

# MULTIMEDIA AND WEB TECHNOLOGY

Time allowed : 3 hours

Maximum Marks : 70

## QUESTION PAPER CODE 89/1

1. (a) Identify the following views used to create a database in Access. 1

(1)

Field Name	Data Type	Description
BID	Text	Book Identification Number
BNAME	Text	Book Name
BPurDate	Date/Time	Date on which the Book was purchased
BPublish	Text	Publisher of the book

(2)

BID	BNAME	BPurDate	BPublish
B03	Action Scripting	10-08-2009	Taxmall
B04	Flash for Dummies	11-08-2009	Penguire
B05	Access Made Easy	10-10-2010	Harping

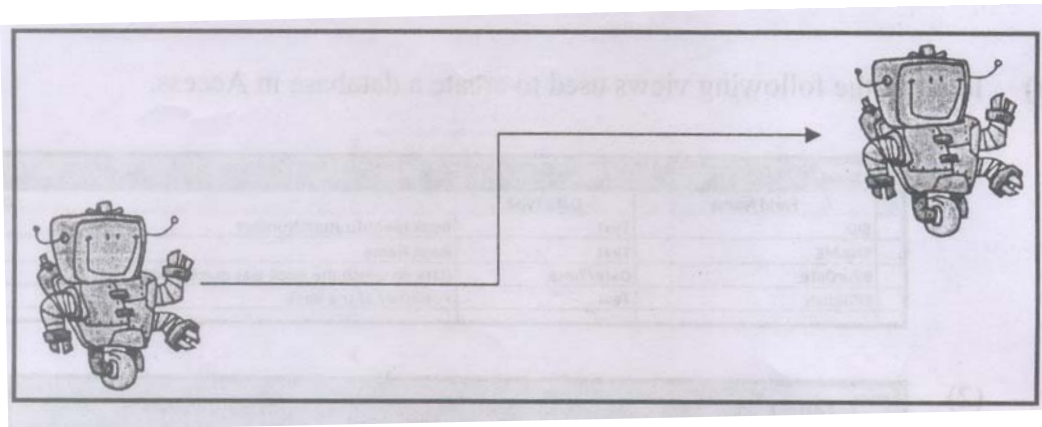
- (b) Illustrate the usage of foreign key with the help of an example. 2
- (c) Study the table WEBSITES given below and answer the following questions:

**Table: WEB SITES**

SITE_ID	SITE_CAT	SITE_LAUNCH	SITE_VOTES
S100	Commerce	11/11/2005	2S000
S101	Government	10/06/2007	15000
S102	Education	07/02/2008	45000
S103	Organisation	11/10/2008	42000

- (1) Name the field which can act as the primary key in the table WEB-SITES. 1
- (2) Suggest the data types that should be used for each of the fields in the table WEBSITES. 2

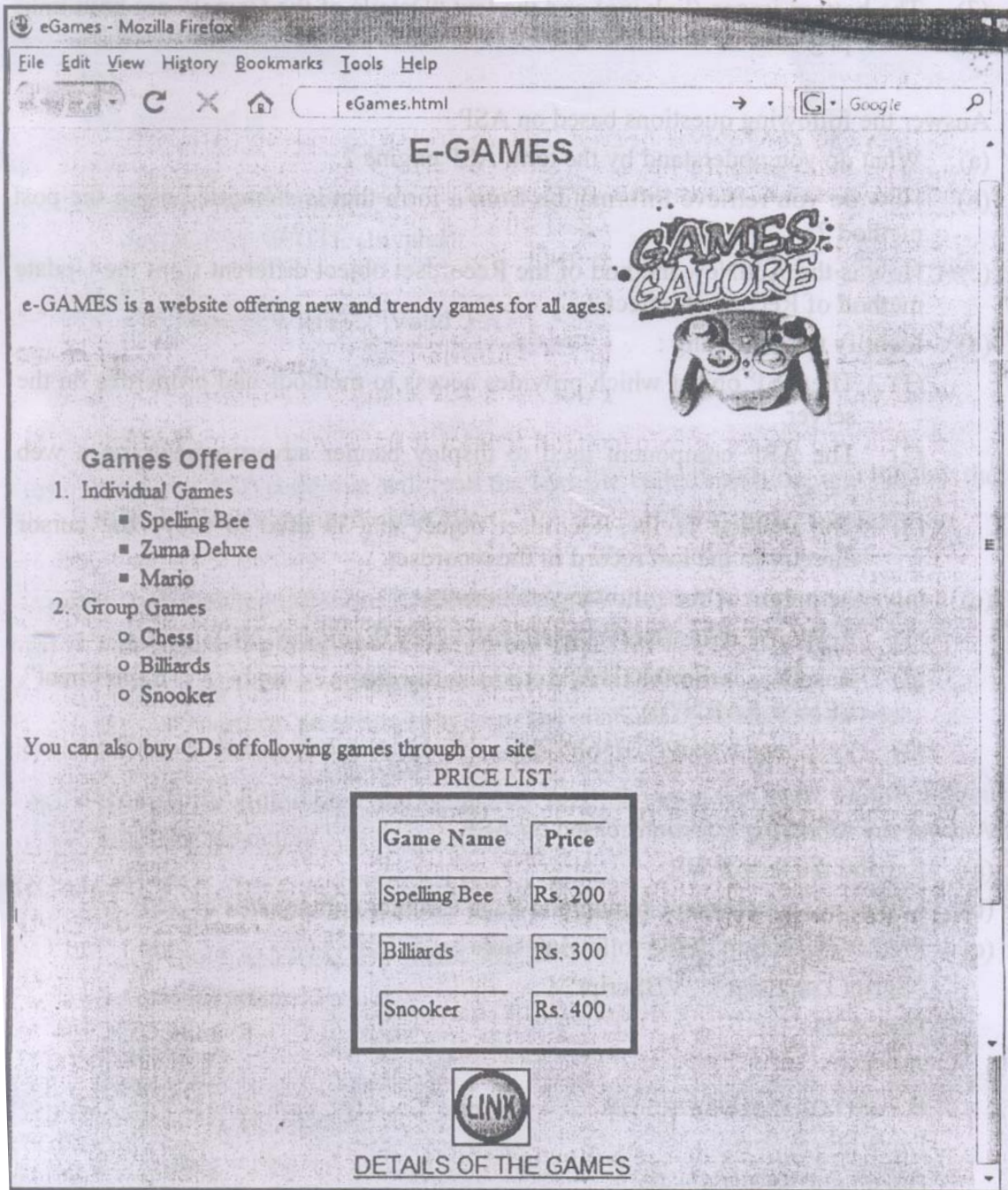
- (d) Expand the term MPEG. What kinds of files are stored using the MPEG format? 2
- (e) Mention any two areas where virtual reality is being used. 2
2. Answer the following questions based on Macromedia Flash.
- (a) What is the use of the onion skinning feature? 1
- (b) Name any two types of tweening. 1
- (c) Enumerate the benefits of vector graphics over bitmap graphics. 2
- (d) What is the use of the Publish Preview option? 2
- (e) Observe the image given below and do as directed: 4



- The image on the left hand side shows the position of the object at frame 1.
- The image on the right side shows the position of the object at frame 25.
- Assume that the image is stored in the library by the name robot. Also note that the colour and size of the image remains the same.
- The arrow shows the path followed by the robot to reach from position at frame 1 to the position at frame 25.

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

3. Answer the following questions based on HTML.
- (a) Name the three structural tags of HTML page and explain the usage of any one of them. 2
- (b) Write the HTML code to generate the web page in the format as shown: 8



Consider the following points while writing the HTML code:

- (1) Title of the page should be "eGames",
- (2) Background colour of the page should be "Pink",
- (3) Text colour of main heading should be "red" and font should be "Arial Bold".
- (4) Image used in the page is "game 1. jpg".

- (5) Use the concept of nested lists to create the given lists.
- (6) The table should have a border of size 5 and color blue and the spacing between adjacent cells is 15 pixels.
- (7) The bottom image (link.jpg) and the text "Details of the Games" are both links' to the page details.html.
4. Answer the following questions based on ASP.
- (a) What do you understand by the term ASP engine? 1
- (b) How do you retrieve information from a form that is submitted using the post method? 1
- (c) How is the AddNew method of the Recordset object different from the Update method of Recordset object? 2
- (d) Identify the following:
- (1) The ASP object which provides access to methods and properties on the server. 3
- (2) The ASP component used to display banner advertisements on a web page.
- (3) The method of the Recordset object that is used to move the cursor directly to the last record in the recordset.
- (e) Give the output of the following statements: 3
- (1) Response.write (NOT TRUE AND (TRUE OR FALSE))
- (2) Response.write(RIGHT("Let's Learn and Experiment", LEN("LEARN")))
- (3) Response.write<5-3>\*(4/2-3))
5. Answer the following questions based on ASP:
- (a) Expand the term PWS. 1
- (b) Differentiate between Counter and Page Counter components of ASP. 2
- (c) Predict the output of the following code: 2
- <Script Language= "VB Script">

```

Dim A, B
A= 1
B = 10
Do While A < 5
Document. Write (A + B)
A=A+ 1
B=B-2
LOOP
</Script>

```

- (d) Rewrite the following code after removing errors with each correction underlined: 2

```

<BODY>
The login name entered by the user is :
<%
pass = RESPONSE.QUERYSTRING ("password") %>
The password is :
<%
if pass <> "enter" then
    REQUEST.WRITE (Invalid)
Otherwise
    RESPONSE.WRITE ("Valid")
end
%>
</BODY>

```

- (e) Write the ASP code that will read the text file called multi.txt, and display the alternate lines contained in the file. 3

6. Answer the following questions based on VBscript :

- (a) Name the event to be used in the following situations: 2

- (1) To perform an action when a button is clicked.
- (2) To perform an action as soon as the contents of a text box change.
- (b) Rewrite the following code using DO WHILE instead of FOR LOOP without affecting the output: 2

```
<HTML>
<BODY>
<SCRIPT LANGUAGE="VBSCRIPT">
DIM Num, Flag
Flag = 0
Num = 10
FORA = 2 TO Num/2
    Flag = Flag + 1
NEXT
</SCRIPT>
</BODY>
</HTML>
```

