INTERNATIONAL INDIAN SCHOOL, DAMMAM
MODEL EXAMINATION – 2013 - 2014
INFORMATICS PRACTICES

STD: XI SUB: Informatics Practices

SET - A

General Instructions:
(i) All questions are compulsory.
(ii) Marks are indicated against each question.
(iii) Programming must be done in Java

1. a) Differentiate between Compiler and Interpreter. 2
   b) What do you mean Output Device? Give one example. 1
   c) A group of 4 bits is called a ______________. 1
   d) Define Inventory Management System with an example. 2
   e) What is cookies? 1
   f) Define Secondary Memory Unit with 2 examples. 2
   g) Name the Cyber Act in India. 1

2. a) What is entry-controlled loop? Which loop is entry-controlled loop. 2
   b) Differentiate between:
      (i) TextField and TextArea components. 2
      (ii) RadioButton and CheckBox.
   c) What is alternate key? 1
   d) Differentiate between Syntax error and logical error with examples. 2

3. a) The following code has some error(s). Rewrite the correct code and 2
    underline all the corrections made:
    ```
    int k = 2; sum = 0; //Declaring k and sum as Integer
    {
    sum = k;
    k += 3;
    }
    while (k<=20);
    jTextField1(Integer.toString(sum));
    ```
   b) How many times does the following while loop get executed? 1
    ```
    int k = 5;
    int L = 36;
    while (k <= L)
    {
    k += 6;
    }`
c) What will be the output of the following program code:

```java
int A = 5, B = 10;
for (int i = 1; i <= 2; i++) {
    System.out.println("Line1 =" + A++ + "&" + B--);
    System.out.println("Line2 =" + ++B + "&" + (A+3));
}
```

2

d) Rewrite the following program code using a if statement.

```java
int C = jComboBox1.getSelectedIndex();
switch (C)
{
    case 0 : Amount = Bill; break;
    case 1 : Amount = 0.9 * Bill; break;
    case 2 : Amount = 0.8 * Bill; break;
    default : Amount = Bill;
}
```

2

4. a) Which method is used to change the display text of a textfield during run time? 1
b) Expand: 1
   (i) IDE
   (ii) GUI

c) Differentiate between Design and Source tabs. 1
d) In Java, the variable names ‘Hi5’ and ‘hi5’ are same? Justify your answer. 1
e) What is the main difference between Combo Box and list box? Illustrate with example. 2

5. Janav Raj is a programmer at Path Educo Enterprises. He created the following GUI in NetBeans. Help him to write code for the following:

- Enter Starting Number:
- Enter Last Number:
- Display The Series:
- Reset
- STOP
(i) To display series of odd or even numbers (depending on starting number – jTextField1 is even or odd) in the jTextArea on the click of command button [Display The Series].

For example:
If the Start Number is 5 and Last Number is 11
Text Area content will be
5 7 9 11
If the Start Number is 2 and Last Number is 10
Text Area content will be
2 4 6 8 10

(ii) To clear both the text fields and text area, on clicking [Reset] button.

(iii) To terminate the application on the click of [Stop] button.

(Assume suitable names for the various controls on the Form)

6. a) Define Primary Key with example.
   b) What is the purpose of ALTER TABLE command in MySQL? How is it different from UPDATE command?
   c) What is meant by cardinality of a table? Give an example.
   d) Define DDL commands with examples.
   e) Define Single row functions with examples.
   f) What do you mean by ‘statement’?

7.
   a) Ms. Sneha is working in a software company. She works under MySQL database. She forgot to know the tables which she worked in last week. What MySQL statement she should use to know the tables?.

   b) A table “Vehicle” in a database has degree 4 and cardinality 7. What is the number of rows and columns in it?

   c ) A numeric data field CNT contains 35675.8765. Write a command to round off CNT to
   (i) Whole number
   (ii) Upto 3 decimal places.

   d) Name the commands for the following:
   (i) To create the table.
   (ii) To change the structure of the table.

   e) Write SQL statements for the following:
   (i) Using the string “Classroom discipline” and extract the string “disc”.
   (ii) Display the length of the string “India is my country”.
   (iii) Display current date.
8. Write the SQL commands for (a) to (f) and write the outputs for (g) on the basis of table STUDENT.

