

Please check that this question paper contains **7** questions and **7** 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 : Java and RDBMS 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.*

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1. (a) Write one word for each of the following : (1+1=2)
- (i) These are used to print Graphics. These are also used in Computer Aided Designing.
 - (ii) It is the system memory where data is proceed before being saved.
- (b) Arrange the following units of memory in descending order : (1)
TB, PB, GB, KB, MB, ZB
- (c) Differentiate between : (2+2=4)
- (i) Virus & worm
 - (ii) Serial Port & Parallel Port
- (d) What is IDE ? (1)
- (e) Write full form of the following : (1+1=2)
- (i) BIOS
 - (ii) HLL
2. (a) The statement `i++`; is equivalent to : (1)
- (i) `i = i + i;` (ii) `i = i + 1;`
 - (iii) `i = i - 1;` (iv) `i --;`
- (b) What is the purpose of `showMessageDialog()` in the following statement : (1)
`JOptionPane.showMessageDialog(this, "Happy Birthday");`

- (c) The following code has some error(s). Rewrite the correct code underlining all corrections made : (2)

```
int i; j=7;
for(i== 1;i<j;i++)
{
    jTextField 1.getText("Hello");
    j- -
}
```

- (d) What message will be displayed after the execution of the following code ? (2)

```
int age=64,Relaxation =4;
if (age - Relaxation < 60)
    JOptionPane.showMessageDialog(NULL, "Not Eligible");
else
    JOptionPane.showMessageDialog(NULL, "Eligible");
```

- (e) What will be displayed in jTextField1 after executing the following statement:

```
jTextArea1.setText("Fully \t Connected\n\t Topolgy"); (1)
```

- (f) Rewrite the following program code using a Switch statement. (2)

```
if (code== 1)
    Season="Spring";
else if (code==2)
    Season="Summer";
else if (code==3)
    Season="Autumn";
else if (code==4)
    Season="Winters";
else
    Season="No Match";
```

- (g) What is the difference between jTextField and jTextArea ? (1)

3. (a) Answer the following :

- (i) Which command is used to make changes to the rows of a table in MySql ? (1)

- (ii) Identify the column which can be used as a Primary key in the table SHOP given below : (1)

Table : Shop

SNo	PName	SName	Qty	Price	City	DOP
S1	Bread	Britannia	150	8.00	Delhi	06-06-2007
S2	Cake	Britannia	250	20.00	Mumbai	04-03-2006
S3	Coffee	Nescafe	170	45.00	Mumbai	07-03-2006
S4	Chocolate	Amul	380	10.00	Delhi	12-08-2006

- (iii) Rahul has created the Table Bank.

Select *from Bank;

Describe Bank;

Help him to choose the command to :

- (a) View the structure of the table
(b) View the contents of the table (1+1=2)
- (b) (i) Mrs. Sharma is using table STUDENTS with the following columns
RNO, ADMNO, NAME, AGGREGATE

She wants to display all information of students in descending order of name and ascending order of aggregate. She wrote the following SQL query but she did not get the desired output.

```
SELECT * FROM STUDENTS  
ORDER BY NAME, AGGREGATE DESC;
```

Rewrite the above query to get the desired output. (2)

- (ii) Mr. Bose has created a Table Furniture with 5 rows and 6 columns. What is the degree & cardinality of the Table Furniture? (2)

- (iii) Differentiate between Char and Varchar datatypes. (2)

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

```
int a=5, b=10;  
if (a>5)  
    if (b>5)    {  
        jTextArea1.setText(" b is " + b);  
    }  
else  
    jTextArea1.setText(" a is " +a);
```

- (b) How many times does the following loop execute? Also identify the type of loop. (Entry controlled or Exit controlled)

```
int x=2, y=20;
while (x<=y) {
    JOptionPane.showMessageDialog(null, “+ x);
    x= x+ 3;
}
```

(1+1=2)

- (c) The following code has some error(s). Rewrite the correct code underlining all corrections made : (2)

```
int k=2; sum=0;
if (k<=20);
    sum = sum+k;
    k++;
else
    k= k+4;
jTextField (Integer.toString (sum));
```

- (d) Write any one similar and one dissimilar property of `jListBox` and `jComboBox`. (2)
- (e) How can we make a Text Field uneditable? Illustrate using an example. (1)
- (f) Regal Theatre has computerised its ticketing system. The Programmer has developed a GUI application in Netbeans as shown below :

Regal Cinema

Movie Name	<input type="text"/>	☑ Box (Rs. 200)
No. of Tickets	<input type="text"/>	○ Balcony (Rs. 150)
		○ General (Rs. 100)
<input type="checkbox"/> Tax free	Total Amount	<input type="text"/>

At the ticket counter, three types of tickets(Box,Balcony and General)at the rate of Rs. 200/-, 150/- and 100/- are available. If the movie is tax free, then the total amount should be deducted by Rs. 25/- per ticket.

