Strictly Confidential: (For Internal and Restricted use only)
Senior School Certificate Examination
March 2019
Marking Scheme – Multimedia and Web technology (SUBJECT CODE 067)
(SERIES: BVM PAPER CODE – 89)

General Instructions:

1. You are aware that evaluation is the most important process in the actual and correct assessment of the candidates. A small mistake in evaluation may lead to serious problems which may affect the future of the candidates, education system and the teaching profession. To avoid mistakes, it is requested that before starting evaluation, you must read and understand the spot evaluation guidelines carefully. **Evaluation is a 10 -12 days mission for all of us. Hence, it is necessary that you put in your best efforts in this process.**
2. Evaluation is to be done as per instructions provided in the Marking Scheme. It should not be done according to one's own interpretation or any other consideration. Marking Scheme should be strictly adhered to and religiously followed. **However, while evaluating, answers which are based on the latest information or knowledge and/or are innovative, they may be assessed for their correctness otherwise and marks be awarded to them.**
3. The Head-Examiner must go through the first five answer books evaluated by each evaluator on the first day, to ensure that evaluation has been carried out as per the instructions given in the Marking Scheme. The remaining answer books meant for evaluation shall be given only after ensuring that there is no significant variation in the marking of individual evaluators.
4. If a question has parts, please award marks on the right-hand side for each part. Marks awarded for different parts of the question should then be totaled up and written in the left-hand margin and encircled.
5. If a question does not have any parts, marks must be awarded in the left hand margin and encircled.
6. If a student has attempted an extra question, answer of the question deserving more marks should be retained and the other answer scored out.
7. No marks to be deducted for the cumulative effect of an error. It should be penalized only once.
8. A full scale of marks ▫ ▫**0 - 70** has to be used. Please do not hesitate to award full marks if the answer deserves it.
9. Every examiner has to necessarily do evaluation work for full working hours i.e. 8 hours every day and evaluate 25 answer books per day.
10. Ensure that you do not make the following common types of errors committed by the Examiner in the past:-
    a. Leaving the answer or part thereof unassessed in an answer book.
    b. Giving more marks for an answer than assigned to it.
    c. Wrong transfer of marks from the inside pages of the answer book to the title page.
    d. Wrong question wise totaling on the title page.
    e. Wrong totaling of marks of the two columns on the title page.
    f. Wrong grand total.
    g. Marks in words and figures not tallying.
    h. Wrong transfer of marks from the answer book to online award list.
    i. Answers marked as correct, but marks not awarded. (Ensure that the right tick mark is correctly and clearly indicated. It should merely be a line. Same is with the X for incorrect answer.)
    j. Half or a part of answer marked correct and the rest as wrong, but no marks awarded.
11. While evaluating the answer books if the answer is found to be totally incorrect, it should be marked as (X) and awarded zero (0) Marks.
12. Any unassessed portion, non-carrying over of marks to the title page, or totaling error detected by the candidate shall damage the prestige of all the personnel engaged in the evaluation work as also of the Board. Hence, in order to uphold the prestige of all concerned, it is again reiterated that the instructions be followed meticulously and judiciously.
13. The Examiners should acquaint themselves with the guidelines given in the Guidelines for spot Evaluation before starting the actual evaluation.
14. Every Examiner shall also ensure that all the answers are evaluated, marks carried over to the title page, correctly totaled and written in figures and words.

15. The Board permits candidates to obtain a photocopy of the Answer Book on request in an RTI application and also separately as a part of the re-evaluation process on payment of the processing charges.

Specific Note:

- Wherever HTML Tags are asked – ignore the format/additional arguments if so given in the answer(s)
- Wherever SQL queries are answered, single quote '' as well as double quotes "" are acceptable to enclose text/date values.
- Wherever multiple answers are suggested, they are not in any particular order of appropriateness

1. (a) Observe the table SKILLS and COURSES of a Database named Digital Literacy given below carefully and answer the questions that follow:

Table: SKILLS

SkillID	SkillName	SkillCategory
101	Critical Thinking	Cognitive
102	Collaboration	Social
103	Curation	Cognitive
104	Creativity	Cognitive
105	Communication	Social

Table: COURSES

CourseCode	CourseName	SkillID	NoofRegistrations
C01	Language Skills	105	150
C02	Team Management Skills	102	200
C03	Design Thinking Skills	104	175
C04	Content Creator Skills	103	100
C05	Programming Skills	101	250

(i) Write SQL command to display details of all Courses **(1)**

Ans

```
SELECT * FROM COURSES
        OR
SELECT ALL FROM COURSES
```

(½ Mark for the select with * /all / column names)
+ (½ Mark for from and table name)

(ii) What is the degree of the table COURSES? **(1)**

Ans Degree - 4

(1 Mark for the correct degree)

