

TED (15) 3132  
(Revision-2015)

N20-08307

Reg.No.....  
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER-2020

**DATABASE MANAGEMENT SYSTEM**

[Maximum marks: 75]

(Time: 2.15 Hours)

**PART – A**

I (Answer any *three* questions in one or two sentences. Each question carries 2 marks)

1. Define DBMS
2. Define attribute and give one example.
3. Write the syntax of SELECT with WHERE clause in SQL
4. What are views.
5. State functional dependency (3 x 2 = 6)

**PART – B**

II (Answer any *four* of the following questions. Each question carries 6 marks)

1. List and explain any four advantages of DBMS
2. Explain Three Schema Architecture with diagram
3. Distinguish between generalization and specialization features of enhanced ER diagram with an example.
4. Describe the select and project relational algebra operations.
5. Explain aggregate functions in SQL
6. Explain the need of normalization
7. Describe data warehousing (4 x 6= 24)

**PART – C**

(Answer *any of the three units* from the following. Each full question carries 15 marks)

**UNIT –I**

- III.(a) Define data, database, instance and schema with examples (9)  
(b) Describe any three DBMS languages (6)

**OR**

- IV. (a) Draw and explain component module of DBMS (9)

(b) Explain hierarchical and network model (6)

**UNIT-II**

V. (a) Explain ER model with an example (9)

(b) Explain about superkey, primary key and foreign key (6)

**OR**

VI. (a) In relational algebra explain about natural join and outer join (9)

(b) How E-R model is mapped to relational model (6)

**UNIT-III**

VII.(a) Write the syntax of the following and explain with an example

1. Create table 2. Insert 3. Update 4. Delete (9)

(b) Explain nested query with an example (6)

**OR**

VIII. (a) Explain the steps for database connectivity using JDBC (9)

(b) Define trigger. Explain how to create and use trigger (6)

**UNIT-IV**

IX. (a) Describe the decomposition of a table with examples (9)

(b) Explain object oriented concepts (6)

**OR**

X. (a) Explain parallel DBMS architecture with suitable diagrams (9)

(b) Explain mobile database (6)

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