ANSWERING SCHEME - SAMPLE QUESTION PAPER
MULTIMEDIA & WEB TECHNOLOGIES (Code 067)
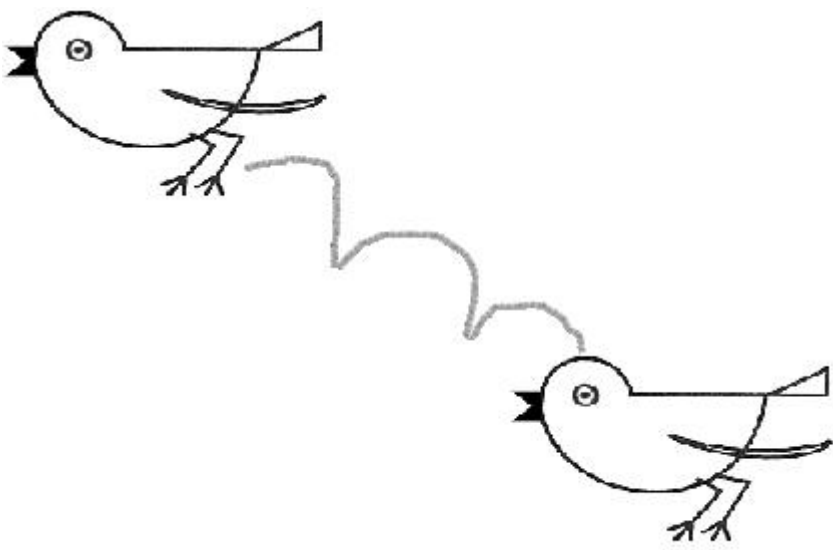### Class XII
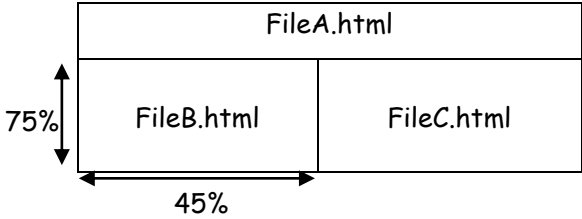
Max. Marks : 70   **Duration : 3 hrs.**

1.	a)	What is a Database?	1
Answer		*Database is an organised collection of data to serve multiple applications.* ***(1 mark for correct answer)***	
	b)	Name the following: i) The extension of MS Access database file. ii) The view in which we can add, edit and view records in MS-Access.	1
Answer		i) .MDB ii) Datasheet View ***(½ mark for each option)***	
	c)	AVI file format is for _____ files.	1
Answer		movie. ***(1 mark for correct answer)***	
	d)	Study the following data and answer the questions given below:	

Table: Doctors

DocID	DocName	Department	OPD_Days
101	M.Panday	ENT	TTS
102	G.P.Gupta	Paed.	MWF
201	C.K.Sharma	Ortho	MWF

Table: Patients

Pat_no	PatName	Department	DocID
1	Neeraj	ENT	101
2	Mohit	Ortho	201
3	Ragini	ENT	101
4	Mohit	Paed.	102
5	Nandini	Ortho	201

	i)	What type of relationship exists between table **Doctors** and the table **Patients**?	1
Answer		A one to many relationship exists between table Doctors and table Patients ***(1 mark for naming the correct relationship type)***	
	ii)	Name the fields, which can act as the primary key and foreign key for the table Doctors and table Patients respectively.	2

Answer		The field DocID can be set as the primary key for the table Doctors. The field DocID can be set as foreign key for the table Patients. ***(1 mark each for correctly naming the primary key and foreign key)***	
	e)	Aman has created a symbol in Flash which can be clicked, write the type of symbol that he has created.	1
Answer		Button symbol. ***(1 mark for correct answer)***	
	f)	Rahul has created a movie in Flash. When he is running his movie, it is going very fast. What should he do to slow down his movie.	1
Answer		He should decrease the frame rate of the movie. ***(1 mark for the correct answer)***	
	g)	Mr. Raja Maheshwari is planning to gift a digital album to his daughter on her birthday. All the images have lots of colour shading and are all static images. Which of the following formats are best suited for this purpose: (i) GIF (ii) JPEG (iii) AVI Justify your choice	2
Answer		Mr. Raja Maheshwari should save the images in JPEG format because it supports lots of colours (suitable for shading), and JPEG real life static photographs are more compressed than GIF. ***(1 mark for naming the correct format)*** ***(1 mark for the correct justification)***	
2.		**Answer the following questions based on Macromedia Flash:**	
	a)	Write the difference between a guide layer and a mask layer.	2
Answer		A motion guide layer lets the designer draw paths along which tweened symbols can be animated whereas a mask layer is used to create a hole through which the contents of one or more underlying layers are visible. ***(2 marks for the correct differentiation)*** ***(1 mark if only one is correctly explained)***	
	b)	Differentiate between a Symbol and an Instance.	2

