

# CLASS XII

## GUESS PAPER

### INFORMATICS PRACTICES

Time : 3 Hrs .

E..M.. -70

General Instructions –

- i) This question paper contains three sections - A, B, and C
- ii) All the questions are compulsory

#### Section A

- Q1.a) What is the difference between selection and repetition statement in Java? 2
- b) Find the output of the following code segment 2
- ```
int n1,n2,counter;
counter =1;
n1 =0;
n2 =1;
while(counter<=4)
{
jTextArea1.append(“” + n1);
jTextArea1.append(“ “+n2);
n1= n1+n2;
n2 = n2+n1;
counter counter+2;
}
```
- c) What will be the corresponding outputs of the following code segment if the possible inputs in the jTextField1 are: 1
- i)10 (ii) 40
- ```
String str = jTextField1.getText();
int Number = Integer.parseInt(str);
switch (Number)
{
case 10:jTextField1.setText("Ten Thousand");break;
case 20:jTextField1.setText ("Twenty Thousand");
case 30:jTextField1.setText ("Thirty Thousand"); break;
case 40:jTextField1.setText ("Forty Thousand");
default:jTextField1.setText ("Not enough!!!");
}
```
- d)How many times will the following loop get executed? 1

```
x = 5;
y = 36;
while ( x <= y)
{
x+=6;
}
```

**e) MULTIPLE CHOICE QUESTIONS**

1+1=2

1. Which of the following is not a feature of Object Oriented Programming?

- a. Inheritance                      b. Data Overloading  
c. Polymorphism                      d. Objects

2. The align attribute of <Table> tag refers to \_\_\_\_\_ placement of the table in relation to the window screen.

- (a) Vertical                                      (b) horizontal  
(c) Both a and b                              (d) None of these

f) What is wrong with following coding ?

```
<UL type="i" start=3>
```

1

g) Differentiate between <p> and <br> tag

1

h) What will be the value of str2 and L

2

```
String a ="DEPARTMENT"
```

```
String str2= a.substring(0, 6);
```

```
int L= a.indexOf('T');
```

i) Write the following code segment using **for... loop** without effecting the output of the code:

2

```
1.  int Num=6;
    int Temp=Num;
    while (Num>=1)
    { Temp=Temp-1;
      if (Temp% 2== 0)
        System.out.println(" is Even");
      else
        System.out.println(" is Odd");
      Num=Num-2;
    }
```

2) Rewrite the following code using switch

2

```
if(ch=='E')
    Eastern++;
if(ch=='W')
```

```
Western++;  
if(ch=='N')  
    Northern++;  
if(ch=='S')  
    Southern++;  
else  
    Unknown++;
```

j). Consider the following code and answer the questions that follow:

$\frac{1}{2} + \frac{1}{2} + 1 = 2$

```
String query="SELECT NAME,EMAIL FROM CONTACT"  
ResultSet rs=stmt.executeQuery(query);  
while (rs.next()) //Statement 1  
{String Name = rs.getString("Name");  
String Email = rs.getString("Email");  
jTextField2.setText(Name);  
jTextField3.setText(Email);  
}
```

- Name the table from where the data is being retrieved
- How many objects of the native String class have been declared in the code?  
Name the objects.
- Explain the function of the statement labeled as Statement 1.

k) Mr.Basu of MEGA MALL decided to computerize the billing department. The accounts manager at MEGA MALL is creating the billing software to generate the bill during the sale period. A new bill is generated for each item sold. The discount is given based on the item category. An additional discount of 5% is given to the MEGA MALL card holders. The following is data entry screen used at the MEGA MALL

controls for the above is as follows:

Object Type	Object Name	Description
JFrame	MEGA MALL	The main form
JPanel	Category	To display different items category
JRadioButtons	MenRB	To select Men's Category
	WomenRB	To select Women's Category
	KidRB	To select Kid's Category
JButtons	CalJB	To calculate discount and final price
	ClearJB	To clear all JTextFields
	ExitJB	To exit from the application
	TestJB	To test data validity
JTextFields	txtItem	To enter item name
	txtPrice	To enter item price
	txtDiscount	To display discount
	txtFP	To final price
JCheckBox	CHCheck	To check card holders

(a) Write the code for the ClearJB Radio button to clear all the JTextFields. 2

(b) Write the code for the TestJB button to ensure that the user does not enter a negative or a zero value in txtItem JTextField. If a negative or a zero value is entered that txtItem should be made blank and a warning message should be displayed through a JOptionPane. 3

(c) Write the code for the CalJB button to display the discount and final price in the txtDiscount and txtFP JTextFields respectively. Note that final price is calculated as (price – discount) and the discount is calculated based on the category and price according to the following table. Also remember to give an additional 5% discount for membership card holders i.e. if the CHCheck JCheckBox is checked. 4

Category	Price	Discount
Men's	<10000	30%
	>=10000	50%
Women's	<8000	40%
	>=8000	50%
Kid's	<5000	20%
	>=5000	30%

1) An electronic shop has announced the following seasonal discounts on the purchase of certain items 5

Purchase Amount In Rs	Discount on TV	Discount on Music System
0-25000	5%	10%
25001-50000	10%	20%
More than 50000	15%	30%

Develop an application based on the above criteria, to input amount of purchase and the type of purchase ( TV or Music System using JRadioButton) by a customer. Compute and print the net amount to be paid by a customer along with his name accepted in a text field.