Write code to do the following :

- (i) Calculate and display the Total amount in corresponding TextFields when Calculate button is pressed. (3)
- (ii) Clear all the Text Fields. (1)
- (iii) Close the application when Exit button is clicked. (1)
- (iv) What should be done so that only one of the Radio Button(Box,Balcony and General) can be selected at a time. (1)

5. (a) (i) Write a command in MySql to create a table PRINTERS with the following structure : (2+1+1=4)

Field Name	Data Type	No. of Characters
P_ID	Integer	
P_Name	Varchar	20
P_Company	Varchar	20
Price	Integer	

- (ii) Write the MySql Command to change the size of P_Company field to 25 characters.
- (iii) Write the MySql Command to add one more column DateofManf which can hold date values.

- (b) Given the following Family relation. Write MySql queries : (4)

No.	Name	FemaleMembers	MaleMembers	Income	Occupation
1	Sharma	3	2	7000	Service
2	Sud	4	1	50000	Business
3	Gupta	6	3	8000	Mixed
4	Bhatia	2	2	25000	Business
5	Goel	7	2	20000	Mixed
6	Joshi	3	2	14000	Service
7	Rao	6	3	5000	Farming
8	Kumar	5	2	10000	Service

- (i) To display all the information of the members whose occupation is service.
- (ii) To display the name of family where female members are more than 3.
- (iii) To display names of family with income in ascending order.
- (iv) To insert a new record in the family table with the following data :
'Sachdeva',2,1,15000, 'Service'.

(c) Select Pow(-2,3); will display the output : (1)

- (i) -6 (ii) -8
- (iii) 8 (iv) 6

(d) Which statement is used to delete data from a table ? (1)

- (i) Delete (ii) Drop
- (iii) Truncate (iv) Remove

6. (a) Identify the correct MySql statement : (1)

- (i) Delete * from Salesman;
- (ii) Delete from Salesman;

(b) Write the output of the following MySql statements : (4)

- (i) SELECT ROUND(4444.862, 1);
- (ii) SELECT LENGTH ('Meena#Kumari###');
- (iii) SELECT INSTR('HIMALAYAN QUEEN', 'MALA');
- (iv) SELECT DAYOFMONTH('2010-02-26');

(c) Consider the table Friends and write the output of the following queries : (4)

Table : Friends

ID	FirstName	LastName	Gender	Age	Hobbies	City
101	Nita	Sharma	Female	42	Swimming	Jaipur
102	Seema	Gupta	Female	50	Reading	Puri
103	Dheeraj	Kumar	Male	36	Travelling	Ahmedabad
104	Sandeep	Arora	Male	22	Reading	Chandigarh
105	Rewa	Kakkar	Female	36	Cooking	Shimla
106	Ankur	Sood	Male	30	Music	Mathura

- (i) SELECT CONCAT(FirstName, ' ', LastName) FROM FRIENDS where city = "Mathura";
- (ii) SELECT DISTINCT(Age) FROM FRIENDS;

- (iii) SELECT LOWER(LastName) FROM FRIENDS WHERE HOBBIES='Travelling';
- (iv) SELECT MID(City,2,3) FROM FRIENDS WHERE GENDER='Male';
- (d) What is the difference between the following two statements. (1)
 - (i) Select LastName from Directory where LastName like "_a%";
 - (ii) Select LastName from Directory where LastName like "%a";
- 7. (a) What is e-Learning ? Give two advantages ? (2)
- (b) Arvind is creating a form for his practical file. Help him to choose most appropriate controls from list box, Combo box, Text Field, Text area, Radio Button, Check Box, Label and Command Button for the following entries from user : (2)
 - (i) A message "Enter Marks" in front of a Text Field.
 - (ii) An input to choose more than one subject from a set of given choices.
 - (iii) An input for accepting the residential area out of Rural and Urban as options.
 - (iv) An input for entering comments of the user.
- (c) Name any two e-Business websites. (1)



CLASS-XI

M. Marks : 70

INFORMATICS PRACTICES

Code : 112015-065-A

Marking Scheme/Hints to Solutions

NOTE : Any other relevant answer, not given here in but given by the candidate, be suitably awarded.

Q.No.	Hint to the Answer	Marks	Total Marks
1.	(a) (i) Plotters	1	2
	(ii) Operating System	1	
	(b) ZB, PB, TB, GB, MB, KB	1	1
	(c) (i) Virus : Computer Virus does not have the capacity to multiply itself. Worm : A worm is capable of replicating itself and make many copies of it.	2	4
	(ii) Serial Port : Through this port the information travels in and out one bit at a time. Mouse & Modem are connected using these ports.	2	
	USB Port : Through this port several data signals are sent simultaneously over several parallel channels. These ports are used to connect printer, scanner etc.		
	(d) An Integrated Development Environment (IDE) is an application program that consists of all required software developing tools required for developing software as part of a single interface. e.g. Java, VB	1	
	(e) (i) Basic input/output system	1	2
	(ii) High Level Languages	1	
	2.	(a) i=i+1;	1
(b) ShowMessageDialog() is used to display a specified message in a dialog box.		1	1
(c) int i, j =7; for(i=1 ; i<j; i++) { jTextField1.setText("Hello"); j- -; }		½ ½	2
		½ ½	

