CBSE AISSCE 2015 Marking Scheme - Multimedia and Web Technology
(Sub Code:067   Paper Code 89/1   Delhi)

General Instructions:
- Marking scheme is the final document for all references with regard to evaluation and cannot be altered under any circumstances
- 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
- In VBScript and ASP, ignore case sensitivity for identifiers (Variable/ Subroutines/ Functions)
- In HTML, ignore case sensitivity, spaces and spelling errors in HTML tags (that sound same) and attributes (Example: <BODY bgcolor> and <body bg color> and <FORNT> are acceptable)

Q1.

(a) Observe the table GYM of a Database named Health Equipment given below carefully and answer the questions that follow:

Table: GYM

ICODE	INAME	PRICE	NUMBER
G101	Power Fit Exerciser	20000	8
G102	Aquafit Hand Grip	1800	5
G103	Cycle Bike	14000	9
G104	Protoner Extreme Gym	30000	9
G105	Cross Trainer	13000	8

   (i)   Name the two fields that have the number data type in the above table.   **(1)**

   (ii)   What are the degree and the cardinality of the table GYM?   **(2)**

   (iii)   Which field can act as the Primary key for the table GYM? Also mention the data type of this field.   **(2)**

Ans   (i)   PRICE & NUMBER have the number data type in the above table
   (½ mark for each field name)
   (ii)   Degree – 4
   Cardinality – 5
   (1 mark each for degree and cardinality)
   (iii)   ICODE can act as the primary key and it has TEXT data type
   (1 mark each for naming the primary key and its data type)

(b) Differentiate between .FLA and .SWF formats used in Flash.   **(1)**

Ans   .FLA file can be edited whereas .SWF file is the final file that cannot be edited
   (1 mark for any one valid differentiation point)

(c) Enumerate any two applications of multimedia in education.   **(2)**

Ans   Two applications are:
   (i)   Video Tutorials
   (ii)   Video Conferencing with subject experts
   (1 mark each for any two valid applications)

(d)   Ashini wants to be able to play the flash movie created by her using different players like   **(2)**
Quick Time player and Windows Media Player. Which option is better suited for her –
Exporting or Publishing? Also mention the extension of the file created that can be played
using Quick Time Player.

Ans   Ashini should use Exporting as she wants the file to be played in different formats.
Extension of the file created that can be played using Quick Time Player is .MOV
(1 mark each for naming the option and the extension)

Q2.   **Questions below are based on Macromedia Flash:**

a)   Study the figure given below and answer the questions that follow:
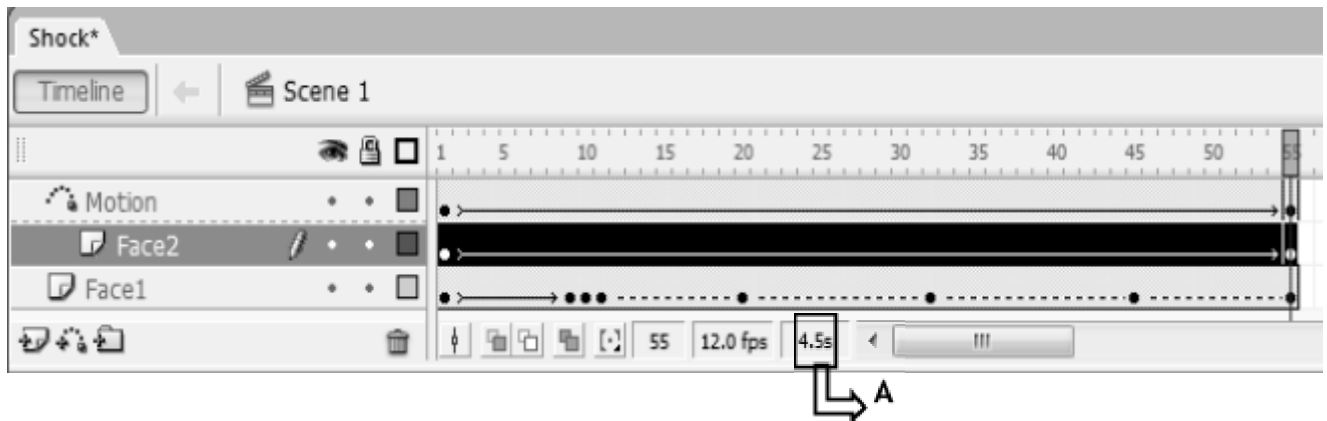
   (i) Name the guide layer in the above scenario.   **(1)**
   (ii) Given the above settings, will the contents of the layer Motion be displayed in the
       final movie? Justify.   **(1)**
   (iii) Given the above settings, name the active layer.   **(1)**
   (iv) What does the number 55 in the area labeled as A signify in the above scenario?   **(1)**