Answer	Symbol	Instance	
	1. Symbols are reusable media elements such as graphics, buttons, movie clips etc. that can be used in a movie.	1. Instance is an occurrence of a symbol	
	2. The symbol is stored in the file's library	2. An instance is placed on the Stage	
	3. A change in any of the symbols effect	3. A change in an individual instance	

		all its instances	need not effect the symbol.	
		(1 mark each for any two correct differences)		
	c)	What is the difference between hiding a layer and locking a layer?		2
Answer		Hiding a layer means that the contents of that layer are not visible and locking a layer means that the contents of that layer cannot be edited. *(2 marks for the correct difference)* *(1 mark if only one option is correct)*		
	d)	Consider the figure given below and do as directed: • The bird on the right hand side shows the position for frame 1. • The bird on the leftt hand side shows the position for frame 20. • The bird in frame 1 moves to frame20 following path as shown in fig. • The image of bird is bird.jpg saved in flash library. Write the procedure and property settings for animating the above scenario.		4
Answer		The following steps have to be followed to animate the given scenario: • Select frame 1 from the timeline and drag the image bird.jpg on stage on the right hand side. • Select frame 20 from the timeline and Select Insert → Keyframe • Change the position of the bird as shown on left side • Select any frame between 1 and 20 • Select Create motion tween. • Click on Insert and select guide layer • Take pencil tool and draw the path of bird as shown		

		• Click on previous layer and align the bird with the path at both ends • Run the movie *(½ mark for each correct step)* *(full marks for any other correct equivalent way for the same animation)*	
3.		**Answer the following questions based on HTML:**	
	a)	Fill in the blanks in the HTML code to create a framed web page in the following format FileA.html 75% FileB.html FileC.html 45%	2

Answer		The required coding is :
		`<HTML>`
		`<FRAMESET ROWS = "25%,*">`
		`  <FRAME SRC = "FileA.HTML">`
		`  <FRAMESET COLS = "45%,*">`
		`    <FRAME SRC = "FileB.html">`
		`    <FRAME SRC = "FileC.HTML">`
		`  </FRAMESET>`
		`</FRAMESET>`
		`</HTML>`
		
		(½ mark for correct cols and rows attribute)
		(½ mark each for correct src attribute)	

	b)	Write the HTML code to generate a Web Page in the format given below :
		
		Consider the following while writing the HTML code
		  1. Title of the page should be "Water Conservation"
		  2. Link colour should be "Maroon", visited link colour should be "Red" .
		  3. Heading of page is "violet"
		  4. Picture used in the page is the file "savewater.jpg"
		  5. Table should have a border of width 1, border of table should be "green".
		  6. Background of first row is "yellow" and of second row is "cyan"
		  7. Pages linked to :
		     • Sustainability as "sust.html"
		     • Energy Conservation as "energy.html"
		     • Habitat Conservation as "habitat.html"
		  8. Bottom message is of size 2 and image used is contact.jpg for link to
		     water@abc.com
			8

| Answer | ```html
<HTML>
<html><HEAD><TITLE> Water Conservation</TITLE></HEAD>
<BODY   LINK="maroon" VLINK="red">
<H2 ALIGN=center color="violet">Save Water </H2>
<HR SIZE=2 COLOR=black><BR>
<IMG SRC="savewater.jpg" HEIGHT=150 WIDTH=200 ALIGN="right">
<P><B>Water conservation encompasses the policies, strategies and
activities to manage fresh water as a sustainable resource to
protect the water environment and to meet current and future
human demand. Population, household size and growth and affluence
all affect how much water is used. Factors such as climate change
will increase pressures on natural water resources especially in
manufacturing and agricultural irrigation
<P>The goals of water conservation efforts include as
follows:<BR>
``` | |

