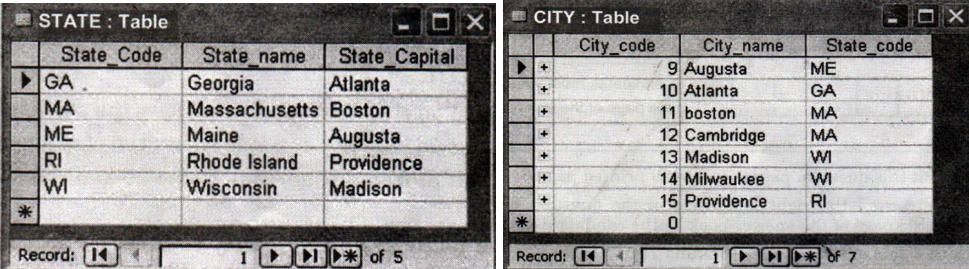


Important Note:


- All answers provided in the Marking scheme are SUGGESTIVE.
- Examiners are requested to accept all possible alternative correct answer(s).
- Wherever HTML Tags are asked - ignore the format/additional arguments if so given in the answer(s)
- Wherever multiple answers are suggested, they are in order of appropriateness

1	(a)	Write any two advantages of using DBMS	1
	Ans	<ul style="list-style-type: none"> • Data Redundancy is controlled. • Data inconsistency is controlled. • Unauthorised access is restricted. • Provide backup and recovery. • Enforces integrity constraints. • Providing multiple user interface. 	
		<p><i>(1/2 mark each for any two correct advantages)</i> <i>(Full marks for any other correct answer)</i></p>	
	(b)	MySQL is a RDBMS. Is this statement true or false ?	1
	Ans	True	
		<i>(1 mark for correct answer)</i>	
	(c)	Study the following data and answer the questions given below	
			
	(i)	What is the degree and the cardinality of CITY table ?	1
	Ans	Degree - 3 Cardinality - 7	
		<i>(1/2 mark for each correct answer)</i>	
	(ii)	Name the fields, which can act as the primary key in STATE table.	1
	Ans	State_Code	
		<i>(1 mark for the correct identification of Column/Field name)</i>	
	(iii)	What type of relationship exists between these two tables?	1
	Ans	ONE TO MANY	
		<i>(1 mark for correct answer)</i>	
	(d)	Give the full form of GIF.	1
	Ans	Graphical Interchange Format	
		<p><i>(1 mark for correct answer)</i> NOTE: <i>(1/2 mark to be awarded for expanding any two characters)</i></p>	
	(e)	Name any two popular sound formats that are mostly used while designing web pages.	1

	Ans	wav or .aif or .aiff or .mp3 or .wma or .asf or .rm or .ra or MIDI.	
		<i>(½ mark each for any two correct formats)</i> Note: <i>(Full marks for any other 2 valid sound formats)</i>	
	(f)	Name any one software used for image editing and for sound editing.	2
	Ans	Image Editing (Any one) <ul style="list-style-type: none"> ● GIMP ● Paint.NET ● Photo Pos Pro ● Pixlr Editor ● PhotoScape ● Google Nik ● Blender ● Photoshop Sound Editing (Any one) <ul style="list-style-type: none"> ● Audacity ● SoundForge ● Ardour ● Traverso ● QTractor ● Linux Multimedia Studio (LMMS) 	
		<i>(1 mark for each correct answer or any other correct ans)</i> Note: 1. <i>(Full marks for any other 2 valid sound formats)</i> 2. <i>(1 mark to be given for attempting the question)</i>	
	(g)	.MOV is the extension of which type of files ?	1
	Ans	Quick time movie or Movie File.	
		<i>(1 mark for correct answer)</i>	
2		Answer the following questions based on Macromedia Flash	
	(a)	How is a Flash movie embedded in HTML ?	2
	Ans	Method 1 The Flash movie can be embedded in HTML using the publish option/export option Method 2 The Flash movie can be embedded in HTML using the <object>tag. For example: <object width="400" height="50" data="CBSE.swf"></object> Method 3 The Flash movie can be embedded in HTML using the <embed>tag.	
		<i>(2 marks for any correct tag)</i>	
	(b)	Differentiate between stage and work area.	2
	Ans	The Stage is the large white rectangle where you add every piece of content to be viewed in your movie. This is the place holder for all the object in the movie.	