[Hint: Discount = ( Discount rate / 100 ) \* Amount of purchase  
Net amount = amount of purchase – discount.]

2.. a) Find the output of the following code : 2

```
int x=1;;
int t=16 ;
```

```
int c=4 ;
while(c>=1)
{
    x= c*t ;
    jTextArea1.append("\n x:" +x) ;
    t =t-4 ;
    c - ;
}
```

- b) List different selection modes of a list. 3
- c) What is a button group? Which control is generally used with a buttongroup. 2
- d) Assume a class **ElectronicToys** derived from a base class **Toys** . Both classes contain a member method *fprice()* that take no arguments . Write the definition for a member function of **ElectronicToys** that calls both the *fprice()*s. 1
- e) Write a program to implement a **product** class . Have a **getdata ()**method as member of the class . This method reads productname,numberofproduct(NOP), price from user.  
Another method **disp\_cal()** calculates total price .This method also display total price on the screen .  
Invoke both method from *calculate* button. 5  
(Assume appropriate controls for performing above operations)

## Section B

1. a)There is a column C1 in a table T1. The following two statements:  
**SELECT COUNT(\*) FROM T1; and SELECT COUNT(C1) from T1;**  
are giving different outputs. What may be the possible reason? 2
- b)What is the purpose of GROUP BY clause? 1
- c) What is the difference between HAVING and WHERE clauses? Explain with the help of an example. 2
- d) In a database there is a table Cabinet. The data entry operator is not able to put duplicate values in a column of Cabinet? What may be the possible reason(s)? 1

2.

### ITEM

I_Co de	Name	Category	Rate
1001	Masala Dosa	South Indian	60
1002	Vada Sambhar	South Indian	40
1003	Idli Sambhar	South Indian	40
2001	Chow Mein	Chinese	80

2002	Dimsum	Chinese	60
2003	Soup	Chinese	50
3001	Pizza	Italian	240
3002	Pasta	Italian	125

### BILL

BillNo	Date	I_Code	qty
1	2010-04-01	1002	2
1	2010-04-01	3001	1
2	2010-04-01	1001	3
2	2010-04-01	1002	1
2	2010-04-01	2003	2
3	2010-04-02	2002	1
4	2010-04-02	2002	4
4	2010-04-02	2003	2
5	2010-04-03	2003	2
5	2010-04-03	3001	1
5	2010-04-03	3002	3

Based on above two tables write SQL statements for the following queries:

- Display the average rate of a South Indian item. 1
- Display the number of items in each category. 1
- Display the details of bill records along with Name of each corresponding item 1
- List all items sorted by rate in descending order. 1

2. Let us consider the structure of two tables:

**TABLE : TECAHER**

Column Name	Data Type	Size	Constraint
TNO	VARCHAR	4	PRIMARY KEY NOT NULL
TNAME	CHAR	20	
TADDRESS	CHAR	10	
SALARY	NUMBER	7,2	
DEPT_NO	NUMBER	2	NOT NULL
DOJ	DATE		NOT NULL

**TABLE : DEPARTMENT**

Column Name	Data Type	Size	Constraint
DEPT_NO	NUMBER	2	NOT NULL
DEPTNAME	VarChar	10	NOT NULL
HOD	Varchar	20	

- (a).Write a SQL – command to create a Teacher and Department table including its constraints. 1
- (b)In DEPARTMENT table add foreign key in the reference of TEACHER table on the field DEPT\_NO. 1
- (c)Write a SQL – command to add a column TPHONE\_NO data type is Number and size is 10 from TEACHER table. 1
- (d)To redefine a column TADDRESS change the data type varchar and length is 30 1

4.a)Write the output of the following SQL queries. 2

- i) SELECT TRUNCATE (15.78969,3)  
 ii)SELECT ROUND(1234.789) ;  
 iii)SELECT ROUND(1234.789,-1);

iv)

Table :ITEM

price
90
190
NULL
100

Select sum(price) from ITEM

b)

Store					
ItemNo	Item	Scod e	Qty	Rat e	LastBuy
2002	Eraser Small	22	220	6	11-Mar-09
2003	Ball Pen 0.25	22	50	0	01-Feb-10
2005	Sharpner Classic	23	60	8	19-Jun-98



Supplier	
Scode	Sname
21	Premium
22	Tetra Supply
23	Soft Plastics

- Anuradha wants to join Store and Supplier table . She wants to issue SQL command for Equi-Join and Natural Join but forgets all join command .  
 Help Anuradha for giving SQL Command for Equi join and Natural join and explain her the difference. 3
- c) Identify Constraints and other details . 2

Create table Consignee(  
 cneeId integer(11) not null primary key ,  
 cneeName varchar(20),  
 cnorid integer(11) ,  
 Constraint fk1 foreign key ( cnorid) References Consignor ( cnorid));

### Section C

- 1.a Define E-Learning and name some major e-learning sites. 2
- b Choose appropriate Controls for following types of input . 1
- i) one out of many choices
- ii) typed text which should remain hidden .
- c. Define Front End. 1.