Roll No. _____

Please check that this question paper contains **7** questions and **12** printed pages.

CLASS–XI
SUBJECT–INFORMATICS PRACTICES

Time allowed : 3 Hrs.   **M.Marks : 70**

General Instructions :

*   *All the questions are compulsory.*

*   *This paper contains 7 questions divided into different parts.*

*   *Please attempt the question sequentially and neatly.*

1. (a) Name the device :

    (i) This device is used to recognize individuals based on physical or behavioral traits.   (1)

    (ii) This device is mainly used for power free storage with digital cameras, mobile phones etc.   (1)

    (b) (i) Identify the utility software from the following :

        (a) Word Processor

        (b) Reservation system

        (c) Compiler

        (d) BIOS   (1)

    (ii) Sunita develops the software according to an individual user's requirement. What type of software is this called ? Write any one example of this type of software.   (½+½=1)

(c) (i) Manish has brought a 4 GB pen drive. His biology teacher has asked him to store the digital project files of his project on the pen drive. Which of the following statements is NOT correct about the number of files & size of each file that can be stored on the pen drive ? Justify.

  (a) He can store 4 files of 1524 MB each.

  (b) He can store 4 files of 1014 MB each.

  (c) He can store 4 files of 1024 KB each.

  (d) He can store 4 files of 5000 KB each.   (1+1=2)

(ii) One word based on Binary codes :

  (a) A code which enables us to work with Hindi _____

  (b) This code makes the computer multilingual _____

                                                              (1)

(d) (i) Which of this is NOT a form of computer security ?

  (a) Firewall

  (b) Digital signature

  (c) Captcha

  (d) Cookie   (1)

(ii) Differentiate between a virus and a worm.   (1)

(e) Write one benefit of E-waste recycling.   (1)

2. (a) What will be the output of the following statement :

   "Net-Beans is an."concat ("Open Source Software") ;   (1)

(b) Evaluate the expression and find the output :

   m = i * ++k + n --

   where k=22 , i=3 and n=4   (1)

(c) Kamakshi wants to change the display character in a password field from '*' to '#'. Which property should she use to change the same ?   (1)

(d) If the user chooses option 2 from a list of values in a combo box control, what will be the value of the variable k ?

switch (j combo1.getselected_Index())

{

    case 0 : k=2;

    case 1 : k=4;

    case 2 : k=6 ; break ;

    default : k=0 ;

}   (1)

(e) Rewrite the following code using SWITCH CASE :

if (x == 1)

    jTextField1.setText ("B.A. English honors") ;

else

    if (x==2)

        jTextField1.setText ("B.Com.Hons") ;

else

    if (x==3)

        jTextField1.setText ("B.Sc.Hons") ;

else

    jTextField1.setText("Wrong Option") ;   (2)

(f) Priyank wants to convert the value in jTextField1 to an integer and store it in a variable k. Write the statement to do so. Also define the variable.   (2)

(g) (i) Write appropriate Java statement for the following condition

If sum is equal to 30 and total is less than 50, print the text in jlabel1 "correct answer".   (1)

(ii) How many times will the following loop be executed :

int x=5;

int y=36;

    while(x<=y)

       {

            x+=6;

       }   (1)

3. (a) The receptionist of Hotel CELEBRATIONS has designed a database to keep a record of client reservations. Based on the table structure, answer the questions that follows :

Table name : Celebrations

Fieldname	Field Type	Field size
FirstName	Varchar	15
LastName	Varchar	15
Client_Id	Integer	8
Address	Varchar	40
DOB	Date	
Room Allotted	Varchar	20

(i) Create a table using above given structure. (2)

(ii) Insert the given data in the table 'celebrations'.

Avi Rana, 1101,397, vikas nagar, Delhi, 12/12/1998 (1)

(iii) Display the firstname concatenated with Last name for the above table. Also give a name "Fullname" to the concatenated fields.
For e.g. :

If the contents of the table are :

Firstname	Lastname	Client-Id	address	DOB	Room-allotted
Preeti	Arora	110011	Preet Vihar	1987-02-01	2409
Kirti	Gupta	120011	Anand Vihar	1986-04-22	1412

then the output of the query should be :

Full Name

Preeti Arora

Kirti Gupta (1)

(iv) Add a column in the table :

Pincode numeric 'c (8) (1)

(v) Write a command to remove the table celebrations physically from the database. (1)

(b) Give the following field declaration in MySQL

(i) name1 char(20)

(ii) name2 Varchar(20)

If the user stores the name "Mary Kom", in each, what will be the size of name1 & name2 ? Justify. (1+1)

(c) Write an alternate query to find out the same output as produced by the given query.

SELECT MID ("Budget Monitoring" 4, 8); (1)

(d) Write a SQL function to remove leading and trailing spaces from a character expression R where

R="##EDUCATION FOR KIDS####" (1)

4. (a) ABC Electric Company has a computerized billing system. Design a GUI application to calculate the electric bill using given screenshot.

