**GUESS PAPER(2012-13)**

**CLASS-XII**

**INFORMATICS PRACTICES**

**Time – 3 Hrs. MM 70**

**General Instructions**

**There are 6 pages and 7 questions.**

**All the questions are compulsory**

**Write down the serial number of the question before attempting it.**

Corporate (C)unit

Mumbai

**1 a)** Q1 The Birla Telcom has set up its offices in DELHI .

DELHI

Research(R)

Development unit(D)

Back office(B)

R TO B 110M Number of computers

RTO D 16KM WING R 158

R TO C 1800M WING B 79

B TO D 13KM WING D 90

 WING C 51

Suggest the kind of network required for connecting office units 1

1) Research to back office

2)Research to development unit

**b)**Suggest the most suitable device for connecting all the computers within each of their office units? 1

**c)**Suggesta communication media to be procured by the company for connecting office units in Pondicherry for very effective high speed communication. 1

**d)** Suggest a cable layout for connecting office units in Pondicherry . 1

**e)** Suggest an effective method/technology for connecting office unit in Mumbai 1

**f)** Meena is reading the content of Reema’s file . What is she doing ? How can it be prevented ? 2

**g)** What are the various privileges that can be given to different users of computer 1

**h**)What are the freedoms given to users using free software. 2

Q2a) Which method is used to convert a number to string? 1

b) What is the use of control structures in a program 1

c) Analyze the program segment and determine how many times the body of loop will be executed

x=5 ; y=50; 2

while (x<=y)

{ y=y/x;

jTextField1.setText (“” +y) ; }

 d) Write a JAVA code that takes a character from JTextField1 and find whether it is a vowel or not and display it in JtextField2. 2

e) Write HTML command to insert an image located in C DRIVE of your computer

 and give it a border. 1

 f) Create a form that contains a button and a text field. 2

 g) Is it a valid xml tag .Justify your answer 1

<student > reena </student>

Q3a)Differentiate between procedural and object oriented programming 2

b)Explain polymorphism with examples. 2

c)What happens after the execution of following statement: 1

 jTextField1.setEditable(false);

d)What is MYSQL? 1

e) What does % and \_ mean with like statement. Explain with help of example 2

f) A student id (5 digits) is stored in a string variable . You want to store it as decimal type in XCD variable . Write JAVA statement to do this. 1

g)”Primary Key of a table can be defined at the time of table creation only and cannot be changed” .Justify your answer. 1

Q4 a) State the output of the given code: 2

int tick=10;

int k;

for(k=1; k<=10; k=k+2)

{ if (tick% k ==0 )

 jTextField1.setText( “ “+k + “ is a factor of “ + tick);

 else

 jTextField1.setText(Integer.toString(k));}

b) Rewrite the code Using Switch case - 2

char c = ‘g’;

if(c = = ‘g’)

string x = “Greetings” ;

if(c = = ‘b’)

 string x = “Bye” ;

if(c = = ‘d’)

 string x = “ok”;

 else string x = “Sorry! No Message Available”;

c) Name the method used to retrieve the selected item from jComboBox. 1

d) What’s wrong with the while statement? 1

while((ctr<5) &&(ctr>30))

{ int i=i++;}

e) double number;

string sn;

number= Double.parseDouble(jTextField1.getText( ));

JTextField2.setText(Integer.toString(sn.length( )));

1. How many variables and objects have been declared in the above code? 2
2. Name any one native class along with its methods . 2

f) . Prachaar Store is a Magazine distributor for Bharat Today. It is offering heavy discounts on the subscription of Bharat Today. The distributor plans to computerize its billing system. A programmer is required to make the following GUI interface to calculate the Discount Amount & Bill Amount to be paid by the subscriber as shown below:

