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 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 in order of appropriateness**

1. (a) Study the following data and answer the questions given below:

Table : Salesperson

SID	Name	Phone	DOB	Salary	Area
S101	Amit Kumar	98101789654	1967-01-23	67000.00	North
S102	Deepika Sharma	99104567834	1992-09-23	32000.00	South
S103	Vinay Srivastav	98101546789	1991-06-27	35000.00	North
S104	Kumar Mehta	88675345789	1967-10-16	40000.00	East
S105	Rashmi Kumar	98101567434	1972-09-20	50000.00	South

(i) Which key can be chosen as the primary key of the above table ? **1**

Ans **SID**
OR
Phone

(1 mark for the correct attribute name)

(ii) What is the degree and cardinality of the given table ? **1**

Ans **Degree - 6**
Cardinality - 5

(½ mark for the correct degree)
+(½ mark for the correct cardinality)

(iii) Write the suitable data types of SID and DOB columns **1**

Ans SID - **Alphanumeric** OR **Text** OR **Character** OR **Varchar**
Note: Except Numeric/Date/Boolean

DOB **- Date** OR **Date/Time**

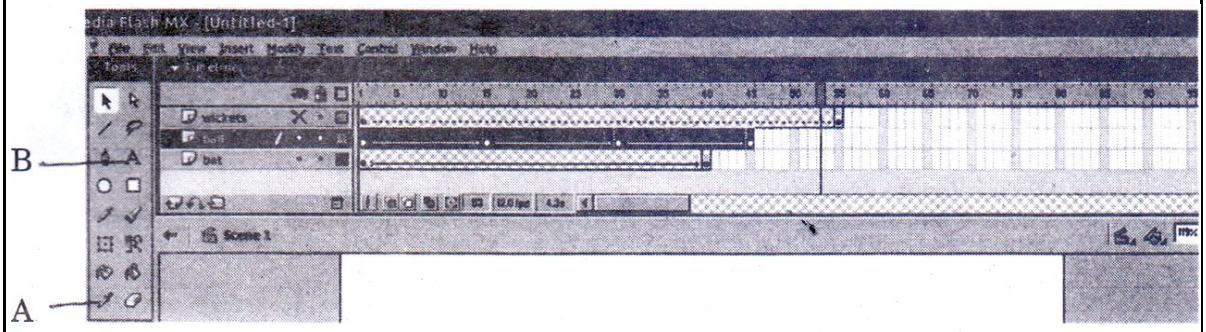
(½ mark each for the correct data type of the two attributes)

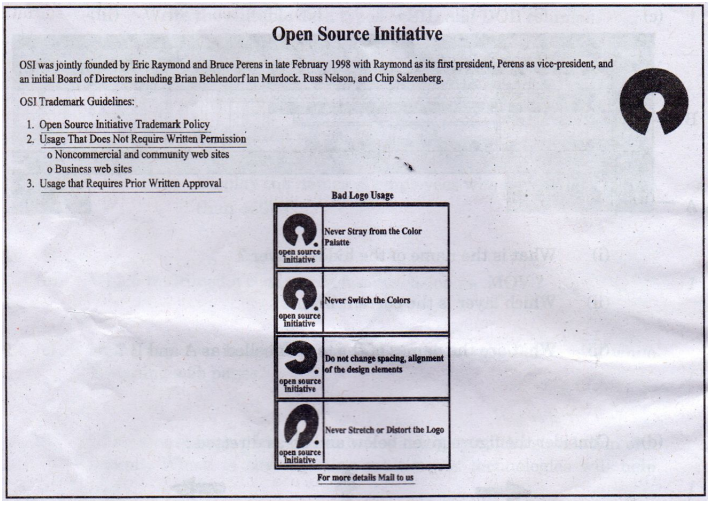
(iv) With reference to the above given table, write commands in SQL to **2**
(A) Insert First record in the table
(B) Display the names of employees who have salary higher than 45000.

Ans **(A)**
```
INSERT INTO Salesperson
VALUES
('S101','Amit Kumar',98101789654,1967-01-23,67000.00, 'North');
```
OR
```
INSERT INTO Salesperson
(SID, Name, Phone, DOB, Salary, Area )
```

		`VALUES`
		`('S101','Amit Kumar',98101789654,1967-01-23, 67000.00, 'North');`
		(½ mark for correct use of INSERT INTO Salesperson)
		+(½ mark for correct use of VALUES part of the statement)
		
		(B) `SELECT Name FROM Salesperson`
		`WHERE Salary > 45000;`
		OR
		`SELECT * FROM Salesperson`
		`WHERE Salary > 45000;`
		
		(½ mark for correct use of SELECT .. FROM)
		+(½ mark for correct use of WHERE clause with > as well as >= as condition)	