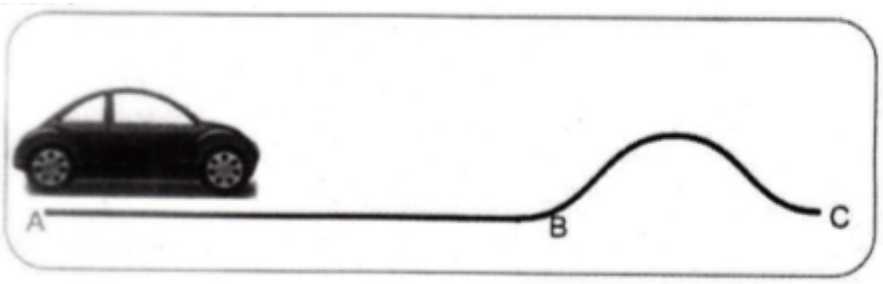
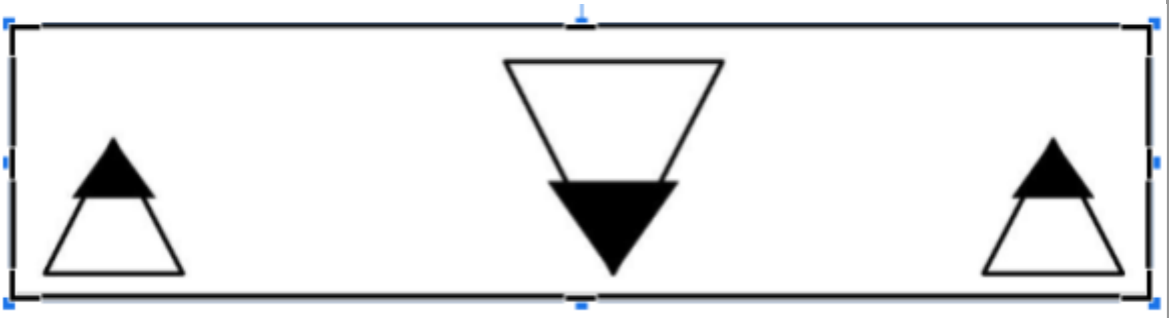
(iii) Which attribute can act as the Primary key for the table SKILLS? Write one special characteristic of this key. **(2)**

Ans SKILLID
The primary key uniquely identifies records in a table.
OR
The primary key cannot be NULL.

(1 Mark each for the correct attribute name for primary key)
+(1 Mark for any one special characteristic of the primary key)

(iv) Swarnima wants to display all the information of records from table SKILLS where the SkillCategory is "Cognitive". She has given the MySQL command shown below but it is showing error. Can you rectify the error and suggest the correct MySQL command to achieve the desired task: **(1)**

		`SELECT * FROM SKILLS FOR SkillCategory Cognitive`	
	Ans	`SELECT * FROM SKILLS WHERE SkillCategory = "Cognitive"`	
		(½ Mark for correct use of WHERE clause in place of FOR) +(½ Mark for correct use of =)	
	(b)	Aarav has created a symbol in Flash which can be clicked and used as an interactive object. Name the type of symbol he has created.	**(1)**
	Ans	Button	
		(1 Mark for the correct symbol type)	
	(c)	Sridhar is a trainer who wants to train his students for handling complex machines before actually making them work on actual machines by means of games. Which of the following multimedia technology will help him achieve this: 1. Video on Demand 2. Virtual Reality 3. Video Conferencing	**(1)**
	Ans	Virtual Reality	
		(1 Mark for the correct technology)	
	(d)	Out of JPG, GIF and TIFF, which file format has the features given below: 1. This file format is the best for any bitmap images that you intend to edit 2. It doesn't compress files because they are meant to preserve quality. 3. These files offer options to use tags, layers, and transparency, and are compatible with photo manipulation programs like Photoshop.	**(1)**
	Ans	TIFF	
		(1 Mark for the correct image file format)	
	(e)	Give the full forms of: 1. MPEG 2. AVI	**(2)**
	Ans	1. MPEG- Motion Pictures Expert Group **OR** Moving Pictures Expert Group 2. AVI - Audio Video Interleave **OR** Audio Video Interleaved	
		(1 Mark each for the two full forms) Note: ½ Mark to be awarded if two words in the full forms are correct	
Q2		**Answer the following questions based on Macromedia Flash:**	
	(a)	Which feature will you use to see faint images of the keyframes before and after the current frame ?	**(1)**
	Ans	Onion skinning **OR** Onion skin	
		(1 Mark each for correct answer)	
	(b)	Name the two tags used to insert a Flash movie into an HTML file.	**(2)**
	Ans	**<EMBED>** tag , **<OBJECT>** tag , **<PARAM>** tag	
		(1 Mark each for any of the two correct tags)	