The annual subscription of Bharat Today for one year is Rs.1400/- without any discount. Under the current scheme discounts are being offered as follows:

|  |  |  |
| --- | --- | --- |
| **Control** | **Name** | **Description** |
| jTextField1 | txtName | To store Subscribers Name |
| jTextField2 | txtAddress | To display the address |
| jTextField3 | txtTot | To display Total Amount |
| jTextField4 | txtDisc | To display Discount Amount |
| jTextField5 | txtNet | To display Net Amount |
| jComboB**ox1** | cmbPeriod | To choose “one”/ ”Two” / “Four” |
| jCheckBox1 | chkMember | To become a member |
| jButton1 | btnCalTotDisc | To Calculate Total & Discount |
| jButton2 | btnCalNet | To display Net Amount |



|  |  |
| --- | --- |
| **Subscription Period in years** | **Discount** |
| One | 10% |
| Two | 15% |
| Four | 25% |

An additional discount of Rs. 200/- is given to the subscriber who wants to become a member of the Prachaar store.

 Create the above interface in Java(using NetBeans) and set/write code for the questions that follow:

1. Ensure at design time that the textfields for Total Amount (txtTot) Discount Amount(txtDisc) and Net Amount(txtNet) are uneditable and btnCalNet is not active 2
2. When “Calculate Total & Discount” button(btnCalTotDisc) is clicked, calculate and display the Total amount and discount in their corresponding textfields(txtTot & txtDisc) 2+2
3. When “Calculate Net” button (btnCalNet) is clicked display the Net amount in the textField txtNet . 1

Q5 a) Table Employee has 4 records and table Dept has 3 records in it. Mr jain wants to display all the information stored in both of these related tables. 1

SELECT \* FROM EMPLOYEE ,DEPT ;

He forgot to specify equijoin. How many rows will get displayed on execution of this query?

b) There is a column c1 in table t1 . The following two statements are giving different outputs. What may be the possible reason ? 1

SELECT COUNT(\*)FROM T1;

SELECT COUNT(C1) FROM T1;

c) What are constraints ?Are they useful or not. Justify your answer. 2

d) Name two statements that can be used to end a transaction. 2

e) Write SQL statements for the queries (i) ,(ii) and output for (iii) and (iv): 4

Table: **STORE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ItemNo** | **Item** | **Scode** | **Qty** | **Rate** | **LastBuy** |
| 2005 | Sharpener Classic | 23 | 60 | 8 | 2009-06-31 |
| 2003 | Ball Pen 0.25 | 22 | 50 | 25 | 2010-02-01 |
| 2002 | Gel Pen Premium | 21 | 150 | 12 | 2010-02-24 |
| 2006 | Gel Pen Classic | 21 | 250 | 20 | 2011-03-09 |
| 2001 | Eraser Small | 22 | 220 | 6 | 2009-01-19 |
| 2004 | Eraser Big | 22 | 110 | 8 | 2009-12-02 |
| 2009 | Ball Pen 0.5 | 21 | 180 | 18 | 2009-11-03 |

Note:

* ItemNo is the Primary Key.

I Delete those records whose last buy is before 2003

ii Add another column Category of type character in the table

iii Select round ( qty\*110/100, 1)from store where rate>10;

iv Select MID(“informatics”,3,4), substr(“practices”,3);

Q6 Table: Employee Table: Department

a)Identify Primary Key, Alternate Key, Candidate Keys in each table & Foreign Key from the following two tables: 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Eno | Name | Designation | Salary | Deptno |
| 45 | Ramanuj Singh | Director  | 90000 | 10 |
| 32 | Gareema Seth | Manager | 78000 | 20 |
| 12 | John Brooke | Accountant | 25000 | 20 |
| 9 | Ahmed Abdul | Manager | 78000 | 30 |

|  |  |  |
| --- | --- | --- |
| Deptno | Dname | City |
| 10 | Research | Delhi |
| 20 | HRD | Delhi |
| 20 | HRD | Kolkata |

b) Display employee name and department number who reside in DELHI. 2

c) Display the sum of salary for each department with minimum salary as 20000 2

d) Explain the states of auto commit. 1

Q7 a)The web address of national portal of INDIA. 1

b)Name two container controls in Java. 2

c)To reach the customers in an effective manner many shops provide their services on net. It falls under which IT application category? 1

d)Explain two major parts of IT applications with example. 2