

**RYAN INTERNATIONAL SCHOOL, FARIDABAD**  
**II-Term- 2017-18 ( SET – A)**

**Subject** : Multimedia And Web Technology

**Class** : XII

**Time allowed** : 3 hours

**Maximum Marks** : 70

**Note :**

- Please check that this question paper contains 7 questions..
- Answer the questions after **carefully reading** the text.
- Please write down the serial number of the question before attempting it .

**Q 1:- Answer the following questions based on Database.**

- a) Explain with the help of an example the concepts of a foreign key. 1
- b) Name the relationship based on following example. 1
- A country will be represented by many athletes, but each athlete represents only one country.
- c) Study the following data and answer the question given bellow 3

**Package Table:** Post data entry. Audit columns CreatedBy, ModifiedBy etc. are not shown for the sake of simplicity.

PackageId	PackageName	Description	TermsConditions	IsActive
1	Budget		Only cash payment	1
2	Standard	Only breakfast	Online payment allowed	1
3	Luxury	Welcome drink, breakfast, lunch included	Online Bookings, Phone Bookings allowed	1

**PackagePrice Table:** Post data entry

PackagePriceId	PackageId	PriceName	Price	MinLimit	TermsConditions	IsActive
1	1	Adult	500	None	None	1
2	2	Adult	700	None	None	1
3	1	Child	300	none	Less than 12 years	1
4	1	College	330	25	Not allowed on Saturday/Sunday	1
5	1	School	200	30	Not allowed on Saturday	1
6	2	School	500	15	Allowed on all days	1
7	1	Senior Citizen	350	None	60+ years of age	1

- i) Name the fields, which can act as the primary key of package table.
- ii) What is the degree and cardinality of PackagePrice table.
- iii) Suggest the data types that should be used for each of the fields in the Package table.
- d) Name the URL of a digital library on the internet that you can visit. 1
- e) Display a records using MYSQL command where the "FirstName" is "Rahul" in the „Emp“ Table. 1
- f) Shivi wants to work on “Swachh Bharat” social message and developed a small movie on flash. She want that this movie should reach to the maximum number of people. Suggest her how she can spread message by publishing it or by exporting it. 2
- g) Name the two sound file formats used in webpages. 1

**Q2. Answer the following question based on Macromedia Flash:**

- a) What are the option available in the Character panel? 1
- b) Differentiate between event sounds and stream sounds. 2
- c) What is the full form of fps? What will happen if the frame rate is decreased from 12 to 6 fps? 2
- d) Explain the usage of the Frame. 1
- e) Observe the figure given bellow and do as directed : 4



- The text “Learn Flash 5.0 in 3 days “ shows the position and size in frame 1 of Layer 1..
- The solid circle image shows the position and size of the image for a new mask layer.

Write the procedure and property settings for animating the above scenario.

**Q3. Answer the following questions based on HTML**

- (a) Write the HTML command to create a button in a form with the caption “calculate Interest” 1
  - (b) Identify the errors in the following HTML code. Also write the correct code 1
- <UL TYPE= “● ” START= “f”>
- (c) Write the HTML code to generate a Web Page in the format given below: 8

## Highest Paying Jobs in India

The qualification, knowledge, Institute and the attitude of the candidate are the things that get a high paying job.

### 1. Management Professionals:

- Premier institutes such as IIMs, IITs, XLRI, FMS, IIFT and Symbiosis earn higher salaries.
- Salary INR 20-24 Lakhs per Annum.

### 2. Investment Bankers:

- Salary-INR 10-40 Lakhs per Annum
- Employers are Goldman Sachs, JP Morgan Chase, Deutsche Bank, Globeop Financial Services Ltd and HSBC.

