

Roll No. \_\_\_\_\_

Code : 112014-065-A

Please check that this question paper contains 7 questions and 8 printed pages.

**CLASS-XI**  
**INFORMATICS PRACTICES**

**Time Allowed : 3 Hrs.**

**Maximum Marks : 70**

**General Instructions :**

- (i) All the questions are compulsory.
- (ii) The question paper contains 7 questions.
- (iii) Programming Language used : GUI Java and RDBMS Software used : MySQL
- (iv) 15 minutes time has been allotted to read this question paper. During the time, the student will read the question paper only, he/she will not write any answer on the answer book during this period.

S. No.	Sub Part	Question	Marks
1.	(a)	Write one word for each of the following :  (i) It is a hardware device which converts images of text into machine editable text.  (ii) It is a program that protects websites against bots by generating and grading tests that humans can pass but computer programs cannot.	(1)
	(b)	Write the full form of the following terms : CIA, MICR	(2)
	(c)	Write any two types of operating system. Write one feature for any one of them.	(2)
	(d)	What is the difference between the following :  (i) Compiler and Interpreter (Write any two points)  (ii) Digital Signature and Digital Certificate (Write any one point)	(2+2)
	(e)	Name the device which is used in a computer system or network to block unauthorized access.	(1)
2.	(a)	<code>double d=Double.parseDouble(jTextField1.getText());</code> In the above statement, what is the use of <code>parseDouble()</code> method ?	(1)

(b) What will be displayed in JTextArea1 after executing the following code ? (1)

```
for(int i=1;i<=5;i++)  
{  
jTextArea1.setText(""+i);  
}
```

(c) What is the difference between line wrap and word wrap property of TextArea ? (1)

(d) Consider the following code : (2)

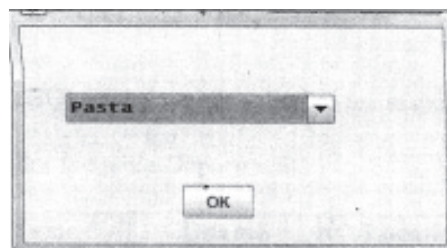
Which statement is missing in order to execute this loop ?

```
int k=5,m=10;  
while(k<=10)  
{  
m=m+2;  
k=k+1;  
}
```

(i) Which type of looping statement is used -Entry Controlled or Exit Controlled ?

(ii) What happens if the statement k=k+1 is missing from the above code ?

(e) In the given form, JComboBox1 is used to display the food items of a restaurant.



(i) Write the Java code to make JComboBox1 invisible.

(ii) What is the index value, if no food item is selected ? (2)

(f) Rewrite the following code using the if statement without affecting the output of the code : (2)

```
char c;  
String p;
```

```

switch(c)
{
    case 'h': p="Shiv Nadar";
        break;
    case 'i': p="Steve Jobs";
        break;
    case 'm': p="Bill Gates";
        break;
    default: p="wrong choice";
}

```

(g) What is the difference between Radio Button and Check Box ?  
(Write any one point)

(1)

3. (a) Answer the following :

(1+2+1=4)

- (i) Write MySQL command to display structure of a student table?
- (ii) Define single row and multiple row functions.
- (iii) Identify the column which can be used as a primary key in a Student table.
  - (i) Class
  - (ii) Section
  - (iii) Admission\_Number
  - (iv) Name

(b) (i) Differentiate between DDL and DML commands. Give two examples of each.

(ii) Alok has created a table Employee in MySQL.

(2×3=6)

**Table: Employee**

Empno	Ename	Location
101	Rakesh	Chennai
102	Neha	Mumbai
103	Pooja	Delhi
104	Ajay	Mumbai
105	Vinay	Delhi

He has written the following SQL query:

Select Ename from the Employee where Location='Mumbai' or Location='Delhi' or Location='Chennai';

Write another SQL query which will give the same output as above.  
 (iii) Consider the table Department :

Name	Dname	Location
Abhay	Marketing	Delhi
Chetan	Research	Bangalore
Sonali	Production	Mumbai
Zubin	Personnel	Srinagar

How will the output of following two queries differ ?

SELECT Dname FROM Department where Location like '%i';

SELECT Dname FROM Department where Location like '\_ \_i%';

4. (a) Hamara Electronics has the following products with their prices given. The store gives 5% discount on every product. However, at the time of festival season the store further gives 5% discount.