Ans   (i)   Motion layer acts as the guide
         (1 mark for naming the correct layer)

       (ii)   No, they will not be displayed as it is the guide layer. Only the object Face2 will be
           moving along that path
           (½ mark each for mentioning no and justification)

       (iii)   Face2 is the active layer
           (1 mark for naming the correct layer)

       (iv)   55 denotes the active frame
   *(1 mark for mentioning the correct signification)*

b)   What is the difference between frame-by-frame animation and tweening?   **(2)**

Ans   In frame-by-frame animation the designer has to specify the contents of each frame where
as in tweening, you just need to specify the contents of first and last frame and
in-between frames are automatically filled.
(1 mark for any one valid differentiation point)

c)   Observe the image given below and do as directed: (4)
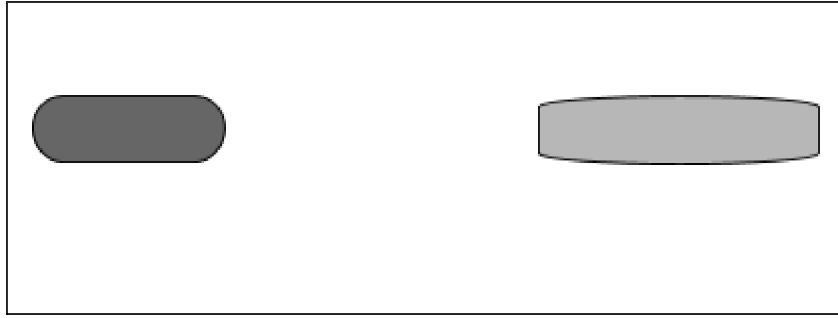
- The graphic on the left hand side shows the position and size for frame 1.
- The graphic on the right hand side shows the position and size for frame 30.
- The oval graphic used in the animation is saved in the flash library.

Write the procedure and property settings for animating the above scenario. Assume that the colour changes from orange to green during the animation.

Ans
- **Select frame 1** from the timeline and **drag an instance of the oval graphic from the library** on the stage.
- Using the arrow 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 arrow tool, **select** the image and **position it** on the right hand side of the stage at the desired location
- Using the arrow tool, **select the image and then resize it and rotate it** as given.
- Using the arrow tool, **select the image and change its colour to green**.
- **Select all frames from 1 to 30.**
- Right click the mouse button and **Select Create Motion Tween.**

OR Any other equivalent method.
(½ mark for each step)

Q3.   **Answer the following questions based on HTML:**

a)   Fill in the blanks in the given HTML code to create a hyperlink on the text "Follow us" to   (2)
the page "WeRSpecial.html"

```
<HTML>
<BODY>
    <A _____ = _____> _____ </_____>
</BODY>
</HTML>
```

Ans
```
<HTML>
<BODY>
    <A HREF = "WeRSpecial.html"> Follow us </A>
</BODY>
</HTML>
```
(½ mark for filling each blank correctly)

b) Write the HTML code to generate the web page in the format shown : **(8)**

Consider the following points while writing the HTML code:

