

INTERNATIONAL INDIAN SCHOOL-DAMMAM
I TERM EXAMINATION- 2013

Class :XII

Time : 3 Hours

Subject : INFORMATICS PRACTICES

MM : 70

SET A

Q1.

- a) Mr. Sohan is working in an global organization. He wants to send his home's computer files to his office's computer. .Suggest the protocol for the same. (1)
- b)Name the major forms of intrusion problems. (1)
- c) A Company MicroData enterprises has various buildings in a city. Company wants to get IP address using URL of website. How can this be achieved? (1)
- d) What are the similarities and differences between bus and tree topology? (1)
- e)Define the various parts of a Mac address. (1)
- f)Define the following (2)
- i) Radiowave ii) Keymap Based Text entry
- g) What is meant by PostgreSQL , W3C ? (2)
- h) Distinguish between open source software and proprietary software with respect to customizability of software. (1)

Q2. a) "The variable /expression in the switch statement should either evaluate to an integer value or string value". State the comment (1)

b)What will be displayed in jTextField1 and jTextField2 in the following code ? (2)

```
int c, First = 0, Last = 10;
c = 0;
while( First <= Last )
{ if( First % 2 == 0 )
    c += 1;
  First += 2;
  Last -= 2;
}
jTextField2.setText(Integer.toString( First-Last) );
jTextField1.setText(Integer.toString( First+Last));
```

c)Observe the following code carefully and find which statement will never get executed in the code ? (1)

```
int a = 1; // statement1
do // statement2
{ //statement3
  if( a > 13) //statement4
    jTextField1.setText("Something"); // statement5
  else // statement6
    jTextField2.setText("Pass"); // statement7
  a += 3; // statement8
} // statement9
while( a <= 15); // statement10
```

d) Identify the errors and give the output , if jTF1 = 5 , jTF2 = 7 (2)

```
int m = Integer.parseInt(jTextField1.getText() + jTextField2.getText() );
OptionPane.showMessageDialog( null, "" + (m+1));
```

- e) What is the purpose of the following code (1)

```
String Str2,Str1;
Str1 = Str2.concat(Str1);
```
- f) What is meant by import ?List different selection modes of a list. (2)
- g) Tanyaman is creating a simple application in java in which she needs to convert the characters input by the user in a particular case. Help her for this.. (1)
- h)What will be the contents of the variables s3, s4 after executing the following code (2)

```
String s1= "NetBeans" , s2 = "JaVa ProGrams " , s3, s4;
s3= s1.substring(1, 5) ;
s4 = s2.substring ( 2 , s2.length ( )-2);
```
- i) Write a java statement to make a jTextField1 appear on the form (1)

Q3.a) Differentiate between order by and group by. (1)

b)Consider the following table CITY (2)

Name	Phone
Arun	514001
Kamal	920012
Radhey	403048
Prakash	281001

Write the output of the following queries-

- i) SELECT phone , substr(Name, 2, 3) from City where Phone not like '%1';
ii) SELECT pow(2,0) , Phone from city where name like '%a_';
- c) "Department " is a column in a table "Dept". The SQL queries (2)

```
Select count(*) From Dept ;
and Select count(Department) From Dept;
```

give the result 28 and 27 respectively . What may be the reason for this? How many records are present in the table
- d) Mr. Kamal has created a table – Employee which contains following fields in it (2)
Empno, Empname , DateofJoin
Help him
i) To display the first three and last four characters of employee's name
ii) To view the column's name with its constraints
- e) Write the output of the following (2)
i) Select round(125.60) + round(125.60, -1) ;
ii)Select length(mid ('MySQL and Java in class XII', 6));
- f) Ankita wants to list the names of all the tables in her database namely Status. What commands(s) should she write at MySQL prompt to get this result. (1)