	(b)	Which multimedia component has extension as .MOV?	**1**
	Ans	Movie / Movie clip / Video ***(1 mark for the correct component name)***	
	(c)	Name any two image formats that are most popularly used while designing web pages.	**1**
	Ans	ŏ JPG/JPEG ŏ GIF ŏ TIFF ŏ PNG ***(½ mark each for any two correct image formats)***	
	(d)	In an amusement park, the trainer wants to give the simulation of the cockpit. Which of the following multimedia technologies will help him ? ŏ Video on Demand ŏ Virtual Reality ŏ Video Conferencing	**1**
	Ans	Virtual Reality ***(1 mark for the correct technology)***	
	(e)	Mention any one use of multimedia in (i) Education (ii) Entertainment	**2**
	Ans	(i) Education - ● **Video/Animations/Simulations to teach use of complex machines** ● **smart classes** ● **CIA** ● **Sharing notes/ lectures** (ii) Entertainment - ŏ **Use of Video on demand to view** programs in real time ŏ download programs and view them later ŏ Playing Game ŏ Watching Movie/Animations/Simulations.	

		(1 mark each for any one appropriate use of Education and Entertainment fields) ***Note: Full mark for any other appropriate use of given fields***	
2		Answer the following questions based on Macromedia Flash:	
	(a)	What is a blank keyframe?	**1**
	Ans	**A blank keyframe is a keyframe with no content.** OR **A keyframe is a frame where we define changes in the animation from the previous frame. The key frame in between the transition is blank keyframe.** ***(1 mark for the correct definition of Blank Keyframe)*** *OR* ***(İ mark for the correct definition of Keyframe only)***	
	(b)	Write any two types of symbols that are in Flash.	**1**
	Ans	ŏ Graphic / Image ŏ Button ŏ Movie Clip / Video ***(½ mark each for any two correct symbols)***	
	(c)		
	(i)	What is the name of the hidden layer?	**1**
	Ans	**Wickets** OR **Top most layer** OR **First layer** ***(1 mark for the correct layer name)***	
	(ii)	Which layer is the current layer?	**1**
	Ans	**Ball** OR **Middle layer** OR **Second layer** ***(1 mark for the correct layer name)***	

	(iii)	What are the names of the tools labelled as A and B?	2
	Ans	**A - Eyedropper Tool** OR **Dropper Tool** **B - Text Tool** ***(1 mark each for the two tool names)*** ***Note: ½ mark in case the answer for B is Text Box tool***	
	(d)	Consider the figure given below and do as directed ŏ The arrow on the right hand side shows the position for frame 20. ŏ The arrow on the left hand side shows the position for frame 1. ŏ The arrow in frame 1 rotates to frame 20 as shown. ŏ The image of the arrow is saved in Flash Library. Write the procedure and property settings for animating the above scenario.	4
	Ans	ŏ Select frame 1 from the timeline and **insert the given image from library**. ŏ Select the **Arrow tool and double click** on the image. ŏ Convert the image to symbol by selecting **Insert > Convert to Symbol. (Optional)** ŏ **Select any frame between 1 to 20** and select **Insert - Keyframe.** ŏ Select the object using arrow tool and **rotate it** with the **Rotate modifier tool** . ŏ **Select frame 20** from the timeline and select **Insert - Keyframe.** ŏ At frame 20 select the object using arrow tool and **rotate it** with the **Rotate modifier tool.** ŏ Select all the frames from frame 1 to 20 right click and **choose Create Motion Tween.** Run the movie ***(½ mark for each correct step)*** ***(Full marks to be awarded for any other correct equivalent way like shape tweening for the same animation)***	
3		Answer the following questions based on HTML:	
	(a)	Write the name of tag and attribute to create a radio button in a form	2
	Ans	**Tag: INPUT** **Attribute: TYPE** ***(1 mark for correct tag)*** ***+(1 mark for correct attribute)***	
	(b)	Write the HTML code to generate a Web Page in the format given below:  	8

Consider the following while writing the HTML code:

1. Title of the page should be “Open Source Initiative”.
2. Heading of the page is “Brown”.
3. Picture used in the page is the file “OSI.jpg”.
4. Text in paragraph is red.
5. Table should have a border of width 1, border of the table should be “green”.
6. Image used in the table are:
   img1.jpg, img2.jpg, img3.jpg, img4.jpg
7. Pages linked to:
   - Open Source Initiative Trademark Policy as “trade.html”.
   - Usage That Does not Require Written Permission as “perm.html”.
   - Usage That Requires Prior Written Approval as “prior.html”.
8. Bottom message is of 2 and is mail linked to contact@abc.com.

