Answering Scheme – Sample Question Paper 1 MULTIMEDIA & WEB TECHNOLOGIES (Code 067) Class XII

Max. Marks: 70 Duration: 3 hrs.

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1. a) The foreign key is an attribute of one relation, whose values match those of the primary key of another relation.

(1 mark for correct definition)

- b) i) Candidate Key
 - ii) Design View
 - (½ mark for each part)
- c) MPEG stands for Moving Picture Experts Group

This file format is used for saving movie files.

- (1/2 mark for correct full form
- (½ mark for correct file type)

d)

- i. Item_Name and Item_Price
- (½ mark for each correct field name)
- ii. Data types to be used for Table Sales are:

Field Name	Data Type
Sale_Date	Date or Time
Item	Text
Bill_No	Number or Text
Price	Currency or Number
Quantity	Number

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

e)		GIF image	JPEG image
	1.	GIF stands for Graphic Interchange Format	1. JPEG stands for Joint Photo graphic Experts Group
	2.	Allows animation	2. Does not allow animation
	3.	GIF files are less compressed and hence take more storage space.	3. JPEG files are almost 10 times more compressed than GIF files; hence JEPG files are more compact than GIF files.

(1 mark each for any two correct difference)

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

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

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(1 mark for correct definition)

(1/2 marks each for any two correct file formats)

2. a) The Timeline is where the user coordinates the timing of the animation and assembles the artwork on separate layers.

(1 mark for correct definition)

b) Symbol is a reusable media element that can be used in a movie.

(1 mark for the correct definition)

c) 2

Keyframe	Blank Keyframe
A keyframe is a frame in which the user can define a change in an animation or include frame actions to modify a movie.	A blank keyframe is one which is empty and is waiting to be filled. It is used to hide the object till it reaches another keyframe.
2. It is denoted by a solid dot in the frame	2.It is denoted by a white frame

(1 mark each for any two correct differences)

d) In tweening, the user creates starting and ending frames and Flash automatically creates the frames in between. For example:



Frame 1 Frame 20

Two types of tweening are: Motion tweening and Shape tweening.

(1 mark for correct definition)

(½ marks each for correctly naming the two tweening methods)

- e) The following steps have to be followed to animate the given scenario:
 - Select frame 1 from the timeline and select Insert → New Symbol → Graphic
 - Create the blue coloured figure given on the right handside.
 - 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 image using scaling button
 - Change the colour of the object by selecting Tint option from the Effect palette and selecting the new colour.
 - Select any frame between 1 and 20

• Select create shape tween.

(1/2 marks for each step)

a) HIDDEN creates an invisible text control that allows the user to store values within a Web page without being seen by the user, while PASSWORD creates a visible text control that displays the characters typed into the input area as asterisks.

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($\frac{1}{2}$ marks for explanation of each interface element)

- b) Intrafile linking is a two step process:
 - 1. The First step involves creating a named anchor:

For example:

```
<a name="TOP"> Heading</a>
```

This creates a marker for the link to jump to on a web page

2. The second step involves using this named anchor to create a link:

For example:

</TABLE>

```
<a href="#TOP"> Back to Top</a>
```

($\frac{1}{2}$ marks for correctly creating the anchor)

(1/2 marks for correctly creating the link using the anchor)

```
Answer(c)<HTML>
                                                                   8
      <BODY BGCOLOR="Gray" VLINK="Green">
      <BASEFONT FACE="Arial">
      <FONT COLOR="Maroon"><H2 ALIGN=center>
      WELCOME TO INDIA</H2></FONT>
      <HR SIZE=3 COLOR=black><BR>
      <IMG SRC="map.jpg" HEIGHT=150 WIDTH=200 ALIGN="left">
      <B> <FONT COLOR=red> Ghumo Phiro Travels </FONT>
      <BR><P> We offer the following packages:
      <OL>
      <LI><A HREF="raj.html">Rajasthan Package</A>
      <UL TYPE=square>
      <LI>Jaipur
      <LI>Udaipur
      <LI>Pushkar
      </UL><BR>
      <LI><A HREF="kerala.html">Kerala Package</A>
      <UL TYPE=cirle>
      <LI>Kumarokom Resort
      <LI>Periyar Wildlife Sanctuary
      <LI>Kovalam Beach
      </UL>
      </OL>
      <TABLE ALIGN=center BORDER=2><CAPTION>Tarriff</CAPTION>
      <TR><TH>Package</TH><TH>Normal</TH><TH>Delux</TH></TR>
      <TR><TD>Rajasthan</TD><TD>Rs.7000</TD><TD>Rs.10,500</TD></TR>
      <TR><TD>Kerala</TD><TD>Rs.11,500</TD><TD>Rs.18,000</TD></TR>
```

```
<HR SIZE=3 COLOR=black>
<FONT SIZE=2><P ALIGN=center>For enquires
<A HREF="mailto:any@email.com">Mail to us</A></P>
</BODY></HTML>
(1 mark for correct use of <HTML> and <BODY> tags)
(½ mark for correct use of <BASEFONT> tag)
(1 mark for displaying heading correctly and <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 colour 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)
(1 mark making table correctly)
(½ mark for correct display of bottom message)
```