- (c) Point out the errors in the following code and rewrite the code with the corrections underlined: 2

```
<HTML>
<BODY>
<SCRIPT = "VB SCRIPT">
DIM A, B, C, Count
A = 0
B = 1
FOR Count = 3 TO 6 INCREASE 1
C = A+B
document. Write (C)
```

```

A = B
B = C
LOOP
</SCRIPT="VBSCRIPT">
</BODY>
</HTML>

```

(d) Write the HTML code for creating the form shown below:

4

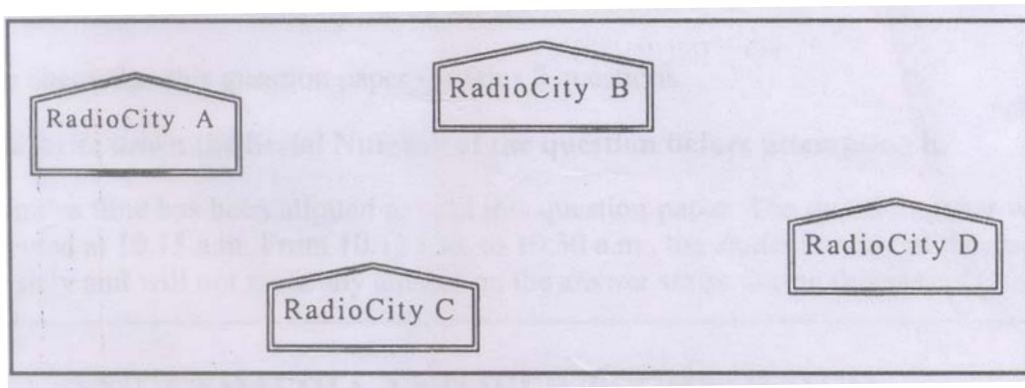
First Number	<input type="text"/>
Second Number	<input type="text"/>
Divisible	<input type="text"/>
<input type="button" value="Check Divisibility"/>	

Write the embedded VBscript code for the click event of the 'Check Divisibility' button such that it displays 1 if the First Number (number input in the first text box) is divisible by the Second Number (number input in the second text box) and 0 otherwise in the third text box.

For example: if the user inputs 10 and 5 in the first two text boxes, then 1 should be displayed in the third text box, on the click of the "Check Divisibility" button.

7. Answer the following questions based on the unit Web Technologies:

- (a) Define the term Firewall. 1
- (b) Expand the term FSF. 1
- (c) What are the following software used for?
  - (1) Open Office
  - (2) MySQL 2
- (d) Differentiate between Twisted pair cable and Optical fiber cable. 2
- (e) Radio City has set up its new center at Mumbai for its office and broadcasting activities. It has 4 blocks of buildings as shown in the diagram below. Answer questions (i) to (iv) in context of the following layout of the four blocks:



Center to Center distance between various blocks.

RadioCity A to RadioCity B	60 m
RadioCity B to RadioCity C	75 m
RadioCity C to RadioCity D	175 m
RadioCity A to RadioCity D	250 m
RadioCity B to RadioCity D	100 m
RadioCity A to RadioCity C	75 m

Number of Computers in each wing

RadioCity A	50
RadioCity B	250
RadioCity C	50
RadioCity D	100

- (1) Suggest a suitable cable layout to connect all the offices and name the topology used. 1
- (2) Suggest the most suitable place to house the server with proper justification.
- (3) Where and why repeaters should be used?
- (4) If the organization needs to link this branch office to another office situated in a distant city (around 1050 Km) away where cable connection is not feasible, then suggest an economic way to connect it with reasonably high speed? 1



**QUESTION PAPER CODE 89**

1. (a) What is the degree and the cardinality of the relation EMPLOYEE given below? 1

**TABLE: EMPLOYEE**

<b>EID</b>	<b>EName</b>	<b>EJoinDate</b>	<b>EExper</b>	<b>EPhone</b>
E01	Shayamli	10/08/07	10	22222101
E02	Kushambha	19/08/07	5	22222202

- (b) Differentiate between design view and datasheet view with respect to a database. 2
- (c) Latest Hit Station Video library stores data of all available DVDs on its server in a table named HitMovies in Access. Study the relation HitMovies given below and answer the following questions:

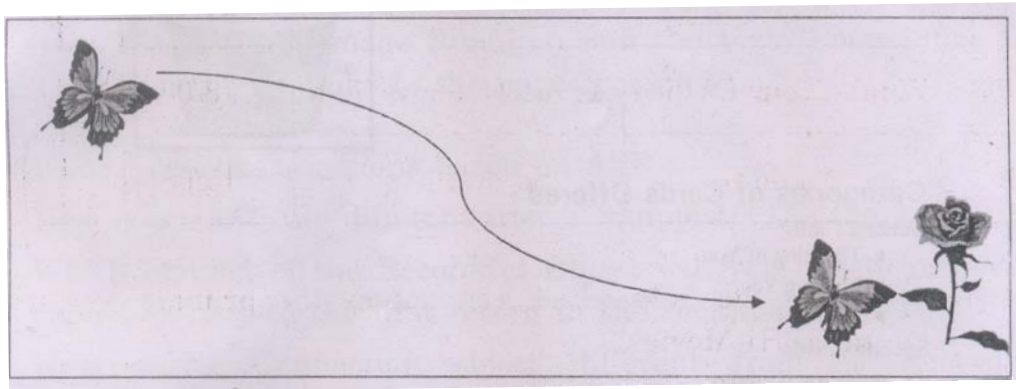
**TABLE: HitMovies**

<b>MID</b>	<b>MName</b>	<b>Director</b>	<b>ReleaseDate</b>	<b>Releasing Company</b>
MO1	London Dreams	Vipul Shah	10/08/09	Joshua
M02	Wake Up Sid	Ayaan Mukherjee	19/08/09	Trinayan
M03	What's Your Rashee	Ashutosh Gowariker	18/08/09	Harem
M04	Aladdin	Sujoy Ghosh	15/08/09	Chahata

- (i) Name the field which can act as the primary key in the table HitMovies. 1
- (ii) If the Release details of the movie have to be stored in a separate table (named RELEASE), then identify any two fields from the above table which should be included in the table RELEASE. 1
- (iii) What type of relationship exists between the table HitMovies and the newly created table RELEASE? 1
- (d) What are the advantages of Flash movie over animated GIF movie? 1
- (e) Give the full form of BMP. 1
- (f) Write a short note on SMS. 2

2. Answer the following questions based on Macromedia Flash:

- (a) The normal layer lets you add content in a flash movie that moves along a straight path. Name any two types of layers which can help you to manipulate the content on a normal layer and improve the animation. 1
- (b) What is the use of dividing a movie into separate scenes? 1
- (c) Enumerate the benefits of frame by frame animation over tweening animation. 2
- (d) Differentiate between Exporting and Publishing a Flash movie. 2
- (e) Observe the image given below and do as directed:



- The image on the left hand side shows the position and size for frame 1.
- The image on the right side shows the position and size for frame 25.
- Assume that the images of butterfly and flower are stored in the Flash library by the name butterfly and flower respectively and the colour and size of the image remains the same.
- The curve shows the path followed by the butterfly to reach from frame 1 to frame 25.

Write the procedure and property settings for animating the above scenario. 4

3. Answer the following questions based on HTML :

- (a) Differentiate between <HR> and <BR> tags. 2
- (b) Write the HTML code to generate the web page in the format shown: 8


eCards - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ecards.html

## E-CARDS

e-Cards is a website offering new and trendy cards for all ages.




### Categories of Cards Offered

1. General Cards
  - Thinking of You
  - Missing You
  - Friends Forever
2. Specific Cards
  - Happy Birthday
  - Happy Diwali
  - Happy Anniversary

You can also order flowers through our site

#### PRICE LIST

Bouquet Type	Price
Flower Galore	Rs. 200
Flower Shower	Rs. 300
Flower Power	Rs. 400



[Personalize The Cards](#)

Consider the following points while writing the HTML code:

- (i) Title of the page should be "eCards".
- (ii) Background colour should be "Purple".

- (iii) Text style of the main heading should be "Aria! Bold" and colour should be red.
  - (iv) Image used is "cards.jpg".
  - (v) Table should have a 5 pixel thick border of colour green and the spacing between cell content and border is 15 pixels.
  - (vi) Use the concept of nested lists for creating the specified lists.
  - (vii) The bottom image (link.jpg) and the text "Personalize the Cards" are links to the page "person.html".
4. Answer the following questions based on ASP:
- (a) How is an ASP file different from a simple HTML file? 1
  - (b) Which method of the RecordSet Object will you use to move the cursor directly to the first record in the record set? 1
  - (c) How is the Connection object different from the RecordSet object? 2
  - (d) Identify the following: 3
    - (i) The ASP object which stores information needs for a particular user session.
    - (ii) The ASP component used to keep track of the number of visitors who have visited the web page.
    - (iii) The Request object collection that will be used to retrieve information submitted by the user in a form using GET method.
  - (e) Give the output of the following statements: 3
    - (i) `Response.write(FALSE AND NOT TRUE OR TRUE)`
    - (ii) `Response.write(LEFT("With Multimedia",5) & UCASE ("Life is Fun")»`
    - (iii) `Response.write((4 - 3)*(6/2 - 3))`
5. Answer the following questions based on ASP:
- (a) Expand the term IIS. 1
  - (b) Differentiate between AdRotator and ContentRotator components of ASP. 2

(c) Predict the output of the following code:

2

```
<Script Language="VBScript">
```

```
Dim A, B
```

```
A = 2
```

```
B = 20
```

```
Do While A < 6
```

```
    Document.Write(A+B)
```

```
    A = A + 1
```

```
    B = B-2
```

```
Loop
```

```
</Script>
```