	(c)	Observe the figure given below and answer the questions that follow:  	
	(i)	What kind of tween animation should be done from point A to B?	**(1)**
	Ans	Motion Tween **OR** Classic Tween	
		(1 Mark for the correct answer)	
	(ii)	Name the special layer to be used to give the animation from point B to C which is a curved path.	**(1)**
	Ans	Motion Guide Layer	
		(1 Mark for the correct layer name) ***Note:*** **½ Mark to be awarded for** Guide Layer	
	(d)	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 in the middle shows the position and size for frame 25. • The graphic on the right hand size shows the position and size for frame 50. • The triangle 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 remains the same during the animation.	
	Ans	• Select frame 1 from the timeline • **Insert** the given image from **Library**. • **Select frame 25** and choose **Insert - Keyframe.** • Select the object using the **arrow tool** • Reposition it at frame 25 • Rotate the graphic and **increase the size.** • **Select frame 50** from timeline • **Insert - keyframe** • Using arrow Tool select the image • **Position it at frame 50** • Rotate the graphic and **decrease the size.** • **Select all frame from 1 to 50** and **Create Shape Tween.**	

OR

- Select frame 1 from the timeline
- **Insert** the given image from **Library**.
- **Select frame 25** and choose **Insert - Keyframe.**
- Select the object using the **arrow tool**, change the size
- Invert it with the **Rotate modifie**r tool or **Free Transform Tool.**
- **Select any frame between 1 to 25**
- choose **Create Motion Tween** and choose **Insert a Keyframe**
- **Select the image** and **using Free Transform** Tool change the size of the image and invert it
- **Select any frame between 25 to 50** from timeline
- select **Create Motion Tween OR Create Classic Tween**

(½ Mark for each correct step upto maximum of 4 Marks)
OR
(Full 4 Marks to be awarded for any other correct equivalent way for the same animation)

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

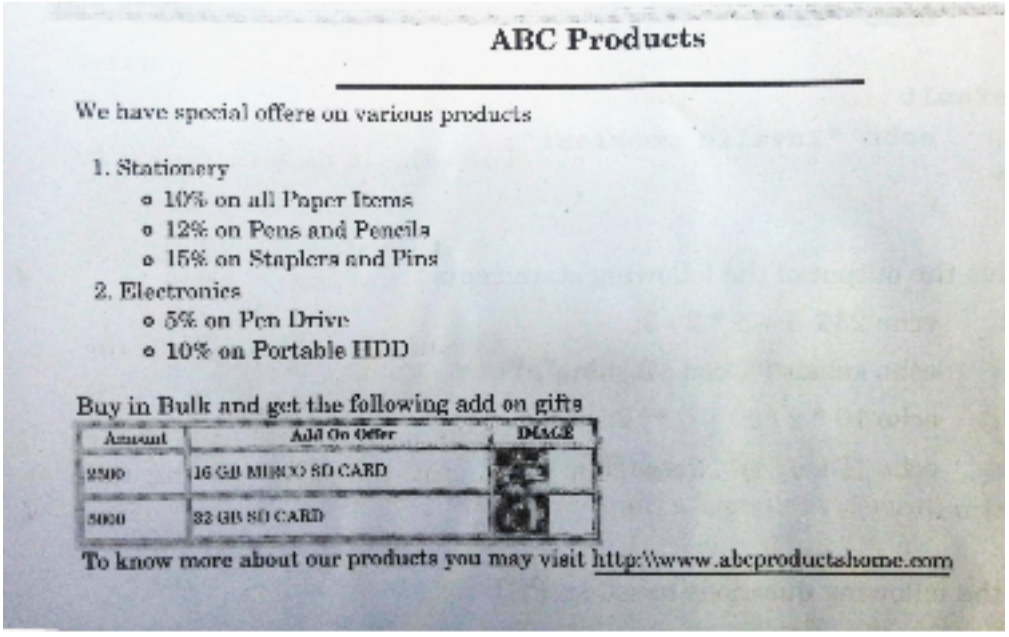
(a) Fill in the blanks to complete the sentence below about HTML Heading tags. **(2)**
There are _____ levels of headings in HTML with _____ as the most important and _____ as the least.

Ans ***6***

<H1> and <H6>

(1 Mark for correct level)
(½ Mark for specifying <H1> and <H6>)

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



Consider the following point while writing the code:
(i) The background color is "YELLOW".
(ii) Title of the webpage is ABC Products.
(iii) The Horizontal line is 5 pixels thick and RED in colour.

(iv) The font used in the paragraph is size 5 and GREEN in colour.
(v) The table has a blue coloured border which is 2 pixels thick and a distance of 2 pixels in maintained in-between cells.
(vi) The images shown in the table are "16gbmsd.jpg" and "32gbsd.jpg".
(vii) A hyperlink should be provided for the website given at the bottom of the page.

