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)

[441]

[P.T.O.

Marks

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) Comparé 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