```
<OL><LI><A HREF="sust.html">Sustainability</A>
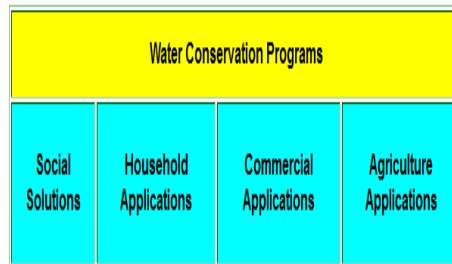
<LI><A HREF="energy.html">Energy Conservation</A>
<LI><A HREF="Habitat.html">Habitat Conservation </A>
</OL>
<TABLE ALIGN=center BORDER=1 bordercolor="green">
<TR bgcolor=yellow><th colspan=4>Water Conservation
Programs</th></tr>
<TR bgcolor=cyan><TH>Social Solutions</TH>
<TH>Household Applications</TH>
<TH>Commercial Applications</TH>
<TH>Agriculture Applications</th></tr>
</table>
<HR SIZE=2 COLOR=black>
<FONT SIZE=2><P ALIGN=center>For all further enquires :<A
HREF="mailto:tourist@abc.com"><IMG SRC="contact.jpg" ></A></P>
</FONT></BODY></HTML>
```
(1 mark for correct use of <HTML> and <BODY> tags)
(1 mark for displaying heading correctly and <HR> tag)
(1 mark for correct use of <IMG> tag)
(1 mark for correct use of <OL> tag)
(1 mark for correct use of <A> tag for creating links)
(2 mark making table correctly)
(1 mark for correct display of bottom message)

4.		**Answer the following questions based on ASP:**	
	a)	Identify the errors and rewrite the given code: ``` <SCRIPT LANGUAGE="VBScript"> OPTION EXPLICIT A=10 B=20 DOCUMENT.WRITE(A+B) </SCRIPT> ```	2
Answer		<SCRIPT LANGAUGE="VBSCRIPT"> OPTION EXPLICIT <u>DIM A,B</u> A=10 B=20 <u>RESPONSE</u>.WRITE(A+B) </SCRIPT> OR <SCRIPT LANGAUGE="VBSCRIPT"> A=10	

		B=20 RESPONSE.WRITE(A+B) </SCRIPT> *(1 mark for each error)*	
	b)	Explain with an example the difference between the string operators + and &.	2
Answer		The string concatenation operator(&) is used to merge two strings together to form a new string. The + operator can also be used for string concatenation. It can handle strings, but when strings are mixed with numbers, it may give ambiguous results. Example: A="12" B=8 N="Hello" C=A&B ' C will contain 128 D=A+B ' D will contain 20 E=N&B ' E will contain Hello8 F=N+B ' this will give type mismatch error *(1mark for correct differentiation and 1 mark for example)* *(Full 2 marks if the difference is explained only with the help of an example)*	
	c)	Which two objects are essential for accessing and reading a text file using ASP? Also write their role using an example.	3
Answer		FileSystemObject and TextStreamObject are essential for accessing and reading a text file. <Html> <Head></Head> <Body> <% Set obj = server.createobject("Scripting. FileSystemObject") **REM " Ïnstance of FileSystemObject is created to get access to the file"** Set myfile = obj.opentextfile("c:\classxii\try.txt") **REM " Ïnstance of TextStreamObject is created to read the file"** response.write myFile.readAll myfile.close %> *(½ mark for each correct object name)* *(½ mark for each correct use of object)* *(1 mark for correct code)*	

	d)	Give output of the following statements:
		    i) Response.Write(UCASE(MID("Hello There"),7,3)))
		    ii) Response.Write(MONTHNAME(MONTH("15-2-2003")))
		    iii) Response.Write((4+5)MOD(3^2))
			3

Answer	i) THE ii) February iii) 0 *(1 mark for each correct output)*	
5.		**Answer the following questions based on ASP:**	
	a)	How many Global.asa files are required for one application?	1
Answer		One *(1 mark for correct answer)*	
	b)	Differentiate between the RESPONSE object and REQUEST object .	2
Answer		The Response object of ASP contains all the information about the response sent from the web server to a web browser whereas the Request object contains all the information about the HTTP request sent from the web browser to the web server. *(2 marks for the correct differentiation)*	
	c)	In a database C:\classxii\student.mdb , there is a table named student with field names as shown: | Adm_no	Name	DOB	Address	Fees | Write the server side script to display the contents of this table.	4
Answer		``` <Html> <Head> <% dim str Set obj = server.createobject("ADODB. Connection") str = "Provider = Microsoft.Jet.OLEDB.4.0; Data Source = "C:\classxii\student.mdb"" obj.open str set rs = server.createobject("ADODB. Recordset") rs.open "student",obj %> </Head> <Body> Student table <table border = 1> <% while not rs.EOF%> <TR> <TD><%=rs("Ädm_no")%></TD> <TD><%=rs("Name")%></TD> <TD><%=rs("DOB")%></TD> <TD><%=rs("Address")%></TD> <TD><%=rs("Fees")%></TD> </TR> <% ```	

| | | ```
rs.movenext
wend
rs.close
obj.close
set rs = nothing
set obj = nothing
%>
</table>
</body>
</html>
``` | |