1. The title of the web page is Pet Care Center.
2. The color scheme is as follows:
   a. Page background color is yellow.
   b. Horizontal lines are red.
   c. Table border is green.
3. The image used is all_pets.jpg.
4. The heading is in Forte font and the rest of the page uses Comic Sans MS font.
5. Create the given list with appropriate bullet type.
6. Use the concept of spanning for the last row of the table.
7. The link at the bottom is an e-mail link to the address expert@petcare.com

Ans

```
<html>
   <head>
      <title>Pet Care Center</title>
   </head>
<body bgcolor="yellow">
   <h1 align = center> <font face = "forte"> Pet Care Center</h1>
   <hr align="left" color="red" width=75%><center>
   <img src="pets.gif" width=600></center>
   <hr align="right" color="red" width=75%>
   <font face = "comic sans ms" size=4>
   <ol type="A"> The one stop <i>Care Center</i> for all your pet's needs.
We provide <b>professional</b> services like -
      <li> Grooming Services
```

```
    <ul>
        <li> Shampoo
        <li> De-flea
     </ul>
     <li>Training
     <li>Nutrition Care
   </ol>
   <center>
   <table border = 4 cellspacing = 5 bordercolor="green" width=35%>
      <caption> Center Timings </caption>
      <tr><th> Monday -  Friday</th><td> <b>10:00AM to 6:00PM
      <tr><th> Saturday</th><td> <b>10:00AM to 1:00PM
      <tr><th colspan=2> SUNDAY CLOSED
   </table>
   </center>
   For Pet Care tips from experts write to
   <a href="mailto:expert@petcare.com">expert@petcare.com</a>
</body>
</html>
```
(½ mark for correct use of <TITLE> tag)
+ (½ mark for mentioning the correct font type)
+ (1 mark for displaying the image correctly)
+ (1½ mark for correctly creating the list)
+ (½ mark for correct usage of <HR> tag)
+ (½ mark for making table border color green)
+(½ mark for correct use of spanning)
+ (1 mark for correctly creating the table using <TR> and <TD> tags)
+ (1 mark for correctly creating the link on the text)
+(1 mark to be awarded for correct use of <HTML> and <BODY> tags)

Q4. **Answer the following based on ASP**

a) With the help of an example explain the difference between the working of the operators + and &. **(2)**

Ans + can be used to add numbers or concatenate strings whereas & is used to concatenate strings only
12 + 12 will give 24
"12" & "12" will give 1212
(1 mark for example of each of the two operators)

b) Explain the use of the Remove and RemoveAll methods of the Session object. **(2)**

Ans Remove removes a specific item from the Session object's Contents Collection whereas RemoveAll removes all the items from the Session object's Contents Collection.
(1 mark for explanation of each of the two methods)

c) Name the object used for the following : **(3)**

  i)   To share information among all users of a given application
  ii)   To control information sent back to the browser from the server.
  iii) To obtain information about an error condition that has occurred in the script

Ans   i) Application Object
    ii) Response Object
    iii) ASPError Object
    (1 mark for each object name)

d)   Give the output of the following statements: **(3)**

```
i)      Response.write((9+5-2 )\4)
ii)     Response.write(LEN("COOKIES TIME"))
iii)    Response.write(STRREVERSE(MONTHNAME(3)))
```

Ans   i) 3
    ii) 12
    iii) HCRAM
    (1 mark for each output)

Q5.   **Answer the following based on ASP:**

a)   What is the use of the recordSet object?   **(1)**

Ans   The recordSet object is used to manipulate the rows of data or sets of records returned from a data source
    (1 mark for the correct usage)

b)   Study the code given below to create a content rotator and answer the questions that follow:

```
<HTML>
<BODY>
<CENTER><H1>FASTnSAFE Radio Taxis</H1></CENTER>
<P>
The Reliable Radio Taxi service that takes you to your destination quickly
<%
   Set myCont=Server.CreateObject("MSWC.ContentRotator")
%>
<P ALIGN="CENTER"><%= myCont.ChooseContent("routes.txt") %>
</BODY>
</HTML>
```

    i)   What is the significance of the delimiters <% %> in the above code?   **(1)**
    ii)   Give one special feature of the Content Rotator component of ASP.   **(1)**
    iii)   Name any one ASP component apart from Content Rotator.   **(1)**
    iv)   Name any one ASP object and one method used in the above code   **(2)**

