Roll Number | | |

INDIAN SCHOOL MUSCAT
FIRST TERM EXAMINATION

INFORMATICS PRACTICES

CLASS: XII   Sub. Code: 065   Time Allotted: 3 Hrs

25.09.2017   Max. Marks: 70

General Instructions:
1. All the Questions are compulsory
2. Answer the questions after reading the text

SECTION – A (JAVA)

1. (a) How Enter level loop is different from Exit Level Loop? Explain with an example.   2

    (b) Write a Java code to disable the text Fields named as jTextField1 and jTextField2.   1

    (c) Mr. Sahil, a programmer in a VISA processing company, has written the following code:

    int ch=Integer.parseInt(jTextField1.getText());

    switch(ch)
    { case 1:   jTextField2.setText("Short Term Single Entry Visa Granted");

      case 2:   jTextField2.setText("Short Term Multiple Entry Visa Granted");   2

      case 3:   jTextField2.setText("Long Term Single Entry Visa Granted");

      case 4:   jTextField2.setText("Long Term Multiple Entry Visa Granted");

      default: jTextField2.setText("Invalid Entry");

    }
    No matter what value is being entered in the text field jTextField1, this program always
    gives a message "Invalid Entry". Help Mr. Sahil in identifying the problem and its reason.
    Also suggest him a suitable correction in the code.

    (d) Shalini is learning Java programming language, as it allows developers to write code that
         can run on any machine, regardless of architecture or platform. Help her in finding
         solutions of her problems:
         I.   She wants to compare two integer values for equality in her java code. Out of (=)   2
               and (= =), which operator she should use and why?
         II.   Help her in writing Java code to initialize two integer variables named num1 and
               num2 with values 5 and 10 respectively. Increase the value of num1 by 5 and   2
               decrease the value of num2 by 5.

(e) Write a Java code that takes an Integer from jTextField1 and prints all the factors of the accepted number in jLable1 with the use of While loop.   2

(f) Rewrite the following program code using for statement: 2

```
int p=30, sum=0;
while(p>=2)
{
sum=sum+p;
p - =2;
}
jTextField1.setText(Integer.toString(sum));
```
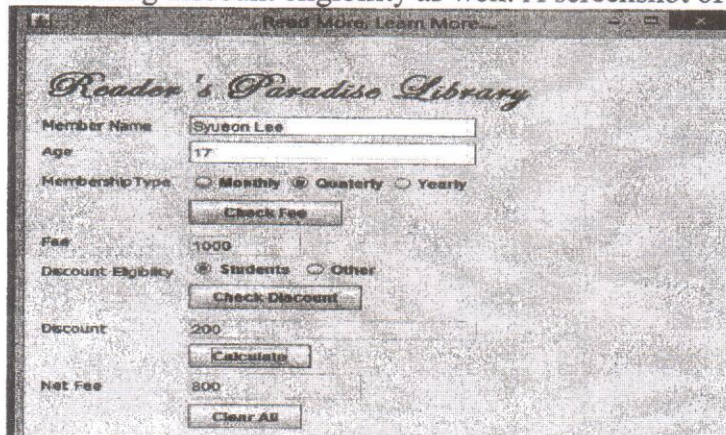
(g) What will be value of x and y after execution of the following code: 2

```
int x;
int y=10;
for(x=20 ; x<=30; x + =2)
{
if (x%2 = =0)
y+=x;
}
jTextArea1.append("x ="+x +"\n" + "y ="+y);
```

(h) Ms. Reshma is designing a frame in Netbeans in which she has used four Radio Button controls. She want that only one radio button out of four should be selected at a time. Which property of the Radio Button should be selected to 1 achieve the same?   2

(i) Ms. Meena is not able to understand the statement "Java is a case sensitive language". Help her in understanding the above mentioned statement by giving suitable example.   1

(j) Mr. Ashish works as a programmer in "Technic Technologies Pvt. Ltd.". He has designed a Library software to generate the member ship fee depending upon the membership type considering discount eligibility as well. A screenshot of the same is shown below:

Help him in writing the code to do the following:

i. After selecting appropriate Radio Button, when 'Check Fee' button is clicked, fee should be displayed in the respective text field according to the following criteria: 1

Membership Type	Fee	
Monthly	500	
Quarterly	1000	
Yearly	1500	

ii. After selecting appropriate Radio Button, when 'Check Discount' button is clicked, appropriate discount should be displayed in the respective text field according to the following criteria: 1

Discount Eligibility	Discount
Students	200
Other	100

iii. When 'Calculate' button is clicked, Net Fee should be calculated and displayed in the respective text field as per the given formula: Net Fee = Fee – Discount   2

iv. When 'Clear All' button is clicked, All the text fields should be cleared.   1

(k) Write a JAVA program to accept any number from the user and check the number is "Prime " or "NOT".   2

SECTION – B   (MySql)

1. (a) A Table **EMP124** has 20 rows and 5 columns and another table **EMPLOYEE** has 10 rows and 4 columns. How many rows and columns will be there if we use cross join of these two tables.   1

(b) Karan, a student of class XI created a table "STUD". Class_sec is one of the columns of this table. To delete all the details of the students whose class and section have not been entered he wrote the following query :   1

Select Class from stud where Class_sec=NULL;

Help Karan to run the query by removing the errors from the query and rewriting it.

