

Q3. A. What is RDBMS? Explain the Relational Data Model in detail. [6]

B. What is normalization? Explain it upto 2NF with example. [6]

OR

B. Explain ER-Diagram in brief. Draw the ER-diagram for University Database. [6]

Q4. A. Explain 2-tier & 3-tier client server architecture with diagrams. [6]

B. Explain Heterogeneous Distributed Database System with example. [6]

OR

B. What is event-driven programming? Explain how does event-driven programming work? [6]

Q5. A. Write SQL commands for the following. (Any THREE) [6]

1 To create a table EMP having fields (ENO number(2,0), DNO number(1,0), varchar2(15), BPAY number(10,0)), where ENO is primary key and DNO is a foreign key referencing DEPTNO of table DEPT.

2 To display all the records of a table EMP whose ENAME has second character as B.

3 To Take back all the permission given on table EMP from user MEHTA.

4 To display DNO wise Total BPAY of table EMP.

B. Explain briefly basic structure of PL/SQL block. Also write the advantages of PL/SQL over SQL. [6]

OR

B. Explain following function with syntax and example: [6]

1. lower() 2. ceil() 3. substr()

Q6. A. Define the term Cursor and write the steps to manage explicit cursor. [6]

B. Write PL/SQL code block to read the ENO from user for the table EMP and search that record in table EMP. If record is found for that input ENO then display that employee information like ENO,ENAME and NPAY. If it is not found then display message like "For given ENO record does not exist in table EMP". [6]

OR

B. Write a Function named FMUL, which returns multiplication of two given numbers. Write a PL/SQL code block, which reads two numbers and using above function FMUL calculates multiplication of that two numbers and display the given numbers & the result. [6]

—X—
②