### 3. IT & Software Engineers:

- Salary INR 8.0 – 19.0 Lakhs per Annum for program manager

### 4. Chartered Accountants:

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### 5. Law professionals:

- AZB & Partners, Luthra & Luthra and Amarchand Mangaldas are prominent law firms in India.
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### Fee Structure

INDIA				
Management Professionals	Investment Bankers	IT & Software Engineers	Chartered Accountants	Law professionals
2900000/- total	200000/- annum	2,20000 /Annum	1,77,500/- only exam fee	INR1,69,900 /-annum

Contact us : [jobs@india.gov.in](mailto:jobs@india.gov.in)

### Consider the following while writing the HTML code:

- Title of the page should be “Jobs”.
- Background colour should be “green”.
- Text style of the main heading should be “Arial Bold” and color should be red.
- Image used is “workforce.jpg”.
- Table in the center of the webpage and should have a 3 pixel thick border of color pink and the spacing between cell content and border is 10 pixels.
- Use the concept of nested lists for creating the specified lists.
- The bottom text “Contact us : [jobs@india.gov.in](mailto:jobs@india.gov.in)” are links to the e-mail “[jobs@india.gov.in](mailto:jobs@india.gov.in)”.

### Q4. Answer the following questions based on PHP:

- |  |   |
|--|---|
| a) List and explain the different features of PHP.                   | 1 |
| b) What are logical operators? Give examples.                        | 1 |
| c) Explain the working of the QueryString using an example.          | 2 |
| d) Explain with example how to set a PHP cookie.                     | 1 |
| e) What does the mysqli_connect() function do? Explain with example. | 2 |
| f) Give output of the following statements:                          | 3 |
| i. Echo SUBSTR(TRIM(“##Olympic#2016###”), -7, STRLEN(“Sindhu”));     |   |

- ii. Echo strrev (stripslashes("Deepa Karmaka/r"));
- iii. Echo "Today is " . date("M-d-Y", mktime(0,0,0,11,45,2014));

**Q5. Answer the following questions based on PHP:**

**a)** Study the codes given below and answer the questions that follow:

4

abc.txt

```

This year I wish to qualify the following exams:
1. CBSE class XII
2. IIT
3. BITS
Hope I can fulfill my wishes.
```

**Exam.php**

```

<?php
$myfile=fopen( "r","abc.txt");
While (feof($myfile))
{
$ch=fgets($myfile);
$count++;
}
print("Total=" + $count);
fclose();
?>
```

- i. Identify the errors in exam.php and rewrite the corrected code.
- ii. What is the use of the feof() method?
- iii. Give the output of the exam.php file.
- iv. What will be the output if the fgets is replaced by fgetc?

**b)** What is a cookie? Write the PHP code to set a cookie named "Topping" and value "Cheese". The cookie should expire after 30 days. Also Display the value stored in \$\_COOKIE .

3

**c)** What is PHP global variable \$GLOBALS? Explain with example.

1

**d)** Find output

2

```

<?php
Function try($p, $q)
{
$p=$p * $q;
$q=$p / $q;
Echo ($p . $q . "<br>");
}
```

```
$a=15;  
$b=3;  
try ($a, $b);  
?>
```

**Q6. Answer the following questions based on JavaScript:**

- a) Differentiate between the onFocus and onSelect events.  
b) Give the output for the following script code:

2

2

```
var x,y  
y=10  
for (x= 1;x<=4;x++)  
{  
  if (x % 2 == 0 )  
  {  
    y=y-x  
  }  
  Else  
  {  
    y=y+2*x  
  }  
  document.write (y)  
}
```

- c) Rewrite the following code after removing errors with each correction underline:  
<script>

2

```
fun result()  
{  
  var K,M  
  while (K<10 && M>5)  
  {  
    if (K % 3 = 0 )  
    {  
      K=K+M  
    }  
    Else  
    {  
      K=K-M  
      M=M+3  
    }  
  }  
  Document.print(“K=” +K)
```

</script>

d) Create a form that contains a list box (Fixed deposit 8.75%/year and Mutual Fund 17.5%/year) of investment methods as shown below 4

<b>Investment Calculator</b>	
<b>Invested amount</b>	<input type="text"/>
<b>Investment duration(inYrs)</b>	<input type="text"/>
<b>Invested through</b>	<div style="border: 1px solid black; padding: 2px;">           Fixed deposit            Mutual Fund         </div>
<b>Profitable Amount</b>	<input type="text"/>

Write the HTML code for creating the form and the embedded JavaScript code to calculate profitable amount on the selection of any list item.