(c) Differentiate between **Foreign Key** and **Primary Key** in context of **RDBMS**.   1

(d) Ms. Roxy Created two tables with Dept No as primary key in EMP table and Foreign Key in Dept Table. While inserting a new row in Dept table, Ms. Roxy is not able to enter a new value in the column Dept No. What could be the reason for it?   1

(e) Is NULL and 0(zero) same? Justify your answer. 2

(f) What do you understand by Single Row Function in MySql? How it is differ from Multi Row functions? 2

(g) Manish is not clear about the difference between the following two statements: 2
   (i) Select (10-4)*2 from dual;

   (ii) Select (10-4)*2 from Marks;

   Help him understand the difference between these two statements.

(h) Consider the following table named as "Teacher" with details. Write Mysql command for(i) to (iv) and output for(v) to (vii).

Table : Teacher

Tno	T_name	T_address	Basic	Department
T10	Mohan	1/65, Lakshmi Nagar	43800	Computer
T11	Vivek Rawat	R-42, Kirti Nagar	32300	Social Science
T13	D Goel	A-24, Triveni Appt	41700	Computer
T14	Lokesh Rathore	C-11,Malviya Nagar	27200	English
T15	Lakshmi	34, Ramesh Nagar	34500	Hindi
T16	Sharma	240,Anna Nagar	24500	Hindi
T17	Suresh Kumar	45,Doctors Colony	44200	Hindi
T18	Ramkrishana	A-41, Friends Appt	30600	English

(i) To display all the teachers name and their salary who are all in computer department and Social department.

(ii) Add a new column DA with integer size of 4. 7

(iii) To change the basic salary as 50000 who are all in English department.

(iv) To display all the teachers name whose name contains the character 'a' as second alphabet.

(v) Select department, count(*) from teacher group by department ;

(vi) Select T_name , Basic from teacher where not basic>40000;

(vii) Select count(distinct(department)) from teacher;

(i) How RollBack To command is different from RollBack? Explain with an example. 2

(j)   Consider the tables Mobile_Details and DEALERS

Mobile_Details

SetCode	Setname	OS	Cost
A1234	Samsung Galaxy 4	Android	34000
L3423	LAVA	Android	31000
N1212	Nokia Lumia 920	Windows	28000

Dealers

Deal_no	SetCode	City
D12	A1234	Chennai
D37	N1212	Chennai
D56	L3423	Delhi
D32	N1212	Mumbai
D43	A1234	Mumbai

(i)   To Display set name, operating system from Mobile_details table and the corresponding Dealer Number and city from Dealers Table.   2

(ii)   To display how many dealers are there in each city.   2

(iii)   To display the dealer details for each dealer who are all selling Android handsets.   2

(k)   Find the output of the following:
   (i) Select round(5678.56,-1)+truncate(3320.45,0);

   (ii) Select mod(dayofmonth("2014-02-20"),3);   4

   (iii) Select POW(INSTR('My_Database','_'),2);

   (iv) Select instr("Correction","r");

(l)   Explain the following   3
   (a) Degree   (b) Tuple   (c) Not Null

(m)   Write SQL query to create a table "Job" with the following structure: 1

Table: Job

Field name	Datatype	Size	Constraint
J_Code	Integer	3	Primary Key
J_Desc	Varchar	25	Not Null
J_Chg_Hr	Integer		
J_Lastupdate	Date		

(n)   Define Transcation. How DDL commands are different from DML?   2

SECTION – C (IT Application)

(a) How has e-Governance benefited the common man and write any two e-Governance projects in India.   2

(b) Write any two popular e-Learning websites.   2

(c) Joshua works for a school. Help him to choose most appropriate controls from List Box, Combo Box, Text Field, Text Area, Radio Button, Check Box, Label and Command Button for the following entries:

    2

SNo	Function
1	To Enter the Admission Number
2	Select Stream
3	Select Subjects
4	Submit the details

(d) Define E-Governance.   1

(e) Observe the given domains carefully and identify the category it belongs out of e-Governance/e-Business/e-Learning: 2
    i.   AMAZON: www.amazon.in
    ii. PMO(Prime Minister's office): www.pmo.gov.in

(f) Mention any one social and economic benefit of ICT.   1

End of the Question Paper