

# CLASS XII

## SAMPLE PAPER

### INFORMATICS PRACTICES

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- Q1 (a) Which protocol is used for the transfer of hypertext document on the Internet. **(1 Mark)** (b) Which transmission medium should be used to transfer data across two continents at very high speed? **(1 Mark)**
- (c) Two doctors in the same room have connected their palm tops using Bluetooth for working on a group presentation. Out of the following , what kind of network they have formed. **(1 Mark)** LAN,WAN,MAN,PAN
- (d) Explain the difference between freeware and free software. **(1 Mark)**
- (e) Distinguish between Open Source Software and Proprietary Software with reference to customizability of the software. **(2 Marks)**
- (f) Name any four Indian Scripts included in Unicode. **(2 Marks)**
- (g) Pooja says that the following numbers indicate an address :  
208.77.188.166  
What is the above address called ? to which object /device is it assigned. **(2 Marks)**

- Q2. (a) Ms. Shrishti has developed a Java application through which the students of her school can view their marks by entering their admission number . The marks are displayed in various text fields. What should she do that the students are able to view but not change their marks in text fields. **(1 Mark)**

(b)What will be the contents of JTextArea1after executing the following code(Assuming that the JTextArea1 had no contents before executing this code) ? **( 1 mark)**

```
for(int X = 1; X <= 5; X ++)  
{  
    JTextArea1.setText( JTextArea1.getText() + " " +Integer.toString( X * X ));  
}
```

- (b) Rewrite the following program code using for loop: **( 2 marks)**

```
int i =1, sum = 0;  
while ( i < 10)  
{  
    sum += i;  
    i += 2;  
}
```

- (c) What will be the value of x and y after execution of the following code: **(2 Marks)**

```
int x,y = 0;  
for( x = 1; x <= 5; ++x)
```

```
y = x ++;
```

```
--y;
```

(f) Write code in java that takes two numbers from text field from user and display which one is greater. **(1 Mark)**

(g) What will be the contents of jTextField1 and jTextField2 after executing the following code : **(2 Marks)**

```
String s = "HMS Micro Systems";
jTextField1.setText(s.length() + " ");
jTextField2.setText(s.toLowerCase());
```

(h) Rewrite the following program code using for loop: **(1 Mark)**

```
int i =1, sum = 0;
while ( i < 10)
{
    sum += i;
    i += 2;
}
```

Q3.

(a) Which command is used to see the names of the tables present in a database. **(1 Mark)**

(b) While creating a table 'Customer' Megha forgot to set the primary key for the table. Give the statement which she should write now to set the column 'CustID' as the primary key of the table? **(1 Mark)**

(c) Arshi wants to see the different departments available in a table namely "SCHOOL" . What Query she should write ? **(1 Mark)**

(d) How is a cross join different from a natural join ? **(1 Mark)**

(e) What is difference between ON and USING join – clauses? **(1 Mark)**

(f) What is the following query doing ? **(1 Mark)**

```
Alter Table Persons
Drop Primary Key;
```

(g) Akshita has created a table namely Trial that has 7 columns and 3 records . after testing , Akshita added three more columns, fourteen more records but deleted the 3 records. What is the degree and cardinality of the table now ? **(1 Mark)**

(h) The Table Qsales has following information in it. i.e.

Quarter	Sales
1	15000
2	NULL
3	5000
4	4000

Based on this, find the output of the following : **(2 Marks)**

- (i) Select AVG(Sales ) from Qsales;
- (ii) Select Concat('Quarter',Quarter), Sales from Qsales;

(i) How a Foreign key different from a Primary Key. **(1 Mark)**

Q4. (a) What will be displayed in jTextField1, jTextField2 and jTextField3 after the execution of following code ? **(2 Marks)**

```
int first, second =4, third =5;
first = ++second + third --;
jTextField1.setText( Integer.toString(first));
jTextField2.setText( Integer.toString(second));
jTextField3.setText( Integer.toString(third));
```

(b) A phone number , consisting of 10 digits, is stored in a string variable strPhone. Now it is required to store this phone number in a Long type variable lngPhone. Write a java statement to do this. **(1 Mark)**

(c) What will be the contents of Textfield T1 after execution of following code. **(1 Mark)**

```
T1.setText("Informatics".substring(3,7));
```

(d) rewrite the following program code using a for loop: **(2 Marks)**

```
int i =6;
int num =i;
while(i>=1)
{
    num--;
    System.out.println(num);
    i--;
}
```

(e) The following code has some error(s). rewrite the corrected code underlining the corrections made: **(2 Marks)**

```
double d = nameTF.getText( );
String age = ageTF.getText( );
double marks = Double.parseDouble(marksTF.getText( ));
```

(f) What will be the contents of jTextField1 and jTextField2 after executing the following code: **(2 Marks)**

```
jTextField1.setText(Math.round(2.3)+10+"");
jTextField2.setText(""+Math.pow(2,3)+10);
```

(g) Read the following case study carefully and answer the questions that follows :  
 ABN Shipment Corporation imposes charges to customer for different products. The cost for wholesaler and retailer unit wise is as follows :



For Units	Price for Wholesalers	Price for Retailers
1-15	Rs.50/-	Rs.60/-
16-20	Rs.45/-	Rs.55/-
21-30	Rs.40/-	Rs.50/-
31-50	Rs.35/-	Rs.45/-
>50	Rs.30/-	Rs.50/-

Special customer are given a discount of 10%.

