

CLASS XII

SAMPLE PAPER-065

INFORMATICS PRACTICES

General Instructions :

- (i) All the questions are compulsory.
- (ii) Programming language : Java.

- Q-1** (a) A School with 20 stand alone computers is considering networking them together and adding a server. State 2 advantages of doing this. [1]
- (b) Distinguish between LAN & WAN. [1]
- (c) What is the use of router in a Network? [1]
- (d) Differentiate between HR and BR tags. [1]
- (e) Define "Domain Name Resolution". [2]
- (f) Name Two Threats to security in a Network. What is the role of Firewall in Network Security? [2]
- (g) Write one Advantage and one Disadvantage of Open-Source Software & Proprietary Software. [2]

- Q-2**(a) Write the value of Variable "c" after execution of the following code :

```
int d;  
int c;  
D =7;  
C =(5*++d)%3;
```

[1]

- (b) What is the difference between jTextField and jPasswordField components ? [1]
- (c) In a Switch statement, what is the purpose of "Default" section ? [1]
- (d) After typing the HTML Code using a Text Editor, how do you see how it would look as a Web Page? [1]
- (e) Write Java Code to assign the value 500 to variable X. Increase the value of x by 50 and store it in Variable Y. [2]
- (f) Write the output that will be generated by the code given below:

```
int i;  
I =7;  
Int r;  
R=8;  
while (I<=10)  
{  
    System.out.println(r*1);  
    I = i+2;  
}
```

[2]

- (g) "With XML there are no Predefined Tags" – Explain in brief with the help of an Example. [2]

- Q-3(a)** Name any societal effects of e-Commerce. [1]
(b) Is Null value the same as 0 ? Write the reason for your Answer. [1]
(c) Write the Update Command to increase the Commission (Column name : COMM) by 500Write the Update Command to increase the Commission (Column name : COMM) by 500 of all the salesman who have achieved Sales (Column Name :Sales) more than 2,00,000.The Table's name is COMPANY. [1]
(d) While using SQL pattern matching.What is the difference between “_” and “%” wildcard Symbols ? [1]
(e) How is Primary key constraint different from Unique Key Constraint ? [2]
(f) Write one similarity and one difference between CHAR and Varchar Data Types. [2]
(g) What is a Transaction ?Which Command is used to make changes done by a Transaction permanent on a Database ? [2]

Q-4(a) The Following code has some errors. Rewrite the correct code underlining all the corrections made. [2]

```
int marks, temperature;  
marks = jTextField1.getText();  
temperature = Integer.parseInt(jTextField2.getText());  
if (marks < 80) and (temperature >=40)  
{  
    System.out.println("Not Good");  
}  
else;  
{  
    System.out.println("OK");  
}
```

(b) How many times will be the following WHILE Loop execute ?

```
int y =7, sum = 0;  
while (y<= 15)  
{  
    Sum = sum +y;  
    Y = y+2;  
}
```

[2]

(c) Rewrite the following program code using IF ELSE IF instead of SWITCH Statement :

```
String tour;  
int cl = Integer.parseInt(jTextField1.getText());  
Switch (cl)  
{  
    case 8: tour = "\n You are going to camp Ramgarh";  
        Break;  
    case 9 : tour = "\n You are going to Manali, Rohtang  
Pass"; break;  
    case 10 :tour = "\n You are going to Chail";  
        Break ;
```

```
default : tour = "No School tour for you this time";
```

```
}
```

[2]

(d) Write the values of sum and x after execution of the following code:

```
int sum,x;
Sum =7;
x=5;
sum = sum +(x++);
```

[2]

(e) What will be the contents of jTextField1 and jTextField2 after execution of the following code :

```
String s = "Best";
jTextField1.setText(s.length()+" ");
jTextField2.setText(s.toUpperCase());
```

[2]

(f) The Students of "Shiksha Vidyalaya" work for different extra curricular activities like 'Community Outreach Programme', 'Swachh Bharat Abhiyan' and 'Traffic Safety Club'. The Programmer at the school has developed a GUI application as shown below :

Shiksha Vidyalaya

Enter Roll Number

Enter Name

Community Outreach Programme

Swachh Bharat Abhiyan

Traffic Safety Club

Total Score

- A student can participate in more than one activities.
- Each student gets 10 points for each activity

namely "Community Outreach Programme",

"Swachh Bharat Abhiyan" and "Traffic Safety Club".