	(d) Eligible	2	2
	(e) Fully Connected Topology	1	1
	(f) switch(code) { case 1 : Season="Spring"; break; case 2 : Season="Summer"; break; case 3 : Season="Autumn"; break; case 4 : Season="Winters"; break; default : Season="No-Match"; break; }	2	2
	(g) jTextField : This control allows user to enter single line of text. jTextArea : This control allows user to enter multiple lines of text.	½ ½	1
3.	(a) (i) UPDATE command	1	1
	(ii) Sno	1	1
	(iii) (a) To view the structure: Describe Bank;	1	
	(b) To view the content : Select * from Bank;	1	2
	(b) (i) SELECT * FROM STUDENTS ORDER BY AGGREGATE, NAME DESC;	2	2
	(ii) Degree: 6	1	
	Cardinality : 5	1	2
	(iii) Char datatype : It specifies a fixed length Character String. Blanks are added if a value is shorter than its length.	1	
	Varchar datatype : It specifies a variable length string. No blanks are added if the length is shorter than maximum length.	1	2

4.	(a) a is 5	2	2
	(b) 7 times	1	
	It is an Entry controlled loop	1	2
	(c) <code>int k = 2, sum = 0;</code>	$\frac{1}{2}$	
	<code>if (k <=20)_</code>	$\frac{1}{2}$	
	<code> { sum = sum+k;</code>	$\frac{1}{2}$	
	<code> k++;</code>		2
	<code> }</code>		
	<code> else</code>		
	<code> k = k + 4;</code>	$\frac{1}{2}$	
	<code> jTextField1.setText(Integer.toString(sum));</code>		
	(d) Common Properties : Model,selectedIndex	1	
	Different Properties : Visible RowCount,Maximum RowCount	1	2
	(e) <code>jTextField1.setEditable(false)</code>	1	1
	(f) (i) <code>int amount ;</code>		
	<code>int tickets = Integer.parseInt(jTextField2.getText());</code>		
	<code>if (jRadioButton1.isSelected())</code>	1	
	<code> amount=tickets *200;</code>		
	<code>else if (jRadioButton2.isSelected())</code>		
	<code> amount=tickets *150;</code>	1	
	<code>else</code>		
	<code> amount=tickets *100;</code>		
	<code>if(jCheckBox1.is Selected())</code>		
	<code> amount= amount-(tickets*25);</code>		
	<code>jTextField3.setText(" "+ amount);</code>	1	3
	(ii) <code>jTextField1.setText(" ");</code>		
	<code>jTextField2.setText(" ");</code>		
	<code>jTextField3.setText(" ");</code>	1	1
	(iii) <code>System.exit(0);</code>	1	1
	(iv) All the Radio Buttons should be put in the same button group.	1	1

5.	(a)	(i) Create Table Printers(P_ID Integer P_Name Varchar(20), P_Company Varchar(20), Price Integer);	2	2
		(ii) ALTER TABLE PRINTERS MODIFY P_COMPANY VARCHAR(25);	½	1
		(iii) ALTER TABLE PRINTERS ADD DATEOFMANF DATE;	½	1
	(b)	(i) SELECT * FROM FAMILY WHERE OCCUPATION ='SERVICE';	1	
		(ii) SELECT NAME FROM FAMILY WHERE FEMALEMEMBERS > 3;	1	
		(iii) SELECT NAME, INCOME FROM FAMILY ORDER BY INCOME;	1	
		(iv) INSERT INTO FAMILY VALUES('SACHDEVA', 2,1,15000, 'SERVICE');	1	4
	(c)	-8	1	1
	(d)	Delete	1	1
	6.	(a)	(i) Delete from Salesman;	1
(b)		(i) 4444.9	1	
		(ii) 15	1	
		(iii) 3	1	
		(iv) 26	1	4
(c)		(i) Ankur Sood	1	
		(ii) 42	1	
		50		
		36		
		22		
	30			
	(iii) kumar	1		
(iv) hme han ath	1	4		

	(d) (i) Will show all the lastnames that have the second letter as 'a' followed by any no. of characters : e.g. Batra	1	1
	(ii) Will show all the lastnames that end with the letter 'a' e.g. Batra, Bhatia, Sharma, Mehta.		
7.	(a) E-learning is the education offered using electronic delivery methods such as CD-ROMs, Video conferencing, e-websites and e mail.	1	
	Advantages to the learner :		
	• On-demand availability : It enables students to take lessons at any time and at any place.	½	
	• Self-pacing : It helps the slow learner students to take the same lesson any number of times.	½	2
	(b) (i) Label	½	
	(ii) Check Box	½	
	(iii) Radio Button	½	
	(iv) Text Area	½	2
	(c) Snapdeal.com, Flipkart.com	1	1
	□□□		