1. Write code to disable the text field for discount and total cost . (1)
2. Write code to calculate total cost as per the given criterion. (3)
3. Write code to clear all the textfields, uncheck the special customer check box and Wholesaler should be set as the default choice. (1)

- Q5. (a) What is the purpose of DROP TABLE command in MySQL. How is it different from DELETE command. (1 Mark)
- (b) What is the difference between Natural join and cross join? (1 Mark)
- (c) Write MySQL commands for (i) to (iv) and write the outputs for (v) on the basis of table HOSPITAL. (6 Marks)

**Table: Hospital**

N o	Name	Age	Department	Dateofad m	Charge s	Gende r
1	Himanshu	62	Surgery	2011-10-12	300	M
2	Jaswant	22	ENT	2011-10-15	250	M
3	Sonali	32	Orthopedic	2011-10-16	200	F
4	Neeraj	12	Surgery	2011-10-	300	M

				18		
5	Ayan	30	ENT	2011-10-22	250	M
6	Sudhanshu	16	ENT	2011-10-25	250	M
7	Lovleen	29	Cardiology	2011-10-28	800	M
8	Snehal	45	Nuclear Medicine	2011-10-29	300	F
9	Tripti	19	Cardiology	2011-11-1	800	F
10	Nehal	23	Surgery	2011-11-2	400	F

- (i) To list the names of female patients who are in ENT department.  
(ii) To list the names of patients with their date of admission in the reverse order of their admission.  
(iii) To display patient's name, Charges, Age for only female patients.  
(iv) To count the number of patients with age < 30.  
(v) (a) Select COUNT( Distinct Charges) from Hospital.  
(b) Select MIN(age) from Hospital where gender ='M';  
(c) Select SUM ( charges) from Hospital where department ="ENT";  
(d) Select SUM ( charges) from Hospital where dateofadm <= '2011-11-01';

(d) Given two tables as shown below

: (2 Marks)

Employee

Empno(PK)	Salary
100	200.85
200	129.54
300	98.17

Id	Employee_no(FK)
51	100
52	100
53	200
54	300

Employer

Write commands to create them

primary key Should be cascaded to its foreign key.

with constraints . Delete on a

Q6. (a) In a VIS there are two tables with the instances given below:( 1x3=3)

**Table : STUDENTS**

ADMNO	NAME	CLASS	SEC	RNO	ADDRESS	PHON
1211	MEENA	12A	D	4	A-26	324567
1212	VANI	10A	D	1	B-25	545678
1213	MEENA	12B	A	1	NULL	NULL
1214	KARISH	10B	B	3	AB-234	456789
1215	SURAJ	11A	C	2	ZW12	434567

**Table : SPORTS**

ADMNO	GAME	COACHNAME	GRADE
1215	CRICKET	MR. RAVI	A
1213	VOLLEYBALL	MR. AMANDEEP	B
1211	VOLLEYBALL	MR. GOVARDHAN	A
1212	BASKET BALL	MR TEWARI	B

Write SQL commands for the following:

- To display name and game of those students whose address is available in **STUDENTS** table.
- To display Name and Class from STUDENTS table and corresponding Grade from SPORTS table.
- To display Names of the students who are studying in class 12 and their corresponding Coach names from STUDENTS and SPORTS table.

(b) In a database School there are two tables Member and Division shown below. (2Marks)

Table: MEMBER

Empld	Name	Pay	Divno
1001	Shankhya	34000	10
1002	Ridhima	32000	10
1003	Sunish	45000	20

Table: DIVISION

Divno	Divname	Location
10	Media	TF02
20	Dance	FF02
30	Production	SF01

- Identify the Foreign Key in the table Member.(1)
- What output you will get, when an equi-join query is executed to get the Name from Member table and corresponding Divname from Division table.(1)

(c) What will be the output of the following SQL queries: (2)

- SELECT 4+2\*3;
  - SELECT 4+2\*3 FROM STUDENT;
- (Assume that table **STUDENT** has four records)

(d) Rakesh wrongly dropped a table named as **STUDENT**. Can he recover this table. Justify your answer.(1)

(e) Which method is used to remove leading and trailing spaces from the string?(1)

(f) Write SQL command to display the position of “My” in the string “Enjoying MySQL”.  
(1)

Q7. (a) What is impact of e-Learning sites on students’ learning process?(1)

(b) How does e-Business improve customer satisfaction? Write any two points.(2)

(c) Sanjeev is working as manager in OCM VXL Ltd. He wants to create a form with following functions. Help him in choosing appropriate controls from TextField, Label, RadioButton, CheckBox, List, ComboBox, TextArea and write in the third column: (2)

Sno	Control Used to	Control
1	Display the stock of item	
2	Enter an input about whether the item is Damaged or Not.	
3	Display the scrollable multi-line description of item	
4	Clear the form detail	



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