Q4.a) Write a short note on Operator overloading and method Overloading with examples for both. (2)

b)Will the following code execute successfully ?State the reasons. (2)

```
int k = 2 , sum = 0 ;      / Declaring k and sum as integer
do
    sum = k;
    k += 2;
}while ( k < 20 )
jTextField1.setText( integer.toString(sum));
```

c) Name any one native class of java and one method of it. (1)

- d) Mr. Kant has developed a Java application for a school, in which a combo box made on the form for selecting class. Name the property which Mr. Kant should use to add the class's data in combo box. (1)
- e) What controls would you suggest for the following (1)
- To enter nationality from all the nationalities given as options.
 - A message in front of a text field.
- f) Define inheritance and abstract class (2)
- g) What is the significance of access specifiers? (1)
- h) Write an appropriate Java statement to transfer the content from a string variable `strPassword` to integer variable `intPassword`. (`strPassword` and `intPassword` are used to store 5 digit password created by a user in his application). (2)

Q5. Read the following case study and answer the questions that follows:

Naveen electronics has the following products with their list prices given. The store gives a 10% discount on every product. However, at the time of festival seasons, the store gives a further 7% festival discount after 10%.

PRODUCT NAME	LIST PRICE	DISCOUNT PRICE
Washing Machine	12000	
Color Television	17000	
Refrigerator	18000	
OTG	8000	
CD Player	1450	

Control	Property Name	Property Value
JFrame	Title	Naveen Electronics
TextField1	Variable Name	txtPrice
TextField2	Variable Name	txtDiscount
TextField3	Variable Name	txtNPrice
ComboBox	Variable Name	cmbProduct
JRadioButton1	Text	Festival
	Variable Name	OptFest
JRadioButton2	Text	Non-Festival
	Variable Name	OptNFest

- a) Write the code to assign as 0 to all the text boxes except list price and set the default choice for Non-Festival. (1)
- b) Write the code to display the listprice, discountprice and netprice in their respective text boxes. (3)
- c) Write the code to change the text of exit button as "Close" (1)

Q6.a) What is the use of COMMIT and ROLLBACK statement in SQL ? Give example. (2)

b) Raj is not able to execute the following sql query, help him to execute it (1)

Select * from Country order by Pincode where City = (Delhi ,Mumbai, Agra)

c) Write the sql commands based on the following table (6)

Table : Train

TrainNo	TrainOrigin	TrainDestination	TrainKm	TrainTime	Traincapacity
21124	AAHG	AGHJ	200	10.05	350
78951	BCAD	ABCD	250	11.20	200
43221	CCSS	SSAA	300		150
12678	BCAD	AGHJ	150	1.00	300

- i) To display the details of trains whose distance is in the range of 200 and 300 km (not inclusive)
- ii) To display number of trains starting from each origin
- iii) To make the destination of all the trains ending at "ABCD" to "BBAA" which are covering a distance of more than 200 Km
- iv) To display destinations whose time is not mentioned.
- v) To remove the data of all the trains covering a distance of less than 200Km .
- vi) To add a new record with some values.

Q7.a) In a Database GYM , there is a table with a sample data given below

Table : FITNESS

PCode	PName	PPrice	PManufacturer
P1	Treadmill	21000	Coscore
P2	Bike	20000	Aone
P3	Massage chair	5500	Regrosene
P4	Cross Trainer	14000	Reliable
P5	Multi Gym	34000	Coscore

Answer the questions given below

- i) Suggest the primary key of the above table with a suitable reason. (1)
- ii) Mr. James created the above table . He added 2 more rows to it and deleted one field
What is the degree and Cardinality of the above table (1)
- iii) Write the Sql Queries for the following
- a) To display the number of products for each manufacturer whose product price is more than 20000. (2)
- b) To create the above table in a database GYM (2)
- c) To make the price by applying a 25% discount reduction of all the products by the manufacturer "Aone" (2)
- b) i) In an insert statement which columns can be omitted ? (1)
- ii) What is the difference between Now() and Sysdate()? (1)
- iii) What is the purpose of Like ? (1)