

# CLASS XII

## SAMPLE PAPER

### INFORMATICS PRACTICES

Time-3hrs

Max<sup>m</sup> Marks-70

**General Instructions :**

- (i) All questions are compulsory.
- (ii) Answer the questions after carefully reading the text.

- Q1
- (i) Tara Industries has registered office in Delhi and head office in Mumbai and sales office in new Delhi. They want to connect all offices. Suggest the type of network and the type of communication medium the should use for
    - (a) Connecting Registered office with Head office.
    - (b) Connecting Registered office with Sales office.
  - (ii) Write any one advantage and one disadvantage of Ring topology and Star topology? 1
  - (iii) How MAC address is different from IP address? Give example. 1
  - (iv) Name two threats to a Network? 1
  - (v) Expand the term (a) GSM and (b) FLOSS. 1
  - (vi) Write any one advantage and one disadvantage of Open Source Software over Proprietary Software? 2
  - (vii) Why Switch is known as intelligent HUB? 1
  - (viii) Name the device used to amplify signal over a long distance? 1
- Q2
- (a) How Entry controlled loop is different from Exit Controlled loop? Give example. 2
  - (b) Name the method used to display password which is entered in a password field pwd? 1
  - (c) What will be an output of the following code: 1  
String str="1020";  
System.out.print(" "+str.length()+Integer.parseInt(str));
  - (d) What will be an output of the code given below: 1  
int x=20;  
int y=++x%3;  
System.out.println(" "+x+" "+y);
  - (e) Name the tag used in HTML for: 2
    - (a) Inserting line break.

- (b) Inserting image in web page.
- (f) How HTML is different from XML? 1
- (g) Write the sample code to store the index value of item which is selected in a listbox list1 in a variable idx of datatype int. 1
- (h) How 'A ' is different from "A"? 1
- (i) Describe any two methods of ResultSet Class? 1
- (j) Name the method used to disable any radio button? 1
- Q3 (i) Mr Samual Created two tables T1 and T2. He already specified Primary key and foreign key. When he wants to delete any record from T1 he gets an error message. Justify the reason. 1
- (ii) Write statement for the output return from the following query: 2
- (a) SELECT ITEMNAME,PRICE FROM ITEM WHERE ITEMNAME LIKE ' \_\_d';
- (b) SELECT ITEMNAME,PRICE FROM ITEM WHERE ITEMNAME LIKE 'S%';
- (iii) How Alternate Key is different from Candidate Key? 1
- (iv) Name the command used for the following: 2
- (a) To end the transaction after saving all the changes.
- (b) To remove all the changes made during transaction.
- (v) Mr Ramchandran created a table School. When he executes the command he gets 8 and 7 as as output. Justify the reason? 2
- (a) SELECT COUNT(\*) FROM SCHOOL;
- (b) SELECT COUNT(PNAME) FROM SCHOOL;
- (vi) Write command in MySQL to add a column COMM of data type float(9,2) in a tables SALES. 2
- Q4 (a) Define the following terms: 2
- (i) Class (ii) Interface (iii) Method (iv) Object
- (b) How abstract member is different from instance members in a class? 1
- (c) Rewrite the following code using switch case. 2
- ```
int mno=Integer.parseInt(textfield1.getText());
if(mno == 1)
    System.out.println("JANUARY");
else if(mno == 2)
    System.out.println("FEBRUARY");
else if(mno == 3)
    System.out.println("MARCH");
```

```
else if(mno == 4)
    System.out.println("APRIL");
```

```
else
    System.out.println("INVALID MONTH NUMBER");
```

- (d) Write sample code to check whether item at 3<sup>rd</sup> position in a combobox is selected or not? 2
- (e) Given below the form for discount calculator:

| Mode of payment | Rate of Discount |
|-----------------|------------------|
| Cash            | 10%              |
| Debit card      | 7%               |
| Credit card     | 5%               |

Based upon the form given above write code for the following:

- (i) Write code for CALCULATE button to calculate discount, gross, service tax and Net amount as per discount rate provided above. 2
- (ii) Write code for clear button to clear the contents of all the textfield. 1
- (f) What will be the output of the following code when combined with suitable declarations and run? 2  

```
StringBuffer city = new StringBuffer("Delhi");
StringBuffer string = new StringBuffer( );
```

```
String.append(new String(city));
String.insert(0,"INDIA GATE");
System.out.println(string);
```