Ans

```
<HTML>                                          <!- 1/2 Mark-->
  <HEAD>
    <TITLE>ABC Products</TITLE>                 <!- 1/2 Mark-->
  </HEAD>
<BODY bgcolor=yellow>                           <!- 1/2 Mark-->
  <H1 align=center> ABC Products</H1>           <!- 1/2 Mark-->
  <CENTER>
  <HR size=5 color= red width=50%>              <!- 1/2 Mark-->
  </CENTER>
  <FONT color="green" size=5>                   <!- 1 Mark-->
  We have special offers on various products
  <BR>
   <OL>                                         <!- 1/2 Mark-->
   <LI>  Stationary
     <UL  type="circle">                        <!- 1/2 Mark-->
       <LI>  10 % on all Paper Items
       <LI>  12 % on all Pens and Pencils
       <LI>  15 % on all Staplers and Pins
   </ul>
  <LI>  Electrician
    <UL  type="circle">                         <!- 1/2 Mark-->
     <LI>  5 % on Pen Drive</LI>
     <LI>  10 % on Portable HDD</LI>
    </ul>
  </OL>
  <BR>
   Buy in Bulk and get the following add on gifts
                                                <!- 1 Mark-->
<TABLE border=2 bordercolor="blue" cellspacing=2 width=50%>
<TR>                                            <!- 1 Mark-->
<TH>Amount</TH>
<TH>Add On Offer</TH>
<TH>IMAGE</TH>
</TR>
<TR>
<TD>2500</TD>
<TD>16 GB MICRO SD CARD  </TD>
<TD><IMG src="16gbmsd.jpg"></TD>                <!- 1/2 Mark-->
</TR>
```

		<TR> <TD>5000</TD> <TD>32 GB MICRO SD CARD </TD> <TD><IMG src="32gbmsd.jpg"> </TD> </TR> </TABLE> <FONT size="2"> To know more about our products you may visit <A href="www.abcproductshome.com"> <!- 1/2 Mark--> http:\\www.abcproductshome.com </FONT> </BODY> </HTML>	
		(½ Mark for correct use of <HTML> and <BODY> tags *+(½ Mark for correct use of <TITLE> tag)* *+(½ Mark for bgcolor in BODY tag)* *+(1 Mark for correct use of <FONT> tag with COLOR attribute for Heading)* *+(½ Mark for displaying heading in center)* *+(½ Mark for correct use of <HR> tag with any one attribute out of size, color,width, align)* *+(1½ Mark for correctly creating the nested lists(½ Mark for each list))* *+(1 Mark for correct use of <TABLE> tag with any one correct attribute out of BORDER / BORDERCOLOR / cellspacing)* *+(1 Mark for correct use of <TR>/<TD> tag)* *+(½ Mark for correct <img> tag)* *+(½ Mark for creating link on bottom message)* *Note:* • *Marks should not exceed 8 Marks* • *No Marks to be deducted for spelling mistakes for example colour in place of color* • *No Marks to be deducted if mailto is used with href attribute*	
4		Answer the following questions based on PHP:	
	(a)	$_POST is an array of variables passed to the current script via the HTTP POST method. Which of the following statement is false about the POST method? (i) In the POST method there is no restriction on data size to be sent. (ii) Form submissions with POST can be bookmarked. (iii) The POST method can be used to send ASCII as well as binary data. (iv) The data sent by POST method goes through HTTP header and is more secure.	**(1)**
	Ans	(ii) Form submissions with POST can be bookmarked is False **OR** They can't be bookmarked	
		(1 Mark for correct option)	

	(b)	Name the two parameters required by the PHP fopen() function.	**(1)**
	Ans	fopen() function requires two mandatory parameters: a. name b. mode **OR** **fopen("TEXT.TXT","R");** **OR** **fopen(<FileName>,<Mode>);**	
		(½ Mark each for the two correct parameters)	
	(c)	Name the inbuilt function used for the following :	**(2)**
		(i) Perform a case-insensitive string comparison (ii) Take a string as argument and return the string with all alphabetic characters converted to uppercase	
	Ans	(i) **strcasecmp() OR strncasecmp()** (ii) **strtoupper()**	
		(1 Mark for each correct function name)	
	(d)	Point out the errors in the following code. Rewrite the corrected code with corrections underlined.	**(2)**
		<?php **if(setis($_COOKIE['Name']))** **{** **$visitor=$_COOKIE['Name'];** **echo "Hello". $visitor + "!Welcome Back!";** **}** **default** **echo "Invalid cookies!";** **?>**	

	Ans	<?php
		if(**isset**($_COOKIE['Name'])) **//Error 1**
		{
		$visitor=$_COOKIE['Name'];
		echo"Hello".$visitor **.** "!Welcome Back!"; **//Error 2**
		}
		else **//Error 3**
		echo "Invalid cookies!";
		?>	

		(1 Mark for any one error correction) ***(½ Mark each for remaining 2 error corrections)*** **OR** ***(1 Mark for identifying all 3 errors without making corrections)***	
	(e)	Give the output of the following statements: (i) **echo 23 % 5 + 5 * 2 - 3;** (ii) **echo substr("Good Morning",-7);** (iii) **echo 10 * 2 / 10 + 5 ** 2;** (iv) **echo "Today is " . date("F j, Y");**	**(4)**