(d) Rewrite the following code after removing errors with each correction underlined:

```
<BODY>
```

```
The login name entered by the user is :
```

```
<%
```

```
pass = RESPONSE.QUERYSTRING ("password")
```

```
%>
```

```
The password is :
```

```
<%
```

```
If pass <> "enter" then
```

```
    REQUEST.WRITE (Invalid)
```

```
Otherwise
```

```
    RESPONSE.WRITE ("Valid")
```

```
end
```

```
%>
```

```
</BODY>
```

- (e) Write the ASP code that will read the text file named friends.txt, count the number of lines in the file and then display the same. 3
6. Answer the following questions based on VBScript :
- (a) Name the event to be used in the following situations: 2
- (i) To perform an action when the button gains focus.
- (ii) To perform an action when a button is clicked.
- (b) Rewrite the following code using DO WHILE instead of FOR loop without affecting the output: 2
- ```

<HTML>

<BODY>

<SCRIPT LANGUAGE = "VBScript" >

DIM A, B, C, Count

A = 0

B = 1

FOR Count = 3 TO 10 STEP 2

    C = A+B

    Document.Write (C & " ")

    A = B

    B = C

NEXT

</SCRIPT>

</BODY>

</HTML>

```
- (c) Give the output of the following code: 2
- ```

<HTML>

<BODY>

<SCRIPT LANGUAGE="VBSCRIPT" >

```

```

DIM Num, Flag
Flag = 0
Num = 10
FOR A = 2 TO Num/2
    IF Num MOD A = 0 THEN
        DOCUMENT.WRITE (Num+ 1)
    ELSE
        DOCUMENT.WRITE (Num - 1)
    END IF
NEXT
</SCRIPT>
</BODY>
</HTML>

```

(d)

Input Number	<input type="text"/>
Check Divisibility by	<input type="text"/>
<input type="button" value="Divisibility Result"/>	

Write the HTML code for creating the above displayed form. Write the embedded VB Script code for the click event of the 'Divisibility Result' button such that it displays a message box based on whether the number input in the first textbox is divisible by the number input in the second textbox according to the following criteria:

- If number is divisible then message displayed is "Wow! I belong to your family"
- If number is not divisible then message displayed is "Let's look for my friends"

4

7. Answer the following questions based on the unit Web Technologies:

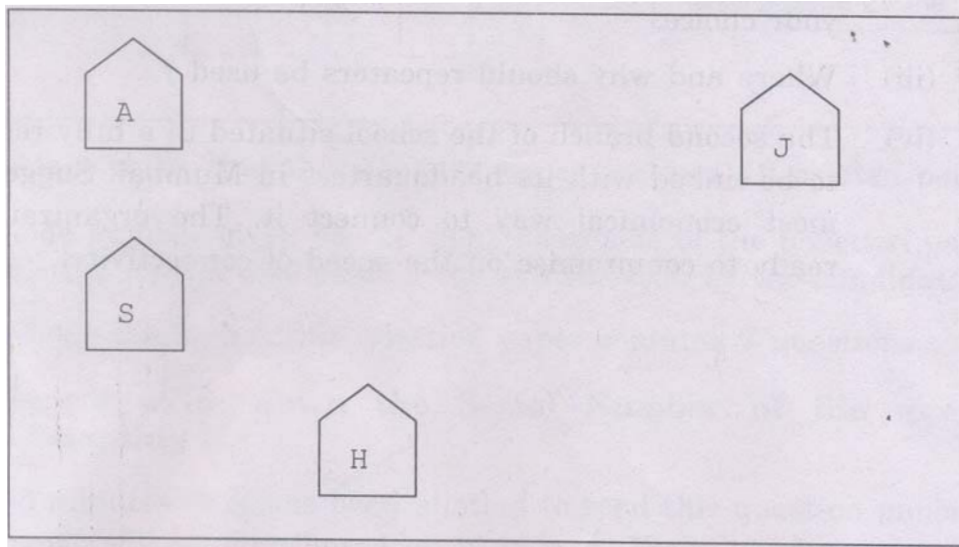
(a) Define the term Cyber Law.

1

(b) Expand the term WLL.

1

- (c) What are the following software used for? 2
- (i) Apache Tomcat
  - (ii) MySQL
- (d) Differentiate between Twisted pair cable and Co-axial cable. 2
- (e) ProActor School of Acting in Mumbai is setting up the network between its different wings. There are 4 wings named as SENIOR(S), JUNIOR(J), ADMIN(A), and HOSTEL(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



- (i) Suggest the most suitable topology for connecting these wings. 1
- (ii) Suggest the most suitable place to house the server. Justify your choice. 1
- (iii) Where and why should repeaters be used? 1
- (iv) The second branch of the school situated in a hilly region is to be linked with its headquarters in Mumbai. Suggest the most economical way to connect it. The organization is ready to compromise on the speed of connectivity. 1

## Marking Scheme — Multimedia and Web Technology

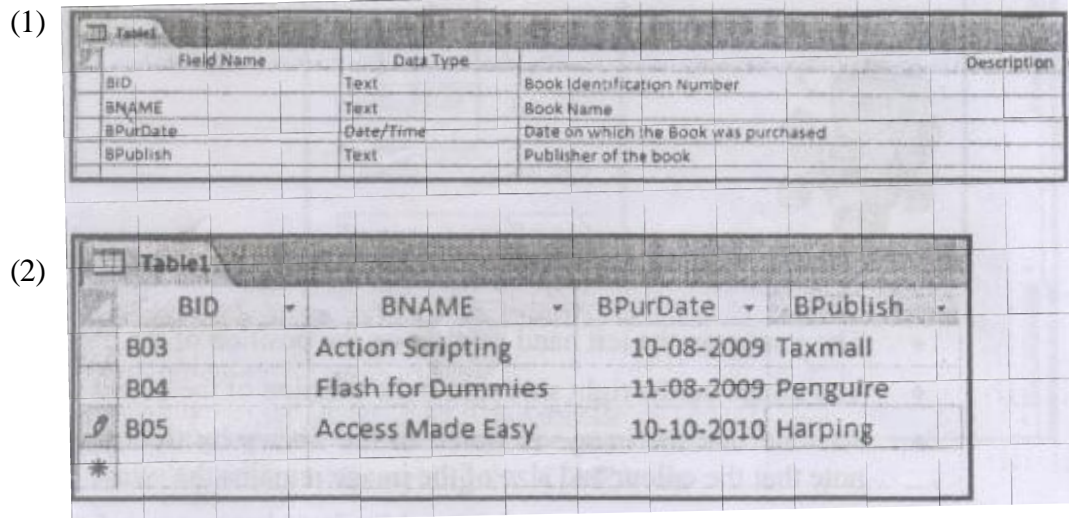
(SUB CODE -067)

**General Instructions :**

- I The answers given in the marking scheme are SUGGESTIVE, Examiners are requested to award marks for all alternative correct Solutions / Answers conveying the similar meaning
- I In VBScript and ASP, ignore case sensitivity for identifiers

QUESTION PAPER CODE 89/1

1. (a) Identify the following views used to create a database in Access. 1



- Ans i) Design View  
ii) Datasheet View

*(1/2 mark for naming each view correctly)*

- (b) Illustrate the usage of foreign key with the help of an example. 2

Ans Foreign key is an attribute of one relation whose values are required to match those of the primary key of some other relation. The foreign key is used to relate two or more tables. For example in the tables given below, Item code acts as a foreign key for the table Sales.

Table.ITEM

Item Name	Price	Item Code
Iron	525.00	1002
Hand Mixie	675.50	1003

Values of this attribute match the values of the primary key of table ITEM

Table: SALES

Cust No	Bill No	Sale Date	Quantity	Item Code
1432	1022	7/12/2008	2	1002

(2 marks for correctly explaining the concept with the help of an example)

**NOTE:**

1. Full marks to be awarded in case the concept is explained only with the help of an example.
  2. 1 mark to be awarded if only the definition is given
- (c) Study the table WEBSITES given below and answer the following questions:

**Table: WEB SITES**

SITE_ID	SITE_CAT	SITE_LAUNCH	SITE_VOTES
S100	Commerce	11/11/2005	25000
S101	Government	10/06/2007	15000
S102	Education	07/02/2008	45000
S103	Organisation	11/10/2008	42000

- (1) Name the field which can act as the primary key in the table WEB-SITES. 1
- (2) Suggest the data types that should be used for each of the fields in the table WEBSITES. 2

Ans (1) SITE\_ID can act as the primary key

*(1 mark for correctly naming the field)*

- (2) SITE\_ID - Text  
SITE\_CAT - Text

SITE\_LAUNCH - Date/Time

SITE\_VOTES - Numeric

*(1/2 mark for correctly naming the data type for each field)*

- (d) Expand the term MPEG. What kinds of files are stored using the MPEG format?

2

Ans MPEG stands for Moving Picture Experts Group OR Motion Picture Experts Group. This format is used to save movie files which cannot be further edited.

*(1 mark for the correct expansion)*

+ *(1 mark for mentioning the correct file usage)*

- (e) Mention any two areas where virtual reality is being used.

2

Ans Useful applications of VR include:

1. Training in a variety of areas (military, medical, equipment operation, etc.),
2. Education,
3. Design evaluation (virtual prototyping),
4. Architectural walk-through,
5. Simulation of assembly sequences and maintenance tasks,
6. Assistance for the handicapped,
7. Study and treatment of phobias (e.g., fear of height)
8. Entertainment
9. Gaming (or any other valid application)

*(1 mark:each for mentioning any two areas correctly)*

2. Answer the following questions based on Macromedia Flash.

- (a) What is the use of the onion skinning feature?

1

Ans 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.

*(1 mark for explaining the correct usage)*

(b) Name any two types of tweening.

1

Ans Motion Tweening, Shape Tweening, Tint Tweening

*(½ mark each for correctly naming any two types of tweening)*

(c) Enumerate the benefits of vector graphics over bitmap graphics.