	The gray area around the stage is known as work area . This can be used to place the animated objects that appear or disappear from the edge of this stage.	
	<i>(1 mark for each correct answer)</i>	
	(c) What do you mean by a key frame?	1
Ans	Key frame is where we define the change in frame.	
	<i>(1 mark for correct answer)</i>	
	(d) What is the use of a locked layer?	1
Ans	Locked layer is useful when we don't want any editing in that layer.	
	<i>(1 mark for correct answer)</i>	
	(e) Consider the figure given below and do as directed: FUTURE ERUTUF <ul style="list-style-type: none"> The text on the right hand side shows the position for frame 20. The text on the left hand side shows the position for frame 1. The text in frame 1 moves to frame 20 and changes as shown in the figure. Write the procedure and property settings for animating the above scenario.	4
Ans	<ul style="list-style-type: none"> Select frame 1 from the timeline and using text tool write the text on the left hand side. Select the text and press ctrl+B. Select frame 20 from the timeline and select Insert - Keyframe. Change the position of the text as shown on the right side. Now select the text and reverse the character as shown Right click on timeline. Select Create motion tween Run the movie 	
	<i>(½ mark for each correct step)</i> <i>(full marks for any other correct equivalent way like shape tweening for the same animation)</i>	
3	Answer the following questions based on HTML:	
	(a) Explain the use of HTML tag to embed an audio clip in HTML file.	2
Ans	Note: <ul style="list-style-type: none"> As the question is ambiguous. Full 2 marks to be awarded on use of any relevant tags such as EMBED/OBJECT/AUDIO/VIDEO. 	
	(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 "Media in life". 2. Background of the page is "pink", Link colour should be "blue". 3. Heading of the page is "maroon". 4. Picture used in the page is the file "images.jpeg". 5. Text in paragraph is "red". 6. Table should have a border of width 1, border of the table should be "green". 7. Pages linked to: <ul style="list-style-type: none"> Evolution as "evol.html" References as "ref.html" 8. Bottom message is of size 2 and mail is linked to contact@abc.com .	8

Media (communicaiton)



Media are the collective communication outlets or tools that are used to store and deliver information or data. It is either associated with communication media, or the specialized communication businesses such as: print media and the press, photography, advertising, cinema, broadcasting (radio and television), and/or publishing.

Contents:

1. **Evolution**
 - o Electronic Media
 - o Social Impacts
2. **References**
 1. Communication
 2. Media Psychology

Media	
1 Advertising Media	2 Broadcast Media
3 Digital Media	4 Mass Media

For more details [Mail to us](#)

Ans

```
<html>
<title>Media in life</title>
<body bgcolor="pink" link="blue">
<center>
<font color="maroon">
<h1>Media (communication)</h1>
</font></center>
<hr>

<font color="red">
Media are the collective communication outlets or tools that are
used to store and deliver information or data. It is either
associated with communication media, or the specialized
communication businesses such as: print media and the press,
photography, advertising, cinema, broadcasting (radio and
television), and/or publishing.</font>
<br>
Media
<table border=1 bordercolor=green>
  <tr><td>1</td>
    <td>Advertising Media</td>
    <td>2</td>
    <td>Broadcast Media</td>
  </tr>
  <tr><td>3</td>
    <td>Digital Media</td>
    <td>4</td>
    <td>Mass Media</td>
  </tr>
</table>

<p>Contents:<br>
<ol>
<li><a href="evol.html">Evolution</a></li>
  <ul>
    <li>Electronic Media</li>
    <li>Social Media</li>
  </ul>
</ol>
```

