

Sample Paper

Class 12

Informatics practices 2019-2020

Total Marks:70

Total Time: 3Hrs

Instructions :

- All questions are compulsory.
- Answer the questions after carefully reading the text.
- Q. 2 and Q.4 have to be answered with respect to Java Language.
- Q.3, Q.5 and Q.6 have to be answered with respect to MySQL.
- Please check that this question paper contains 6 printed pages.
- Please check that this question paper contains 7 questions.
- Please write down the Serial Number of the question before attempting it.

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- Q1. (i) What is the difference between URL and MAC address? Also give example. 2
Or
What is Domain Name Resolution?
- (ii) Mr Dhiraj Singh does not want to allow others i.e unknown users to access his resources in a network. Suggest him the hardware/software so that he may restrict others from accessing his resources? 1
Or
Name the process or threat which restrict authorized persons from accessing their resources?
- (iii) Name the medium used to transfer files from one mobile to another in a PAN? 1
Or
Name the communication medium which uses Line of Sight communication?
- (iv) Name the program which creates copy of itself and occupy more and more disk space? 1
Or
What is Snooping or Eavesdropping?
- (v) Mr Mehta an owner of Sigma Communication has registered office in Bandra and Corporate office in Juhu. He wants to link his both the offices. Suggest him the suitable communication medium and also write the name of network formed between the two offices. 1
Or

Name the protocol which allows us to log on to system from remote location?

(vi) Why switch is known as an Intelligent HUB? 1

Or

Name the device which is used to connect two different network using two different protocol?

(vii) How Proprietary Standards is different from Open Standards? 2

Or

Write any four criteria which should be fulfilled by a software to be an open source software?

(viii) What is an abbreviation of OSI and FLOSS? 1

Q2. (i) What will be an output of the following code:- 2

```
(a) for(int i = 1 ; i <= 10; i++)
    {
        i ++;
        if ( i % 2 == 0)
            break;
        else
            System.out.println(i);
    }
```

Or

```
int j = 20;
while(j >= 1)
{
    j--;
    if(j % 3 ==0)
        continue;
    else
        System.out.println( i); }
```

(ii) Convert the following program written using switch case to if..else:- 2

```
char choice = ' ';
switch(choice)
{
    case 'a' :    System.out.println("Alpha");break;
    case 'b' :    System.out.println("beta");
    case 'g' :    System.out.println("Gama ");break
    case 'd' :    System.out.println("Delta");
    default :    System.out.println("Option is wrong");
}
```

- (iii) What will be an output if the value of choice is 'b' and 'g' in the code given above? 1
Or
What is the difference between if...else and switch....case in java?
- (iv) Write the sample code to accept any two number in two different textfield t1 and t2 and display the even number series between the two numbers. 2
Or
Write the sample code to accept any number(i.e number>1000) and display reverse of the digits.
- (v) What will be the values of variables 'P' and 'Q' after the execution of the following code: 1
int P, Q = 1;
while (P <= 4)
{ Q+=P;
Q--;
}
- (vi) What will be the content of the JTextArea1 after executing the following code(Assuming that That the text area had no content before executing this code)? 2
for(int i = 2; i <= 5; i++) {
JTextArea1.setText(JTextArea1.getText()+" "+Integer.toString(i * i));
}
- Or
Write the sample code to extract the selected value from the listbox li1 and store it in a variable String1.
- (vii) Write Java code to assign the value 900 to a variable x. Divide the value of x by 55 and store it in a variable y. 1
Or
Write the values of sum and t after execution of the following code:
int sum, t;
sum = 27;
t = 3;
sum = sum + (t++);
- (ix) What is the difference between the following statements (i) and (ii) ? 1
(a) x = 5; (b) if(x == 5)
x = 3;
- Q3. (i) What is the difference between Alternate Key and Candidate Key? 1
(ii) Mrs. Ranjana wants to add a column "Destination" of data type varchar and size 30 in an existing table FLIGHT. Suggest her by writing the command for the same? 1
(iii) A numeric column Average in Marks table contains 1234.7689. Write a command to remove 2 digits after decimal places? 1
(iv) Write command in MySQL to increase the value of fare by 15% in a table Passenger? 1

- (v) While using the LIKE clause, which wildcard symbol is used to represent one, none or more characters. 1
- (vi) Mrs. Jinal does not want to display duplicate city from the table Flight. Help her by writing the correct query statement in MySQL. 1
- (vii) Declare and define a method total() which accept price and quantity as parameter and returns total price which is equal to price * qty? 2
- (viii) Mr. Ramesh created two tables Item and Sales which contain icode(a column) as primary key in Item table but does not know how to define foreign key on Icode of Sales table. Suggest him the complete command to define foreign key on the column Icode of Sales table which refers to Icode of Item table. 2
- Q4. (i) Write the sample code to: 1
- (a) Make Combobox cb1 editable.
- (b) Make radio button r1 inactive.
- (ii) What is the difference between `getSelectedItem()` and `getSelectedValue()`? 1
- Or
- Write the syntax to obtain the password from the password field `pwd1` and store it in a variable `Pass` of type `String`.
- (iii) What is the difference between Static and Instance members of a class? 1
- Or
- What is the meaning of following statements in java:
- ```
School s1,s2,s3;
```
- (iv) How does a class enforce information hiding? 1
- Or
- Write the syntax to derive a class `student` from the class `School`.
- (v) What is the difference between `String` class and `StringBuffer` class in Java? 1
- Or
- What is the difference between `insert()` method and `append()` in java?
- (vi) Write any four difference between HTML and XML? 2
- (Or)
- What is an use of the following tags in HTML?
- (a) `<TD>` (b) `<Caption>` (c) `<Font>` `<Hr>`
- (vii) Given below the design of an application of Uncle Sahaj Pizza Shop:



