

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

CLASS-XI
INFORMATICS PRACTICES (065)

Time Allowed : 3 Hrs.

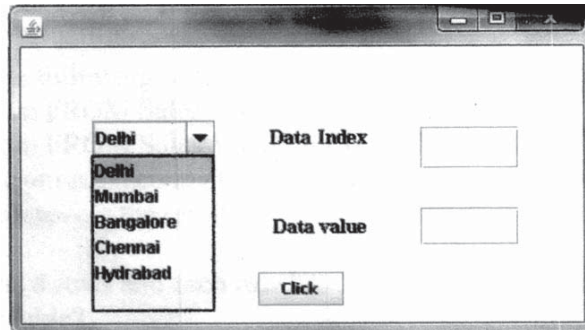
Maximum Marks : 70

General Instructions :

- (i) All the questions are compulsory.
- (ii) The 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 this 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) What is the difference between Dot Matrix printer and Laser printer ? Give two points. (2)
 - (b) What is Biometric sensor ? (1)
 - (c) What is the difference between RAM and ROM ? Give two points. (2)
 - (d) Write one word for each of the following : (1×2=2)
 - (i) It allows the server to store its own information about a user on the user's own computer.
 - (ii) It is used to prevent unauthorized Internet users from accessing private networks connected to the Internet.
 - (e) What is Digital Certificate ? (1)
 - (f) Name any two utility softwares. (1)
 - (g) Give two functions of an Operating System. (1)
-
2. (a) In the following statement : (1)
`int a = Integer.parseInt(jTextField1.getText().trim());`
What is the function of `parseInt()` method ?
 - (b) What will be the output of the following statement : (1)
`jTextArea1.setText("Hardwork is key\t to \n success");`

- (c) What is the difference between the following : (2)
- (i) Two Checkboxes are placed on same ButtonGroup.
 - (ii) Two Checkboxes are placed on different ButtonGroups.
- (d) Consider the following form : (1×2=2)



- (i) Write the code to display the index of selected value of JComboBox1 in jTextField1.
 - (ii) Write the code to display the selected value of JComboBox1 in jTextField2.
- (e) Write a code that displays the message “I like Java programming” in Message box on click of jButton1. (1)
- (f) Rewrite the following code using the IF statements without affecting the output of the code : (2)
- ```
switch (Grade)
{
 case 'A' : Remarks = "Distinction"; break;
 case 'B' : Remarks = "Good"; break;
 case 'C' : Remarks = "Average"; break;
 default : Remarks = "Fail";
}
```
- (g) What is the difference between RadioButton and CheckBox ? (1)

3. (a) Give two advantages of using MySQL. (1)
- (b) Define and Identify the Primary key and Candidate key(s) in the following table : (2)

Table : Dept

| Deptno | DeptName  | Location     |
|--------|-----------|--------------|
| 101    | Physics   | First Floor  |
| 102    | English   | Second Floor |
| 103    | Chemistry | Second Floor |
| 104    | Computer  | Third Floor  |
| 105    | Maths     | Third Floor  |

- (c) Mona has created a table Sales in MySQL. (1×2=2)

Table : Sales

| Salesman_No | Comm |
|-------------|------|
| 1001        | 200  |
| 1002        | 800  |
| 1003        | NULL |
| 1004        | 800  |
| 1005        | NULL |

She has written the following statements :

- (i) SELECT Comm FROM Sales WHERE Comm = NULL;
- (ii) SELECT Comm FROM Sales WHERE Comm !=NULL;

But she gets an error on executing the above statements. Write the correct statements after removing the errors.

- (d) A table “Item” has 8 rows and each row has 5 columns. What is the degree and cardinality of the table ? (2)
- (e) The column Ename of the table “Employee” is given below : (1×2=2)

|        |
|--------|
| Arpit  |
| Zarina |
| Kareem |
| Aruna  |
| Ankit  |

What will be the output of the following queries :

- (i) SELECT Ename FROM Employee WHERE Ename like “%a”;
- (ii) SELECT Ename FROM Employee WHERE Ename like “\_r%”;

- (f) What is the difference between CURDATE () and NOW () ? (1)

4. (a) What will be the content of JTextArea1 after the execution of the following code : (2)

```
int x,R = 0;
x = 20;
while (x >= 10)
{
 if (x > 9)
 R = 0;
```

```

else
 R = 2;
x = x - 4;
jTextArea1.append(x + "\n");
}
jTextArea1.append(" + R);

```

- (b) Rewrite the following code after removing the syntax errors. Underline the corrections. (2)