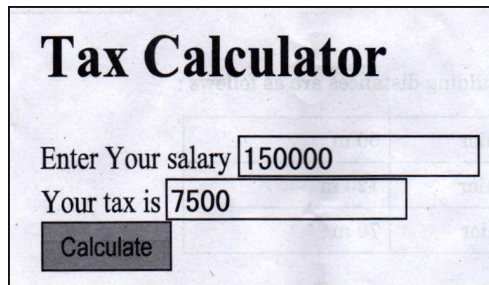
	<pre> References <!-- 7b --> Communication Media Psychology <hr> For more details <!-- 8a --> Mail to us <!-- 8b --> </body> </html> </pre>	
	<p><i>(1 Mark for correctly writing each part of the question)</i></p> <p>Note: Points 6, 7 and 8 of the question has ½ mark for each Part</p>	
4	Answer the following questions based on PHP:	
	<p>(a) Identify the errors and rewrite the given code:</p> <pre> <html> <body> <?php \$d = date("D"); Switch (\$d) case "Mon": echo "Today is Monday"; break; case "Tue": echo "Today is Tuesday"; break; case "Wed": echo "Today is Wednesday"; break; case "Thu": echo "Today is Thursday"; break; case "Fri": echo "Today is Friday"; break; case "Sat": echo "Today is Saturday"; break; case "Sun": echo "Today is Sunday"; break; Default Echo "Wonder which day is this ? "; } </body> </html> </pre>	2
	<p>Ans</p> <pre> <html> <body> <?php </pre>	

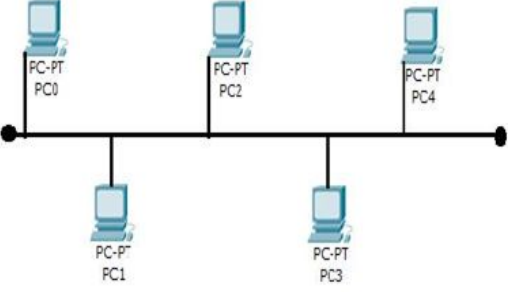
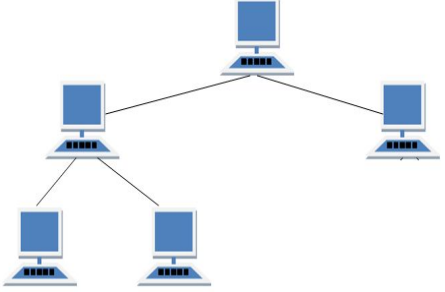
	<pre> \$d = date("D"); switch (\$d) //Error 1 { //Error 2 case "Mon": echo "Today is Monday"; break; case "Tue": echo "Today is Tuesday"; break; case "Wed": echo "Today is Wednesday"; break; case "Thu": echo "Today is Thursday"; break; case "Fri": echo "Today is Friday"; break; case "Sat": echo "Today is Saturday"; break; case "Sun": echo "Today is Sunday"; break; default: //Error 3 and 4 _echo "Wonder which day is this ? "; //Error 5 } ?> //Error 6 </body> </html> </pre>	
	<p><i>(1/2 Mark for identifying and correcting each error - any four)</i> OR <i>(1 Mark for only identifying any four errors without correction)</i></p>	
	(b) What is the importance of \$_POST over \$_GET ?	2
Ans	<ul style="list-style-type: none"> • There is no restriction on data size to be sent. • It can be used to send binary as well as ASCII. • Form submission with POST can not be bookmarked. • Data is invisible and more secure. 	
	<i>(1 mark for each correct importance - Any two)</i>	
(c)	<p>Using PHP, create a text file saved as C:\xampp\htdocs\test\exam.txt in which write the four lines of the English poem as written.</p> <p style="text-align: center;">Fisherman in the cold sea would not harm whales and the man gathering salt would not look at his hurt hands</p> <p>In the same file write the code to display the number of vowels in this poem.</p>	3
Ans	<pre> <?php \$file = fopen("c:\xampp\htdocs\test\exam.txt" , "w"); \$text = "Fisherman in the cold sea \n"; fwrite(\$file, \$text); </pre>	

