

CLASS XII

SAMPLE PAPER

INFORMATICS PRACTICES

Time Allowed: 3 Hours

Maximum Marks: 70

General Instruction-

1. This Question paper is divided into 3 sections.
 2. Section-A consists 30 Marks.
 3. Section-B and Section-C are of 20 marks each.
 4. Answer the questions after carefully reading the text.
-

SECTION-A

1. (a) Which protocol is used for transferring the files to and from a remote host? 1
(b) What does the last three byte of MAC address indicate? 1
(c) By which other name the Ring topology is called? 1
(d) Define snooping. 1
(e) What do you mean by topology? Write the names of two types of topologies. 2
(f) Define the following: Bridge and a Router. 2
(g) Define the followings: 2
(i) GNU (ii) Open Office
2. (a) By default a combo box does not offer editing features. How would you make a combobox editable? 1
(b) Why is it necessary to put break statement after every case in a switch statement? 1
(c) What are the values we can give with type attribute in tag? 1
(d) Which tag is used to create tables in HTML? 1
(e) How many times the following loops be executed? 2

Loop-1	Loop-2
int a =5,b=25;	int a=5,b=25;
while (a>=b)	while(a<=b)
{	{
a=a+10;	a=a+10;
}	}
- (f) Write a function in java that accepts two numbers as parameters and return the greater number. 2
(g) Name any four control types supported by HTML forms. 2
3. (a) if a database "Employee" exists, which MySql command helps you to start working in that Database ? 1

- (b) Sahil created a table in MySQL. Later on he found that there should have been another column in the table. Which command should he use to add column to the table? 1
- (c) Pooja, a student of class XI create a table "Book". Price is a column of this table. To find the details of books whose prices have not been entered she wrote the following query:
Select * from book where price = Null; 1
 Help Pooja to run the query by removing the errors from the query and rewriting it.
- (d) Which command in MySQL makes the changes in Tables permanent? 1
- (e) In Students table, out of rollno, name, address which column can be set as primary key and why? 2
- (f) Write two DDL and DML commands used in MySQL? 2
- (g) A table "Stock" in a database has 5 columns and contains 17 records. What is the degree and cardinality of this table? 2

SECTION-B

4. (a) Define Inheritance with reference to object oriented programming. 1
- (b) What will be content of jTextField1 after executing the following code. 1
- ```
int num=10;
num=num-2;
if(num>8)
jtextfield1.setText(integer.toString(num+10));
else
jtextfield1.setText(integer.toString(num-10));
```
- (c) What will be contents of jTextField1 after executing the following statement. 1
- ```
jTextArea1.setText("Object\nOriented\tProgramming");
```
- (d) Rewrite the following program code using switch statement. 2
- ```
If(d==1)
Day="Monday";
Else if(d==2)
Day="Tuesday";
Else if(d==3)
Day="Wednesday";
Else
Day="-";
```
- (e) The following code has some error(s). Rewrite the correct code underlining all the corrections made. 2
- ```
int i=2; j=5;
while j>i
{
jtextfield1.getText("j is greater");
j--;
++i;
}
JOptionPane.showMessageDialog("Hello");
```
- (f) What will be the contents of jTextField1 and jTextField2 after executing the following code. 1

```
String s="ROHIT PUBLICATIONS";
jTextField1.setText(s.length()+" ");
jTextField2.setText(s.toLowerCase());
```

- (g) Glamour Garments has developed a GUI application for their company as details given below:
The company accepts payments in 3 modes-cheque,cash and credit cards. The discount given as per mode of payment is as follows.

Mode of Payment	Discount
Cash	8%
Cheque	7%
Credit Cards	Nil

If the Bill Amount is more than 15000 then the customer gets an additional discount of 10% on Bill Amount.