(1+4+1=6)

Product	Price
Washing Machine	₹ 15000
LED TV	₹ 35000
Refrigerator	₹ 20000
Microwave	₹ 8000

Write the Java code for the following :

- (i) Clicking the Initial button will disable the textboxes for Discount (jTextfield2) and Net Price(jTextField3).
- (ii) Clicking the Calculate button will calculate the Net Price on the basis of Discount given above and display Discount and Net Price in the appropriate textboxes.
- (iii) Clicking the EXIT button will close the application.

(b) What will be the output of the following code :

(2)

```
int k=10;
for(int j=2;j<= 10;j=j+2)
{
    k=k+j;
    jTextArea1.setText(""+k);
}
jTextArea1.append(""+j);
```

How many times will the following loop get executed ?

(c) int p=5,q=35, x=0;

(2)

```
while(p<q)
{
    x=x+p;
    p+=1;
}
```

(d) (i) Find the errors in the code given below :

(2)

```
Int p=3:sum=0;
Do
{
    sum=p;
    p+=3;
}while(p=<12);
Joptionpane.showMessageDialog(null,"correct the code");
```

(ii) What will be displayed in jTextField1 after executing the following code :

(2)

```
int n=20;
n=n+5;
```

	<pre> if(n&lt;21)     jTextField1.setText(""+n+5); else     jTextField1.setText(""+n); </pre> <p>(e) Choose the correct output from the options given below :</p> <pre> jTextArea1.setText("I\tEnjoy\tJava\nProgramming); </pre> <p>(i) I   Enjoy       Java           Programming</p> <p>(ii) I   Enjoy           Java Programming</p>	(1)																																																														
5.	<p>(a) Write MySQL commands based on the table given below :</p> <p style="text-align: center;">Table: BANK</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 25%;">Field Name</th> <th style="width: 25%;">Data Type</th> <th style="width: 25%;">No. of Characters</th> <th style="width: 25%;">Constraint</th> </tr> </thead> <tbody> <tr> <td>Acc_Number</td> <td>INTEGER</td> <td></td> <td>PRIMARY KEY</td> </tr> <tr> <td>Name</td> <td>VARCHAR</td> <td>15</td> <td>NOT NULL</td> </tr> <tr> <td>DOB</td> <td>DATE</td> <td></td> <td></td> </tr> <tr> <td>Balance</td> <td>INTEGER</td> <td></td> <td>NOT NULL</td> </tr> </tbody> </table> <p>(i) Create the above table Bank with the constraints given.</p> <p>(ii) Write MySQL command to add a column Address of datatype varchar (20).</p> <p>(iii) Write MySQL command to change the size of Name field to 30 characters.</p> <p>(b) Consider the table Employee and answer the questions that follows :</p> <p style="text-align: center;"><b>Table : Employee</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Empno</th> <th style="width: 20%;">Ename</th> <th style="width: 15%;">Dept</th> <th style="width: 15%;">DOJ</th> <th style="width: 10%;">Age</th> <th style="width: 10%;">Salary</th> </tr> </thead> <tbody> <tr> <td>E101</td> <td>Raj Kumar</td> <td>Sales</td> <td>2011-03-10</td> <td>35</td> <td>29000</td> </tr> <tr> <td>E102</td> <td>Shailija</td> <td>Marketing</td> <td>2012-01-01</td> <td>30</td> <td>30000</td> </tr> <tr> <td>E103</td> <td>Paras</td> <td>Production</td> <td>2010-09-23</td> <td>34</td> <td>32000</td> </tr> <tr> <td>E104</td> <td>Mohan</td> <td>HRD</td> <td>2012-05-15</td> <td>45</td> <td>40000</td> </tr> <tr> <td>E105</td> <td>Vidhushi</td> <td>Marketing</td> <td>2011-04-30</td> <td>40</td> <td>38000</td> </tr> <tr> <td>E106</td> <td>Sapna</td> <td>Sales</td> <td>2013-02-18</td> <td>31</td> <td>27000</td> </tr> </tbody> </table>	Field Name	Data Type	No. of Characters	Constraint	Acc_Number	INTEGER		PRIMARY KEY	Name	VARCHAR	15	NOT NULL	DOB	DATE			Balance	INTEGER		NOT NULL	Empno	Ename	Dept	DOJ	Age	Salary	E101	Raj Kumar	Sales	2011-03-10	35	29000	E102	Shailija	Marketing	2012-01-01	30	30000	E103	Paras	Production	2010-09-23	34	32000	E104	Mohan	HRD	2012-05-15	45	40000	E105	Vidhushi	Marketing	2011-04-30	40	38000	E106	Sapna	Sales	2013-02-18	31	27000	(2+1+1=4)