Ans   i)   They mark the beginning and ending of the script to be executed on the server side
        (1 mark for the correct significance)

    ii)   It can be used to add images as well as text as HTML rotating content.
        (1 mark for the correct feature)

iii) AdRotator
(1 mark for the correct name of any one component)

iv) Object – Server
Method – CreteObject
(1 mark each for the correct object and method name)

c) Study the code given below:

```
<%
Set FileObj=Server._____("Scripting.FileSystemObject")
Set nfile= FileObj._____("lines.txt")
Do WHILE NOT _____. AtEndOfStream
    Response.Write(nfile.ReadLine)
    Response.Write("<BR>")
    nfile.ReadLine
LOOP
nfile._____
%>
```

i)   Fill in the blanks to complete the above code fragment that reads the text in the file lines.txt and displays alternate lines on the web page.   **(2)**

ii) If the file lines.txt has 5 lines and the above code is executed then which lines will be displayed – the first, third & fifth line or the second & fourth line.   **(1)**

iii) How will the output change if the first and the third line of the loop are interchanged as shown below?   **(1)**

```
<%
Set
FileObj=Server._____("Scripting.FileSystemObject")
Set nfile= FileObj._____("lines.txt")
Do WHILE NOT _____. AtEndOfStream
    nfile.ReadLine
    Response.Write("<BR>")
    Response.Write(nfile.ReadLine)
LOOP
nfile._____
%>
```

Ans   i) Complete Code

```
<%
Set
FileObj=Server.CreateObject("Scripting.FileSystemObject")
Set nfile= FileObj.OpenTextFile("lines.txt")
Do WHILE NOT nfile.AtEndOfStream
    nfile.ReadLine
    Response.Write("<BR>")
    Response.Write(nfile.ReadLine)
LOOP
nfile.Close
%>
```

(½ mark for filling each blank correctly)

ii) The first, third & fifth line will be displayed
   (1 mark for the correct answer)

iii) The second & fourth line will be displayed
   (1 mark for the correct answer)

Q6. **Answer the following questions based on VBSCRIPT:**

a) Which of the following option correctly matches the given events with the appropriate interface element **(1)**

Event	Interface Element
OnClick	Text
OnMouseOver	Button
OnChange	Image

   (i)   Button – OnChange, Text – OnClick, Image - OnMouseOver
   (ii) Button – OnClick, Text – OnChange, Image – OnMouseOver
   (iii) Button – OnMouseOver, Text – OnClick, Image – OnChange

Ans   (ii) Button – OnClick, Text – OnChange, Image – OnMouseOver
   (1 mark for the correct answer)

b) Study the code given below and answer the questions that follow:

```
<HTML>
<BODY>
  <SCRIPT LANGUAGE="VBScript">
    P=5
    Q=29
    DO WHILE P<=Q
        P=P+6
        DOCUMENT.WRITE P
    LOOP
  </SCRIPT>
</BODY>
</HTML>
```

   i)   How many times the above WHILE loop gets executed? **(1)**
   ii) Convert the given DO WHILE loop to FOR loop without affecting the output. **(2)**
   iii) Give the output of the above code **(2)**