2

Ans

Vector Graphics	Bitmap Graphics
1. Vector graphics are made-up of mathematical expressions	1. Bitmap graphics are made up of colored pixels.
2. File sizes are usually very small.	2. File sizes are usually very large.
3. The quality of Vector graphics will not be affected on re:izing.	3. Bitmap graphics will suffer in quality if resized.

*(2 marks for mentioning anyone benefit of vector graphics over bitmap graphics)*

(d) What is the use of the Publish Preview option?

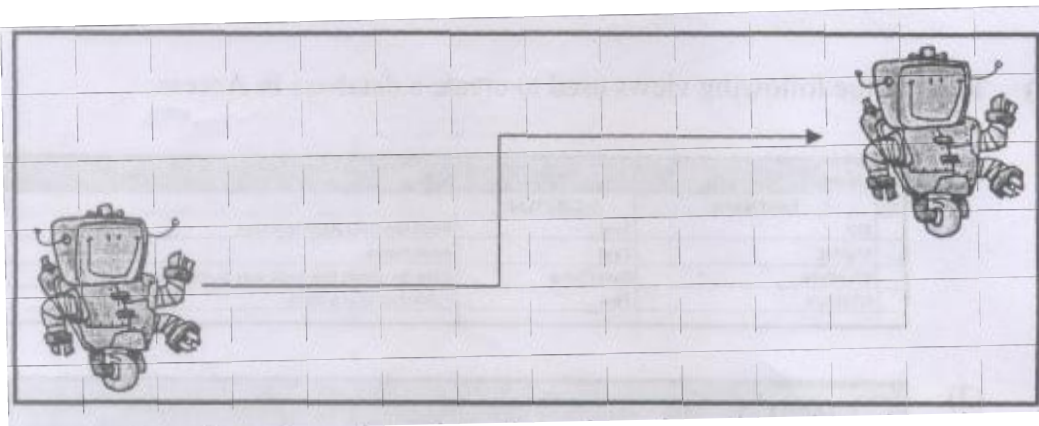
2

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

*(2 marks for explaining the correct usage)*

(e) Observe the image given below and do as directed:

4



1 The image on the left hand side shows the position of the object at frame 1.

1 The image on the right side shows the position of the object at frame 25.

1 Assume that the image is stored in the library by the name robot. Also note that the colour and size of the image remains the same.

- I The arrow shows the path followed by the robot to reach from position at frame 1 to the position at frame 25.

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

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

- I Select frame 1 .from the timeline and drag the robot image on the stage from the library.
- I Using the arrow tool, select the image and place it on the left hand side.
- I Select frame 25 from the timeline and Select Insert – Keyframe
- I Using the arrow tool, select the image and position it on the right hand side of the stage at the desired location
- I Select all frames from 1 to 25.
- I Right click the mouse button and Select Create Motion Tween.
- I Select the layer containing the motion tween. Right click and select Add Motion Guide.
- I Using the pencil tool, draw the path of motion as shown in the image. OR Any other equivalent method.

*(1/2 marks for each step)*

3. Answer the following questions based on HTML.

- (a) Name the three structural tags of HTML page and explain the usage of anyone of them.

2

Ans Three structural tags are: <HTML>, <HEAD> and <BODY>

Usage:

< HTML> - marks the beginning and the end of the html file

< HEAD> - contains, information about initial load parameters of the webpage like title, scripts, style definitions and document descriptions

<BODY> - contains the visible content of the webpage

*(1/2 mark each for naming the three structural tags)*

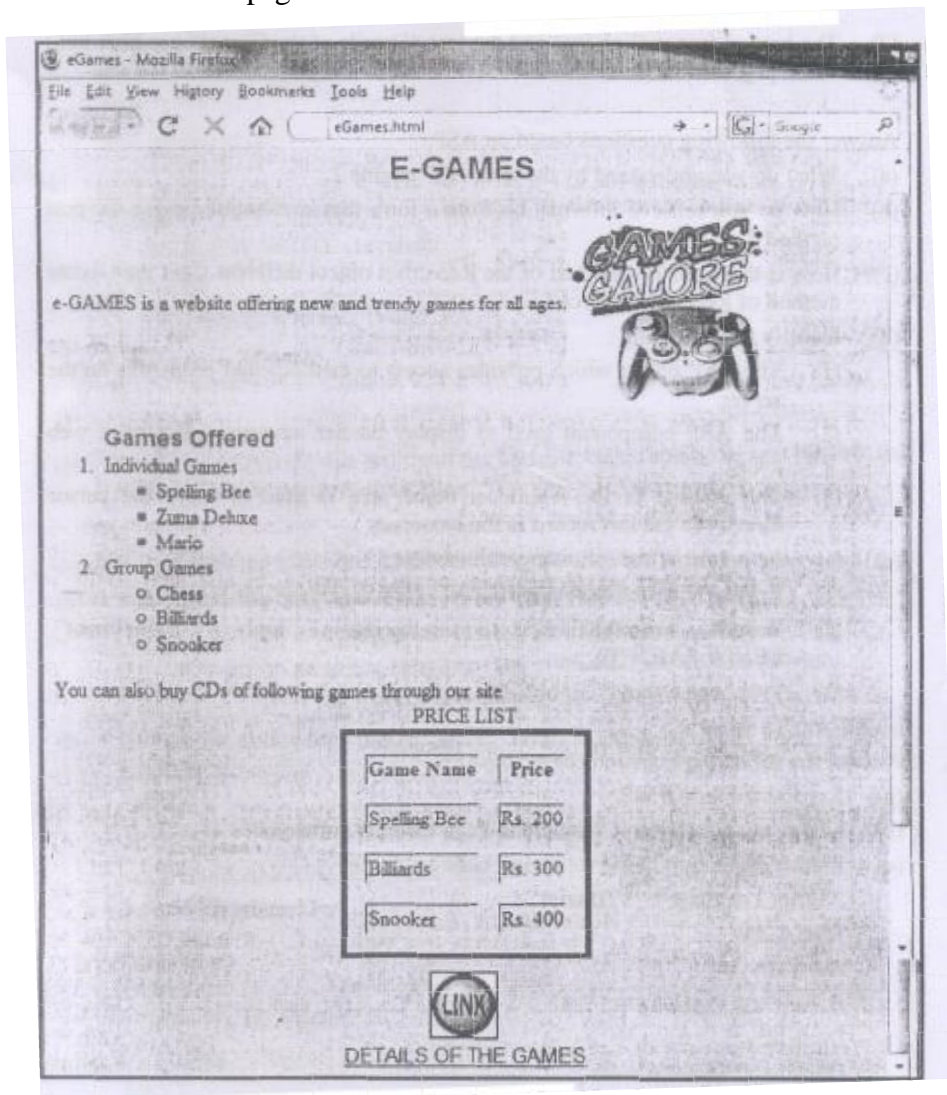
*+(1/2 mark for correctly explaining the usage of anyone of them)*

(b) Write the HTML code to generate the web page in the format as shown:

8

Consider the following points while writing the HTML code:

- (1) Title of the page should be "eGames",
- (2) Background colour of the page should be "Pink",
- (3) Text colour of main heading should be "red" and font should be "Arial Bold".
- (4) Image used in the page is "game 1. jpg".
- (5) Use the concept of nested lists to create the given lists.
- (6) The table should have a border of size 5 and color blue and the spacing between adjacent cells is 15 pixels.
- (7) The bottom image (link.jpg) and the text "Details of the Games" are both links' to the page details.html.



Ans <HTML>

```
<HEAD> <TITLE>'eGames</TITLE> </HEAD>
```

```
<BODY BGCOLOR="PINK">
```

```
<FONT FACE ="ARIAL" COLOR = "RED">
```

```
<H2 ALIGN = CENTER> E-GAMES </H2></FONT>
```

e-GAMES is a website offering new and trendy games for all ages.

```
<IMG SRC = "game.JPG" height =150 width = 150 ALIGN = "MIDDLE">
```

```
<OL><FONT FACE = "ARIAL" SIZE = +1><B> Games Offered </B>
```

```
<LI>Individual Games
```

```
<UL TYPE="square">
```

```
<LI>Spelling Bee
```

```
<LI>Zuma Deluxe
```

```
<LI>Mario
```

```
</ UL>
```

```
<LI>Group Games
```

```
<UL TYPE="circle">
```

```
<LI>Chess
```

```
<LI>Billiards
```

```
<LI>Snooker
```

```
</UL>
```

```
</OL>
```

You can also buy CDs of following games through our site

```
<TABLE ALIGN=CENTER BORDER=5 BORDERCOLOR="Btue"
```

```
CELLSPACING=15>
```

```
<CAPTION> PRICE LIST </CAPTION>
```

```
<TR>
```

```
<TH> Game Name </TH>
```

```
<TH> Price </TH>
```



```

<TR>
    <TD> Spelling Bee
    <TD> Rs. 200
<TR>
    <TD> Billiards
    <TD> Rs. 300
<TR>
    <TD> Snooker
    <TD> Rs. 400
</TABLE>
<BR>
<CENTER>
<A HREF="details.html"> <IMG SRC="link.jpg" height=50 width=50> <BR>
DETAILS OF THE GAMES </A>
</FONT>
</BODY>
</HTML>

```

- (1/2 mark for correct use of <HTML> and <BODY> tags)*
- + (1/2 mark for correct use of <TITLE> tag)*
- + (1/2 mark for body background colour)*
- + (1/2 mark for mentioning the correct font type and color)*
- + (1/2 mark for displaying the heading correctly in center)*
- + (1 1/2 mark for correctly creating the nested list (1/2 mark for each list))*
- + (1/2 mark for making table border 5 pixel thick with border color blue)*
- + (1/2 mark for making table cellspacing as 15 pixels)*
- + (1/2 mark for giving table <CAPTION>)*
- + (1 mark for correctly creating the table using <TR> and <TD> tags)*

+ (½ mark for displaying the links in center)

+ (½ mark each for correctly creating the link on the image and the text)

4. Answer the following questions based on ASP.

(a) What do you understand by the term ASP engine? 1

Ans The ASP engine is a special program named ASP.dll where all the server side scripts are executed and converted to HTML code.