Ans

```
<HTML>
<HEAD>
<TITLE>Open Source Initiative</TITLE>                <!-- 1 -->
</HEAD>
<BODY>
<CENTER>
<FONT color="Brown">                                 <!-- 2a -->
<H1>Open Source Initiative</H1>
</FONT></CENTER>
<IMG SRC="OSI.jpg" ALIGN="right">                    <!-- 3 -->
<FONT color="red">                                   <!-- 2b -->
OSI was jointly founded by Eric Raymond and Bruce Perens in
late February 1998 with Raymond as its first president Perens
as vice-president and <br>an initial Board of Directors
including Brian  Behlendorf lan Murdock Russ Nelson, and Chip
Salzenberg.
</FONT>
<BR>
OSI Trademark Guidelines
<OL>
 <LI> <A href="trade.html"> Open Source Initiative Trademark Policy  </A>
 </LI>                                               <!-- 5 -->
 <LI> <A href="perm.html"> Usage That Does Not  Require written Policy </A>
 </LI>
 <UL type="circle">                                   <!— 6 -->
       <LI>Noncommercial and community web sites</LI>
       <LI>Business web site</LI>
 </UL>
 <LI> <A href="prior.html"> Usage that Requires Prior Written Approval </A>
 </LI>
</OL>
 <CENTER>
<CAPTION>Bad Logo Usage </CAPTION>
<TABLE BORDER=1 BORDERCOLOR="green">                <!-- 7a 7b -->
   <TR><TD><IMG SRC="img1.jpg"></TD>
       <TD>Never Stray from the Color Palatte</TD>
   </TR>
   <TR><TD><img src="img2.jpg"></TD>                 <!--8a-->
```

```
        <TD>Never Switch the Colors </TD>
    </TR>
    <TR><TD><img src="img3.jpg"></TD>
        <TD>Do not change spacing,alignment of the design elements
        </TD> </TR>
    <TR><TD><img src="img4.jpg"></TD>                    <!--8b-->
        <TD>Never stretch or Distort the Logo </TD>
    </TR>
</TABLE>
For more details
<FONT size="2">                                          <!-- 9a -->
<A HREF="mailto:contact@abc.com">For more detail Mail to us</a>
                                                         <!-- 9b -->
</FONT>
</BODY>
</HTML>
```

(1 mark for correct use of <TITLE> tag)
+(1 mark for correct use of <FONT> tag with COLOR attribute)
+(1 mark for correct use of <IMG> tag)
+(1 mark for correct use of <A> tag for linking)
+(1 mark for correct use of <Ol>/<UL> tags for creating lists)
+(1 mark for correct use of <TABLE> tag with BORDER and BORDERCOLOR attribute)
+(1 mark for correct use of <TR>/<TD> tag)
+(1 mark for bottom message [½ for font and ½ for mailto])

Note:
- *Nesting to be ignored*
- *Use of TH instead of TD is acceptable*

4 Answer the following questions based on PHP:

(a) Identify the errors and rewrite the following code underlying the changes: **2**

```
<? PHP
for ($x==0; $x<=8; $x++)
{
  if ($x == 6)
  {
     continue;
  }
  echo $x;
>
```

Ans

```
<? php
for($x=0; $x<=8; $x++)
{
  if($x == 6)
  {
     continue;
  } echo $x;
}
?>
```

(½ Mark for identifying and correcting any of the four errors)
NOTE:
(1 Mark for only identifying any four errors without correction)

	(b)	(i) What is a constant? Declare a constant MAX assign the value 15.	**2**
	Ans	**Constant is the value that does not change throughout the execution of script.** **define("MAX" , 15);** ***(1 mark for definition of constant)*** ***+ (½ mark for proper declaration using the keyword define)*** ***+(½ mark for assignment of value)***	
		(ii) Write any two features of PHP.	**1**
	Ans	ŏ It is an **open source** scripting language ŏ PHP can **run on various platforms** such as windows, linux, unix Mac Os etc. ŏ **Dynamically edit, change or add** any content of a web page. ŏ It can add, delete, modify, **access data in any database**. ŏ **Provide security** by **encrypting data** ***(1 Mark for any two correct features)*** ***Note : 1 mark for any other relevant features***	
	(c)	Write any two points of difference between echo and print statements.	**2**
	Ans	**Echo:** 1.echo has no return type. 2. echo takes multiple arguments/parameters. 3. It is faster than print. **Print:** 1. print has a return value of 1. 2. print takes only one argument. 3. It is slower than echo. ***(1 mark for each correct difference)*** ***Note:*** ***ŏ 1 mark each for any other valid differences*** ***ŏ 1 mark to be awarded if the child has written 2 points of any one statement***	
	(d)	Give the output of the following statements: (i) `echo substr("Multimedia and Web Technology", 0,2);` (ii) `echo 20+(3+5)%2;` (iii) `echo date("M-d-Y" , mktime(0,0,0,14,1,2001));`	**3**
		(i) `Mu` ***(½ marks to be awarded for Mul)*** **(ii)** `20` **(iii)** `Feb-01-2002` ***(1 mark for each correct answer)***	
5		Answer the following questions based on PHP:	
	(a)	Write the output of the following code: `<?php` `$fruits = array ("mango", "apple", "pear", "peach") ;` `$fruits = sort($fruits);` `for ($x = 0; $x<=3; $x++)` `echo ($fruits[$x]. " ");` `?>`	**2**