Answering Scheme - SAMPLE QUESTION PAPER 3
MULTIMEDIA & WEB TECHNOLOGIES (Code 067)
Class XII

Max. Marks : 70   **Duration : 3 hrs.**
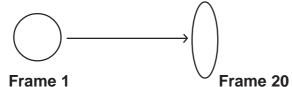
1. a)   i)   One-to-One   1
          ii)   One-to-Many
          iii)   Many-to-Many
          (Any two)
          (½ mark each for naming any two correct types of relationships)

    b)   i)   Currency   ½
          ii)   MS Access   ½
          (½ mark for each part)

    c)   The extension of the file created when a Flash movie is published using a   1
Macintosh projector is .hqx.
(1mark for naming the correct extension)

    d)   (i)   The Adm_No should be the primary key as it will be unique for each student. 1
          (1 mark for naming the correct field)

          (ii)   **Field Name**   **Data Type**   2

Field Name	Data Type
Adm_No	Text
Name	Text
Class	Text
DOB	Date/Time
Percentage	Number

(2 marks if all correct data types are given)
(1 mark if atleast 3 correct data types are given)

    e)   .DAT stands for Data File Format and the .GIF stands for Graphics   2
Interchange Format.
A .DAT extension is used for storing files of any kind whereas the .GIF file format is used for image files.
(½ mark for each full form)
(1 mark for the correct difference)

    f)   MPEG is the most suitable format because MPEG videos can be viewed on   2
DVD player as well as the internet and no special codec is required to view them. AVI format is not suitable because it cannot be played on DVD player and require special codecs to view them. JPEG format can only be used for static images and hence is not suitable.
(1 mark for naming the correct format)
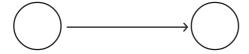*(1 mark for the correct justification)*

2. a) A keyframe is a frame in which the user can define a change in an animation or include frame actions to modify a movie.   1

   (1 mark for the correct definition)

   b) Stage is the actual canvas where all the objects to be included in the movie are placed. This is where you draw graphics and preview the movie as you build it.   1

   (1 mark for the correct definition)

   c) Shape tweening refers to making one shape appear to change into another shape over time. By tweening shapes, you can create an effect similar to morphing. For example: 2

   Frame 1   **Frame 20**

   Motion tweening refers to changing the position of an object over time. Motion tweening is helpful in creating an animation effect. For example:

   (½ mark for each definition)
   (½ mark for each example)

   d) The Timeline is used to organize and control a movie's content over time in layers and frames so that each movie instance happens at the correct times. The major components of the Timeline are layers, frames, and the play head.   2

   (1 mark for the correct usage)

   (1 mark for correctly naming any two components of Timeline)

   e)   4
   • Select frame 1 from the timeline and select Insert → New Symbol → Graphic
   • Create the black coloured text given on the left hand side.
   • Insert an instance of this symbol in frame 1 by dragging it from the library window.
   • Select frame 20 from the timeline and Select Insert → Keyframe
   • Change the size of the text
   • Change the colour of the text by selecting
   • Select any frame between 1 and 20
   • Right click the mouse button and Select Create shape tween.
   (½ mark for each correct step)

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

   a) `<INPUT TYPE=TEXT MAXLENGTH=20 VALUE="Enter Name">`   1
   (½ mark for naming the <INPUT> tag)
   (½ mark each for TYPE, MAXLENGTH & VALUE attributes)

b)   <HTML>, <BODY>, <HEAD>, <TITLE>   1
   (Any Two)
   (½ mark each for naming any two structural tags)