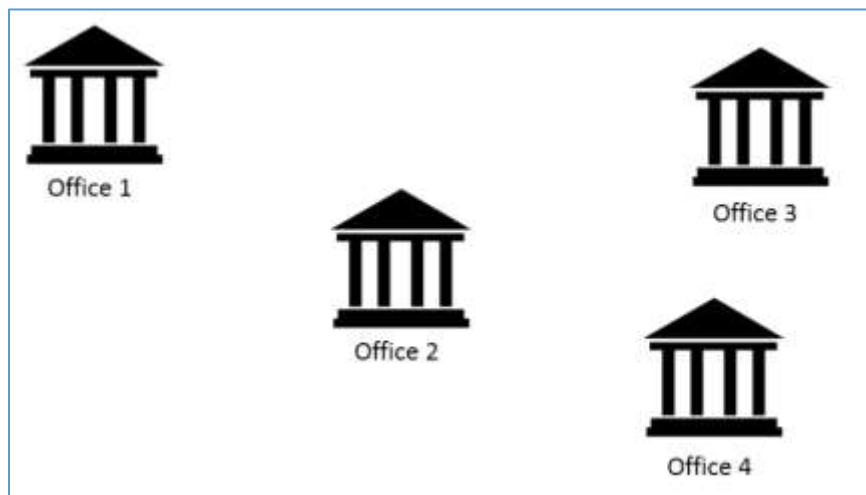
For example if invested amount is Rs.1000/- and investment duration is 1 year and invested through Mutual Fund then profitable amount would be  $1000 * 1 * 17.5/100 = \text{Rs } 175$ .

**7. Following questions are based on web technologies :**

- (a) Differentiate between star and bus topology . 1
- (b) What is ARPANET ? 1
- (c) Differentiate between message and packet switching. 1
- (d) Explain the following term 3
  - i. CDMA
  - ii. WAIS
  - iii. USENET

(e) Educomp has set up its new center at Faridabad for its office and web based activities, it has 4 offices of buildings as shown in the diagram below :

4



The distances between the different Offices are given below :

Office 1 to Office 2	50 m
Office 2 to Office 3	60 m
Office 3 to Office 4	55 m
Office 4 to Office 1	170 m
Office 1 to Office 3	125 m
Office 2 to Office 4	90 m

Number of computers

Office 1	15
Office 2	150
Office 3	5
Office 4	1

Answer the following questions based on the above given information :

- Suggest suitable cable layout(s) for connecting the Offices.
- Where do you think the server should be placed and explain why ?
- The Educomp is planning to link its office situated in the different part of the same city ,which type of network will be formed .Give reason.
- Where and why should repeaters and hub/switch be used ?



[CBSEGuess.com](http://CBSEGuess.com)

Sudhir Dwivedi

Mob 9873690129



- Solution (Give full marks to any other correct answer) .

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**Q 1:- Answer the following questions based on Database.**

- Foreign key is a primary key of main table in relative table.it is used to relate two or more table.  
Relationship depends on Foreign key.Data can be repeat in foreign key.
- One to many
- Study the following data and answer the question given bellow
  - packageid
  - degree=7 and cardinality=7
  - number,text,text,text,number
- [National Digital Library of India](http://ndl.iitkgp.ac.in/) (or any other )  
<https://ndl.iitkgp.ac.in/>
- Select \* from Emp where FirstName= "Rahul" ;
- Publishing, as it is used to upload movie on Internet
- MIDI,Wave,MP3

**Q2. Answer the following question based on Macromedia Flash:**

- Size ,color font
- Event sound downloaded first and then play. Stream sound play along with the download.
- Frame per second. Movie speed will slow down to half.
- Frame is the basic unit to design a symbol or instances.
- mask layer:
  - draw an object , say a text “ learn flash 5.0 in 3 days” with the help of tools on layer 1 at frame 1st and press ctrl+g.
  - press F6 and increase it to the frame 50.
  - click on insert and select “ mask layer”, a layer will be created above the layer 1. select the frame 1 of mask layer...
  - draw a solid circle on the layer 1 and press F6 till 50th frame, move the circle on the text to the new position.
  - right click in mask layer and select create motion tween .
  - look the layer and click on contr test movie.
  - play the movie.