Ans   i) 5 times
   (1 mark for the correct answer)

   ii) Code with For loop
```
<HTML>
<BODY>
  <SCRIPT LANGUAGE="VBScript">
    Q=29
```

```
FOR P = 5 TO Q STEP 6
    DOCUMENT.WRITE P
NEXT
</SCRIPT>
</BODY>
</HTML>
```
(½ mark for initializing Q outside loop)
(½ mark for the STEP statement)
(½ mark for FOR keyword)
(½ mark for NEXT keyword)

iii) 11172329
   (½ mark for each correct value - 11,17, 23, 29)

c)   Write the HTML code to generate the following form: **(4)**

Write the VBscript code to display the fee for the Dance Course as
   Rs 600 for children aged 6 – 12
   Rs 1000 for children aged 13 – 16
   "Not Eligible" for any other age
on the click of the **CALCULATE** button. The user inputs the child's age in the top text box and the fee amount or the message "Not Eligible" should be displayed in the second text box.

Ans
```
<html>
<head>
<script language="vbscript">
sub b1_OnClick
age=f1.t1.value
select case age
  case 6,7,8,9,10,11,12
     fee=600
  case 13,14,15,16
     fee=1000
```

```
      case else
          document.write "Not Eligible"
end select
f1.t2.value=fee
end sub
</script>
</head>
<body>
<form name="f1">
<p align=CENTER>
<b>HOP & DANCE FEE CALCULATOR

Enter Age of your child:
<input type = "TEXT" name="t1">
<br>
FEE AMOUNT :
<input type="TEXT" name="t2">
<br>
<center>
<input type="BUTTON" VALUE="CALCULATE" name="b1">
</form>
</body>
</html>
```

(1½ mark for creating the form)
(½ mark for associating the subroutine with the button element)
(½ mark for extracting the value and storing it in a variable)
(1 mark for the conditional statement – if or select case)
(½ mark for displaying the fee in the text box)

Q7.

(a) Which of the following is not open source software? (1)
    (i)   Firefox web browser
    (ii)   MySql
    (iii) Visual Basic

Ans Visual Basic
(1 mark for the correct answer)

(b) What was the objective behind developing UNICODE? (1)

Ans To have a common code for languages
(1 mark for the correct answer)

(c) Define Protocol. Give the full form of SMTP. (2)

Ans Protocol is a set of rules. SMTP stands for Simple Mail Transfer Protocol
(1 mark for the correct definition)
+ *(1 mark for the correct expansion)*

(d) Differentiate between E-mail and SMS. (2)

Ans E-mail has no limit on the number of characters being sent whereas SMS has a limit.
(1 mark for any one valid differentiation point)

(e) EduSmart School is in the process of setting up their new campus in Gurgaon. As a network expert, you are expected to help the institution by studying the physical locations of various blocks and the number of computers to be installed. On the basis of the given information, provide the best possible answers for the queries (i) to (iv) to help them in the planning phase.
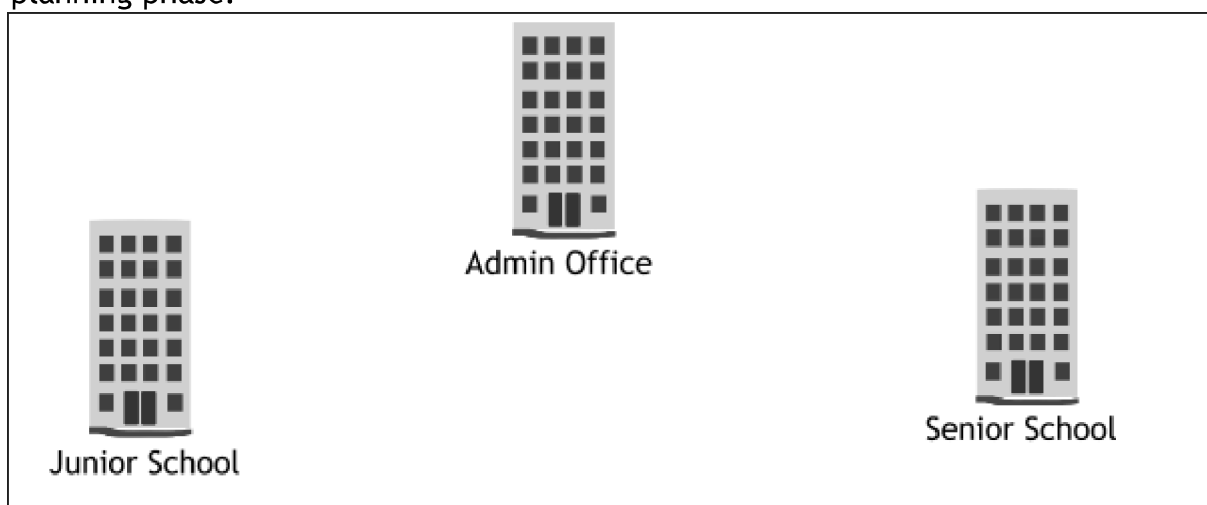
Block to Block distances (in mtrs.)