(1 mark for correct explanation)

(b) How do you retrieve information from a form that is submitted using the post method? 1

Ans We use the Form collection of the Request object to retrieve the information submitted using the post method.

(1 mark for the correct answer)

(c) How is the AddNew method of the Recordset object different from the Update method of Recordset object? 2

Ans The AddNew method adds a new blank record in the database whereas the Update method saves the newly written record in the database permanently.

(2 marks for mentioning anyone correct difference between the two)

(d) Identify the following:

(1) The ASP object which provides access to methods and properties on the server.

(2) The ASP component used to display banner advertisements on a web page.

(3) The method of the Recordset object that is used to move the cursor directly to the last record in the recordset. 3

Ans 1. Server Object

2. Ad Rotator 'Component

3. MoveLast

(1 mark for each correct answer)

- (e) Give the output of the following statements: 3
- (1) `Response.write (NOT TRUE AND (TRUE OR FALSE))`
  - (2) `Response.write(RIGHT("Let's Learn and Experiment", LEN("LEARN")))`
  - (3) `Response.write<5-3>*(4/2-3))`

- Ans i) False  
 ii) iment  
 iii) -2

*(1 mark for each correct answer)*

Note: ½ mark to be awarded for each part if the steps showing the working are correct but the final output is wrong

5. Answer the following questions based on ASP:

- (a) Expand the term PWS. 1

Ans Personal Web Server

*(1 mark for the correct expansion)*

- (b) Differentiate between Counter and Page Counter components of ASP. 2

Ans	<b>Counter</b>	<b>Page Counter</b>
	<p>i. Counter component can be used for creating counters that can be used to count anything such as, the number of visitors to the Web site, the number of times an advertisement has been clicked etc.</p> <p>ii. The Counters component is manually set using the Set method.</p> <p>iii. The HTML &lt;OBJECT&gt; tag is used to create an instance of the Counters component in the Global.asa file.</p>	<p>i. Counts the number of times a page has been viewed.</p> <p>ii. Page Counter component is an automatic process.</p> <p>iii. An instance of the PageCounter object is created on a page by using the Server.CreateObject method.</p>

iv. Only one instance of the Counter component can be created. This single Counters object can create any number of individual counters with different names.	iv. Any number of instances of the page counter object can be created.
---	--

*(2 marks for anyone correct differentiation point)*

(c) Predict the output of the following code:

2

```
<Script Language= "VB Script">
Dim A, B
A= 1
B = 10
Do While A < 5
Document. Write (A + B)
A=A+ 1
B=B-2
LOOP
</Script>
```

Ans 111098

*(1/2 mark for each correct number)*

(d) Rewrite the following code after removing errors with each correction underlined:

2

```
<BODY>
The login name entered by the user is :
<%
pass = RESPONSE.QUERYSTRING ("password") %>
The password is :
<%
if pass <> "enter" then
REQUEST.WRITE (Invalid)
```

```

Otherwise
    RESPONSE.WRITE ("Valid")
end
%>
</BODY>

```

Ans < BODY >

The login name entered by the user is :

```

<%
pass = REQUEST.QUERYSTRING("password") %>

```

The password is:

```

<%
if pass <> "enter" then
    RESPONSE.WRITE("Invalid")

```

ELSE

```

    RESPONSE.WRITE("Valid")

```

End IF

```

%>
</BODY>

```

*( 1/2 mark each for correcting any four errors)*

(e) Write the ASP code that will read the text file called multi.txt, and display the alternate lines contained in the file.

3

Ans < %

```

Set Fobj=Server.createObject("Scripting.FileSystemObject")
Set mFile = Fobj.OpenTextFile("multi.txt")
Do while NOT mFile.AtEndOfStream
    Response.Write(mFile.ReadLine)
    Response.Write ("<BR>")

```

mFile.ReadLine

Loop

mFile.close

%>

*(1/2 mark for correctly creating the file system object)*

*+(1/2 mark for opening the file)*

*+(1/2 mark for the loop)*

*+(1/2 mark for reading the line)*

*+(1/2 mark for displaying the line)*

*+(1/2 mark for closing the connection)*

6. Answer the following questions based on VBscript :

(a) Name the event to be used in the following situations:

2

(1) To perform an action when a button is clicked.

(2) To perform an action as soon as the contents of a text box change.

Ans i) OnClick

ii) OnChange

*(1 mark for each correct answer)*

(b) Rewrite the following code using DO WHILE instead of FOR LOOP without affecting the output:

2

<HTML>

<BODY>

<SCRIPT LANGUAGE="VBSCRIPT">

DIM Num, Flag

Flag = 0

Num = 10

FORA = 2 TO Num/2

Flag = Flag + 1

```
NEXT
</SCRIPT>
</BODY>
</HTML>
```

Ans <HTML>  
<BODY>  
<SCRIPT LANGUAGE = "VBSCRIPT">  
DIM Num, Flag  
Flag = 0  
Num = 10  
A = 2  
DO WHILE A<=Num/2  
    Flag = Flag+1  
    A=A+1  
LOOP  
</SCRIPT>  
</BODY>  
</HTML>

*(1/2 mark each for writing the mentioned four underlined lines correctly)*

- (c) Point out the errors in the following code and rewrite the code with the corrections underlined:

```
<HTML>
<BODY>
<SCRIPT = "VB SCRIPT">
DIM A, B, C, Count
A = 0
B = 1
```

2

```
FOR Count = 3 TO 6 INCREASE 1
```

```
C = A+B
```

```
document. Write (C)
```

```
A = B
```

```
B = C
```

```
LOOP
```

```
</SCRIPT="VBSCRIPT">
```

```
</BODY>
```

```
</HTML>
```

Ans <HTML>

```
<BODY>
```

```
<SCRIPT LANGUAGE="VBSCRIPT">
```

```
DIM A, B, C, Count
```

```
A = 0
```

```
B = 1
```

```
FOR Count = 3 TO 6 STEP 1
```

```
C = A + B
```

```
document. Write (C)
```

```
A = B
```

```
B = C
```

```
NEXT
```

```
</SCRIPT>
```

```
< / BODY >
```

```
</HTML>
```

*(1/2 mark each for correcting the four errors)*

(d) Write the HTML code for creating the form shown below:

4

Write the embedded VBscript code for the click event of the 'Check Divisibility'



button such that it displays 1 if the First Number (number input in the first text box) is divisible by the Second Number (number input in the second text box) and 0 otherwise in the third text box.

For example: if the user inputs 10 and 5 in the first two text boxes, then 1 should be displayed in the third text box, on the click of the "Check Divisibility" button.

First Number	<input type="text"/>
Second Number	<input type="text"/>
Divisible	<input type="text"/>
<input type="button" value="Check Divisibility"/>	

Ans <HTML>

```
<HEAD><TITLE>DIVISIBILITY CHECK</TITLE>
```

```
<SCRIPT LANGUAGE = "VBScript" >
```

```
SUB B1_OnClick
```

```
Dim A, B
```

```
A = FORM1.T1.VALUE
```

```
B = FORM1.T2.VALUE
```

```
IF A MOD B = 0 THEN OR IF FORM1.T1.VALUE MOD FORM1.T1.VALUE THEN
```

```
FORM1.T3.Value = 1
```

```
Else
```

```
FORM1.T3.Value = 0
```

```
END IF
```

```
END SUB
```

```
</SCRIPT>
```

```
</HEAD>
```

```
<BODY>
```

```
<FORM NAME="FORM1">
```

```

<P>FIRST NUMBER <INPUT TYPE= "TEXT" NAME="T1">
<P>SECOND NUMBER <INPUT TYPE = "TEXT" NAME = "T2">
<P>DIVISIBLE <INPUT TYPE = "TEXT" NAME = "T3">
<P>
<INPUT TYPE."Button" VALUE = "Check Divisibility" NAME = "B1">
</FORM>
</BODY>
</HTML>

```

- (1/2 mark for correct <FORM> tag)*
- + (1/2 mark for creating textboxes using <INPUT> tags)*
- + (1/2 mark for creating button using <INPUT> tag)*
- + (1/2 mark for the correct <SCRIPT> tag)*
- + (1/2 mark for associating subroutine with the button element)*
- + (1 mark for correct conditional statement)*
- + (1/2 mark for correctly displaying the output in the third textbox)*

7. Answer the following questions based on the unit Web Technologies:

(a) Define the term Firewall. 1

Ans A computer network firewall is an electronic blocking mechanism that will not allow unauthorized intruders (people or messages) into a computer system.

*(1 mark for the correct definition)*

(b) Expand the term FSF. 1

Ans Free Software Foundation

*(1 mark for the correct expansion)*

(c) What are the following software used for?

(1) Open Office

(2) MySQL 2

Ans i) Office Tasks like word processing, Presentation Creations, Database management etc

ii) Relational Database Management System

**(1 mark each for mentioning the correct usage of each of the two)**

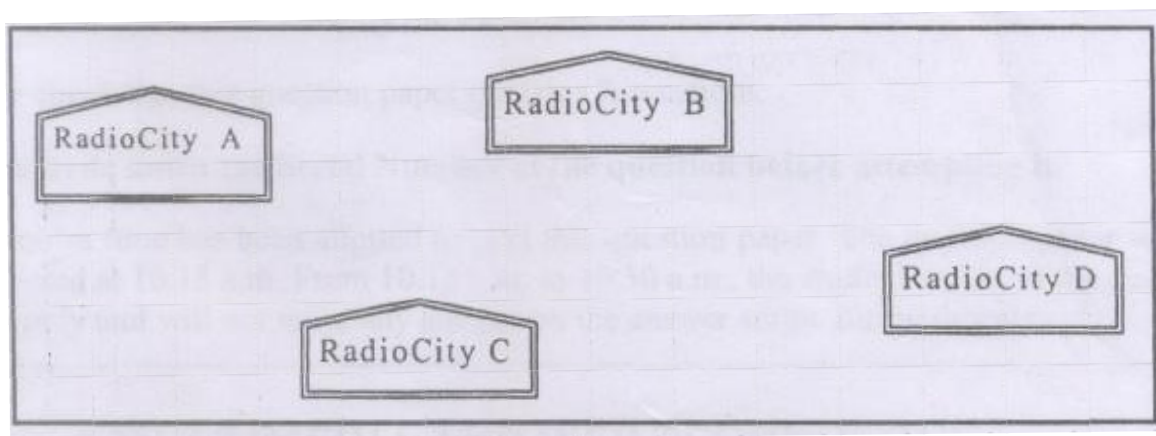
(d) Differentiate between Twisted pair cable and Optical fiber cable.