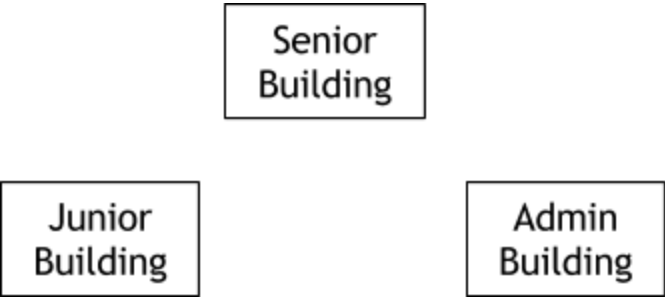
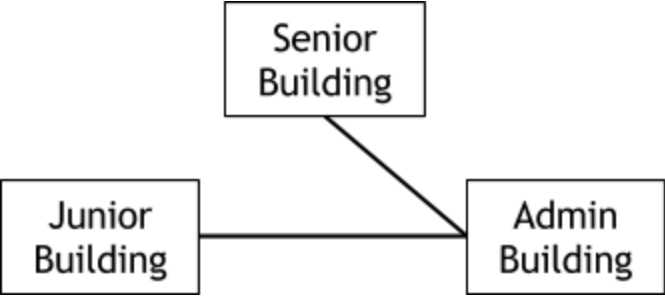
	<pre> \$text = "would not harm the whales \n"; fwrite (\$file, \$text); \$text = "and the man gathering salt \n"; fwrite (\$file, \$text); \$text = "would not look at his hurt hands\n"; fwrite (\$file, \$text); fclose(\$file); \$file = fopen("c:\xampp\htdocs\test\exam.txt" , "r"); \$count = 0; while (! feof (\$file); { \$p = strtolower (\$file); // strtoupper if ((\$p == "a") (\$p == "e") (\$p == "i") (\$p == "o") (\$p == "u")) \$count = \$count + 1; } echo (" Number of vowels is : " . \$count); fclose(\$file); ?> </pre>	
	<p><i>(1½ Mark for opening file in r or w mode)</i> <i>(1½ Mark for writing the text on file or 1½ Mark for reading the text from file)</i> OR <i>(Full 3 Marks to be given on any one of the complete READ or WRITE operation)</i></p>	
	<p>(d) Give the output of the following statements: (i) echo strlen ("Hello world! "); (ii) echo substr ("Hello world!", b); (iii) echo strcasecmp ("Hello", "Hello");</p>	3
Ans	<p>(i) 12 (ii) World! (iii) 0</p>	
	<i>(1 mark for each correct answer)</i>	
5.	Answer the following questions based on PHP:	
	(a) What will be the values of variables x and y after executing the following code?	1
	<pre> \$x=0; \$y=0; for(\$x = 1;\$x<=5; ++\$x) { \$y = \$x++; --\$y; } </pre>	
Ans	<p>$x = 7$ $y = 4$</p>	
	<i>(1/2 mark for each correct answer)</i>	
	(b) What is meant by superglobals in PHP? Give the names of any two Superglobals.	2
Ans	<p>Predefined variables in php are called “superglobals”. They are always accessible regardless of their scope. we can access them from any function, class or file. The PHP superglobals variables are:</p> <pre> \$GLOBALS \$_SERVER \$_REQUEST \$_POST \$_GET \$_FILES </pre>	

