P131/CMP509/EE/20230607

Time : 3 Hours **Marks : 80**

Instructions :

1. All Questions are Compulsory.
2. Each Sub-question carry 5 marks.
3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
4. Question paper of 80 Marks, it will be converted in to your programme structure marks.

1. Solve any **four** sub-questions.

   a) What are the advantages of procedure in SQL? 5

   b) What is data and information with example? 5

   c) Consider Courier services system. In which Administrator is person who handles administrations of system. Administrator is person who is actually owner of Courier Services shop. Client is person who courier the documents or things. Workers are person who works in courier office to handle enquiry, dispatching process of courier's etc. Payment_Mode option is available for client. Client can do payments by using different Payment modes.

   Draw ER diagram for Courier Service System. 5

   d) What is Normalization? List types of normalization 5

   e) What is concurrency control in dbms? 5

2. Solve any **four** sub-questions.

   a) Determine functional dependency in Mark sheet table given below : 5

Roll No.	Subject code	Marks
101	C110	82
101	C112	45
102	C122	65
103	C123	70

   b) Explain the concept of Super key, Candidate key and Primary key with examples? 5

   c) Explain transaction states with example? 5

d) Write short note on group by clause. 5

e) Explain any eight application of DBMS? 5

3. Solve any **four** sub-questions.

a) Explain ACID properties. 5

b) What is SQL? Also List down the DDL and DML commands. 5

c) What is a Functional dependency with example? 5

d) Explain the structure of a PL/SQL program. 5

e) Explain following commands with syntax and example: 5

i) Update

ii) Insert

iii) Delete

4. Solve any **four** sub-questions.

a) What is trigger? Write syntax for creating trigger? 5

b) What is an attribute? Explain any two types of attributes. 5

c) Write syntax and example of while loop in PL-SQL? 5

d) What is decomposition? Explain with example 5

e) Explain the following terms. 5

i) Degree of relationship

ii) Multiplicity

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