2

Twisted Pair cable	Optical Fiber cable
1. Relatively low data transfer rate (in mbps)	1. Very high data transfer rate (in gbps)
2. This type of cable is very susceptible to electromagnetic fields	2. This type of cable is not susceptible to electromagnetic interference
3. Transmission takes place through electromagnetic waves	3. Transmission takes place through light pulses
4. Most common application is the telephone system	4. Most suited for LANs where high quality of facilities is required

**(2 marks for anyone correct differentiation point)**

(e) Radio City has set up its new center at Mumbai for its office and broadcasting activities. It has 4 blocks of buildings as shown in the diagram below. Answer questions (i) to (iv) in context of the following layout of the four blocks:



Center to Center distance between various blocks.

RadioCity A to RadioCity B	60 m
RadioCity B to RadioCity C	75 m
RadioCity C to RadioCity D	175 m
RadioCity A to RadioCity D	250 m
RadioCity B to RadioCity D	100 m
RadioCity A to RadioCity C	75 m

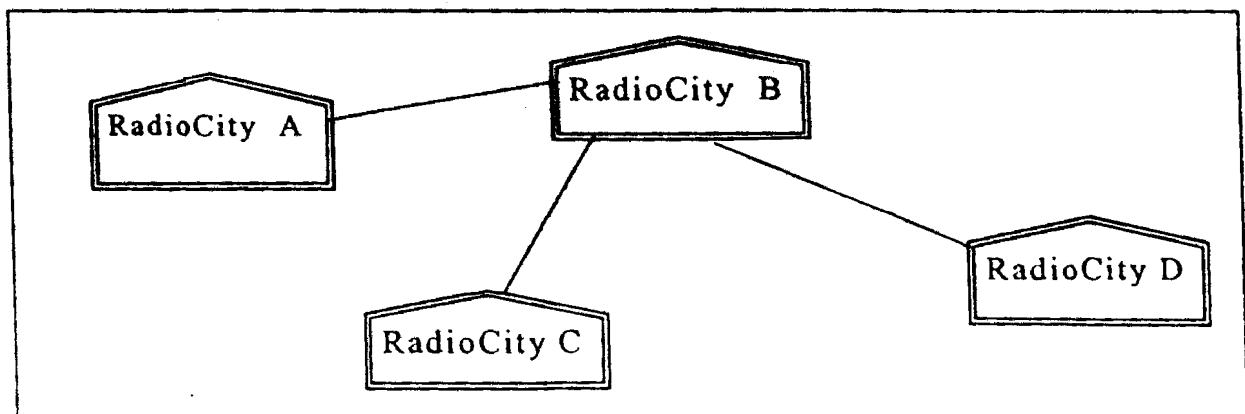
Number of Computers in each wing

RadioCity A	50
RadioCity B	250
RadioCity C	50
RadioCity D	100

- (i) Suggest a suitable cable layout to connect all the offices and name the topology used.

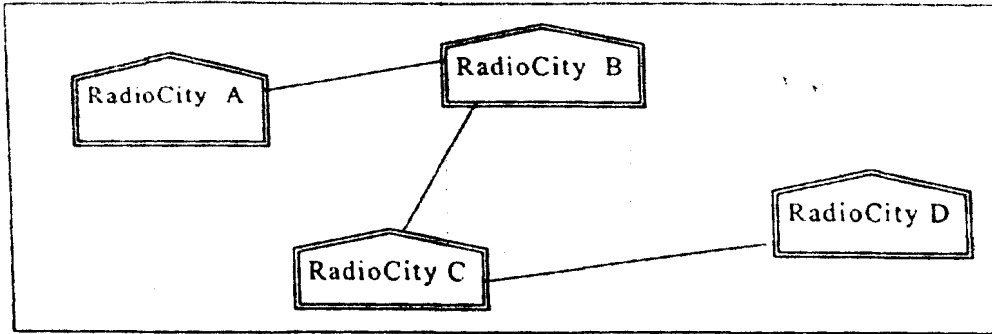
1

Ans Layout 1 : Star Topolgy



OR

Layout 2 : Bus Topology



*(1/2 mark for the correct cable layout and 1/2 mark for naming the correct topology)*

(ii) Suggest the most suitable place to house the server with proper justification. 1

Ans Radio City B should be the server as it has the most number of computers.

*(1/2 mark for naming the place and 1/2 mark for the correct justification)*

(iii) Where and why repeaters should be used? 1

Ans In case of Layout 1, repeater should be placed between building Band D as the distance is more than 75 Kms.

**OR**

In case of Layout 2, repeaters should be placed between building C and D as the distance is more than 75 Kms.

*(1/2 mark for naming the place and 1/2 mark for the correct justification)*

(iv) If the organization needs to link this branch office to another office situated in a distant city (around 1050 Km) away where cable connection is not feasible, then suggest an economic way to connect it with reasonably high speed? 1

Ans Radio Wave OR Microwave OR TCP / IP

*(1 mark for naming the correct technology)*

## MULTIMEDIA & WEB TECHNOLOGY

QUESTION PAPER CODE 89

### EXPECTED ANSWERS/VALUE POINTS

1. (a) What is the degree and the cardinality of the relation EMPLOYEE given below? 1

**TABLE: EMPLOYEE**

EID	EName	EJoinDate	EExper	EPhone
E01	Shayamli	10/08/07	10	22222101
E02	Kushambha	19/08/07	5	22222202

Ans Degree - 5


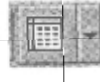
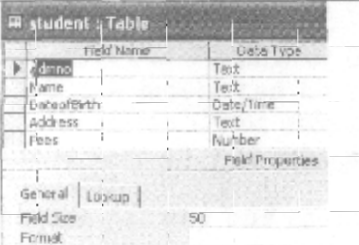

Cardinality.- 2

(1/2 mark each for correctly mentioning the degree and cardinality)

(b) Differentiate between design view and datasheet view with respect to a database.

2

Ans

<b>Design View</b>	<b>Datasheet View</b>
	
1. Allows the user to define each field, their data types, and descriptions in the table.	1. Allows the user to enter raw data in the table.
2. The user can create an entire new table or add, delete or customize the fields in an existing table.	2. The user can add, delete, edit, view or otherwise work with the data in an existing table.
	

(2 marks for anyone correct differentiation point)

(c) Latest Hit Station Video library stores data of all available DVDs on its server in a table named HitMovies in Access. Study the relation HitMovies given below and answer the following questions:

**TABLE: HitMovies**

<b>MID</b>	<b>MName</b>	<b>Director</b>	<b>ReleaseDate</b>	<b>Releasing Company</b>
M01	London Dreams	Vipul Shah	10/08/09	Joshua
M02	Wake Up Sid	Ayaan Mukherjee	19/08/09	Trinayan
M03	What's Your Rashee	Ashutosh Gowariker	18/08/09	Harem
M04	Aladdin	Sujoy Ghosh	15/08/09	Chahata

(1) Name the field which can act as the primary key in the table HitMovies.

1

Ans MID can act as the primary key.

***(1 mark for naming the correct field)***

- (2) If the Release details of the movie have to be stored in a separate table (named RELEASE), then identify any two fields from the above table which should be included in the table RELEASE.

1

Ans The two fields to be included in the Table RELEASE are ReleaseDate and, Releasing Company

***(½ mark each for naming the two fields correctly)***

- (3) What type of relationship exists between the table HitMovies and the newly created table RELEASE?

1

Ans One-to-One

***(1 mark for the naming the correct relationship type)***

- (d) What are the advantages of Flash movie over animated GIF movie?

1

Ans Advantages of Flash over GIF are:

- 1 A Flash movie can be stopped or restarted by the user while in GIF user interaction is not possible.
- 1 It is very easy to edit a Flash movie, while editing of GIF animation is not possible.

***(1 mark for anyone correct advantage)***

- (e) Give the full form of BMP.

1

Ans Bitmap Picture

***(1 mark for the correct expansion)***

- (f) Write a short note on SMS.

2

Ans SMS stands for Short Message Service. This facility allows users to send and receive short alphanumeric messages (approx. 160 characters) to a mobile phone via a network operator's message center.

***(2 marks for the correct explanation of SMS)***

2. Answer the following questions based on Macromedia Flash:

- (a) The normal layer lets you add content in a flash movie that moves along a straight path. Name any two types of layers which can help you to manipulate the content on a normal layer and improve the animation. 1

Ans Guide Layer, Motion Guide Layer, Mask Layer

*(1/2 mark each for mentioning any two layer types)*

- (b) What is the use of dividing a movie into separate scenes? 1

Ans The advantage of breaking a movie into scenes is that every scene can be accessed individually and thus the sequence or order of the scenes can be changed.

