Sample Paper 2014-15
Class: XII
Subject: INFORMATICS PRACTICES

Time Allowed: 3 hours   *Maximum Marks: 70*

Instructions:
  1. *All questions are compulsory.*
  2. *Answer the questions after reading the text carefully.*

Q1

(a) Mr. Aman Verma wants to prevent unauthorized access to/from his company's local area network. Write the name of a system (System / Hardware), which he should install to do the same.   1

(b) Which device is used to connect dissimilar networks?   1

(c) Name the term which is used while online textual talk in real time.   1

(d) Name the term for malicious programmers, who break into secure systems.   1

(e) Differentiate between Star topology and Bus Topology with one advantage and one disadvantage.   2

(f) What is Open Source Software? Brief one example of such software.   2

(g) Expand the following abbreviations: 2
    a. PPP
    b. GSM
    c. GNU
    d. SMS

Q2

(a) A list namely *playerList* has *selectionMode* property set to SINGLE_INTERVAL. How would you obtain the selected values? Give example.   1

(b) Write a statement in java to display message "Hello" using dialog box   1

(c) What do you mean by conditional operator? Explain it with one suitable   1
     example.

(d) Write one property of <table> element in HTML.   1

(e) Write code in HTML to display following contents using list.   2
     III. Rahul
     IV. Ketan
     V. Mahima
     VI. Shalini

(f) What will be displayed in output window after the execution of the   2
     following loop?
```
int ptr=5,cnt;
for(cnt=10;cnt>0;cnt=cnt/2)
 ptr = ptr + cnt;
System.out.println("Ptr : " + cnt + " " + "Cnt : " +
ptr);
```

(g) Write java code that takes one value of integer type. Find out cube of it.   2
     Assign result to the String object and display result.

Q3
(a) Which MySQL command helps you to see the structure of the table?   1

(b) Mr. Karan Vairagi wants to remove the entire content of a table "Hospital"   1
     along with its structure to release the storage space. What MySql command
     should he use? And also write the category of the command.(DDL / DML).

(c) Table Employee has 4 rows and 3 columns. Table Status has 5 rows and 2   1
     columns. What will be the cardinality and degree of the Cartesian product
     of Employee and Status?

(d) While Creating table Sports, Ms. Poonam forgot to add the field TYPE with   1
     type character and size 10. Help her to write MySql command to do so.

(e) Distinghish between alter table and update command of MySql with one   2

example of each one.

(f) There is a column Price in a table Product. The following two statements are giving different outputs. What may be the possible reasons?   2
- Select count(*) from Product;
- Select count(Price) from Product;

(g) What is the use of constraints in MySql? Write MySql query to remove constraint Primary key for the field Account_Number in the table Bank.   2

Q4

(a) What do you mean class and object? Explain. Also mention the class from which the jPasswordField1 belongs?   2

(b) Rewrite the following program using a switch statement.   2
```
String s = jTextField1.getText();
String message;
char choice=s.charAt(0);//a method to extract first
                       //character of the String
    if(choice=='A')
        message =  "Better";
    else if(choice=='B'||choice=='c')
        message = "Good";
    else
        message = "Average";
```

(c) What will be displayed in jTextArea1 after executing the following statement?   1
```
jTextArea1.setText("World\nCup\t2015");
```

(d) Find out output of the following code: 1
```
String text1 = "Computer";
String text2 = "world";
text1 = text1.toLowerCase();
text2 = text1;
String message = text1.concat(text2);
System.out.println(message+(message.length()+4));
```

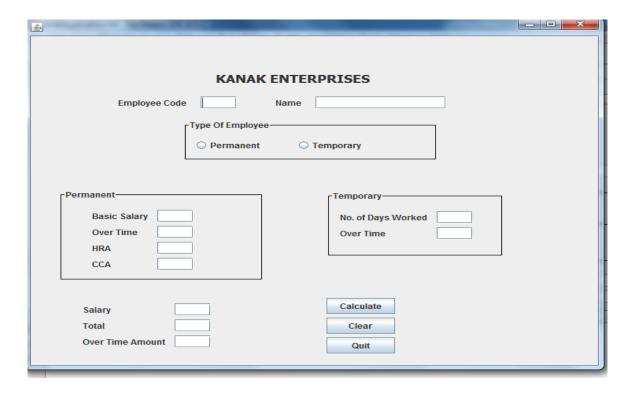(e) How many times is the following loop executed? And also convert it into for loop.   2
```
int number=5;
do
```

```
        {
             System.out.println(number);
             number- -;
        } while (number >=1);
```

(f)   Find out the errors, if any   2

```
        int Counter=0;
        mm=0;
        while ( Counter < 10 )
        {
             if (Counter % 2 = 0)
             {
                  mm =/ 10 ;
                  jTF1.putText(mm);
             }
             Counter++;
        }
```

(g)   Kanak enterprises is a Yarn Manufacturing Company. The Human
      Resource Department manages 100 employees on regular basis. The
      company provides salary on two categories: Temporary employee and
      Permanent Employee. The account department instructs the computer
      department to develop a salary calculation form as shown below:

The list of swing controls for the above is as follows:

Object Name	Description
codeTF	Code of the employee
nameTF	Name of the employee
salaryTF	Basic salary of the employee
otpTF	Over Time for Permanent Employee
ottTF	Over Time for Temporary Employee
hraTF	House Rent Allowance of Employee
ccaTF	A type of allowance of Employee
daysTF	Number of days worked
amtTF	Salary Amount
totTF	Total Amount
otaTF	Over Time Amount

(i) Write code for the both Permanent and Temporary radio buttons that when 1
user click Permanent button, then text boxes available in Temporary panel
is automatically disabled. Similarly, when user click Temporary button,
then text boxes available in Permanent panel is automatically disabled.