(1/2 mark for creating instance of both the objects)
(1 mark for opening the database)
(1/2 mark for opening the table)
(1 mark for displaying the records)
(1/2 mark for using EOF property)
(½ mark for using movenext method)

	d)	Write the structure of rotator schedule file where 3 images are displayed namely img1.jpg, img2.jpg, img3.jpg. All the images have same weightage and are not redirecting to any site. Also the alternative text for them is "Today", "we have", "exam" resp. Assume the default height, width and border for images.	3

| Answer | ```
REDIRECT
WIDTH
HEIGHT
BORDER
*
Img1.jpg
-
Today
1
Img2.jpg
-
We have
1

Img3.jpg
-
Exam
1
``` |
|---|---|

(1 mark for correct usage of Redirect, Height, Width and Border)
(½ mark for correct position of *)
(½ mark for correct position of file name)
(½ mark for correct position of alt text)
(½ mark for correct position of weight)

6.		**Answer the following questions based on VBScript:**	
	a)	A code to display the reverse of a string is written below. Fill in the blank to complete it: ``` <html> <head> <script language="vbscript"> sometext = "Bye!" document.write(_____(sometext)) </script> </head> </html> ```	1
Answer		Strreverse **(1 mark for correct answer)**	

	b)	Write the equivalent script for the following code using FOR loop without effecting the output:
		``
		<SCRIPT LANGUAGE="VBScript">
		DIM count(5)
		i=1
		DO
		If i mod 2 = 0 then
		count(i)=1
		Else
		count(i)= i *10
		end if
		i = i + 1
		LOOP WHILE i<=5
		</SCRIPT>
		``
			2

Answer		```
		<SCRIPT LANGUAGE="VBScript">
		DIM count(5)
		For i=1 to 5
		If i mod 2 = 0 then
		count(i)=1
		Else
		count(i)= i *10
		end if
		next
		</SCRIPT>
		``
		(1 mark for correct syntax of FOR statement)
		(½ mark for giving correct value in STEP)
		(½ mark for NEXT)	

	c)	Write a function using VbScript that allows two values to be passed to it and calculates the multiplication of those two nos. and returns the result.	3
Answer		``` <script language = "VBScript"> Function mul(x,y) mul = x * y ```	

		end function a = cdbl(inputbox("ënter 1st number")) b = cdbl(inputbox("ënter 2nd number")) document.write mul(a,b) </script> **(1/2 mark for both input boxes)** **(1 mark for call of function and display of result)** **(1 mark for definition of function)** **(1/2 mark for passing values as arguments)**	
	d)	Create a form that contains two checkbox options and a textbox as shown below. When the user clicks on any or both checkboxes, the price to be paid should be displayed in the textbox. Write the HTML code for creating the form and the embedded VBScript code for the click events of the button. **XYZ Superstore** ☑ T Shirt for Rs 600 ☑ Trouser for Rs 2000 Total amount 2600 calculate	4

Answer		```
		<html>
		<head>
		<script language=vbscript>
		Sub b1_onclick
		If document.f1.c1.Checked Then
		   Result = 600
		 End If
		 If document.f1.c2.Checked Then
		   Result = Result + 2000
		 End If
		 document.f1.t1.Value = Result
		End Sub
		</script>
		</head>
		<body>
		<form name=f1>
		  XYZ Superstore
		
		``	

| | | ```
<input type=checkbox name="c1"> T Shirt for Rs 600 <br>
<input type=checkbox name=c2> Trouser for Rs 2000<br><br>
Total amount <input type=text name=t1><br><br>
<input type=button value = calculate name=b1>
</form>
</body><INPUT NAME="txtResult" SIZE="60">
</BODY>
</HTML>
```<br>*(1 mark for correct declaration and end of sub routine)*<br>*(1 mark for correct if statements)*<br>*(½ mark for correct use of <FORM> tag)*<br>*(1 mark for correctly making checkboxes)*<br>*(½ mark for correct usage of onClick event)* | |
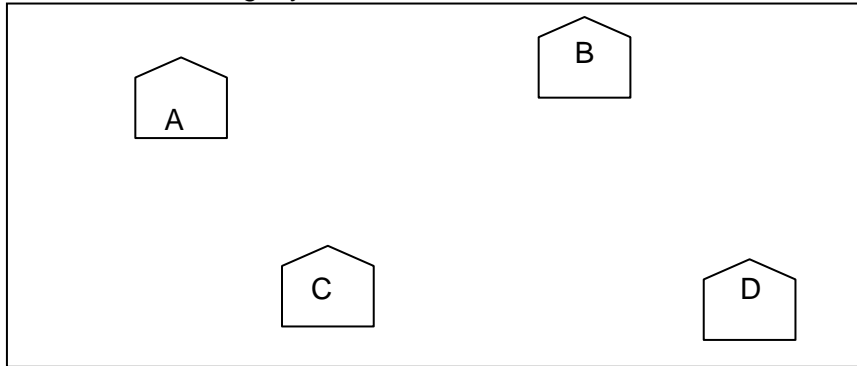| **7.** | | **Answer the following questions based on Communication and network concepts:** | |
	a)	Girish Ramanuj is an entrepreneur who has recently set up a new business. Girish needs to create a lot of documents, presentations, databases and spreadsheets to maintain data and spread his business. However, he does not have the money to purchase any of the proprietary software which offers all these packages. Can you suggest what software can Girish use for which he has to pay no licensing fee?	1
Answer		Girish Ramanuj can use Free open source software to save on licensing fee. *(1 mark for correct software)*	
	b)	Write any two advantages of using optical fiber cable over coaxial cable and twisted pair cable.	2
Answer		Highest bandwidth Complete immunity to noise Negligible attenuation upto 50km No electromagnetic interference Most secure *(2 marks for any two correct reasons)* *(full marks for any other correct points)*	
	c)	Explain the term Protocol and give the names of any two protocols.	2
Answer		**Protocol:** a communications protocol is a system of digital rules for message exchange within or between computers. *(1 mark for correct definition)* *(1 mark for any two correct protocol names)*	
	d)	What is UNICODE?	1
Answer		UNICODE is a single standard code which could manage to represent all languages of the world. *(1 mark for correct definition)*	