*(1 mark for the correct usage)*

- (c) Enumerate the benefits of frame by frame animation over tweening animation. 2

Ans	<b>Frame by Frame Animation</b>	<b>Tweening Animation</b>
	1. This is a form of animation where an object's appearance or position is changed slightly from frame to frame to create the impression of movement.	1. This is a form of animation where the starting and finishing points for the object to be animated are given and Flash automatically fills the frames in between.
	2. This type of animation allows greater control over changing content across the Flash Timeline	2. It allows less control over changing content due to automatic animation done by Flash

*(2 marks for correctly explaining anyone benefit)*

- (d) Differentiate between Exporting and Publishing a Flash movie. 2

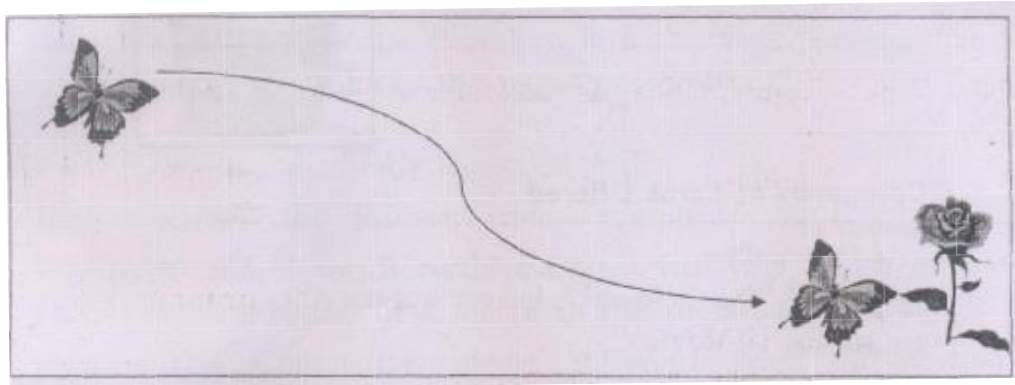
Ans	<b>Publishing</b>	<b>Exporting</b>
	1. Publishing is preparing movie files and accompanying HTML codes for uploading movies on the Internet.	1. Exporting is saving a movie file in different formats to be played using a particular player.
	2. Settings can be saved for reuse.	2. Settings cannot be saved.



<p>3. A movie is published only if the recipients are expected to play it on the internet using Flash player (Publishing in other formats is also possible)</p>	<p>3. A movie is exported from Flash only if the recipients are expected to play it using software other than Flash.</p>
---	--

*(2 marks for anyone correct differentiation point)*

(e) Observe the image given below and do as directed:



- | The image on the left hand side shows the position and size for frame 1.
- | The image on the right side shows the position and size for frame 25.
- | Assume that the images of butterfly and flower are stored in the Flash library by the name butterfly and flower respectively and the colour and size of the image remains the same.
- | The curve shows the path followed by the butterfly to reach from frame 1 to frame 25.

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

4

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

- | Select frame 1 from the timeline and insert the butterfly image from the library.
- | Select the image and place it on the left hand side.
- | Select frame 25 from the timeline and Select Insert – Keyframe
- | Select the image and position it on the right hand side of the stage at the desired location. Also insert the image of the rose.
- | Select any frame between 1 and 25.
- | Right click the mouse button and Select Create motion tween.
- | Select the layer containing the motion tween. Right click and select Add Motion Guide.
- | Select the pencil tool from the drawing toolbar and draw the path of motion.

OR

Any other equivalent method.

*(1/2 marks for each step)*

3. Answer the following questions based on HTML :

(a) Differentiate between <HR> and <BR> tags.

2

Ans HR stands for horizontal rule and the <HR> tag allows the user to insert a section break by inserting a horizontal line. On the other hand, BR stands for break and the <BR> tag is used to insert a line break so that the subsequent text is displayed on a fresh line.

*(2 marks for the correct differentiation point)*


*Note: Only 1 mark to be awarded if only the full forms of the tag are given*

(b) Write the HTML code to generate the web page in the format shown:

8

**E-CARDS**

e-Cards is a website offering new and trendy cards for all ages.




**Categories of Cards Offered**

1. General Cards
  - Thinking of You
  - Missing You
  - Friends Forever
2. Specific Cards
  - Happy Birthday
  - Happy Diwali
  - Happy Anniversary

You can also order flowers through our site

**PRICE LIST**

Bouquet Type	Price
Flower Galore	Rs. 200
Flower Shower	Rs. 300
Flower Power	Rs. 400

  
Personalize The Cards

Consider the following points while writing the HTML code:

1. Title of the page should be "eCards".
2. Background colour should be "Purple".
3. Text style of the main heading should be "Aria! Bold" and colour should be red.
4. Image used is "cards.jpg".
5. Table should have a 5 pixel thick border of colour green and the spacing between cell content and border is 15 pixels.
6. Use the concept of nested lists for creating the specified lists.
7. The bottom image (link.jpg) and the text "Personalize the Cards" are links to the page "person.html".

Ans <HTML>

```
<HEAD> <TITLE>eCards</TITLE> </HEAD>
```

```
<BODY BGCOLOR="Purple">
```

```
<FONT FACE = "ARIAL" COLOR = "RED">
```

```
<H2 ALIGN = CENTER> E-CARDS </H2>
```

e-Cards is a website offering new and trendy cards for all ages.

```
<IMG SRC= " cards.JPG" height = 200 width = 150 ALIGN="MIDDLE">
```

```
<OL><FONT SIZE = +1 ><B> Categories of Cards Offered </B></FONT>
```

```
<LI> General Cards
```

```
<UL TYPE = "square">
```

```
<LI>Thinking of You
```

```
<LI>Missing You
```

```
<LI> Friends Forever
```

```
</UL>
```

```
<LI>Specific Cards
```

```
<UL TYPE = "circle" >
```

```
<LI>Happy Birthday
```

- <LI> Happy Diwali
- <LI> Happy Anniversary

</UL>

</OL>

You can also order flowers through our site

<TABLE ALIGN = CENTER BORDER=5 BORDERCOLOR = "Blue" CELLPADDING=15>

<CAPTION> <FONT COLOR = "BLUE"> PRICE LIST </CAPTION>

<TR>

<TH> Bouquet Type </TH>

<TH> Price </TH>

<TR>

<TD> Flower Galore

<TD> Rs. 200

<TR>

<TD> Flower Shower

<TD> Rs. 300

<TR>

<TD> Flower Power

<TD> Rs. 400

</TABLE>

<BR>

<CENTER>

<A HREF = "person.html"> <IMG SRC="link.jpg" height=50 width=50> <BR>

Personalize The Cards <IA>

</BODY>

</HTML> .

*(½ mark for correct use of <HTML> and <BODY> tags)*

- + (*1/2 mark for correct use of <TITLE> tag*)
- + (*1/2 mark for body background colour*)
- + (*1/2 mark for mentioning the correct font type and color*)
- + (*1/2 mark for displaying the heading correctly in center*)
- + (*1 1/2 mark for correctly creating the nested list*)
- + (*1/2 mark for making table border 5 pixel thick and bordercolor green*)
- + (*1/2 mark for making table cellpadding as 15 pixels*)
- + (*1/2 mark for giving table <CAPTION> )*
- + (*1 mark for correctly creating the table*)
- + (*1/2 mark for displaying the links in center*)
- + (*1/2 mark each for correctly creating the link on the image and the text*)

4. Answer the following questions based on ASP:

(a) How is an ASP file different from a simple HTML file? 1

Ans The main differences between a HTML file and an ASP file are:

- 1 HTML files are static web pages while ASP are dynamic web pages.
- 1 HTML file has the extension. htm or .html while ASP files have the extension .asp.
- 1 When a user requests a HTML file, the web server sends the HTML file directly to the client without any processing while the ASP file is first executed by the ASP engine and converted into HTML code before sending it to the client.

*(1 mark for anyone correct differentiation point)*

(b) Which method of the RecordSet Object will you use to move the cursor directly to the first record in the record set? 1

Ans MoveFirst

*(1 mark for naming the correct method)*

(c) How is the Connection object different from the RecordSet object? 2

Ans The Connection Object is used to connect to a data source. Through the connection object, one can access and manipulate a database while the . Recordset object is

used to hold a set of records from a database table. A Recordset 'object consists of rows and columns in which the data is stored in an organized manner.

**(2 marks for the correct differentiation point)**

- (d) Identify the following: 3
- (i) The ASP object which stores information needs for a particular user session.
  - (ii) The ASP component used to keep track of the number of visitors who have visited the web page.
  - (iii) The Request object collection that will be used to retrieve information submitted by the user in a form using GET method.

- Ans 1. Session Object  
2. Page Counter  
3. Querystring Collection

**(1 mark for each correct answer)**

- (e) Give the output of the following statements: 3
- (i) `Response.write(FALSE AND NOT TRUE OR TRUE)`
  - (ii) `Response.write(LEFT("With Multimedia",5) & UCASE("Life is Fun")»`
  - (iii) `Response.write((4 - 3)*(6/2 - 3))`

- Ans i) True  
ii) With LIFE IS FUN  
iii) 0

**(1 mark for each correct answer)**

**Note: 1/2 mark to be awarded for each part if the steps showing the working are correct but the final output is wrong**

5. Answer the following questions based on ASP:
- (a) Expand the term IIS. 1

Ans Internet Information Services

**(1 mark for the correct expansion)**

(b) Differentiate between AdRotator and ContentRotator components of ASP. 2

Ans The ASP AdRotator component which can be used to display a different advertisement in the form of an image each time a user enters or refreshes a page while the ASP Content Rotator which can be used to display different HTML content string each time a user enters or refreshes a page.

*(2 marks for the correct differentiation)*

(c) Predict the output of the following code: 2

```
<Script Language="VBScript">
```

```
Dim A, B
```

```
A = 2
```

```
B = 20
```

```
Do While A < 6
```

```
    Document.Write(A+B)
```

```
    A = A + 1
```

```
    B = B-2
```

```
Loop
```

```
</Script>
```

Ans 22212019

*(1/2 mark each for the four numbers in the output)*

(d) Rewrite the following code after removing errors with each correction underlined:

```
<BODY>
```

```
The login name entered by the user is :
```

```
<%
```

```
pass = RESPONSE.QUERYSTRING ("password")
```

```
%>
```

```
The password is :
```

```
<%
```

```

If pass <> "enter" then
    REQUEST.WRITE (Invalid)
Otherwise
    RESPONSE.WRITE ("Valid")
end
%>
</BODY>

```

Ans <BODY>

The login name entered by the user is :

```

<%
pass = REQUEST.QUERYSTRING ("password")
%>

```

The password is:

```

<%
if pass <> "enter" then
    RESPONSE.WRITE("Invalid")
ELSE
    RESPONSE.WRITE ("Valid")

```

End IF

```

%>
</BODY>

```

*(1/2 mark each for correcting any four errors)*

(e) Write the ASP code that will read the text file named friends.txt, count the number of lines in the file and then display the same.