ABC ELECTRIC SUPPLY COMPANY

Old Units

New Units

Units Comsumed

Bill amount(on or before due date)

Penality(4% of total bill)

Bill amount (After due date)

| CALCULATE BILL | CLEAR | EXIT |

(i) Write a code for CALCULATE BILL button (named as calc) to calculate Bill amount. Penalty is @ 4% of bill amount if bill is not paid till due date. Display the information in their respective textfields. Rates per unit is calculated according to the following criteria: (4)

Units consumed	Rates per unit (in Rs.)
1-150 Units	5.5
151-300 Units	6.5
301 or more Units	7.5

(ii) Write a code for CLEAR button (named as clear) to clear all textfields. (1)

(iii) Write a code for EXIT button (named as exit) to exit application. (1)

(b) Identify the errors in the given code and write the correct code again underlining the corrections :

```
int i=0; q=5;
for(p=0; p<=5; p++)
{
    q+=5;
    i=i+q;
}
JTextArea1.showText(" "+i);                                    (2)
```

(c) Rewrite the given code using Do While loop.

```
int j=1, i=2;
while(++i<5)
{    J*=i;
    jTextField1.setText("value is:" +i);
}                                                              (1)
```
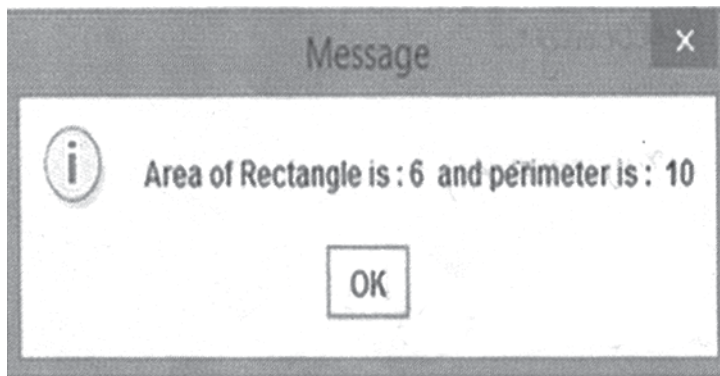
(d) What will be the value of n after execution of the following code :

```
int j=3, k=4;
int n=2;
if (j < 4 || j<k)
{
    n=n+j ;
}
    else
{
    n=n+k ;
}                                                              (1)
```

(e) (i) Write a code to calculate the area and perimeter of a rectangle and print the output in message dialog box as shown in given screenshot. (can accept any values for length and breadth).

Message

ⓘ Area of Rectangle is : 6 and perimeter is : 10

OK

(3)

(ii) What will be the output after the execution of the following :

```
int m, n=2;
m = 4;
while (m > = 0)
   {
       if (m > 2)
           n= n+2 ;
       else
          n=n–2 ;
          m=m–2 ;
   }
       jTextField1.setText (" " +n) ;
```

(2)

5. (a) Write the output of following queries :

   (i) SELECT LOWER ("MR.R.C. SHARMA") ;

   (ii) Select power (6, 2) ;

   (iii) Select Right (Substr ("Casablanca", 2), 4) ;

   (iv) SELECT Round (4.958, 2) ;   (½×4=2)

   (b) Write SQL Commands :

   (i) To display the position of the word 'or' in the string "information".

   (ii) To display the name of the day when we celebrated Gandhi Jayanti in 2011.

   (iii) To display the month of the current date.

   (iv) To display the ASCII value of the first character of the string "Cloud Computing".   (1×4=4)

   (c) Kavya has written the following insert into statement in MySQL :

   INSERT INTO student (rollno, name, marks, dob)

   VALUES (24, "Preeti Singh", 95.0) ;

   But the statement when executed gives an error. Help Kavya by writing the correct statement.   (1)

   (d) (i) Write a SQL query to give an increase of 20% in salary to all those employees whose salary is between 35000-40000.   (1)

   (ii) Manish wants to display the record of all students of a class who are not enrolled in any activity. Help him to write the command to do so.   (1)

   (e) Differentiate between Drop table command and Delete command.   (1)

6. (a) Based on given table **PATIENTS.** Write the SQL queries.

PNo	PName	Age	City	Phone No	Diagnosis	Gender
P101	RamGopal	47	Rohtak	9896011242	Viral Fever	M
P102	Urvashi	52	Delhi	9456258456	Typhoid	F
P103	Mansi	46	Gohana	8025974562	Fever	F
P104	RajKumar	12	Hisar	8502415631	Cold	M
P105	Vikas	7	Delhi	9812468952	Dengue	M
P106	Nishtha	47	Gurugram	9856412368	Typhoid	F
P107	Richa	53	Faridabad	8215460564	TB	M

(i) Write a SQL query to display name of all those patients whose name contains eight characters and starts with 'R'. (1)

(ii) Display complete information of all those patients whose age is greater than 45 and less than 55. (1)

(iii) Display the gender of all patients who have the letter 'K' in their name. (1)

(iv) Display the records of all patients whose gender is male and CITY is from Delhi, Hisar or Gurugram. (1)

(v) Display the details of all patients in alphabetic order. (1)

(vi) Display the name and diagnosis of patients, whose diagnosis is typhoid. (1)

(b) (i) Ankit Stores wants to give a flat discount of 15% on all the shirts in his store. Kindly help him write an SQL command to do the same by decreasing the price of all shirts. (1)

(ii) Consider the column NAME of the table employee given below

Name
Preeti
Moulika
Chandani

Write a MySQL command to display the following output :

Name
Preeti
Chandani

(1)

(iii) Name the keyword which is used to eliminate duplicate values in the columns in the output of MySQL query. (1)

(iv) Choose the correct statement :

(a) A relation can have only one candidate key and may have many alternate keys.

(b) only one alternate key and many candidate keys.

(c) only one candidate key and may have more than one primary key.

(d) only one primary key and may have many candidate keys.

(1)

7. (a) Name any two Government Portals of the Government of India.

(½×2=1)

(b) (i) What do you understand by MOOCs ? (1)

(ii) Write any one challenge faced by E-Business. Give the name of one E-Business site. (½+½=1)

(c) Mr. Vikas Bhalla is creating a form for accepting the details of his employees. Help him choose most appropriate control out of list box, combo box, text field, text area, radio buttons, check boxes, labels and command buttons for the following entries : (½×4=2)

S.No.	Function
1.	To enter E-Mail id
2.	To choose Gender
3.	To enter multiple options from different hobbies
4.	To enter medical history of employees

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