|                                                      | Price  | Quantity | Total Price |
|------------------------------------------------------|--------|----------|-------------|
| <input checked="" type="checkbox"/> Neapolitan Pizza | 500.00 | 2        | 1000        |
| <input checked="" type="checkbox"/> Sicilian Pizza   | 550.00 | 1        | 550         |
| <input checked="" type="checkbox"/> Detroit Pizza    | 700.00 | 1        | 700         |
| <input checked="" type="checkbox"/> Greek Pizza      | 750.00 | 2        | 1500        |
| Bill Amount                                          |        |          | 3750        |
| Discount @10%                                        |        |          | 375         |
| Net Amount Payable                                   |        |          | 3375        |

Buttons: Calculate, Clear, Close

(a) Write the code for calculate button to calculate total price, bill amount, discount (i.e 10% of bill amount) and net amount payable i.e bill amount-disc. 2

(b) Write the code for close button to close an application. 1

(viii) Write the name of the property which is used to/allows us to: 1

(a) Specify items in a combobox

(b) Select any one option from multiple option.

(ix) How radiobutton is different from checkbox? 1

Or

How Listbox is different from Checkbox?

(x) What is the difference between Java and Netbeans? 1

Or

Write any two methods of PasswordField?

Q5. (i) Write Query in MySql Display first three characters of the Name "Reliance Green" . 1

(ii) Distinguish between single row and aggregate functions of MySQL? Write one example of each. 2

(iii) Consider the Table **PROJECT \_WORK** given below. Write command in MySql for (a) to (e) and output for (f) and (g).

**Table PROJECT\_WORK :**

| P_Id | Name      | P_Size | St_Date    | E_Date     | cost  |
|------|-----------|--------|------------|------------|-------|
| 1001 | Emp-MMS   | Large  | 2016-04-02 | 2017-12-02 | 70000 |
| 1002 | Hotel-MMS | Medium | 2014-05-01 | 2015-01-02 | 55000 |
| 1003 | Sales-MMS | Short  | 2015-07-09 | 2017-01-02 | 76000 |
| 1004 | Emp-MMS   | Large  | 2014-04-02 | 2016-12-07 | 87000 |
| 1005 | Sales-MMS | Short  | 2015-07-09 | 2016-11-02 | 98000 |

- a. To display sum of cost of each project\_work as per their size. 1
- b. To display name each project\_work whose name does not contain t as any character in their name. 1
- c. To display P\_Id,P\_Name and P\_size of each project in order of their cost. 1
- d. Count the name of different project names. 1
- e. To display the detail of all project which ends in 2017. 1
- f. Select substr(Name,4,length(P\_size)) from Project\_work; 1
- g. Select st\_date+10 from Project\_work; 1
- Q6 (i) Write MySQL command to create the table "Passenger" with the following structures and constraints. 2

**Table: Passenger**

| Column_Name     | Data_Type(Size) | Constraint   |
|-----------------|-----------------|--------------|
| P_Id            | Int(20)         | Primary Key  |
| P_Name          | Varchar(20)     |              |
| Gender          | Varchar         | Default male |
| Age             | Int             |              |
| Date_of_journey | Date            |              |

- (ii) Write command in MySQL to remove the records of passenger whose age is not known ? 1

(iii) Consider the table MOBILE AND CUSTOMER given below:

**Mobile**

| SetCode | SetName       | TouchScreen | Cost  |
|---------|---------------|-------------|-------|
| S2      | Samsung<br>3G | Y           | 12000 |
| S4      | Samsung<br>2G | N           | 15000 |
| S7      | Samsung<br>4G | Y           | 22000 |

**Customer**

| CustNo | SetNo | CustAddress |
|--------|-------|-------------|
| 1      | S2    | Rajkot      |
| 2      | S4    | Ahmedabad   |
| 3      | S4    | Kolkata     |
| 4      | S7    | Ahmedabad   |
| 5      | S2    | Rajkot      |

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

- (a) Display the CustNo, CustAddress and corresponding SetName for each customer. 2
- (b) Display the detail of each customer who uses Samsung mobile. 2
- (c) Display the cross join of the table and also specify degree and cardinality of output. 2
- (iv) How WHERE clause is different from HAVING clause in MySQL? 1
- Q7. (i) Write any two positive and two negative impacts of E-Governance? 2
- (ii) Write any two online business portals of India ? 1
- (iii) Identify and write the type of control used for the following works: 2

| Works                                     | Control Name |
|-------------------------------------------|--------------|
| To select many items from multiple items  |              |
| To display a message Pass or Fail         |              |
| To enter encrypted text                   |              |
| To select an option from multiple option. |              |