Place From	Place To	Distance
Admin Office	Junior School	60
Junior School	Senior School	120
Admin Office	Senior School	60m

Expected number of computers in each block:

Block	No. of Computers
Admin Office	50
Junior School	30
Senior School	30

(i) Draw the most appropriate cable layout to connect all three blocks for efficient communication. (1)

Ans
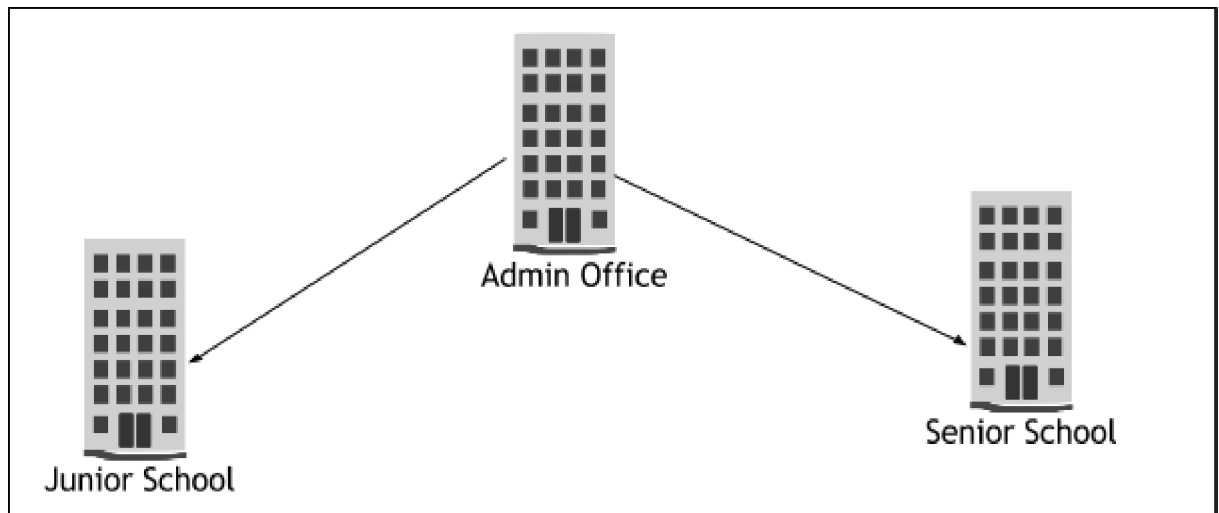
(1 mark for the correct cable layout as shown or any other valid layout)

(ii) Name the block that is most suitable to house the server for this campus with a suitable reason. **(1)**

Ans Admin Office
(1 mark for the correct block name)

(iii) Which type of network, out of the following, is formed by connecting the computers of these three blocks? **(1)**
- PAN
- LAN
- MAN

Ans LAN
(1 mark for the correct answer)

(iv) Which wireless channel out of the following should be chosen by the School Management to connect to their campus in another country? **(1)**
- Infrared
- Microwave
- Satellite

Ans Satellite
(1 mark for the correct answer)