4. a) An Active Server Page can contain server-side scripts, built-in objects and additional Active-X components whereas a normal HTML page cannot have any scripts or additional components.

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(1 mark for the correct difference) (½ mark if only one option is correct)

- b) (i) FORM collection
 - (ii) The alternate command is:

Response.Write("HELLO")

(1 mark for each part)

A subroutine is a named block of code that can be called from anywhere in a program to accomplish a specific task. Subroutines are procedures that do not return a value to the caller.

Data that is required for the execution of the subroutine may be passed through variables called arguments.

Example:

```
Sub DisplaySum(a,b)
   Dim c
   c=a+b
   Response.Write("Sum =" & c)
End Sub
(1 mark for correct definition of subroutine)
(1 mark for correct definition of arguments)
(1 mark for example)
```

- d) (i) Variable A has global scope while variable B has local scope.

 (1/2 mark for each correct scope)
 - (ii) The subroutine *Work* will be executed two times (1 mark for correct answer)

(e) Output: 2 Answer i) 4 ii) 26 (1 mark for each correct output) 5. A group of related ASP pages is called an application. An application object has all the methods and collections related to applications. For example, an application variable contains data that can be used on all the pages and by all the users of an application. (1 mark for correct usage with or without an example) 2 Answer(b) Corrected script with errors underlined: <HTML> <BODY> <% for a = 1 To 4 %> <FONT SIZE= <% =a %>> Hello World!
 <% Next %> </BODY> </HTML> (1 mark for correcting each error) Answer(c) Output: 2 25 86 80 55 (½ mark for each correct line of output) 2 (d) Line 1: objRS.AddNew Line 2: objRS.Update (1 mark for each correct line of output) e) 3 Coding: <HTML> <BODY> <HR> <% Set myad=Server.CreateObject("MSWC.AdRotator") <CENTER><%= myad.GetAdvertisement("ads.txt") %></CENTER> </BODY> </HTML> ($\frac{1}{2}$ mark for correct <H1> tag)

```
(1 mark for correct usage of CreateObject)
        (1 mark for correct usage of GetAdvertisement)
6. (a) An event describes actions that occur as the result of user interaction with a web
        page. For example, when a user clicks a hyperlink or a button an event is gener-
        ated.
                                                                              2
        (i) OnUnload
        (ii) OnBlur
        (1 mark for correct definition)
        (½ mark for each correct event name)
                                                                              2
   b) <SCRIPT LANGUAGE="VBScript">
       DIM sum, a
        sum=0
        a=1
        DO WHILE a <= 10
           sum=sum + a*a
           document.write(a)
           a=a+3
        LOOP
        document.write(sum)
        </SCRIPT>
        (½ mark for correct initialisation of variables)
        (1 mark for correct syntax of DO..WHILE loop)
        (½ mark for correct increment of variable)
   c)
      Output:
        111098
                                                                              2
                  (½ marks for each correct value i.e. 11, 10, 9, 8)
      <HTML>
                                                                              4
   d)
        <HEAD><TITLE>Button Event</TITLE>
        <SCRIPT LANGUAGE="VBScript">
        Sub calc
           c1=cDbl(document.form1.txt1.value)
           c2=cDbl(document.form1.txt2.value)
           c3 = c1 + c2
           document.form1.txt3.value =c3
        End Sub
        </SCRIPT>
        <HEAD>
        <BODY LANGUAGE="VBScript">
        <FORM NAME="form1">
        <H4>Enter numbers into the first two text boxes to find their
        sum < /H4 >
        <INPUT TYPE="text" value=0 NAME="txt1" size=5 onChange='calc'>
```

(1/2 mark for <HR> tag)

<INPUT TYPE="text" value=0 NAME="txt2" size=5 onChange='calc'>

- <INPUT TYPE="text" value=0 NAME="txt3" size=6>
 </FORM>
 </BODY>
 </HTML>
- (1 mark for correct declaration and end of sub routine)
- (½ mark for correct retrieval of values from the form textbox)
- (½ mark for correct calculation of sum)
- (½ mark for correct use of <FORM> tag)
- (1 mark for correct syntax for making text boxes)
- (½ mark for correct usage of onChange event)
- **7.** a) A protocol is a set of rules that governs data communications between two devices.

