

CLASS XII

SAMPLE PAPER-065

INFORMATICS PRACTICES

Time Allowed : 3HR

Maximum Marks: 70

General Instructions:

- I. All the questions are compulsory.
- II. Answer the questions after carefully reading the text.

Question 1:

- a. What will be the value of total after the loop finishes execution? [1]
- ```
int total=0;
for(int count=5;count<=10;count++)
{
 total=total+count;
}
jTextField1.setText("The total is"+total);
```
- b. Identify the error(s) in HTML code. Also, write the correct code [1]
- ```
< body color="yellow" text="white">
```
- c. Which of the following method(s) does not accept any arguments? [1]
- i) pow() ii) toLowerCase() iii) round() iv) All of these
- d. Amit created a program using switch case. He used the data type double for selection variable. Is it correct to define selection variable as double? Give reason. [1]
- e. Find the output: [2]
- ```
int i=1;
for(i=1;i<=5;i++)
System.out.println(""+i);
System.out.println(""+i);
```
- f. Write a function using java to calculate the area of a circle. Notice that the function should pass radius as parameter and return area. [2]

- g. What will be the value of P and Q after execution of the following code. [2]
- ```
int P,Q=100;
for(P=10;P<=12;P++)
{
Q+=P;
}
JOptionPane.showMessageDialog(this,"P:"+P+",Q:"+Q+"");
```

Question 2:

- a) Which MySQL command helps you to see constraints applied on column(s) in a table? [1]
- b) Mohan created a table in Mysql. Later he found that table is wrongly created and he wants to remove it. Name the command by which Mohan can do it. [1]
- c) Reena created a table named student, she wants to see those students whose name ending with p. She wrote a query `SELECT name.* FROM student WHERE name="%p"`; Help Reena to run the query by removing the errors from the query and rewriting it. [1]
- d) Table Shop contains 4 columns(itemcode, itemname, itemprice, itemdom) and 10 records. Delete all records where itemname is "Parle". [1]
- e) What is primary key? How is it different from candidate key? Explain with the help of suitable example. [2]
- f) Table Employee contain the columns named with Emp_no, Emp_name and Basic: [2]

Emp_No	Emp_Name	Basic
6985	Suresh	6700
5874	Rahman	7500
6587	Sourav	NULL
5478	Ajay	5500

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

- a. `SELECT AVG(Basic) FORM EMPLOYEE;`
- b. `SELECT Name FROM employee WHERE Basic IS not Null;`
- g) A table "Hospital" in a database has degree 4 and cardinality 9. What is the number of rows and columns in it. [2]

Question 3:

- a) Write java statement to extract selected item from a given listbox names "jList1". [1]

- b) What is friendly access of class members? [1]
- c) A class Vehicle and its subclass Car both have a method speed(). If Maruti is an object of class type Car, what will happen if following statement is issued? [1]
Maruti.speed();
- d) What is an abstract class? [1]
- e) Differentiate between Group by and having? [2]
- f) What will be the content of JTextArea1 and TextField1 after execution of the following statements? [2]
1) JTextArea1.setText("Go\tGreen\nIndia");
2) String msg="All The Best";
JTextField1.setText((msg.length()-6)+"");
- g) Which property sets action to be performed when the user attempts to close the frame. [1]
- h) What is the use of forClass() method in JDBC? [1]

Question 4: Write the SQL Query for (a) to (f) and output of (g) and (h) on the basis of table BANK [8]
given below:

BANK

Ac_No	Cust_Name	B_Name	Amount	Date_of_open	No_of_transaction
A001	Agam Shah	SBI	28000	2011-06-01	5
A002	Nishant Patel	HDFC	22000	2012-07-02	7
A003	Krunal	ICICI	66000	2012-06-04	9
A004	Twinkle	HDFC	55000	2013-01-10	6
A005	Jinal	ICICI	34000	2013-01-15	3
A006	Aaditya	SBI	90800	2013-08-18	1
A007	Varsha	AXIS	18000	2013-09-11	2
A008	Vishnu	ICICI	97000	2011-08-13	5
A009	Dhruv Raj	UCO	12000	2010-12-01	7

