

Roll No.

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Candidates must write the Code on the title page of the answer-book.

- Please check that this question paper contains 4 printed pages.
- Code number given on the right hand side of the question paper should be written on the title page of the answer-book by the candidate.
- Please check that this question paper contains 4 questions.
- **Please write down the Serial Number of the question before attempting it.**
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

## DATABASE MANAGEMENT APPLICATIONS

Time allowed : 2½ hours

Maximum marks : 50

### SECTION – A

1. Multiple Choice Questions (Choose the most appropriate options) : **14 × 1 = 14**
- (i) The feature that database allows to access only certain records in database is :
- (a) Forms (b) Reports  
(c) Queries (d) Tables
- (ii) You can add a row using SQL in a database with which of the following ?
- (a) add (b) update  
(c) insert (d) make
- (iii) Which of the following is the original purpose of SQL ?
- (a) To specify the syntax and semantics of SQL data definition language.  
(b) To specify the syntax and semantics of SQL manipulation language.  
(c) To define the data structures.  
(d) All of the above.
- (iv) The concept of electronic cash is to execute payment by
- (a) Credit Card  
(b) ATM Card  
(c) Using computers over network  
(d) Cheque

- (v) Which segment do eBay, Amazon.com belong ?  
 (a) B2Bs (b) B2Cs  
 (c) C2Bs (d) C2Cs
- (vi) Which of the following are advantages normally associated with B2B e-commerce ?  
 (a) Shorter cycle times (b) Reduction in costs  
 (c) Reaches wider audiences (d) All of the above
- (vii) In Java byte, short, int and long, all of these are  
 (a) signed (b) unsigned  
 (c) both of the above (d) none of these
- (viii) Automatic type conversion in Java takes place when  
 (a) Two type are compatible and size of destination type is shorter than source type.  
 (b) Two type are compatible and size of destination type is equal of source type.  
 (c) Two type are compatible and size of destination type is larger than source type.  
 (d) All of the above
- (ix) What would be the output of the following fraction of code ?  

```
int Integer = 34 ; char string = 'S' ;
System.out.print( Integer ) ;
System.out.print( String ) ;
```

 (a) Throws exception (b) 34  
 (c) S (d) 34 S
- (x) With x = 0, which of the following are legal lines of Java code for changing the value of x to 1 ?  
 1. x ++;  
 2. x = x + 1;  
 3. x += 1;  
 4. x ==+ 1;  
 (a) 1, 2 & 3 (b) 1 & 4  
 (c) 1, 2, 3 & 4 (d) 3 & 2
- (xi) Which of these operators can be used to concatenate two or more String objects ?  
 (a) + (b) +=  
 (c) & (d) ||
- (xii) Which SQL statement is used to extract data from a database ?  
 (a) Select (b) Open  
 (c) Extract (d) Get
- (xiii) With SQL, how do you select all the columns from a table named "Persons" ?  
 (a) SELECT \* FROM persons (b) SELECT Persons  
 (c) SELECT \*.Persons (d) SELECT [all] FROM persons
- (xiv) Which of these is an incorrect array declaration ?  
 (a) int arr[] = new int[5]  
 (b) int [] arr = new int[5]  
 (c) int arr[]  
     arr = new int[5]  
 (d) int arr[] = int [5] new

### SECTION – B

2. Very Short Answer Questions : (Attempt any **seven** Questions) : **7 × 2 = 14**

- (a) Define DDL and DML.
- (b) Define Aggregate functions.
- (c) What is the default ordering of data using the ORDER BY clause ? How could it be changed ?
- (d) Write any two major benefits of e-commerce.
- (e) What is e governance objective ?
- (f) Write any two advantages of e-reservation.
- (g) Write the output of following code :

```
class A
{
    public static void main(String args[])
    {
        int x;
        x = 10;
        if(x == 10)
        {
            int y = 20;
            System.out.print("x and y: "+ x + " " + y);
            y = x*2;
        }
        y = 100;
        System.out.print("x and y: " + x + " " +
            y);    }
```
- (h) What is meant by exception handling in java ?
- (i) What are the desirable attributes of an employer ?

### SECTION – C

3. Short Answer Questions : (Attempt any **four** questions) **4 × 3 = 12**

- (a) Consider the following table Pharma and answer the following questions :

Table : Pharma

RxID	Drug ID	Drug Name	Price	Pharmacy Name	Pharmacy Location
R1000	5476	Amlodipine	100.00	Rx Pharmacy	Pitampura, Delhi
R1001	2345	Paracetamol	15.00	Raj Medicos	Bahadurgarh, Haryana
R1002	1236	Nebistar	60.00	MyChemist	Rajouri Garden, Delhi
R1003	6512	VitaPlus	150.00	MyChemist	Gurgaon, Haryana
R1004	5631	Levocitrezine	110.00	RxPharmacy	South Extension, Delhi

Write SQL commands :

- (i) To display all those medicines whose price is in the range 100 to 150.
  - (ii) To display the Maximum price offered by pharmacy located in "Gurgaon".
  - (iii) To display the Drug ID, DrugName and Pharmacy Name of all the records in descending order of their price.
- (b) On the basis of the Table Pharma given above, write the output(s) produced by executing the following queries :
- (i) SELECT RxID, DrugName, Price from Pharma where PharmacyName IN("Rx Pharmacy", "Raj Medicos");
  - (ii) SELECT PharmacyName, COUNT(\*) FROM Pharma GROUP BY PHARMACY NAME;
  - (iii) SELECT DrugName from Pharma where DrugID = 5476;
- (c) Write any three measures to ensure that as an employee you are compatible with change and adapt easily to it.
- (d) Write any three applications where java is used.
- (e) Write the output of following code :
- ```
class operation
{
    int data=50;
    void change(int data)
    {
        data=data+100;
    }
    public static void main(String args[])
    {
        operation op=new operation();
        System.out.println("before change "+op.data);
        op.change(500);
        System.out.println("after change "+op.data);
    }
}
```
- (f) What is the meaning of Work integrated learning ?

#### SECTION – D

4. Long Answer Questions : (Attempt any **two** questions) : **5 × 2 = 10**
- (a) What are the challenges in implementing e-governance ?
  - (b) Write the solution of challenges faced by e-commerce.
  - (c) What are the benefits to students of Work Integrated Learning ?
  - (d) What are the advantages of e-learning ?