(1 mark for correct definition)

- b) Aleena can use Infrared or Bluetooth to transfer the songs.
 - (½ mark for each correct option)
- c) A hub is a common connection point for devices in a network. Hubs are commonly used to connect segments of a LAN.

A switch is similar to a hub, in that it provides a central connection between two or more computers on a network, but with some intelligence.

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(2 marks for the correct differentiation point)

(1 mark if only one option is correct)

- d) i. Firewall
 - ii. Cracker

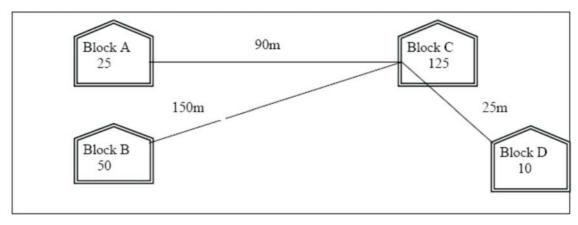
Firewall: Software/hardware used to prevent unauthorized access from a computer system or network of computer systems.

Cracker: A person who breaks into a computer system/network without having authorized access with a malicious intent.

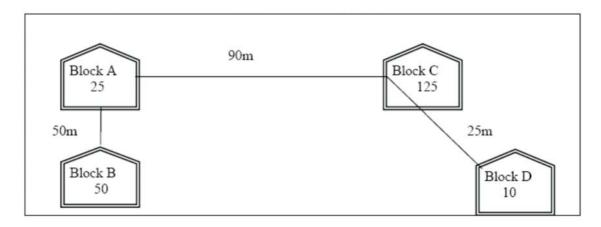
(1 mark for each correct term explanation)

Answer (e) (i) (Any of the following option)

Layout Option 1:



Layout Option 2: Since the distance between Block A and Block B is quite short

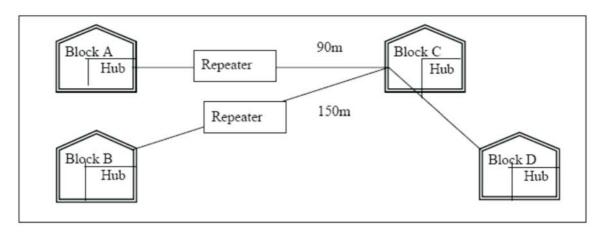


(1 mark for any one correct layout suggested above)

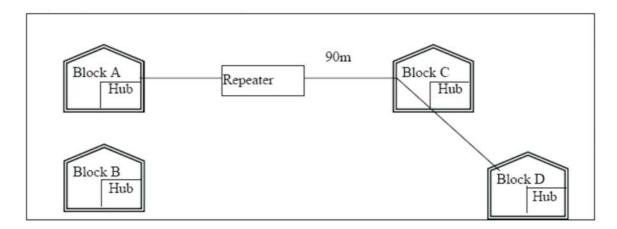
- (ii) The most suitable place / block to house the server of this organisation would be Block C, as this block contains the maximum number of computers, thus decreasing the cabling cost for most of the computers as well as increasing the efficiency of the maximum computers in the network.
 - (½ mark for naming the correct block)
 - (½ mark for correct justification)

(iii) Repeater:

<u>For Layout 1</u>, since the cabling distance between Blocks A and C, and that between B and C are quite large, so a repeater each, would ideally be needed along their path to avoid loss of signals during the course of data flow in these routes.



For layout 2, since the distance between Blocks A and C is large so a repeater would ideally be placed in between this path



Hub/Switch:

In both the layouts, a hub/switch each would be needed in all the blocks, to interconnect the group of cables from the different computers in each block.

(1/2 mark for correct placement of repeater and hub)

(1/2 mark for correct justification)

(iv) The most economic way to connect it with a reasonable high speed would be to use radio wave transmission.

(1 mark for naming the correct technology)