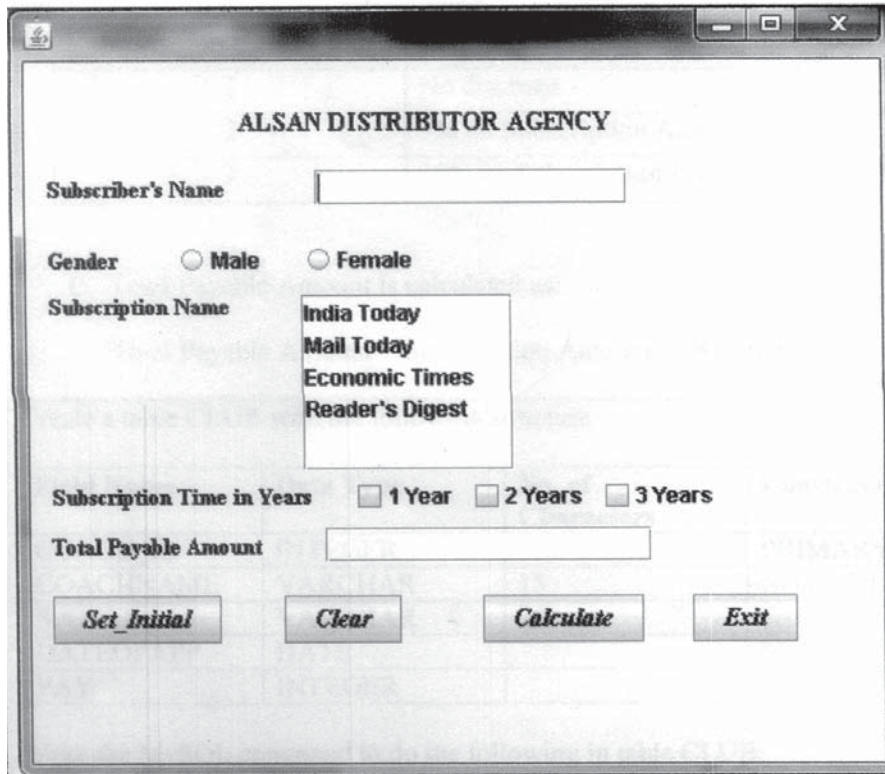
```

Int I= 10;
J = 5;
if (I = J)
 jTextField1.setText("I is equal to J")
else
 jTextField1.setText("I is not equal to J");

```

- (c) ALSAN Distribution agency supplies newspapers and magazines in the city have computerized their billing system. The data entry form in Java used by them is given below :

| Controls    | Control Name  | Description                              |
|-------------|---------------|------------------------------------------|
| Frame       | JFrame        | The Form Object                          |
| Textbox     | jTextField1   | To enter Subscriber's name               |
|             | jTextField2   | To display Total Payable Amount          |
| RadioButton | jRadioButton1 | To select Male gender                    |
|             | jRadioButton2 | To Select Female gender                  |
| List        | jList1        | To select Newspaper/Magazine from a list |
| Checkboxes  | jCheckBox1    | To select subscription time as 1 year    |
|             | jCheckBox2    | To select subscription time as 2 years   |
|             | jCheckBox3    | To select subscription time as 3 years   |
| Button      | jButton1      | To set the Initial values                |
|             | jButton2      | To clear the contents of TextFields      |
|             | jButton3      | To calculate Total Payable Amount        |
|             | jButton4      | To close the Application                 |



- (i) Write the code for Set\_Initial button to do the following : (1×3=3)
- Select the Male gender.
  - Select the Subscription time as 1 year.
  - Make the Total Payable Amount jTextField non-editable.
- (ii) Write the code for the CLEAR button to clear the contents of all jTextField. (1)
- (iii) Write the code for Exit button to close the application. (1)
- (iv) Write the code for Calculate button which will calculate the Total Payable Amount and displayed in jTextField2. The steps for the calculation are : (6)
- Subscription Amount is calculated as :

| Magazine/Newspaper | Subscription Amount per year in Rs. |
|--------------------|-------------------------------------|
| India Today        | 400                                 |
| Mail Today         | 200                                 |
| Economic Times     | 100                                 |
| Reader's Digest    | 450                                 |

- If the subscription time is 2 years, Subscription amount is multiplied by 2.
- If the subscription time is 3 years, Subscription Amount is multiplied by 3.