	\$_ENV \$_COOKIE \$_SESSION	
	(1 mark for correct definition) (½ mark for each correct superglobal name - Any two)	
	(c) Why is it important to close the active connections when their requirement is over?	1
ans	It is good programming practice to close the active connection. This will release the memory and return the resource to PHP and MYSQL to improve performance.	
	(1 mark for correct answer)	
	(d) Following is the code to create a connection to the server and to create a database named myDB in mySQL. Fill in the blanks to complete the following code:	3
ans	<pre> <?php \$servername = "localhost"; \$username = "username"; \$password = "password"; //Create connection \$conn = mysqli_connect (_____, \$username, _____); // Check connection if _____{ die("Connection failed: " . mysqli_connect_error()); } //Create database \$sql = "_____DATABASE myDB"; if(mysqli_query(\$conn, _____)) { echo "Database created successfully"; } else { echo "Error creating Database"; mysqli_error(\$conn); } mysqli_close(_____); ?> </pre>	
Ans	\$servername \$password !\$conn CREATE \$sql \$conn	
	(1 Mark for each correct value - any three) Note: Full 2 marks to be awarded, if the student mentions ERROR in line if (mysqli_query(\$conn, _____)) Note: Full marks to be awarded if connectivity is done through other methods like PDO or IIS.	
	(e) Write PHP code to set a cookie named "user" and value "exam". The cookie should expire after a week. Also display the values stored in \$_COOKIE.	3

	<p>ans <code><?php setcookie("user", "exam", time()+(86400 * 7) ; echo "The value is :" . \$_COOKIE[country]; ?></code></p> <p>OR</p> <p><code><?php \$cookie_name = "user"; \$cookie_value = "exam" ; Setcookie(\$cookie_name, \$ cookie_value, time() + (86400 * 7)); echo " value is :" . \$_COOKIE[cookie_name]; ?></code></p>	
	<p><i>(1 mark for the setcookie function)</i> <i>(½ mark for appropriate name)</i> <i>(1 mark for appropriate value)</i> <i>(½ mark for setting expire time)</i> <i>(1 mark for displaying the cookie)</i></p>	
6.	Answer the following questions based on JavaScript:	
(a)	With the help of suitable example, explain two points of difference between global and local variables.	2
ans	<p>Variables declared inside any function/method are called local variables. Their scope is limited within the function, they are declared. They expire as soon as the function ends.</p> <p>Variables declared outside any function/method are called global variables. They can be accessible by any function and any script in the web page. They live as long as application or web page lives.</p> <p>Variables created without the keyword var, are always global, even if they are created inside a function.</p>	
	<i>(½ mark for each point of difference)</i>	
(b)	<p>Give the output of the following set of statements:</p> <pre><SCRIPT LANGUAGE="JavaScript"> var num = [4]; var con = 0; for (i= 3; i>=0; i--) { num[i]= i * con; document.write(num[i]+ "
"); con = con + 1; } </script></pre>	2
ans	<pre>0 2 2 0</pre>	
	<i>(2 marks for correct output)</i>	
(c)	Rewrite the above code using while loop without affecting the output.	2
ans	<pre><SCRIPT LANGUAGE = "JavaScript"> var num = [4] ; var con = 0 ; i = 3; do</pre>	

	<pre> { num [i] = i * con; Document.write (num [i] + "
") ; con = con + 1; i-- ; } while (i>=0) </script> </pre>	
	<p>(1 Mark for appropriate placement of do)</p> <p>(1 Mark for appropriate placement of while)</p>	
	<p>(d) Create a form that contains a Tax Calculator as shown below. When the user enters his salary, the tax to be paid should be displayed in the second textbox. The calculation of tax should be done as follows:</p> <p>If the salary is greater than or equal to 200000, then the tax should be 10% of the salary.</p> <p>If the salary is greater than or equal to 100000 but less than 200000, then the tax should be 5% of the salary.</p> <p>And if the salary is less than 100000, then no tax.</p> <p>Write the HTML code for creating the form and the embedded JavaScript code for the click event of the button.</p> <div data-bbox="577 931 1069 1214" data-label="Form">  </div>	4
ans	<pre> <script language = "JavaScript"> function calc() { var a ; a = parseFloat(document.f1.t1.value) ; if(a >= 200000) document.f1.t2.value = 0.1 * a ; else if (a >= 100000) document.f1.t2.value = 0.05 * a ; else document.f1.t2.value = "No tax" ; } </script> </head> <body> <form name = "f1"> <h1> Tax Calculator</h1> Enter your salary <input type = "text" name = "t1">
 Your tax is <input type ="text" name = "t2">
 <input type = "button" name = "b1" value = "Calculate" onclick = "calc()"> </form> </body> </pre>	

