GULF SAI IDAYA (SAUDI CHAPTER) EXAMINATION 2011-12
GRADE: XI
SUBJECT: INFORMATICS PRACTICES
MAX.MARKS: 70
DURATION: 3HRS

General Instructions:
1. All questions are compulsory.
2. Marks are indicated against each question.
3. Programming must be done in Java

Q1.
(a) Which of the following Operating Systems is suitable for handling more than one user at one time?
   i) Multiprocessing OS
   ii) Multiuser OS
   iii) Multiprogram OS
   iv) Multiprogramming OS

(b) Expand the following:
   i) BIOS
   ii) MCIR

(c) Write the difference between Digital Signature and Digital Certificate.

(d) Pair the following equivalent units.
   1GB, 1000MB, 10MB, 10^4 KB

(e) When a file is saved in computer, where is it saved by default?

(f) What do you mean by a bit and a byte?

(g) What is Firewall?

(h) Name the Cyber Act in India.

Q2.
(a) List any 4 characteristics of Java.

(b) The most suitable component to accept multiline text is:
   a) Text Field
   b) Password Field
   c) Text Area
   d) All of the above

(c) Differentiate between:
   (a) TextField and TextArea components.
   (b) parseInt() and parseDouble() methods

(d) Explain the following terms:
   (a) IDE
   (b) Inspector Window

(e) What will be the content of JTextField1 after executing the following code:
   int Num = 6;
   Num = Num + 1;
   if ( Num > 5)
      jTextField1.setText(Integer.toString(Num));
   else
      jTextField1.setText(Integer.toString(Num+5));

(f) Explain the usage of the following methods with the help of an example.
   (a) setText()
   (b) toString()
Q3.

(a) What will be the output of the following code segment?
   ```java
   String firstName = "Charlie ";
   String lastName = "Chaplin";
   String fullName = firstName + lastName;
   JTextField1.setText("Full Name: ");
   JTextField2.setText(fullName);
   ```

(b) Write code in Java to display the following output:
   1
   1 2
   1 2 3
   1 2 3 4

(c) To print the value of a variable "x" of type int, which of the following expressions can be used:
   (a) JTextField1.setText("x = " + x);
   (b) JTextField1.setText("x = " + x);
   (c) JTextField1.setText("x = " + Integer.toString(x));
   (d) JTextField1.setText(x = +"x");
      (i) Both (a) & (b)
      (ii) Only (a)
      (iii) Both (a) and (c)
      (iv) Only (c)

(d) What will be the result of the following expression
    ```
    x > 65 ? 200:150
    if (a) x = 30
    (b) x = 70
    ```

Q4.

(a) Read the following case study and answer the questions that follow.
Develop an application that performs subtraction of two numbers. The sample screen shot is shown below:

<table>
<thead>
<tr>
<th>Object Type</th>
<th>Object Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text Field</td>
<td>ValueTextField</td>
<td>To enter Numeric Value</td>
</tr>
<tr>
<td></td>
<td>Value2TextField</td>
<td>To enter Numeric Value</td>
</tr>
<tr>
<td>Button</td>
<td>AddButton</td>
<td>To Provide corresponding action</td>
</tr>
<tr>
<td></td>
<td>SubtractButton</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ClearButton</td>
<td></td>
</tr>
<tr>
<td>Label</td>
<td>ResultLabel</td>
<td>To display the result</td>
</tr>
</tbody>
</table>

1. Write the code segment to find the difference of two values for the click on ADD button.
2. Write the code segment to clear off the values entered by the user and result generated for the click on EXIT button.
(b) Develop an application to prepare students Report by calculating Total Marks, Percentage and grade on the basis of marks obtained in five subjects. The criteria for grade evaluation is given below.

Criteria

<table>
<thead>
<tr>
<th>Per</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;=90</td>
<td>A</td>
</tr>
<tr>
<td>&gt;=75 and &lt;90</td>
<td>B</td>
</tr>
<tr>
<td>&gt;=60 and &lt;75</td>
<td>C</td>
</tr>
<tr>
<td>&gt;=45 and &lt;60</td>
<td>D</td>
</tr>
<tr>
<td>&lt;45</td>
<td>E</td>
</tr>
</tbody>
</table>

KENDRIYA VIDYALAYA

Roll No  Name

English  Accounts  B.Studies  Info.Prac  Economics

Total Marks  Calculate  Percentage

Grade

Q5
(a) Define a function in MySQL. Which function is used to display the system date? 2
(b) Differentiate between DDL and DML commands with an example each. 2
(c) Differentiate between a Keyword and a clause with example. 2
(d) What is the purpose of the following commands in MySQL.
   (i) DESCRIBE
   (ii) USE
   (f) What is the purpose of a Column Alias? Write an example. 2

Q6
(a) Define RDMS? 1
(b) Distinguish between Primary Key and Candidate Key. 2
(c) How do you list all the columns from a table named “Employee”? 1
(d) Consider the following tables ‘Employee’ and ‘Department’.

Employee

<table>
<thead>
<tr>
<th>ECode</th>
<th>LastName</th>
<th>FirstName</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Sharma</td>
<td>Amit</td>
<td>Sales</td>
</tr>
<tr>
<td>102</td>
<td>Arora</td>
<td>Shiv</td>
<td>Personnel</td>
</tr>
<tr>
<td>103</td>
<td>Lakshmi</td>
<td>KS</td>
<td>Accounts</td>
</tr>
<tr>
<td>104</td>
<td>Rajani</td>
<td>Shivika</td>
<td>Accounts</td>
</tr>
<tr>
<td>105</td>
<td>Thakral</td>
<td>Satvik</td>
<td>Sales</td>
</tr>
</tbody>
</table>
Department

<table>
<thead>
<tr>
<th>DepCode</th>
<th>DepName</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Sales</td>
<td>200000</td>
</tr>
<tr>
<td>102</td>
<td>Personnel</td>
<td>150000</td>
</tr>
<tr>
<td>104</td>
<td>Accounts</td>
<td>300000</td>
</tr>
</tbody>
</table>

Write the SQL commands for the following:
i) Display department details (from Department table) in descending order of Budget amount.
ii) Display all the details of employees whose last name is "Rajlani" or "Sharma".
iii) Display the Employee codes, first names and department name of all employees of 'Accounts' department.
iv) Display department names of departments with budget above 18000.
v) Display all the details of employees whose First name begins with "S".
vi) Display all the details of employees working in sales department.

(c) Write SQL statements for the following:
   (i) Display the name of current month.
   (ii) Use the string "Internet is a boon" and extract the string "net".
   (iii) Display the length of the string "Informatics Practices".
   (iv) Display the position of "My" in "Enjoying MySQL".
   (v) Display current date.
   (vi) Using the three separate words "We", "study" and "MySQL" produce the following output:
        "We study MySQL"

(f) Write the output that the following statements will produce:
i) SELECT RIGHT('Informatics', 4);
ii) SELECT ROUND(7.3456, 2);
iii) SELECT TRUNCATE(2.3456, 2);
iv) SELECT DAYOFMONTH('2009-08-25');

Q7. (a) What is E-Business? Write any two benefits.
(b) Write short notes on E-Governance.
(c) Write any two websites of E-Learning.