- (i) Write the code to make the textfields for Discount(named txtDisc) and Net Amount (named textNetAmt) uneditable. 2
- (ii) Write code to do the following:
- (a) When "Calculate Discount" button is clicked the discount should be calculated as per the given criteria and it should be displayed in the discount textfield."Calculate Net Amount" button(named btnCalcNetAmt) should also be enabled. 3
- (b) When "Calculate Net Amount" button is clicked the net amount should be calculated and it should be displayed in the net amount textfield. 2
5. (a) What is constraint? Name any two constraints in MySql? 2
- (b) Write the output of the following SQL queries: 2
- Select Round(6.5675,2);
 - Select Trauncate(5.3456,1);
 - Select dayofmonth("2009-08-25");
 - Select Mid("Class 12",2,3);
- (c) Consider the table TEACHER given below. Write commands in SQL for(i) to (iv) and output for (v) to (vii)

Teacher

ID	Name	Department	Hiredate	Category	Gender	Salary
1	Tanya Nanda	SSt	1994-03-17	PGT	F	25000
2	Saurabh Sharma	Art	1990-02-12	PRT	M	20000
3	Nandita Arora	English	1980-05-16	PGT	F	30000
4	James jacob	English	1989-10-16	TGT	M	25000
5	Jaspreet Kaur	Hindi	1990-08-01	PRT	F	22000
6	Disha Sehgal	Maths	1980-03-17	PRT	F	21000
7	Siddarth Kapoor	Science	1994-09-02	TGT	M	27000
8	Sonali Mukherjee	Maths	1980-11-17	TGT	F	24500

- (i) To display all information about teachers of PGT category. 1
- (ii) To list the names of female teachers of Hindi department. 1

- (iii) To list names, departments and date of hiring of all the teachers in ascending order of date of joining. 1
- (iv) To count the number of teachers in English department. 1
- (v) Select Max(hiredate) from teacher. 0.5
- (vi) Select Distinct(category) from teacher. 0.5
- (vii) Select count(*) from teacher where category="PGT" 0.5
- (viii) Select AVG(salary) from teacher group by gender 0.5

SECTION-C

6. (a) Write an SQL query to create the table "Menu" with following structure: 2

Field	Type	Constraint
ItemCode	Varchar(5)	Primary Key
ItemName	Varchar(20)	
Category	Varchar(20)	
Price	Decimal(5,2)	

- (b) In a database there are two tables 'Customer' and 'Bill' as shown below:

Customer

Customer ID	Customer Name	Cust Address	Cust Phone
1	Akhilesh Narang	C4,Janak Puri,Delhi	9811078987
2	Purnima William	B1,Ashok Vihar,Delhi	9811078988
3	Sumedha Madan	33,South Ext.,Delhi	9811078989

Bill

Bill No.	Cust Id	Bill Amt
1	2	12000
2	1	15000
3	2	13000
4	3	13000
5	2	14000

- (i) How many rows and how many column will be there in the Certisian product of these two tables? 1
- (ii) Which Column in the 'Bill' tables is the foreign key? 1
- (c) Consider the tables Handset and Customer given below:

Handset

Set Code	Set Name	Touch Screen	Phone Cost
N1	Nokia 2G	N	5000
N2	Nokia 3G	Y	8000
B1	BlackBerry	N	14000

Customer

Cust No	Set No	Cust Address
---------	--------	--------------

1	N2	Delhi
2	B1	Mumbai
3	N2	Mumbai
4	N1	Kolkatta
5	B1	Delhi

With reference to these tables, Write commands in SQL for (i) and (ii) and output for (iii) below:

- (i) Display the cust no, cust address and corresponding set name for each customer. 2
- (ii) Display the customer Details for each customer who uses a Nokia handset. 2
- (iii) Select set no, set name from handsets, customer where set no=set code and cust address='Delhi'; 2

7. (a) How does e-business improve customer satisfaction- Write one point. 1
- (b) How has our society benefited from e-governance ? Write 2 points 2
- (c) Vijayan works for the Customer Department. He wishes to create controls on a form for the following functions. Choose appropriate controls from Text Box, Label, Option Button, Check box, List Box, Combo Box, Command button and write in the third column. 2

S.No.	Control Used to	Control
1	Enter Last Name	
2	Enter Gender	
3	Choose City from a list of cities	
4	Submit Form	