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	<p>(i) To show all the information about employees who are in Sales Department.</p> <p>(ii) To display details of employees in descending order of Salary.</p> <p>(iii) To display names and department of employees whose age is between 35 and 45.</p> <p>(iv) To increase the Salary by 3% for all the employees.</p> <p>(c) Write SQL statement to extract the characters from 3rd to 7th position of Employee Name</p> <p>(d) Write SQL statement to display the position of 's' in the Department.</p>	(1) (1)																																								
6.	<p>(a) Differentiate between logical operator OR and AND in MySQL.</p> <p>(b) Write the output of the following SQL statement :</p> <p>(i) SELECT TRUNCATE (76.235,-1);</p> <p>(ii) SELECT CONCAT ("INFO",NULL,"MATICS");</p> <p>(iii) SELECT LCASE ("MYSQL");</p> <p>(iv) SELECT ASCII("APPLE");</p> <p>(c) Consider the table VOTER and write the output of the following queries :</p> <table border="1" data-bbox="288 1133 1291 1579"> <thead> <tr> <th>VNo</th> <th>VName</th> <th>DOB</th> <th>Address</th> <th>Gender</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Aman</td> <td>1990-09-23</td> <td>Rohini</td> <td>M</td> </tr> <tr> <td>2</td> <td>Raman</td> <td>1993-06-03</td> <td>Dwarka</td> <td>M</td> </tr> <tr> <td>3</td> <td>Vasuda</td> <td>1991-01-18</td> <td>Gomti Nagar</td> <td>F</td> </tr> <tr> <td>4</td> <td>Rekha</td> <td>1994-07-20</td> <td>Adarsh Nagar</td> <td>F</td> </tr> <tr> <td>5</td> <td>Rahul</td> <td>1992-03-07</td> <td>Punjabi Bagh</td> <td>M</td> </tr> <tr> <td>6</td> <td>Sugandh</td> <td>1991-09-15</td> <td>Rohini</td> <td>F</td> </tr> <tr> <td>7</td> <td>Paras</td> <td>1992-11-26</td> <td>Dwarka</td> <td>M</td> </tr> </tbody> </table> <p>(i) SELECT UPPER (VName) FROM Voter WHERE Address='Rohini';</p> <p>(ii) SELECT MID (Address,3,6) FROM Voter WHERE Gender = 'M' and VName like 'R%';</p> <p>(iii) SELECT MONTH (DOB) from Voter where where VNo&gt;5;</p> <p>(iv) SELECT LEFT (VName,5) FROM Voter WHERE year(DOB)=1992;</p>	VNo	VName	DOB	Address	Gender	1	Aman	1990-09-23	Rohini	M	2	Raman	1993-06-03	Dwarka	M	3	Vasuda	1991-01-18	Gomti Nagar	F	4	Rekha	1994-07-20	Adarsh Nagar	F	5	Rahul	1992-03-07	Punjabi Bagh	M	6	Sugandh	1991-09-15	Rohini	F	7	Paras	1992-11-26	Dwarka	M	(1) (1×4=4) (1×4=4)
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	<p>(d) Will the output of the following two queries be same ? Give reason. (1)</p> <p>(i) <code>SELECT MID (Address,-3) FROM Voter where VName="Aman";</code></p> <p>(ii) <code>SELECT RIGHT (Address, 3) FROM Voter where VName="Aman";</code></p>	
7.	<p>(a) What is e-business ? Give its two features. (2)</p> <p>(b) Shikhar is creating a form to enter user's data for his project work. Help him to choose most appropriate controls from List box, Combo box, TextField, PasswordField, TextArea, RadioButton, Check box, Label and Command button for the following entries from user. 2</p> <p>(i) A control used for encrypted text.</p> <p>(ii) An input to choose from a list of grades.</p> <p>(iii) An input to enter remarks.</p> <p>(iv) An input to accept the gender.</p> <p>(c) What is e-waste ? (1)</p>	