	Ans	**(i)** `10` **(ii)** `Morning` **(iii)** `27` **(iv)** `Today is April 3, 2019`	
		(1 Mark for each correct answer) ***Note: No Mark is to be deducted if comma is not provided in April 3, 2019***	
5		**Answer the following questions based on PHP:**	

	(a)	Analyse the following program segment and determine how many times the loop will be executed. Justify.
		`<?php`
		`$p = 200;`
		`while(true)`
		`{`
		`  if($p < 200)`
		`  break;`
		`  $p = $p – 20 ;`
		`}`
		`echo $p;`
		`?>`
			(2)

	Ans	The loop will execute two times. Justification : The break statement causes the loop to terminate when $p<200 so loop runs twice,first time for $p=200 and second time for $p=180 ***(1 Mark for specifying the number of times the loop will execute)*** ***+(1 Mark for justification)*** ***Note: Full 1 Mark to be awarded for partial justification also.***	
	(b)	Differentiate between the unset() function and the session_destroy() function.	**(2)**
	Ans	The **unset()** function is used to unset a session variable i.e to destroy a single session variable(s) whereas the **session_destroy()** function is used to completely destroy the session entirely.	
		(1 Mark for the usage of unset() function) ***+(1 Mark for the usage of session_destroy() function)***	
	(c)	Study the code given below and answer the questions that follow:	
		`<?php` `$Score = array(30,25,17,16,18,20);` `$Avg = 0;$C=0;` `foreach ($Score as $S)` `if ($S%10 != 0)` `{` `  $Avg += $S;` `  $C++;` `}` `echo "Sum = $Avg  ";` `$Avg=$Avg/$C;` `echo "Avg = $Avg";` `echo "<HR>";` `?>`	

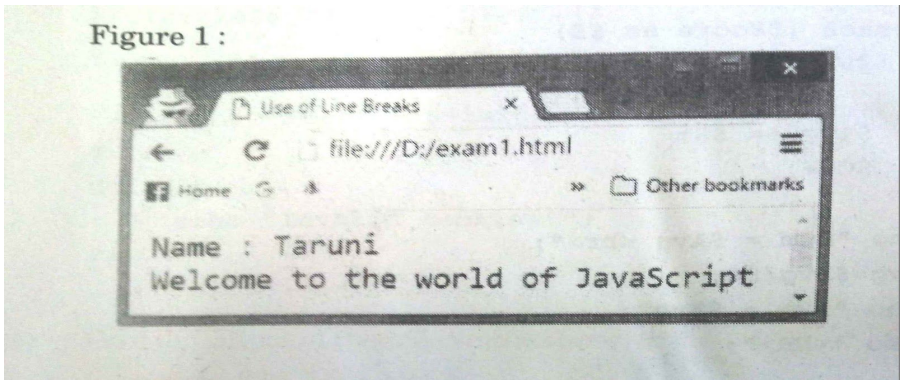
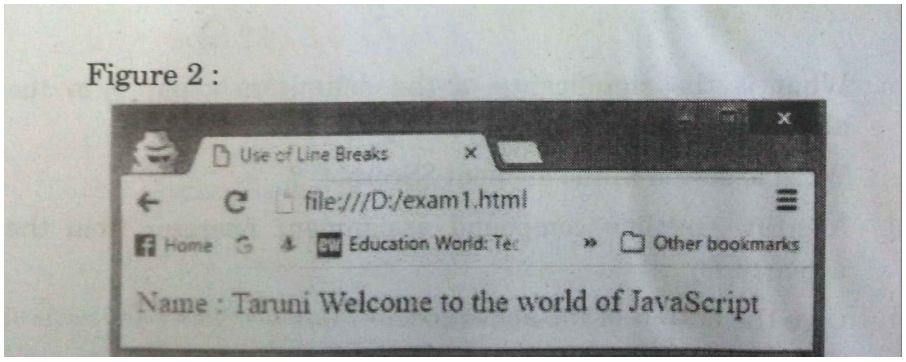
		(i) What is the significance of the delimiters <?php?> in the above code? (ii) What is stored in the element $Score[4] ? (iii) Identify any one compound assignment operator from the above code. (iv) Give the output of the above code	**(1)** **(1)** **(1)** **(1)**
	Ans	(i) The delimiters <?php ?> signify that the script will be executed on the server side. **OR** (i) It marks the beginning and end of a php script **OR** (i) It means php code ahead in the web page	
		(1 Mark for stating the correct significance)	
		(ii) 18	
		(***1 Mark for correct value)***	
		(iii) +=	
		(***1 Mark for correct operator)***	

		(iv)
		`Sum = 76`
		`Avg = 19`	

		(½ ***Mark for the correct output of Sum)***
		+(½ Mark for the correct output of Avg)
		OR
		(½ Mark for the following)
		`Sum =`
		`Avg =`	