B. Discount Amount is calculated as :

| Subscription time in years | Discount                   |
|----------------------------|----------------------------|
| 1                          | No discount                |
| 2                          | 7% on Subscription Amount  |
| 3                          | 10% on Subscription Amount |

C. Total Payable Amount is calculated as :

Total Payable Amount = Subscription Amount – Discount Amount (if any)

5. (a) Create a table CLUB with the following structure : (2)

| Field Name | Data Type | No. of Characters | Constraint  |
|------------|-----------|-------------------|-------------|
| COACH_ID   | INTEGER   |                   | PRIMARY KEY |
| COACHNAME  | VARCHAR   | 15                | NOT NULL    |
| SPORTS     | VARCHAR   | 20                | NOT NULL    |
| DATEOFAPP  | DATE      |                   |             |
| PAY        | INTEGER   |                   |             |

- (b) Write the MySQL command to do the following in table CLUB. (1×2=2)

(i) To change the data type of coachname to varchar(20).

(ii) To add one more column gender which can hold value as 'M' or 'F'.

- (c) Consider the table CLUB with the following data and answer the questions that follow : (1×6=6)

**Table : CLUB**

| COACH_ID | COACHNAME | SPORTS     | DATAOFAPP  | PAY   | SEX |
|----------|-----------|------------|------------|-------|-----|
| 1001     | RAVINDER  | KARATE     | 1990-03-27 | 12000 | M   |
| 1002     | AMBIKA    | KARATE     | 1998-01-20 | 30000 | F   |
| 1003     | NITIN     | SQUASH     | 1998-02-19 | 15000 | M   |
| 1004     | ROHIT     | BASKETBALL | 1999-04-23 | 18000 | M   |
| 1005     | MOHAN     | SWIMMING   | 1998-02-24 | 30000 | M   |
| 1006     | SAUMYA    | SWIMMING   | 2001-01-22 | 15000 | F   |
| 1007     | GARIMA    | KARATE     | 2010-02-27 | 5600  | F   |
| 1008     | SHAILJA   | BASKETBALL | 2010-05-29 | 8500  | F   |

- (i) To show all the information about KARATE coaches in the club.
  - (ii) To display name of all coaches with their date of appointment (DATEOFAPP) in descending order.
  - (iii) To display coachname, pay, bonus (80% of the pay) for all the coaches.
  - (iv) To insert a new row with the following data :  
1009, "MANIK", "KARATE", "2010-12-10", 10000, "M"
  - (v) Increase the pay by 25% to all the BASKETBALL coaches.
  - (vi) To display the information of all the coaches who were hired in the year 2010.
6. (a) Write SQL statement separately to extract the following from the word 'Samaira' : (2)
- (i) Sam
  - (ii) maira
- (b) Write the output of the following SQL statements : (1/2×4=2)
- (i) SELECT POWER (4, 3);
  - (ii) SELECT CONCAT (CONCAT('Object', 'Oriented'), 'Programming');
  - (iii) SELECT TRUNCATE (657.76, 0);
  - (iv) SELECT ROUND (765.89);
- (c) Consider the table PATIENT and write the output of the following queries : (1×6=6)

**Table : Patient**

| Pcode | Name   | Age | Dept       | DOA        | Charge | Gender |
|-------|--------|-----|------------|------------|--------|--------|
| P1    | Karan  | 24  | Surgery    | 2010-07-07 | 5000   | M      |
| P2    | Varun  | 45  | Orthopedic | 2010-12-19 | 8000   | M      |
| P3    | Ravina | 12  | Orthopedic | 2010-01-15 | 8000   | F      |
| P4    | Ankita | 36  | Surgery    | 2009-04-16 | 12000  | F      |
| P5    | Ketan  | 16  | ENT        | 2009-07-31 | 25000  | M      |
| P6    | Arvind | 29  | ENT        | 2010-07-07 | 15000  | M      |
| P7    | Zugal  | 45  | Cardiology | 2010-10-20 | 14000  | M      |

- (i) SELECT LCASE (Name) FROM Patient WHERE Age between 45 and 60;
- (ii) SELECT SUBSTR (Name,2,4) FROM Patient WHERE Gender = 'M' and Charge >= 15000;

- (iii) `SELECT Name, INSTR (Name, 't') FROM Patient;`
- (iv) `SELECT LEFT (Dept, 3) FROM Patient WHERE Age between 25 and 40;`
- (v) `SELECT DISTINCT (Gender) FROM Patient;`
- (vi) `SELECT MONTH(DOA), DAY(DOA) FROM Patient WHERE Gender = 'F';`

7. (a) What is e-Governance ? Give its two features. (2)
- (b) What is e-Learning ? Give its two benefits to learners. (2)
- (c) How e-Business is beneficial to buyers ? Give two points. (1)