

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2018

DATABASE MANAGEMENT SYSTEMS

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. Write the different database users.
2. Define entity set.
3. What is domain ?
4. Define Normalization.
5. List the uses of ALTER command.

(5 × 2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Write the advantages and disadvantages of DBMS.
2. Write three schema architecture with diagram.
3. What is relationship set ? Write about its different types.
4. Compare 1 NF and 2 NF.
5. Write the following operations with example.
(a) SELECT (b) PROJECT (c) RENAME
6. Write the features of SQL.
7. What is view ? List their advantages.

(5 × 6 = 30)

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks)

UNIT — I

- III (a) Describe the Application Areas of DBMS. 6
 (b) Compare Hierarchical, Network and Relational models. 9

OR

- IV (a) Describe DDL, DML, DCL. 9
 (b) Explain parallel and distributed databases. 6

UNIT — II

- V (a) What are the different keys used in Relational Model ? Explain it. 6
 (b) Explain Binary relational operations. 9

OR

- VI (a) Describe Specialization and Generalization. 6
 (b) Explain UML class diagrams with example. 9

UNIT — III

- VII (a) Describe different constraints. 9
 (b) Explain concurrent execution in transaction. 6

OR

- VIII (a) Describe multivalued dependency. 6
 (b) What is Transaction ? Explain the properties of transaction. 9

UNIT — IV

- IX (a) Compare ORDERBY and GROUPBY clauses with example. 6
 (b) Write short notes on :
 (i) Triggers (ii) Cursors (iii) Stored Procedures. 9

OR

- X (a) Explain SQL data types. 5
 (b) Explain aggregate functions. 10