3

Ans < %

```
count = 0
```

```
Set Fobj = Server.CreateObject ("Scripting.FileSystemObject")
```



```

Set mFile = Fobj.OpenTextFile ("multi.txt")
Do while NOT mFile.AtEndOfStream
    mFile.ReadLine
    count = count + 1
Loop
Response.Write ("Total lines in the file are: & count")
mFile.close
%>

```

- (1/2 mark for correctly creating the file system object)*
- + (1/2 mark for opening the file)*
- + (1/2 mark for the loop)*
- + (1/2 mark for reading the line)*
- + (1/2 mark for incrementing the counter)*
- + (1/2 mark for displaying the number of lines)*

6. Answer the following questions based on VBScript :

- (a) Name the event to be used in the following situations: 2
  - (i) To perform an action when the button gains focus.
  - (ii) To perform an action when a button is clicked.

Ans i) Onfocus  
ii) OnClick

*(1 mark for each correct answer)*

- (b) Rewrite the following code using DO WHILE instead of FOR loop without affecting the output: 2

```

<HTML>
<BODY>
<SCRIPT LANGUAGE = "VBScript" >
DIM A, B, C, Count

```

```

A = 0
B = 1
FOR Count = 3 TO 10 STEP 2
    C = A+B
    Document.Write (C & " ")
    A = B
    B = C
NEXT
</SCRIPT>
</BODY>
</HTML>

```

Ans <HTML>

```

<BODY>
<SCRIPT LANGUAGE = "VBScript">
DIM A, B, C, Count
A = 0
B = 1
Count = 3
DO WHILE Count < 10
C=A+B
Document. Write (C &. " ")
A = B
B = C
Count=Count+2
LOOP
</SCRIPT>
</ BODY>
</ HTML>

```

*(1/2 mark each for writing the mentioned underlined lines correctly)*

(c) Give the output of the following code:

2

```
<HTML>
<BODY>
<SCRIPT LANGUAGE="VBSCRIPT" >
DIM Num, Flag
Flag = 0
Num = 10
FOR A = 2 TO Num/2
    IF Num MOD A = 0 THEN
        DOCUMENT.WRITE (Num+ 1)
    ELSE
        DOCUMENT.WRITE (Num - 1)
    END IF
NEXT
</SCRIPT>
</BODY>
</HTML>
```

Ans 119911

*(1/2 mark for each correct number in the output)*

(d)

Input Number	<input type="text"/>
Check Divisibility by	<input type="text"/>
<input type="button" value="Divisibility Result"/>	

Write the HTML code for creating the above displayed form. Write the embedded VB Script code for the click event of the 'Divisibility Result' button such that it displays a message box based on whether the number input in the first textbox is divisible by the number input in the second textbox according to the following criteria:

- 1 If number is divisible then message displayed is "Wow! I belong to your family"
- 1 If number is not divisible then message displayed is "Let's look for my friends"

4

Ans <HTML>

```

<HEAD><TITLE>DIVISIBILITY CHECK</TITLE>
<SCRIPT LANGUAGE="VBScript">
SUB B1_OnClick
Dim A, B
A = FORM1.T1.VALUE
B = FORM1.T2.VALUE
IF A MOD B = 0 THEN OR IF FORM1.T1.VALUE MOD FORM1.T1.VALUE THEN
    MsgBox ("Wow ! I belong to your family")
Else
    MsgBox ("Let's look for my friends")
END IF
END SUB
</SCRIPT>
</HEAD>
<BODY>
<FORM NAME = "FORM1">
<P>INPUT NUMBER <INPUT TYPE = "TEXT" NAME = "T1">
<P>CHECK DIVISIBILITY BY <INPUT TYPE = "TEXT" NAME = "T2">
<P>
<INPUT TYPE = "Button" VALUE = "Divisibility Result" NAME="B1">
</FORM>
</BODY>
</HTML>

```

*(1/2 mark for correct <FORM> tag)*

*(1/2 mark for creating textboxes using <INPUT> tags)*

*(1/2 mark for creating button using <INPUT> tag)*

*(1/2 mark for correct <SCRIPT> tag)*

*(1/2 mark for associating subroutine with the button element)*

*(1 mark for correct conditional statement)*

*(1/2 mark for correctly displaying the output in the message box)*

7. Answer the following questions based on the unit Web Technologies:

(a) Define the term Cyber Law. 1

Ans It refers to the set of laws governing the usage of cyberspace / Internet. It encompasses a wide variety of political and legal issues related to the Internet.

*(1 mark for the correct definition)*

(b) Expand the term WLL. 1

Ans Wireless Local Loop

*(1 mark for the correct expansion)*

(c) What are the following software used for? 2

(i) Apache Tomcat

(ii) MySQL

Ans i) Web Server

ii) Relational Database Management System

*(1 mark each for mentioning the correct usage of each of the two)*

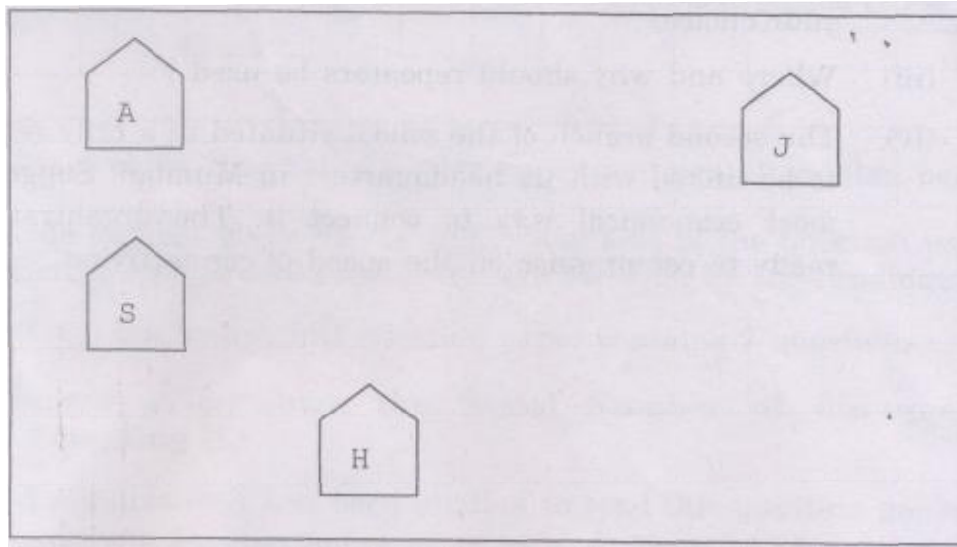
(d) Differentiate between Twisted pair cable and Co-axial cable. 2

	<b>Twisted Pair cable</b>	<b>Co-axial cable</b>
1.	Relatively low data transfer rate	1. Comparatively higher data transfer rate
2.	This type of cable is very susceptible to electromagnetic fields	2. This type of cable is less susceptible to interference

3. Most common application is the telephone system	3. Widely used for cable television
--	-------------------------------------

*(2 marks for anyone correct differentiation point)*

- (e) ProActor School of Acting in Mumbai is setting up the network between its different wings. There are 4 wings named as SENIOR(S), JUNIOR(J), ADMIN(A), and HOSTEL(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

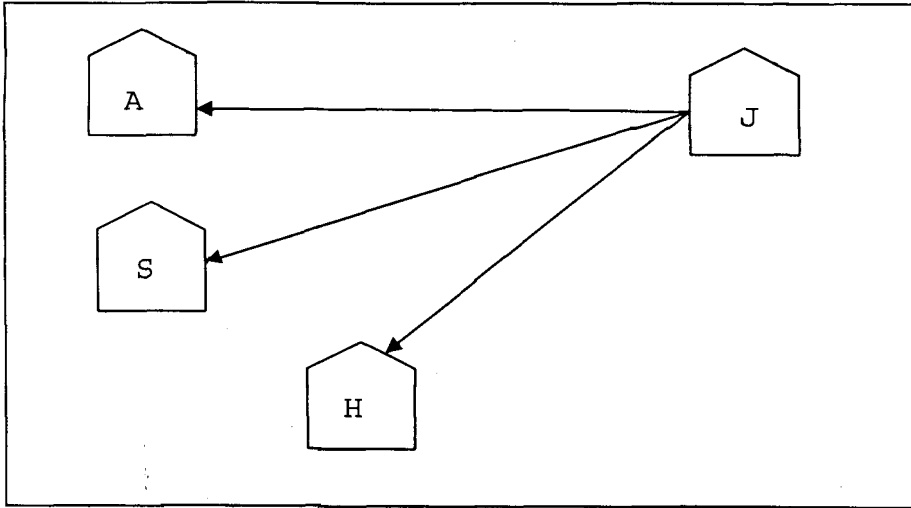
Number of computers in each wing is as given below:

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

(i) Suggest the most suitable topology for connecting these wings.

1

Ans Star Topology



*(1 mark for the correct topology)*

(ii) Suggest the most suitable place to house the server. Justify your choice.

1

Ans Wing S as it has the maximum number of computers

*(1/2 mark for the correct name and 1/2 mark for the justification)*

(iii) Where and why should repeaters be used?

1

Ans Between S and A, S and J, S and H as all the distances are greater than 75 m

*(1/2 mark for the correct placement and 1/2 mark for the justification)*

(iv) The second branch of the school situated in a hilly region is to be linked with its headquarters in Mumbai. Suggest the most economical way to connect it. The organization is ready to compromise on the speed of connectivity.

1

Ans Radio Waves OR TCP/IP

*(1 mark for the correct transmission medium)*