DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE – APRIL -2021.

DATABASE MANAGEMENT SYSTEM

(Maximum Marks : 75)   [Time : 2.15 hours]

PART–A

Marks

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

1. Define DBMS.

2. List any four types of database users in DBMS.

3. Differentiate simple and composite attributes.

4. What are the purposes of triggers?

5. State functional dependency.   (3x2=6)

PART - B

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

1. List and brief the advantages of DBMS.

2. Illustrate Three Schema architecture with diagram.

3. Summarize notations for ER diagram.

4. Explain specialization with example.

5. Explain the data types in SQL.

6. State the properties of Data Warehouse.

7. Explain the working of mobile databases.

[4x6 =24]

PART - C

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

UNIT I

III (a) Explain hierarchical and relational data models with an example.   (8)

(b) List and explain different types of database languages.   (7)

OR

IV (a) Distinguish Centralised and Client-Server database systems.   (8)

(b) Describe different application areas of DBMS.   (7)

UNIT- II

V (a) Explain the unary relational operations-select and project with examples.   (8)

(b) Summarize Natural-Join with its syntax and example.   (7)

OR

VI (a) Differentiate foreign key, candidate key and primary key.   (8)

(b) Explain the steps to convert ER model to Relational Model.   (7)

UNIT- III

VII (a) What is SQL and explain any 3 features?   (8)

(b) Describe procedures and functions in SQL.   (7)

OR

VIII (a) Explain how does SQL allow implementation of the integrity constraints. (8)

(b) Describe SQL SELECT query with different clauses and examples.

Which are required and which are optional.   (7)

UNIT – IV

IX (a) Explain how normalization used to access the quality of relational

schema design.   (8)

(b) List and explain the features of Object oriented databases.   (7)

OR

X (a) Explain decomposition of relation with an example.   (8)

(b) Explain distributed database management system.   (7)

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