

SAMPLE PAPER
INFORMATICS PRACTICES
CLASS - XII

General Instructions:

- Please check that this question paper contains ===== printed pages.
- Please check that this question papers contains 7 questions.
- **Please write down the Serial Number of the question before attempting it.**
- First 15 minutes time has been allotted to read this question paper. The students will read the question paper only and will not write any answer on the answer-book during first 15 minutes.
- **All questions are compulsory.**
- Answer the questions after carefully reading the text.

- 1 (a) Explain how java codes are compiled and run. 2
- (b) What will be the output of the following code segments: 2
- ```
int a=5, b=10, c=9, d=8;
System.out.println("" + ((a++)+(++c)-(--b)+(d--));
System.out.println("" + ((a>b)?(c>d)?(++d):35:(--b)));
```
- (c) Convert the following code segment using switch-case construct: 2
- ```
int num = Integer.parseInt(txtNum.getText());
if(num>=2 && num<=5)
txtRes.setText("Prime");
else if(num==6 || num==8 || num==10)
txtRes.setText("Even");
else
txtRes.setText("Not Valid");
```
- (d) Predict the output of the following java construct: 2
- ```
int m=5;
int prod=1;
int i=1;
while(i<=5)
{
prod=prod+prod*(m%2);
```

```
--m;
++i;
}
System.out.println(""+prod);
```

(e) What is the difference between an ordinary method and a Constructor? 2

2 (a) Differentiate between DDL and DML commands. 2

(b) Differentiate between TRUNCATE TABLE and DROP TABLE in SQL. 2

(c) What does isolation property imply? 2

(d) Explain atomicity property of transaction. 2

(e) Briefly explain the concept of ResultSet method. Also discuss the next() and first() methods. 2

3 (a) Mr. Lal is designing the GUI for managing customer details. The GUI designed in Netbeans is as follows: 2+2+1



Answer the following:

i) Mr. Lal wants that when the form is run, it should display the details of first customer in the form from the customer database. Which event he should handle to write the java code to do the above? And write the code for performing the task.

ii) Write java code to navigate current customer record to next customer record or from to navigate from current customer record to previous customer record from the table CUST(CID, CNAME, CADDR) in the database CUSTOMER and display the id and name in the textfield , and address in the textarea.

iii) Write java code to exit from the application, when the exitBTN is clicked

(b) What is Dialog Box? 2

(c) Write minimum four features of XML. 2

(d) What do you understand by option VLINK used with <BODY> tag? 2

(e) The following code has some error(s). Rewrite the correct code underlining all the correction made: 2

```
int num1=Integer.parseInt (jTextField1.getText ());
String num2=Integer.parseInt (jTextField2.getText ());
int sum=num1+num2;
jLabel1.setText (sum);
```

(f) Write HTML code for the following page for generating Form:

2

The image shows a web form with three input fields. The first field is labeled 'Customer Id.' and is a text input. The second field is labeled 'Customer Name:' and is a text input. The third field is labeled 'Customer Membership:' and is a dropdown menu. The dropdown menu is currently open, showing four options: 'Platinum', 'Gold', 'Silver', and 'Bronze'. The 'Platinum' option is highlighted in blue.

4 (a) What will be the output of the following program code when the user will press JButton:

2

```
public class class1
{
 int a;
 public class1(int p)
 {
 a=p;
 }
 void assign(int no)
 {
 a=no;
 }
 int disp()
 {
 return a;
 }
}
public class class2 extends class1
{
 int b;
 public class2(int p)
 {
 super(p);
 b=p+5;
 }
 int disp()
 {
 System.out.println(super.disp());
 return b;
 }
}
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
 class2 c2 = new class2(15);
 System.out.println(" " + c2.disp());
}
```

- (b) Give the value of x after executing following Java code. 2
- ```
int a=10;
int b=12;
int x=5; int y=6;
while (a<=b)
{ if (a%2= =0)
    x=x+y;
  else
    x=x-y;
  a=a+1;
}
```
- (c) Find the errors from the following code segment and rewrite the corrected code underlining the correction made. 2
- ```
int a,b;
c=a+b;
for(j<=5;j++)
{
 Display c;
 c=c+1
}
```
- (d) Rewrite the following code using **do-while** loop. 2
- ```
For(int x=0;x<10;x++)
{
System.out.PrintIn(x);
}
```
- (e) Explain abstract class. 2