**Q3. Answer the following questions based on HTML**

(a) `<input type="button" value="calculate Interest" >`

(b)

`<UL TYPE="disc">`

(c) Write the HTML code to generate a Web Page in the format given below:

8

**Consider the following while writing the HTML code:**

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(do it yourself)

**Q4. Answer the following questions based on PHP:**

- Dynamically edit, Respond to user query
- Logical operators are used to combine one or more relational expressions. Example  
a>b && a>c
- The \$\_SERVER["QUERY\_STRING"] retrieves the values of the variables in the HTTP query string. The HTTP Query string is specified by the values following the question mark? .  
Example  
<http://www.gmail.com/signin.php?user name=Aaditya+Gupta>
- A PHP cookie is created using setcookie() function.this function requires upto six arguments and should be called before <html> tag.  
Example  
Setcookie("name", "Lalit", time()+60\*60)
- PHP provides mysqli\_connect() function to open a database connection. This function takes three parameters and returns a MYSQL link identifiers on successor false on failure.  
\$conn=mysqli\_connect(\$servername,\$username,\$passwd);
- Give output of the following statements:
  - Echo SUBSTR(TRIM("##Olympic#2016###"), -7, STRLEN("Sindhu"));  
ic#201
  - Echo strrev (stripslashes("Deepa Karmaka/r"));  
rakamraK apeeD
  - Echo "Today is " . date("M-d-Y", mktime(0,0,0,11,45,2014));  
Today is Dec-15-2014

**Q5. Answer the following questions based on PHP:**

**a)** Study the codes given below and answer the questions that follow:

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```
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1. CBSE class XII
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**Exam.php**

```
<?php
$myfile=fopen("r","abc.txt");
While (feof($myfile))
{
$ch=fgets($myfile);
$count++;
}
print("Total=" + $count);
```

```
fclose();
```

```
?>
```

```
i. <?php
    $myfile=fopen("abc.txt", "r");
    While (!feof($myfile))
    {
        $ch=fgets($myfile);
        $count++;
    }
    Echo("Total=" . $count);
    fclose($myfile);
?>
```

ii. The use of the feof() function is to check whether file pointer reached at the end of file.

iii. Total=5.

iv. Total=107 (it will count each and every space) (full marks if only reason given)

**b) <HTML>**

**<BODY>**

**<? PHP**

```
Setcookie("Topping", "Cheese",time()+30 x 24 x60 x 60);
```

```
Echo "The value is ;" . $_COOKIE["Topping"];
```

```
?>
```

```
</body>
```

```
</html>
```

c)PHP stores all global variables in an array called \$GLOBALS[index].the index held the name of the variable.

```
<?php
$a=10;
$b=20;
Function abc()
{
    $GLOBAL['c']= $GLOBAL['a'] + $GLOBAL['b'];
}
abc()
```

```
echo $c;
?>
```

d) 45 0

Q6.

- a) onFocus – triggers when the button gets the focus.  
and onSelect –triggers when the contents of the text box are selected
- b) the output for the given script:

12 10 16 12

- c) code written after removing errors with each correction underline:

```
<script language="JavaScript">
    function result()
    {
        var K,M
        while (K<10 && M>5)
        {
            if (K % 3 == 0 )
            {
                K=K+M
            }
            Else
            {
                K=K-M
                M=M+3
            }
        }
        Document.write ("K=" +K)
    }
</script>
```

- d) Create a form that contains a list box (Fixed deposit 8.75%/year and Mutual Fund 17.5%/year)of investment methods as shown below

Investment Calculator	
Invested amount	<input type="text"/>
Investment duration(inYrs)	<input type="text"/>
Invested through	<input type="radio"/> Fixed deposit <input type="radio"/> Mutual Fund
Profitable Amount	<input type="text"/>

Write the HTML code for creating the form and the embedded JavaScript code to calculate profitable amount on the selection of any list item.