(g) What do you mean by JDBC? 1

Q5 (a) Write output of the following queries: 2

- (i) SELECT SUBSTR("GLOBALIZATION",4,5);
- (ii) SELECT LENGTH(CONCAT("NORMAL","WATER"));
- (iii) SELECT MOD(232,5);
- (iv) SELECT ROUND(763.395,2)+10;

(b) A table SPORTS is created as per specification given below:

| Column name | Constraint            |
|-------------|-----------------------|
| Scode       | Primary key           |
| Sname       | Default "Virat Kohli" |
| Match fees  |                       |
| Match date  | Date                  |

(i) Write command to insert at least two records. 1

(ii) Identify the data type of Match fees column. 1

(c) Given below the table "INDUSTRY": 6

Table name: INDUSTRY

| REG_NO | CEO                | IND_TYPE    | CITY    | CAPITAL | DOR          |
|--------|--------------------|-------------|---------|---------|--------------|
| R001   | AKASH<br>PATEL     | CEMENT      | RAJKOT  | 5000000 | "2016-09-08" |
| R002   | YASH<br>SOLANKI    | ELECTRONICS | MUMBAI  | 3300000 | "2016-01-08" |
| R003   | SAURABH<br>MODI    | MEDICINE    | SURAT   | 2500000 | "2016-10-19" |
| R004   | HEENA<br>CHAUDHARY | NULL        | KOLKATA | 4500000 | "2016-07-20" |
| R005   | MEET MODI          | IRON        | IMPHAL  | 4100000 | "2016-12-08" |

Based upon the table INDUSTRY write query in MySQL for (i) to (v) and output for (vi) .

- (i) Display Reg\_No, Ind\_type, and city of Industries whose city is either Rajkot or surat or Kolkata.
- (ii) Display detail of industries whose capital is more than 4000000 and less than 5500000.
- (iii) Detail of industries which is registered before 12<sup>th</sup> Dec 2016.
- (iv) Display sum and maximum of capital.
- (v) Change the industry type medicine to drugs.
- (vi) SELECT COUNT(IND\_TYPE),AVERAGE(CAPITAL) FROM INDUSTRY;

Q6 (a) Write MySQL command to create the table “ACTORS” with the following structures and constraints.

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**Table: ACTORS**

| Column_Name | Data_Type(Size) | Constraint             |
|-------------|-----------------|------------------------|
| ACT_Id      | Int(20)         | Primary Key            |
| ACTOR_NAME  | Varchar(20)     | DEFAULT “NISHTA VERMA” |
| MOVIE       | Varchar (40)    |                        |
| CHARGES     | FLOAT(9,2)      |                        |
| GENDER      | CHAR(5)         |                        |

(b) Consider the table MOBILE AND COMPANY given below:

**MOBILE**

**Company**

| Mob_Code | SER_PROVIDER | Storage |
|----------|--------------|---------|
| M02      | RELIANCE     | 4GB     |
| M04      | IDEA         | 8GB     |
| M07      | AIRTEL       | 16GB    |
| M03      | RELIANCE     | 2GB     |

| Mob_Code | CName    | Cost  |
|----------|----------|-------|
| M07      | NOKIA    | 12000 |
| M02      | SAMSUNG  | 15000 |
| M04      | MICROMAX | 22000 |
| M02      | APPLE    | 15000 |

With reference to these tables, write commands in SQL for (i) to (iii)

- (i) Display Mob\_Code,CNAME and Cost of the mobile whose service provider is RELIANCE.
- (ii) Display the detail of all Mobile and Company whose record is available in both the tables.

2

2

- (iii) What will be degree and cardinality of cross join of the two table. 2
- Q7 (a) Define E-Governance. Write name of any two popular E-Governance portals of India ? 2
- (b) Write any two advantage of E-Commerce? 1
- (c) Identify the type of control used for the following works: 2

| Works                                                           | Control |
|-----------------------------------------------------------------|---------|
| To select any subject and in absence of subject it can be added |         |
| To enter encrypted characters                                   |         |
| To enter multiple line of text                                  |         |
| To select gender                                                |         |