	<p>(1/2 mark for correct declaration of function) (2 marks for correct if statement) (1/2 mark for correct use of <FORM> tag) (1/2 mark for correct text boxes) (1/2 marks for correct usage of onClick event)</p>	
7.	Answer the following questions based on Communication and Network concepts:	
(a)	Name one Open Source Indian Operating System.	1
ans	BOSS (Bharat Operating System Solutions)	
	<p>(1 mark for correct answer) Note: Full marks on naming any Open source Operating System</p>	
(b)	Write any two points of difference between logical address and physical address of a computer connected over LAN.	2
	<p>Physical address :</p> <ul style="list-style-type: none"> • A Physical address is a 48-bit flat address. • This works in Layer-1 of OSI Model. • This is unique for each system and cannot be changed. <p>Logical address :</p> <ul style="list-style-type: none"> • A Logical address is a 32- bit address assigned to each system in a network. • This works in Layer-3 of OSI Model. • This would be generally the IP address. 	
	<p>(1 Mark for writing about Physical Address) (1 Mark for writing about Logical Address)</p> <p>Note: Full 2 Marks to be awarded if IP address or example of IP address is given.</p>	
(c)	Illustrate the layout for connected 5 computers in a Bus and a Tree topology of network.	2
	 	
	(1 mark for drawing each layout)	
(d)	What do the following top level domains signify ? (i) .com (ii).org	1
Ans	.com - commercial .org - non profit organisation	
	(1/2 mark for each correct answer)	
(e)	Sarvodyay school is setting up their new campus in Mumbai. You, as a network expert,	

	<p>have to study the data given below and answer the following questions : Physical locations of the buildings of the school:</p> <div style="text-align: center;">  </div> <p>Building to Building distances are as follows:</p> <table border="1"> <tr> <td>Admin to Senior</td> <td>60m</td> </tr> <tr> <td>Admin to Junior</td> <td>120m</td> </tr> <tr> <td>Junior to Senior</td> <td>70m</td> </tr> </table> <p>Each of the above building has following number of computers:</p> <table border="1"> <tr> <td>Junior</td> <td>60</td> </tr> <tr> <td>Senior</td> <td>50</td> </tr> <tr> <td>Admin</td> <td>120</td> </tr> </table>	Admin to Senior	60m	Admin to Junior	120m	Junior to Senior	70m	Junior	60	Senior	50	Admin	120	
Admin to Senior	60m													
Admin to Junior	120m													
Junior to Senior	70m													
Junior	60													
Senior	50													
Admin	120													
	(i) Suggest and draw the layout for a network, with proper justification to connect all the buildings.	1												
	<div style="text-align: center;">  </div>													
Ans	(1 mark for correct layout)													
	(ii) Suggest the most appropriate building to, house the server with proper justification.	1												
Ans	Server - Admin building													
	(½ mark for correct block name and ½ mark for justification)													
	(iii) What type of network, out of the following, IS formed by connecting the computers of these buildings:	1												
	<ul style="list-style-type: none"> • LAN • MAN • WAN 													
Ans	LAN													
	(1 mark for correct answer)													
	(iv) Which of the following is used to connect each building with one another considering	1												

		security as the main issue along with high speed connectivity: <ul style="list-style-type: none">● Twisted pair cable● Coaxial cable● Optical fiber	
	ans	Optical fiber	
		<i>(1 mark for correct cable name)</i>	