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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 :  $2\frac{1}{2}$  hours

Maximum Marks : 50

### SECTION A

1. Multiple Choice Questions (Choose the most appropriate option) :  $1 \times 6 = 6$

(a) Consider the statement :

Employee (Employee\_id, Emp\_name, designation)

Here the Employee\_id, Emp\_name and designation are \_\_\_\_\_ and Employee is a \_\_\_\_\_ .

1

- (i) Tuples, Relation
- (ii) Attributes, Relation
- (iii) Tuples, Attribute
- (iv) Relations, Attribute

- (b) A group of statements which get executed based on a condition is called 1
- (i) Selection
  - (ii) Sequential
  - (iii) Iteration
  - (iv) None of these
- (c) Which SQL command is used to modify the structure of any table ? 1
- (i) MODIFY TABLE
  - (ii) ALTER TABLE
  - (iii) UPDATE TABLE
  - (iv) CHANGE TABLE
- (d) Which of the following is true regarding Referential Integrity ? 1
- (i) Each primary key value must match a primary key value in a related table.
  - (ii) Each primary key value must match a foreign key value in a related table.
  - (iii) Each foreign key value must match a primary key value in a related table.
  - (iv) Each foreign key value must match a foreign key value in a related table.
- (e) Which segment do eBay and Amazon belong to ? 1
- (i) B2B (Business to Business)
  - (ii) C2C (Consumer to Consumer)
  - (iii) C2B (Consumer to Business)
  - (iv) B2C (Business to Consumer)
- (f) Which of the following statement(s) is/are true in relation to B2C (Business to Consumer) commerce ? 1
- I. Business gets a wide reach to customers.
  - II. Availability 24 hours a day seven days a week.
  - III. Privacy of transaction is always maintained.
- (i) I and II
  - (ii) II and III
  - (iii) I and III
  - (iv) I only

## SECTION B

2. Short Answer Questions : 2×8=16

- (a) State any two advantages of using DBMS over traditional file system. 2
- (b) Find the output of the following code. How many times will the loop be executed ? 2
- ```
for (int count = 1; count <= 10; count = count + 2)
{
    System.out.println (count);
}
```
- (c) Define Variable. Write the code to declare a variable to store your age. 2
- (d) What is NULL value ? Write the query to retrieve all the records from table 'Result' where marks are NULL. 2
- (e) What do you mean by Work Integrated Learning ? Give example. 2
- (f) Why is Java known as a Platform independent language ? 2
- (g) Write any two advantages of Online learning. 2
- (h) What do you mean by Entity and its attribute ? 2

## SECTION C

3. Short Answer Questions : 3×6=18

- (a) Consider the Table Oven and answer the following questions : 3

**Table : Oven**

| Mod_No | Article       | Company |
|--------|---------------|---------|
| O11    | Convection    | IFB     |
| O12    | Grill         | IFB     |
| O13    | LC Convection | LG      |
| O14    | Fridge        | Samsung |
| O15    | Grill         | LG      |

- (i) Which field can be set as Primary Key and why ?
- (ii) Write the SQL command to display unique Company names from the table Oven.
- (iii) What is the degree and cardinality of the relation 'Oven' ?

- (b) Differentiate between While and Do while loop. 3
- (c) Explain any three modes of payment in Online Transactions. 3
- (d) What is End-User Development ? Name any one front end and back end tool used for developing software/application. 3
- (e) Define E-commerce. Give any two advantages of it. 3
- (f) Explain how Database management applications can be used in the Education Sector. 3

## SECTION D

4. Long Answer Questions : 5×2=10

- (a) What is e-Governance ? List the advantages of e-Governance. 5
- (b) What are User defined methods in Java ? Write a program to find the area of rectangle. 5

## OR

Differentiate between Char and String in Java. Read the code carefully and give its output :

```
package javaprograms;
public class StringDemo{
public static void main(String[] args)
{
String myString = "Hello Everyone";

System.out.println(myString.toUpperCase());

System.out.println(myString.indexOf('E'));

System.out.println(myString.replace("Hello", "Yellow"));

System.out.println(myString.contains("Hill"));
}
}
```