The screen design is given below :

Help the programmer to write the code for the following:

- (i) When "Calculate Total Score" button is clicked ,the points for each activity (that is selected) Should be displayed in the text field in front of that activity's checkbox and the Total Score should Be displayed in the appropriate Text field.
- (ii) When clear button is clicked, all the Text fields and Check Boxes should be cleared.
- (iii) When Stop button is clicked, the application should close.

[5]

Q-5(a) Distinguish between Single Row and Aggregate Functions of MySQL. Write one example of each. [2]

(b) Consider the following table named "SOFTDRINK". Write commands of SQL for (i) to (iv) and output for (v) to (vii). [7]

- I. To display name and drink codes of those drinks that have more than 120 calories.
- II. To display drink codes, name and calories of all drinks in descending order of calories.
- III. To display name and prices of drinks that have price in the range 12 to 18 (both 12 and 18 included).
- IV. Increase the price of all drinks in the given table by 10%.
- V. SELECT COUNT(DISTINCT(PRICE)) FROM SOFTDRINK;
- VI. SELECT MAX(CALORIES) FROM SOFTDRINK;
- VII. SELECT DNAME FROM SOFTDRINK WHERE DNAME LIKE "%MANGO%";

(c) What is the cardinality and degree of the 'SOFTDRINK' table? [1]

Q-6.(a) Write MySQL command to create the table 'LIBRARY' with given constraints. [2]

- Book_ID (Primary key)
- Book_name (should not be null)
- Price (should be greater than 0)

(b) In a database two tables given below:

School (school_id, school_nm, phone)

Teachers (teacher_id, nm, school_id, qualification)

Write the SQL queries for the following: [2]

- To display schoolname, phone, teacher name and qualification of teachers.
- To display the name of all the teacher working in the school 'SBPS';

(c) What will be the result of following expression if [1]

- (i) age=25
 - (ii) age=65
 - (iii) age=85?
- age > 65 ? 350: 100.

(d) Write a statement to convert "1002" into int. [1]

(e) Which of the following are Open Standard and which are Proprietary standard? [2]

- a. FLAC b. XLS c. BMP
- d. PNG e. JPEG e. WMA

(f) What is wrong with the following code? [1]

```
public class Tomato extends Fruits, Vegetables
```

(g) Name the two jump statements of Java. [1]

Q-7(a) What do you understand by the following in a relational database: [2]

- i) Candidate Key
- ii) View

(b) Consider the following tables BOOKINGS and PACKAGE and write SQL commands for (i) to (iv) and outputs for (v) and (vi). [6]

BOOKINGS

Pcode	Tourist Name	Agency	No_of_persons	Tdate
P5	Raghavendra	Voyager	2	23-dec-10
P2	Hardep	Pristine	4	12-jan-11
P5	Shazia	Go Now	6	25-dec-10
P6	Lizza	Pristine	2	28-dec-10
P3	Diana	Voyager	4	19-mar-11
P6	Harshal	Go Now	4	21-mar-11
P1	Rajiv Khanna	Travels	12	12-apr-11
P1	Veena Sethi	Voyager	5	01-apr-11

PACKAGE

Pcode	Pname	Per_Person_amt
P1	Kerala	20000
P2	Malaysia	35000
P3	Goa	56525
P4	Manali	15000
P5	Simla	12000
P6	Singapore	75450

- I. Display the name of all the tourists, their travel dates, names of the places they are traveling to and the total amount to be paid by each tourist.
- II. Display the name of the agencies from the BOOKING table.
- III. Arrange the contents of the table BOOKING in ascending order of travel date.
- IV. Display the maximum no_of_persons traveling of each travel agency.
- V. SELECT Tourist Name, Agency, Pname from BOOKINGS, PACKAGE where BOOKINGS.Pcode = PACKAGES.Pcode and Per_person_amt > 3500;
- VI. SELECT Agency, sum(No_of_persons) from BOOKING group by agency having sum(No_of_persons) > 10;
- (c) Rajen wants to list all the tables in his database namely RESULT. What command should he write at sql prompt to get the result ? [1]
- (d) What will be the result of the following code ? [1]
 select CONCATENATE(RIGHT('MAHAN',4),MID('MANAN',3,1));