	(d)	Study the code given below:	**(2)**
		`<?php` `$MyFil = fopen("quiz.txt","_____");//Point 1` `//***** To display lines until end-of-file *****` `while(_____($MyFil))  //Point 2` `{` `  echo _____($MyFil)." ";  //Point 3` `}` `_____($MyFil);  //Point 4` `?>` Fill in the blanks (Point 1 to Point 4) to complete the above code fragment that reads the text in the file quiz.txt and displays the content line by line on the web page.	
	Ans	`<?php` `$MyFil = fopen("quiz.txt","r");  //Point 1` `//***** To display lines until end-of-file *****` `while(!feof($MyFil))  //Point 2` `{` `  echo fgets($MyFil)." ";  //Point 3` `}` `fclose($MyFil);  //Point 4` `?>`	

		(½ Mark each for correctly entering in the blank spaces)	
6		**Answer the following questions based on JavaScript:**	

	(a)	Taruni wrote a code to get the output shown in Figure 1 but she is getting the output as shown in Figure 2.
		Figure 1:
		
		
		Figure 2:
		
		
		Correct the code to help Taruni get the desired output.
		`<HTML>`
		`<HEAD>`
		`<TITLE>Use of Line Breaks</TITLE>`
		`</HEAD>`
		`<BODY>`
		`<SCRIPT LANGUAGE="JavaScript">`
		`document.write("Name : ")`
		`document.writeln("Taruni")`
		`document.write("Welcome to the world of JavaScript")`
		`</SCRIPT>`
		`</BODY>`
		`</HTML>`
			(1)

	Ans	She needs to add **the <PRE>** tag for the document.writeln to work properly.The corrected code is
		`<HTML>`
		`<HEAD>`
		`<TITLE>Use of Line Breaks</TITLE>`
		`</HEAD>`
		`<BODY>`
		`<PRE>`
		`<SCRIPT LANGUAGE="JavaScript">`
		`document.write("Name : ")`
		`document.writeln("Taruni")`
		`document.write("Welcome to the world of JavaScript")`
		`</SCRIPT>`
		`</BODY>`	

		</HTML> **OR** She needs to add **the ** tag to insert a line break.The corrected code is **<HTML> <HEAD> <TITLE>Use of Line Breaks</TITLE> </HEAD> <BODY> <SCRIPT LANGUAGE="JavaScript"> document.write("Name : ") document.writeln("Taruni"+ <"BR">) document.write("Welcome to the world of JavaScript") </SCRIPT> </BODY> </HTML>** **OR** **<HTML> <HEAD> <TITLE>Use of Line Breaks</TITLE> </HEAD> <BODY> <SCRIPT LANGUAGE="JavaScript"> document.write("Name : ") document.write("Taruni"+ " ") document.write("Welcome to the world of JavaScript") </SCRIPT> </BODY> </HTML>**	
	(b)	Identify the statement that is equivalent to the given statement **document.write("Hello! Welcome to JavaScript World")** (i) **location.document.write("Hello! Welcome to JavaScript World")** (ii) **alert("Hello! Welcome to JavaScript World")** (iii) **window.document.write("Hello! Welcome to JavaScript World")** (iv) **body.document.write("Hello! Welcome to JavaScript World")**	**(1)**
	Ans	(iii) **window.document.write("Hello! Welcome to JavaScript World")**	
		(1 Mark for choosing the correct option)	
	(c)	Predict the final value of i and j after the execution of the following command if the initial value of **i=3**: **j = (i++) + (--i) + (++i) + (i++)**	**(2)**
	Ans	**i = 5** **j = 14**	
		(1 Mark each for the values of the two variables)	
	(d)	Rewrite the following code using do..while loop instead of for loop without affecting the output:	**(2)**
		<SCRIPT LANGUAGE="JavaScript"> var Arr = new Array(3)	

```
a=2
for (k=0;k<=3;k++)
{
   Arr[k]=a
   a=a+3
   document.writeln(Arr[k])
}
</SCRIPT>
```

Ans

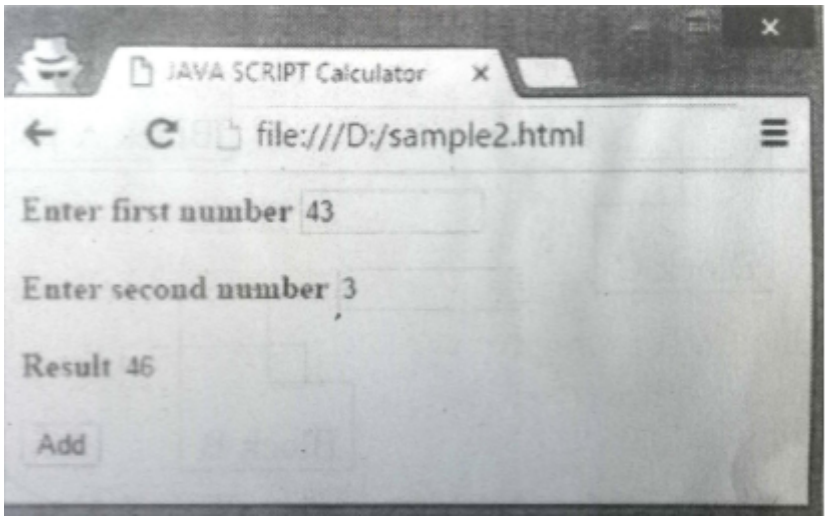
```
<SCRIPT LANGUAGE="JavaScript">
var Arr = new Array(3)
a=2;
k=0 ;
do
{
     Arr[k]=a;
     a=a+3 ;
     document.writeln(Arr[k]);
     k++;                          //OR k=k+1;
}
while(k<=3);

</SCRIPT>
```