For example if invested amount is Rs.1000/- and investment duration is 1 year and invested through Mutual Fund then profitable amount would be  $1000 * 1 * 17.5/100 = \text{Rs } 175$ .

```

<html>
<head>
<script language="javascript">
function calculate()
{
var a,b,c
a= parseInt(document.f1.t1.value)
b= parseInt(document.f1.t2.value)

if (document.f1.s1.selectedIndex==0)
{
c= (a* b* 8.75) / 100
}
else if (document.f1.s1.selectedIndex==1)
{
c= (a* b* 17.5) / 100
}

document.f1.t3.value= c
}
</script>
</head>
<body>
<form name=f1 method="post">

```

```

<h1> INVESTMENT CALCULATOR</h1>
Invested amount < input type=text name=t1>
<br>

Investment duration(yrs)< input type=text name=t2>
<br>

Invested through <select name=s1 onChange="calculate()" size=2>
                <option> Fixed deposit</option>
                <option> Mutual fund</option>
            </select>
<br>

Profitable amount < input type=text name=t3>
<br>
</form>
</body>
</html>

```

Q7 a)

<u>STAR</u>	<u>BUS</u>
<ul style="list-style-type: none"> <li>• Easy to install and wire (even for multifloor plans of network) long cable length</li> <li>• Expensive as compared to bus, one device per connection.</li> <li>• Easy to detect fault and to remove part.</li> <li>• Central node dependency</li> </ul>	<ul style="list-style-type: none"> <li>• East to connect a computer or peripheral short cable length</li> <li>• Slower as compare to star</li> <li>• Difficult to identify the problem if the entire network shuts down.</li> </ul>

(b) **ARPANET** : “ advanced research projects agency network”  
 the goal of this project was to connect computers at different university and US defense.  
 It was developed in the mid-1960.

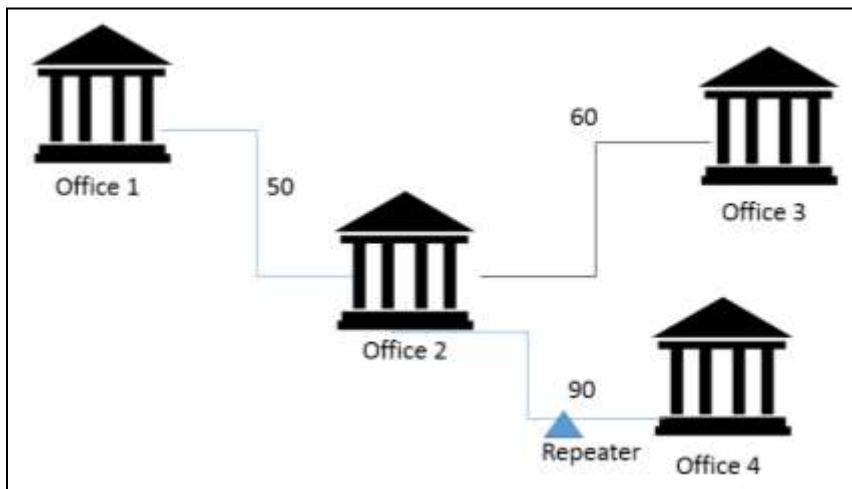
(c)

<b>MESSAGE SWITCHING</b>	<b>PACKET SWITCHING</b>
<ul style="list-style-type: none"> <li>• Similar to the post office mailing system</li> </ul>	<ul style="list-style-type: none"> <li>• Long messages are subdivided into short packets</li> </ul>

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Message switching is also known as store and forward</li> <li>• Message stored in disk</li> </ul> | <ul style="list-style-type: none"> <li>• Each packet may be sent to its destination separately</li> <li>• All the packets are stored in the main memory instead of disk.</li> </ul> |
|--|---|

- (d)
- i) **CDMA**: code division multiple access: a digital wireless telephony transmission technique. CDMA cannot offer international roaming.
  - ii) **WAIS**: “wide area information server”  
it maintains separate indexes of the contents of selected documents. These indexes are same as indexes available at the book of book.
  - iii) **Usenet**: **Usenet** is a collection of newsgroups where the users can post messages and these posted messages are distributed via **Usenet** servers.

e)(i) **ON THE BASIS OF SERVER (Star topology)**



- ii) **SERVER** should be placed in office 2, because
  - 1) since it contains maximum number of computers.
  - 2) Decreasing the cabling cost for most of the computers.
  - 3) Increasing the efficiency of the maximum computers in the network.

iii) **MAN**

MAN is designed to extend over an entire city.

- iv) **REPEATERS**: since the cabling distance between office 2 and office 4 is more so a repeater would be needed along their path to avoid loss of signals during the course of data flow in routes.



**HUB/SWITCH** : in office 1 , office 2, office 3

As there are number of computes are more that one. It connect the group of cables from different computers in each offices.