Answer the question based on the table given below:

TABLE : HOSPITAL

| No. | Name | Age | Department | DateFadm | Charges | Sex |
|-----|---------|-----|------------------|----------|---------|-----|
| 1 | Arpit | 62 | Surgery | 21/01/98 | 300 | M |
| 2 | Zareena | 22 | ENT | 12/12/97 | 250 | F |
| 3 | Kareem | 32 | Orthopedic | 19/02/98 | 200 | M |
| 4 | Arun | 12 | Surgery | 11/01/98 | 300 | M |
| 5 | Zubin | 30 | ENT | 12/01/98 | 250 | M |
| 6 | Ketaki | 16 | ENT | 24/02/98 | 250 | F |
| 7 | Ankita | 29 | Cardiology | 20/02/98 | 800 | F |
| 8 | Zareen | 45 | Gynecology | 22/02/98 | 300 | F |
| 9 | Kush | 19 | Cardiology | 13/01/98 | 800 | M |
| 10 | Shiba | 23 | Nuclear Medicine | 21/02/98 | 400 | F |

- (a) To list the names all the patients admitted after 15/01/98. 2
- (b) To list the names of female patients who are in ENT department. 2
- (c) To list names of all patients with their date of admission in ascending order. 2
- (d) To display Patient's Name, Charges, Age for only female patients. 2
- Find Out the Output of Following SQL Command:-
- (i) Select COUNT(DISTINCT charges) from HOSPITAL; 1
- (ii) Select MIN(Age) from HOSPITAL where Sex='F'; 1

6 (a)

Write SQL commands for the statements (i) to (vi) and give outputs for SQL queries (vii) to (x) on the basis of the table Shop.

Table: Shop

| No. | Shop_name | Sale | Area | Cust_percent | Rating | City |
|-----|---------------|--------|-------|--------------|--------|------------|
| 1 | West side | 250000 | West | 68.6 | C | Delhi |
| 2 | Pantaloons | 500000 | South | 81.8 | A | Chennai |
| 3 | Sir's & Her's | 300000 | North | 79.8 | B | Amritsar |
| 4 | Sports king | 380000 | North | 88.0 | B | Baroda |
| 5 | Biswas stores | 456000 | East | 92.0 | A | Delhi |
| 6 | Big Bazar | 290000 | South | 66.7 | A | Kolkota |
| 7 | Levis' | 230000 | East | 50.0 | C | Jamshedpur |
| 8 | Peter England | 428000 | South | 90.0 | A | Chennai |

- (i) To display the name of all shops which are in Area South and sale more than average sales.
- (ii) To display shop name and Customer Percentage of all the shops having cust_percentage is more than 77 and less than 90.
- (iii) To display list of all the shops with sales less than 300000, in ascending order of shop name.
- (iv) To display the city along with sum of sale for each city.
- (v) To display all the columns where rating is A in the descending order of area;
- (vi) To display all the Area where more than one shop is there.
- (vii) Select min(sale) from SHOP where Sale>300000 Group by Sales;
- (viii) Select Count(Distinct City) from Shop;
- (ix) Select Avg(Sale) from Shop where Area='South';
- (x) Select Avg(Cust_percentage), sum(sale) from shop where Rating='A';

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- (b) **Name the clauses for the following:** 2
- i. To display the record in specified range.
 - ii. Eliminate the redundant data from the query result.
 - iii. Deletes the rows from table_name and returns the number of rows deleted
 - iv. To find the rows that do not match in the list

- 7 (a) Design an application that obtains three values in three text fields from user: Principal, Rate of Interest, Time. It should then compute and display Simple Interest when Calculate button is clicked. Controls names and Interface are given below 3

The screenshot shows a Java Swing window titled "SimpleInterest". The window has a standard Windows-style title bar with minimize, maximize, and close buttons. The main content area is light gray and contains the following elements:

- A title "SimpleInterest" centered at the top.
- Four text input fields arranged vertically, each with a label to its left:
 - "Principal" with the value "4500"
 - "Rate of Interest" with the value "10"
 - "Time" with the value "5"
 - "Simple Interest" with the value "2250.0"
- A "Calculate" button centered below the "Time" field and above the "Simple Interest" field.

- (b) Write a java code to calculate and print the factorial of an integer stored in variable **num**. 2