- (a) To display the number of customer in SBI who opened their account in the year 2015.
- (b) Display Ac_No, Amount, No_of_transaction of customers whose bank is SBI or ICICI or UCO bank.
- (c) Display the detail of customer whose name ends with 'l'.
- (d) Display the Date _ of _ Open of oldest customer.
- (e) Display sum of amount deposited in each bank separately.
- (f) Remove the detail of all customer of UCO bank.
- (g) Select Count(distinct B_Name) from Bank;
- (h) Select SUBSTR(Cust_Name,3,6) from BANK;

- (i) Which command is used to end the transaction successfully in MySQL. [1]
- (ii) Define ACID properties? [1]

Question 5: (a) Ms. Rakhi works in an International Bank as an IT Head. She designed a simple interest calculator program as shown below: [6]

The interest rate is given based on the account type as shown below:

ACCOUNT TYPE	INTEREST RATE %
SAVING	4 %
RECURRING DEPOSIT	6 %
FIXED DEPOSIT	8 %

i. Write the code required for 'INTEREST RATE' button to display interest rate as per the above given criteria.

ii. Write the code required for 'SI' button to calculate and display 'Simple Interest' based on the given formulae: $SI = \frac{\text{amount} * \text{interest_rate} * \text{duration}}{100}$;

iii. Write the code required for 'CLEAR ALL' to clear all the textfields.

(b) Write a program for below mentioned pattern. [2]

####

(c) Find output of the following java code snippet: [2]

```
String word="Highrise";

String wordlc = word.toLowerCase();

for (int i = 0; i < wordlc.length(); i+=4)

{

    String extstr = wordlc.substring(i,i+2);

    jTextArea1.append(extstr+"\n");

}
```

Question 6:

a) Consider the tables Doctors and Patients given below:

Table: Doctors

DOCID	DOCNAME	DEPARTMENT	OPD_DAYS
101	M.Panday	ENT	TTS
102	G.P.Gupta	Surgery	MWF
103	C.K.Sharma	Ortho	MWF

Table: Patients

PATNO	PATNAME	DEPARTMENT	DOCID
1	Neeraj	ENT	101
2	Mohit	ORTHO	201
3	Raj	ENT	101
4	Mohit	SURGERY	102
5	NANDINI	ORTHO	201

- Display the PATNO, PATNAME and CORRESPONDING DOCNAME for each patient. [2]
- Display the list of all patients' whose OPD_DAYS are MWF. [2]
- Select OPDS_DAYS_DAYS, count(*) from DOCTORS, PATIENTS where PATIENTS.department=DOCTORS.department grouped by OPD_DAYS; [2]

d. Write the resulting output of the followings: [2]

```
Select floor(3456.98)+ceil(9876.89);
Select substr('CLGupta World School',1,3);
Select round(1023.432,1);
Select MOD(ROUND(120.1),5);
```

e. TeacherName is a column in a table Schools. The SQL queries [2]

Select count(*) from schools;

And

Select count(TeacherName) from Schools;

Give the result 26 and 25 respectively. What may be the possible reason for this? How many records are present in the table 26 or 25?

Question7:

a) Write any four features of XML? [2]

b) If `int x=5;`
`int y=7;`

What is the value of x and y after the expression `y+=x++;` [1]

c) Differentiate between `executeQuery()` and `executeUpdate()` with example. [2]

Question 8:

(a) Write two features of a good interface. [1]

(b) How is e-business beneficial to shopkeepers? Write two points. [2]

(c) Shraddha works for a hospital. She wishes to create controls on a form for the following functions. Suggest controls to her. Choose appropriate controls from Text box, Label, Radio button, Check box, List box, Combo box, Command button. [2]

SNo	Control used to :	Control
1	Enter Patient name	
2	Choose Gender (out of Male/Female)	
3	Choose Department from a list of available departments	
4	Submit Form	



“Good grades are life’s way of saying that there is a bright future in store for you.”