100
Wing H	50

Answer the following questions based on the above given information:

1. Suggest suitable cable layout(s) or topology for connecting the wings.
2. Where do you think the server and repeater should be placed and explain why?
3. Suggest the type of cable should be used if the organization wants best and fast networking.

ANSWER-Q7.6:

1. The two suitable cable layout or topology for network are:
 1. Ring Topology and
 2. Bus Topology
2. The server should be placed in the wing which has maximum number of computers. It should be placed at Wing S. The repeaters should be placed in between Wing S and Wing H(at Wing H), Wing S and Wing A(at Wing A) and Wing S and Wing J(at Wing J).
3. Optic-Fibre should be used for this purpose.

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