c)   <u>Coding:</u>   8
```
<HTML>
<BODY BGCOLOR="CYAN"><FONT FACE="COMIC SANS MS">
<FONT COLOR=RED><H2 ALIGN=CENTER> The Little Starlings </
H2></FONT>
<HR SIZE=3 COLOR=BLUE><BR>
<IMG SRC="ACTIVITY.GIF" HEIGHT=120 WIDTH=180
ALIGN=LEFT>
<P><B>Welcome to our World..... <BR>
<FONT COLOR=Maroon >The Little Starlings</FONT> is an hobby
club that believes in all-round development of a child
through various activities.
<BR><BR><BR><P> We offer the following activity choices:</P>
<OL>
<LI><A HREF="in.html">Indoor Activities</A>
<UL TYPE=SQUARE>
<LI>Dramatics
<LI>Dance
</UL><BR>
<LI><A HREF="out.html">Outdoor Activities</A>
<UL TYPE=CIRLE>
<LI>Horse-riding
<LI>Swimming
</UL>
</OL>
<TABLE ALIGN=CENTER BORDER=2 BORDERCOLOR="blue">
<CAPTION>Activity Charges</CAPTION>
<TR><TH>Activity</TH><TH>Monthly Charges</TH></TR>
<TR><TD>Dramatics</TD><TD>Rs.250</TD></TR>
<TR><TD>Dance</TD><TD>Rs.350</TD></TR>
<TR><TD>Horse-riding</TD><TD>Rs.400</TD></TR>
<TR><TD>Swimming</TD><TD>Rs.500</TD></TR>
</TABLE>
<HR SIZE=3 COLOR=BLACK>
<FONT SIZE=2><P ALIGN=CENTER>For enquires <A
HREF="mailto:mail@abc.com">Mail to us</A></P>
```
   (1 mark for correct use of <HTML> and <BODY> tags)
   (1 mark for correct use of <FONT> tag)
   (½ mark for displaying heading correctly
   (½ mark for correct use of <HR> tag)
   (1 mark for correct use of <IMG> tag)
   (1 mark for correct use of <P> tag with <FONT> or <SPAN> tag to change color of text in between)

(1 mark for correct use of <OL> and <UL> tags in proper nested order)

(1 mark for correct use of <A> tag for creating links)

(½ mark making table border color blue)

(½ mark for correct display of bottom message)

4. a) `TRIM(NAME)` 1

OR

`LTRIM(RTRIM(NAME))`

OR

(1 mark for the correct command)

(½ mark to be awarded if only the leading or trailing blanks have been removed)

b) PWS **or** IIS 1

(1 mark for the correct server name)

c) The error is that the variables I and C have not been declared. All variables need to be declared explicitly because of the OPTION EXPLICIT command at the top. 1

Corrected Code:
```
<SCRIPT LANGUAGE = "VBSCRIPT" RUNAT="SERVER">
   OPTION EXPLICIT
   DIM A, B, C, I
   A=0
   FOR I=1 TO 5 STEP 1
      C= A*B
      RESPONSE.WRITE C
      A=B
      B=C
      NEXT
   </SCRIPT>
```
(½ mark for identifying the error)
(½ mark for writing the corrected code)

d) Two features of ASP: 2

• ASP contains server-side scripts, objects and components.

• ASP is capable of adding dynamic content to a web page

(1 mark each for any two correct features)

e) A Variant is a special kind of data type that can contain different kinds of information, depending on how it's used. 2

Sub-types of the variant data type are: Empty, Null, Boolean, Byte, Integer, Long, Currency, Single, Double, Date, String, Object. **(Write any two)**

(1 mark for correct definition)

(½ mark each for naming any two correct sub-types)

f) i) Con   1

   ii) 12   1

   iii) 41   1

(1 mark for each correct output)

5. a) Ad Rotator component – used for controlling the rotation of advertising images   1
in a website

OR

(½ mark for naming any one component)

(½ mark for its usage)

b) An object's methods determine the things that one can do with the object whereas   2
an object's properties can be set to specify the state of the object. For example:

Object : Book

Method : Read the book

Properties : Number of pages in the book, author of the book

(1 mark for the differentiation point)

(1 mark for the example)

c) <u>Corrected code with errors underlined</u>:   2

```
<%
DIM fname
fname=Request.QueryString("fname")
IF fname<>"" THEN
    Response.Write("Hello " & fname & "!<br />")
    Response.Write ("How are you today?")
END IF %>
```

½ mark each for correcting any 4 errors)

(Give 1½ mark if the child has identified errors but not written the corrected code)

d) 310   2

40

450

140

(½ mark for each correct line of output)

e) **Coding:**   3

```
<HTML>
<TITLE>ASP TRY</TITLE>
<BODY>
<P>
Welcome to the green world. Click the links below to know
more about us.
<P>
```

```
<A HREF= "Reuse.ASP"> Reuse Recycle </A> <P>
<A HREF= "Activity.ASP"> Activities </A> <P>
<A HREF= "Join.ASP"> Join Us </A> <P>
</P>
<%set pgCount = Server.Createobject("MSWC.PageCounter")%>
<%pgCount.PageHit%>
This page has been viewed <%=pgCount.Hits%> times
</BODY>
</HTML>
```