(ii) Write the code of clear button to clear all the values stored in all the text 1
boxes and temporary employee should be selected as default employee.

(iii) Write code for the calculate button to calculate the salary amount, over 3
time amount and total amount.
The criteria for salary calculation is as given below:

For permanent employee	- Hra is 20% of basic salary - CCA is Rs. 500 - Over time allowance is Rs. 75 per overtime hour - Salary amount is the sum of basic+hra+cca
For temporary employee	- Salary is Rs. 250 per day - Overtime is Rs. 50 per day overtime hour

Total amount for permanent and temporary employee will be calculated as
the sum of total salary amount and over time amount.

Q5 (a) What is the use of COMMIT statement in SQL? How is it different from 2

ROLLBACK statement?

(b)   Mr. Anoop Singhvi created a table SUPER with 5 rows and 7 columns. He   1
       added 4 more rows to it and delete two columns. What will be the
       cardinality and degree of the table SUPER?

(c)   Mr. Ramdin runs his medical store and he has created table STORE with   7
       Ayurvedic medicines. Write command of SQL for (i) to (iv) and output for
       (v) to (vii)

Table: STORE

Batchno	Medicine_name	Company	Type	DOM	DOE	Price
A0051	Godhan Ark	Patanjali	Ark	2005-5-26	2004-8-29	40
P7845	Baheda Churna	Prashant	Churana	2001-8-26	2004-5-21	30
T6832	Kumari Aasav	Dindayal	Syrup	2011-1-1	2015-6-29	100
R49256	Neem Giloy	Kamdhenu	Syrup	2004-5-12	2003-5-8	135
T59923	Jatyadi Taila	Baidyanath	Oil	2001-2-28	2008-2-26	NULL
G5993	Shankhs Pushpi	Baidyanath	Syrup	2004-8-7	2004-5-24	55

(i)   To display the names of all the medicines with the type Syrup.
(ii)   To display the names of all the medicines by the manufacturer
       Dindayal.
(iii) To show the price with medicine name in descending order of their
       price.
(iv)   To add a new row for product with the details: E4992, Kaya Kalp,
       Patanjali, Churna, 1st Dec 2002, 31st march 2006, 60
(v)   Select * from store where company like "%an%".
(vi)   Select count(distinct company) from store;
(vii) Select avg(price) from store;

Q6 (a)   Write an SQL query to create the table **SalesPerson** with the following   2
          structure-

Field	Type	Size	Constraint
Snum	Int	6	Primary key
Sfname	Varchar	15	Field should not left blank
Slname	Varchar	12	
City	Varchar	15	

Sales	Double	9,2	
Comm	Double	8,2	

(b) In a database there are two tables 'Books and 'Issued' are shown below-

Table: Books

Bk_id	Book_Name	Author_Name	Publishers	Price	Type	Qty
C0001	Fast Cook	Lata Kapoor	EPB	350	Cookery	5
F0001	The Tears	William H.	First Pub.	650	fiction	20
T0001	My first c++	Brain & broke	EPB	350	text	10
T0002	Let us c++	Yashwant k.	BPB	250	text	40
F0002	thunderbolts	Anna Roberts	First Pub.	750	Fiction	50

Table: Issued

Bk_id	Quantity_issued
T0001	4
C0001	5
F0001	2

Write MySql queries for the following:

i. To list the names from books of text type and quantity issued is more han 2.   2

ii. To display the book_id, book_name and quantity_issued for all books which have been issued.   2

iii. Display total number of books according to their types.   2

(c) In a database LIC, there is a table **Customer** with the following contents

C_No	C_Name	Policy	DOI	Premium	Pan_No
18450215	Amit	Jeevan Kishore	2005-8-29	1245	AODPM3745
65214581	Saloni	Market Plus	2001-4-15	3402	PIOWM4159
12457786	Zahir	Jeevan Kishore	1997-5-26	9499	WIISL4521
23545871	Ali	Makret Plus	2000-4-25	6408	ALSILW5668
44557581	Martin	Health Plus	2003-6-9	7529	NIWIWL1249

2

With reference to above table, which column should be set as the primary key? Which column is the foreign key? Give reasons.

Q7

(a) What social impact does e-Governance have on society?   1

(b) Write two important features of e-business. Give two most commonly used   2

e-business websites.

(c)   Ms. Shristi Suman working as a manager in Dhupia Enterprises wants to   2
        create a form in Netbeans to take various inputs from user. Choose
        appropriate controls from Label, TextField, Radio Button, CheckBox,
        ListBox, ComboBox & Command Button.

SNo	Control Used to	Control
1	Enter Name , address and salary	
2	Select Gender (Male / Female)	
3	Select Department from available list	
4	Submit the form	

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