(½ Mark for initialising k outside loop)
+(½ Mark for using do keyword)
+(½ Mark for incrementing k before end of loop)
+(½ Marks for using while loop)

Note: Ignore the semicolon at the end of the statement

(e) Write the HTML code to design the webpage as shown below with 3 textboxes and a button. Also write the embedded JavaScript code to add the values of the first two textboxes and display the same in the third textbox on the click of the Add button. **(5)**



Ans

```
<HTML>
<HEAD>
<TITLE>JAVA  SCRIPT Calculator </TITLE>
<SCRIPT LANGUAGE="JavaScript">
function  bl()
{
  document.FORM1.T3.value= parseInt(document.FORM1.T1.value) +
  parseInt(document.FORM1.T2.value);
}
```

```
</SCRIPT>
</HEAD>
<BODY>
       <FORM NAME="FORM1">
       <B> Enter first number</B>
       <INPUT TYPE=TEXT SIZE=8 NAME ="T1"><P>
       <B> Enter second number</B>
       <INPUT TYPE=TEXT SIZE=8 NAME =”T2”><P>
       <B> Result</B>
       <INPUT TYPE=TEXT SIZE=8 NAME ="T3"><P>
       <INPUT TYPE=BUTTON VALUE="Add" NAME="B1" onClick=b1()>
</BODY>
</HTML>
```

OR

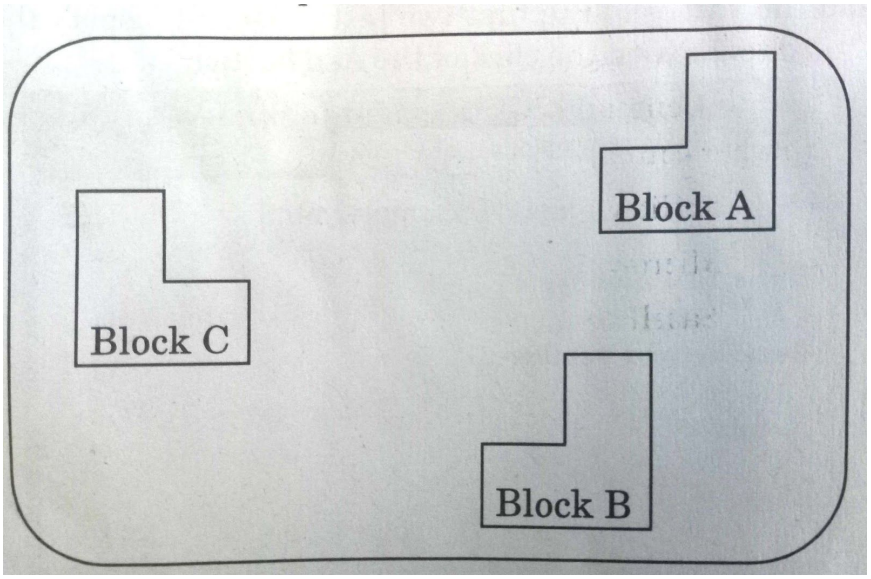
```
<HTML>
<HEAD>
<TITLE>JAVA  SCRIPT Calculator </TITLE>
<SCRIPT LANGUAGE="JavaScript">
VAR  A,B,C
function  bl()
{
  A= parseInt(document.FORM1.T1.value);
  B= parseInt(document.FORM1.T2.value);
  C= A + B;
  document.FORM1.T3.value = C;
}
</SCRIPT>
</HEAD>
<BODY>
       <FORM NAME="FORM1">
       <B> Enter first number</B>
       <INPUT TYPE=TEXT SIZE=8 NAME ="T1"><P>
       <B> Enter second number</B>
       <INPUT TYPE=TEXT SIZE=8 NAME ="T2"><P>
       <B> Result</B>
       <INPUT TYPE=TEXT SIZE=8 NAME ="T3"><P>
       <INPUT TYPE=BUTTON VALUE="Add" NAME="B1" onClick=b1()>
</BODY>
</HTML>
```

OR

```
<HTML>
<HEAD>
<TITLE>JAVA  SCRIPT Calculator </TITLE>
<SCRIPT LANGUAGE="JavaScript">
VAR  A,B,C
function  bl()
{
  A= parseInt(document.getElementById("T1").value)
  B= parseInt(document.getElementById("T2").value)
  C= A + B
  document.getElementById("T3").value= C
}
</SCRIPT>
```

