TED (15) –3132

Reg. No. ....

(REVISION — 2015)

Signature ....

THIRD SEMESTER DIPLOMA EXAMINATION IN COMPUTER ENGINEERING — OCTOBER, 2016

DATABASE MANAGEMENT SYSTEM

[*Time* : 3 hours

(Maximum marks : 100)

PART—A

(Maximum marks : 10)

Marks

I   Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Define field and record.

2. Define degree of a relation.

3. State the use of triggers.

4. Write the syntax for creating a virtual relation in SQL.

5. State the need of normalization.

(5×2=10)

PART — B

(Maximum marks : 30)

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

1. Write various application areas of DBMS.

2. Describe the duties of a database administrator.

3. Define keys.

4. Summarize the notations used in E-R diagrams.

5. Distinguish between inner join and outer join.

6. Discuss the goals of Data Mining Technology.

7. Explain transparency in Distributed databases.

(5×6=30)

[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) Explain Component Modules of DBMS.   9

(b) Write short notes on DBMS languages.   6

OR

IV (a) Explain any two data models.   9

(b) Distinguish between two-tier and three-tier architectures for DBMS.   6

UNIT—II

V (a) Explain the following relational operations with examples.

(i) SELECT   (ii) PROJECT   (iii) RENAME   9

(b) Explain mapping of entity types and relationship types in E-R model to
relational model.   6

OR

VI (a) Explain enhanced ER diagram with an example.   9

(b) Discuss the relational model concepts of a database.   6

UNIT—III

VII (a) Explain different aggregate functions with suitable examples.   8

(b) Discuss the use of stored procedures with an example.   7

OR

VIII (a) List the steps taken to provide database connectivity using JDBC.   9

(b) List and explain the operations that can be done using 'ALTER TABLE'
command.   6

UNIT—IV

IX (a) Define Functional Dependency.   6

(b) Discuss parallel and distributed database architectures.   9

OR

X (a) State the object oriented database concepts.   9

(b) Explain dependency preservation and lossless join properties of decomposition. 6

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