	e)	An Organization has its offices in building A, B, C and D. Answer questions (a) to (d) in context of the following layout of the three offices:	4

Centre to Centre distances between different buildings are as follows:

Block A to Block B	100 m
Block A to Block C	70 m
Block A to Block D	20 m
Block B to Block C	150 m
Block B to Block D	120 m
Block C to Block D	140 m

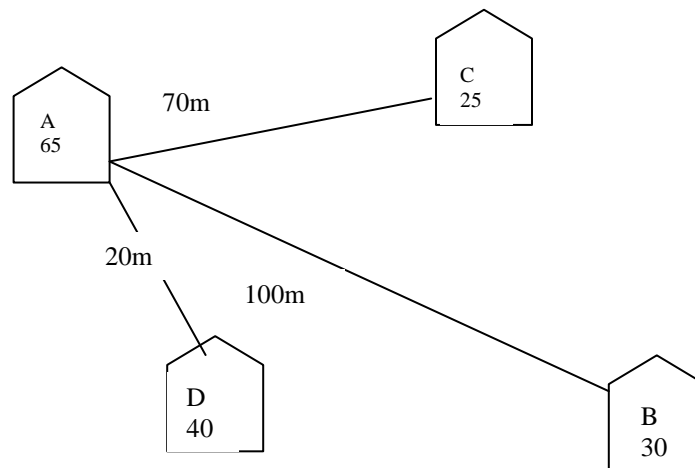Each of the above buildings has following number of computers

A	65
B	30
C	25
D	40

	(i)	Suggest and draw the layout for a network, with proper justification to connect all the office	
Answer		Layout is:	

		(1 mark for correct layout)	
	(ii)	Where would the following preferably be placed • Hub/Switch • Repeater	
Answer		• A Hub/Switch needs to be placed at each building • A repeater needs to be placed along the wire between buildings A and B & also between A and C. *(½ mark for suggesting the correct placement of each)*	
	(iii)	Suggest the most suitable place to house the server for the organization with proper justification.	
Answer		Building A can house the server, since it contains the maximum number of computers. *(½ mark for naming the correct block)* *(½ mark for correct justification)*	
	(iv)	If the organization needs to link up to a branch office which is in a neighbouring city, (around 100 km distant) suggest the best type of cabling connection, from the building hosting the server, provided price is not a factor.	
Answer		Since price is not a factor, Optical Fibre is best suited and shall give best speed. *(1 mark for naming the correct cable type)*	