**TABLE: STUDENT**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Age</th>
<th>Department</th>
<th>Dateofadm</th>
<th>Fees</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R.K. Pankaj</td>
<td>24</td>
<td>Computer</td>
<td>1997-01-10</td>
<td>120.50</td>
<td>M</td>
</tr>
<tr>
<td>2</td>
<td>S.P. Shalini</td>
<td>21</td>
<td>History</td>
<td>1998-03-24</td>
<td>200.00</td>
<td>F</td>
</tr>
<tr>
<td>3</td>
<td>K.P. Sanjay</td>
<td>22</td>
<td>Hindi</td>
<td>1996-12-12</td>
<td>300.50</td>
<td>M</td>
</tr>
<tr>
<td>4</td>
<td>M.P. Sudha</td>
<td>25</td>
<td>History</td>
<td>1999-07-01</td>
<td>400.50</td>
<td>F</td>
</tr>
<tr>
<td>5</td>
<td>S.P. Rakesh</td>
<td>22</td>
<td>Hindi</td>
<td>1997-09-05</td>
<td>250.00</td>
<td>M</td>
</tr>
<tr>
<td>6</td>
<td>G.P. Shakeel</td>
<td>30</td>
<td>History</td>
<td>1998-06-27</td>
<td>300.00</td>
<td>M</td>
</tr>
<tr>
<td>7</td>
<td>D.G. Surya</td>
<td>34</td>
<td>Computer</td>
<td>1997-02-25</td>
<td>210.50</td>
<td>M</td>
</tr>
<tr>
<td>8</td>
<td>B.P. Shikha</td>
<td>23</td>
<td>Hindi</td>
<td>1997-07-31</td>
<td>200.00</td>
<td>F</td>
</tr>
</tbody>
</table>

a) To show all information about the students of History department.  
b) To list the names of female students who are in Hindi department.  
c) To list names of all students with their date of admission in ascending order.  
d) To display student’s name, fees, age of male students only.  
e) To display the details of the students who are above 23 years.  
f) To insert a new row in the STUDENT table with the following data:  
g) Give the output of the following SQL statements: [Include the last inserted values in part (f)]  
   (i) SELECT name, LCASE(name), UCASE(name) FROM student where  
       fees < 250.00;  
   (ii) SELECT DAYOFMONTH(Dateofadm) FROM STUDENT;  
   (iii) SELECT MID(Name,6) FROM STUDENT;  
   (iv) SELECT ROUND(Fees, -2) FROM STUDENT;  

9. The LastName column of a table “CLUB” is given below:  

<table>
<thead>
<tr>
<th>LastName</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anu</td>
</tr>
<tr>
<td>Sagar</td>
</tr>
<tr>
<td>Samir</td>
</tr>
<tr>
<td>Gaurav</td>
</tr>
<tr>
<td>Ankur</td>
</tr>
<tr>
<td>Priya</td>
</tr>
</tbody>
</table>

Based on this information, find the output of the following queries:

(i) SELECT LastName FROM CLUB Where LastName like " _a%";  
(ii) SELECT LastName FROM CLUB Where LastName not like "%r";
10. a) Write two important features of e-Governance. Give two most commonly used e-Governance sites.  

b) How is e-learning beneficial to students?  

c) Priya works for a school. She wishes to create controls on a form for the following functions. Choose appropriate controls from Textbox, Label, radio button, Check box, List box, Combo box, Command button and write in the third column.  

<table>
<thead>
<tr>
<th>SNo</th>
<th>Control used to:</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enter admission number</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Select Stream</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Select Subjects</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Clear the Form</td>
<td></td>
</tr>
</tbody>
</table>