(1 mark for creating the hyperlinks)

(1 mark for creating the Server object)

(1 mark for using PageHit & displaying the count)

6. The **If...Then** statement offers only one alternative for the value being checked 2
whereas SELECT … CASE is well suited for situations where there are a large
number of possible conditions for the value being checked. For example:

`If Location = "Delhi" Then`
`    ShippingFee= 400`
`Else`
`    ShippingFee = 500`
`End If`
	`Select Case Location`
	`    Case "Delhi"`
	`        ShippingFee= 400`
	`    Case "Mumbai"`
	`        ShippingFee= 300`
	`    Case Else`
	`        ShippingFee = 500`
	`End Select`

(1 mark for the correct difference)
(1 mark for the example)

b) The code using DO… WHILE is: 2
```
<SCRIPT LANGUAGE="VBScript">
DIM arr(5)
counter=1
DO WHILE counter <= 5
    arr(counter) = counter *counter
    counter =counter + 1
LOOP
</SCRIPT>
```
(1 mark for correct syntax of DO..WHILE loop)
(1 mark for correct condition check of counter)

c) 11 2

 13

 15

 17

(½ mark for each correct output line)

(Give 1½ marks if the output is given without line breaks)

d)

```
<HTML>
<HEAD>
<SCRIPT LANGUAGE="VBSCRIPT">
SUB fun
    DIM w,dat,d
dat=cdate(document.f1.txt1.value)
w=weekday(dat)
SELECT CASE w
    CASE 1
        d="Sunday"
    CASE 2
        d="Monday"
    CASE 3
        d="Tuesday"
    CASE 4
        d="Wednesday"
    CASE 5
        d="Thursday"
    CASE 6
        d="Friday"
    CASE 7
        d="Saturday"
END SELECT
MSGBOX "You were born on :"& d
END SUB
</HEAD>
<BODY>
<FORM NAME="F1">
<P> Enter your date of birth :<INPUT TYPE="TEXT"
NAME="TXT1"><BR><BR>
<INPUT TYPE="BUTTON" NAME="B1" VALUE="CLICK ME!"
ONCLICK="FUN">
```

4

(1 mark for correct declaration and end of sub routine)
(1 mark for correct calculation of day)
(½ mark for correct use of <FORM> tag)
(1 mark for correctly creating the text box and button)
(½ mark for correct usage of onClick event)

7. a) Data transfer rate is measured in bps (bytes per second), kbps (kilobytes per second), Mbps (Megabytes per second), Gbps (Gigabtyes per second) or Tbps (Terabytes per second).

1

(½ mark each for naming any two correct units)

b) SMTP

1

(1 mark for the correct protocol name)

c) Hubs are commonly used to connect segments of a LAN whereas a gateway is a device that connects dissimilar networks.

2

(2 marks for the correct difference)

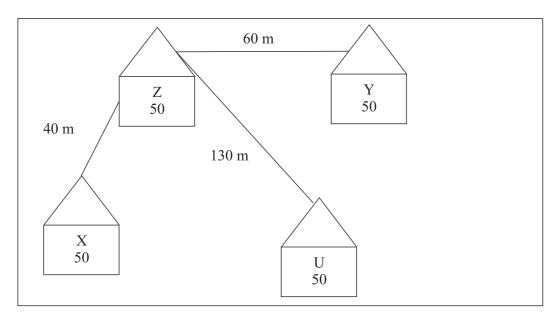d) i. **Telnet**: A text-based Internet program used for connecting to a remote host or server.   2
    ii. **CDMA**: Code Division Multiple Access: a digital wireless telephony transmission technique.

(1 mark for each correct definition)

e) (i) Most suitable layout: 1

(1 mark for the correct layout)

(ii) Wing Z as it has largest number of computers.
(½ mark for naming the correct block)
(½ mark for correct justification)

(iii) A **repeater** needs to be placed along the wire between wings Z to U as the distance between them is more than 70 m.

A **hub/switch** each would be needed in all the wings, to interconnect the group of cables from the different computers in each wing.
(½ mark for correct placement)
(½ mark for correct justification)

(iv) TCP/IP Dial Up as it is the most economic option with a reasonable speed.
(½ mark for correct technology)
(½ mark for correct justification)