		</HEAD> <BODY> <FORM NAME="FORM1"> <B> Enter first number</B> <INPUT TYPE=TEXT SIZE=8 NAME ="T1"><P> <B> Enter second number</B> <INPUT TYPE=TEXT SIZE=8 NAME ="T2"><P> <B> Result</B> <INPUT TYPE=TEXT SIZE=8 NAME ="T3"><P> <INPUT TYPE=BUTTON VALUE="Add" NAME="B1" onClick=b1()> </BODY> </HTML>	
		(½ Mark for correct <FORM> tag) ***+(½ Mark for creating textboxes using<INPUT> tags)*** ***+(½ Mark for creating button using<INPUT> tags)*** ***+(½ Mark for correct <SCRIPT> tag)*** ***+(½ Mark for associating function with the button element/calling function)*** ***+(½ Mark for creating the function)*** ***+(½ Mark for creating variables)*** ***+(½ Mark for retrieving value from the textboxes)*** ***+(½ Mark for adding the two values)*** ***+(½ Mark for correctly displaying the sum in the third text box)*** ***Note:*** ● ***Full Marks to be awarded for any correct alternative method of extracting data from the form.*** ● ***Ignore use of parseInt***	
7			
	(a)	Two engineers have connected their mobile phones to transfer a picture of a building being designed by them .	**(2)**
	(i)	What type of network is formed ?	
	Ans	PAN	
		(1 Mark for correct answer)	
	(ii)	Which communication media out of Microwave, Radiowave, Bluetooth, Satellite link should be used to transfer the file ?	
	Ans	Bluetooth	
		(1 Mark for correct answer)	
	(b)	Which protocol helps us to browse through web pages using internet browsers? Name any one internet browser.	**(2)**
	Ans	Protocol:HTTP Browser: Chrome / Mozilla / Safari / Internet Explorer / Any other Internet Browser	
		(1 Mark for correct protocol) ***+ (1 Mark for naming corect web browser)*** ***Note: ½ Mark awarded for mentioning TCP or IP instead of HTTP***	
	(c)	Write two advantages of 4G over 3G Mobile Telecommunication Technologies in terms of speed and services.	**(2)**
	Ans	(i) 4G is faster than 3G (ii) Data transfer rate is higher	

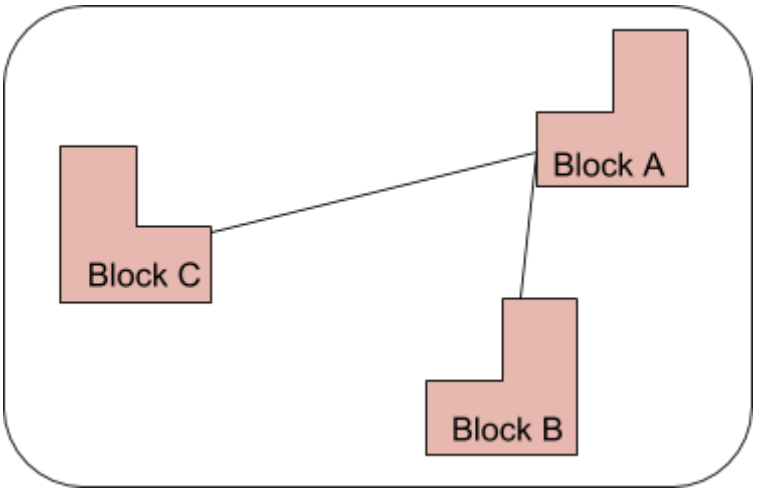
		(iii) Frequency band is from 2 - 8 GHz (iv) 4G technology can offer HDTV, Mobile Gaming, IP (v) IP based Protocols (LTE) (vi) True Mobile Broadband	
		(1 Mark for each correct advantage(any two)) ***Note: Marks should be awarded for any other correct advantage***	
	(d)	EduLimitless Solution is in the process of setting up their new campus in a remote area. 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.	
	(i)	Draw the most appropriate cable layout to connect all three blocks for efficient communication.	**1**



Place From	**Place To**	**Distance**
Block A	Block B	50 m
Block B	Block c	80 m
Block C	Block A	40 m

Expected number of computers in each block:

Block	**No. of Computers**
Block A	80
Block B	30
Block C	40

	Ans		
		(1 Mark for drawing appropriate cable layout)	
	(ii)	**Name the topology formed by the above cable layout.**	**1**
	Ans	Star topology **OR** Tree topology	
		(1 Mark for correct name of the topology)	
	(iii)	**Name the block that is most suitable to house the server for this campus with a suitable reason.**	**1**
	Ans	Block A because it has maximum number of computers and also it is closest to both the other blocks.	
		(½ Mark for correct block name and ½ Mark for justification)	
	(iv)	**Which wireless channel out of the following should be chosen by the Company Management to connect to their campus in another country ?** • **Radiowave** • **Microwave** • **Satellite**	**1**
	Ans	**Satellite**	
		(1 Mark for the correct name of the channel)	