II B.Tech II Semester Examinations,April/May 2012
DATABASE MANAGEMENT SYSTEMS
Common to Information Technology, Computer Science And Engineering
Time: 3 hours   Max Marks: 80
Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Consider the following instance of sailor's relation.

Sid	Sname	Rating	Age
16	Raghu	1	27
22	Srinivas	2	24
15	Nagendar	Null	25
4	Ravi	3	24

    i. Write SQL queries to compute the average rating using AVG, the sum of
       the ratings using SUM and the number of ratings using COUNT.
    ii. If you divide the sum just computed by the count, would the results be
        the same as the average? How would your answer change if these steps
        were carried out with respect to the age field instead of rating?

   (b) What are NULL values? What is its impact on SQL constructs?   [11+4]

2. (a) Explain logical undo Logging?

   (b) Explain Transaction Rollback?   [8+7]

3. (a) Explain problems caused by decomposition? What are the different measures
       adopted to rectify it?

   (b) Explain closure set of Functional dependency's?   [7+8]

4. (a) Explain ACID properties of Transaction?

   (b) Explain Different states of Transaction?   [7+8]

5. (a) Define DBMS? Explain Database system Applications.

   (b) Give short notes on Transaction management.   [7+8]

6. Explain clustered index organization with examples?   [15]

7. (a) Explain about syntax of Tuple Relational Calculus queries.

   (b) Discuss about semantics of Tuple Relational Calculus queries.   [7+8]

8. (a) Explain conceptual design for large database.

   (b) Define the terms: Ternary relationship, Weak entity set, Identify owner, Ag-
       gregation.   [7+8]

⋆ ⋆ ⋆ ⋆ ⋆

1

II B.Tech II Semester Examinations,April/May 2012
DATABASE MANAGEMENT SYSTEMS
Common to Information Technology, Computer Science And Engineering
Time: 3 hours   Max Marks: 80
Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. Explain clustered index organization with examples? [15]

2. (a) Explain ACID properties of Transaction?
   (b) Explain Different states of Transaction? [7+8]

3. (a) Explain problems caused by decomposition? What are the different measures adopted to rectify it?
   (b) Explain closure set of Functional dependency's? [7+8]

4. (a) Explain logical undo Logging?
   (b) Explain Transaction Rollback? [8+7]

5. (a) Explain about syntax of Tuple Relational Calculus queries.
   (b) Discuss about semantics of Tuple Relational Calculus queries. [7+8]

6. (a) Define DBMS? Explain Database system Applications.
   (b) Give short notes on Transaction management. [7+8]

7. (a) Explain conceptual design for large database.
   (b) Define the terms: Ternary relationship, Weak entity set, Identify owner, Aggregation. [7+8]

8. (a) Consider the following instance of sailor's relation.

Sid	Sname	Rating	Age
16	Raghu	1	27
22	Srinivas	2	24
15	Nagendar	Null	25
4	Ravi	3	24

       i. Write SQL queries to compute the average rating using AVG, the sum of the ratings using SUM and the number of ratings using COUNT.
       ii. If you divide the sum just computed by the count, would the results be the same as the average? How would your answer change if these steps were carried out with respect to the age field instead of rating?

   (b) What are NULL values? What is its impact on SQL constructs? [11+4]

⋆ ⋆ ⋆ ⋆ ⋆

II B.Tech II Semester Examinations,April/May 2012
DATABASE MANAGEMENT SYSTEMS
Common to Information Technology, Computer Science And Engineering
Time: 3 hours   Max Marks: 80
Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain logical undo Logging?

   (b) Explain Transaction Rollback?   [8+7]

2. Explain clustered index organization with examples?   [15]

3. (a) Explain about syntax of Tuple Relational Calculus queries.

   (b) Discuss about semantics of Tuple Relational Calculus queries.   [7+8]

4. (a) Explain problems caused by decomposition? What are the different measures adopted to rectify it?

   (b) Explain closure set of Functional dependency's?   [7+8]

5. (a) Explain conceptual design for large database.

   (b) Define the terms: Ternary relationship, Weak entity set, Identify owner, Aggregation.   [7+8]

6. (a) Explain ACID properties of Transaction?

   (b) Explain Different states of Transaction?   [7+8]

7. (a) Define DBMS? Explain Database system Applications.

   (b) Give short notes on Transaction management.   [7+8]

8. (a) Consider the following instance of sailor's relation.

Sid	Sname	Rating	Age
16	Raghu	1	27
22	Srinivas	2	24
15	Nagendar	Null	25
4	Ravi	3	24

   i. Write SQL queries to compute the average rating using AVG, the sum of the ratings using SUM and the number of ratings using COUNT.

   ii. If you divide the sum just computed by the count, would the results be the same as the average? How would your answer change if these steps were carried out with respect to the age field instead of rating?

   (b) What are NULL values? What is its impact on SQL constructs?   [11+4]

⋆ ⋆ ⋆ ⋆ ⋆

II B.Tech II Semester Examinations,April/May 2012
DATABASE MANAGEMENT SYSTEMS
Common to Information Technology, Computer Science And Engineering
Time: 3 hours   Max Marks: 80
Answer any FIVE Questions
All Questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Define DBMS? Explain Database system Applications.

   (b) Give short notes on Transaction management.   [7+8]

2. (a) Explain about syntax of Tuple Relational Calculus queries.

   (b) Discuss about semantics of Tuple Relational Calculus queries.   [7+8]

3. (a) Explain logical undo Logging?

   (b) Explain Transaction Rollback?   [8+7]

4. (a) Explain problems caused by decomposition? What are the different measures adopted to rectify it?

   (b) Explain closure set of Functional dependency's?   [7+8]

5. Explain clustered index organization with examples?   [15]

6. (a) Explain ACID properties of Transaction?

   (b) Explain Different states of Transaction?   [7+8]

7. (a) Explain conceptual design for large database.

   (b) Define the terms: Ternary relationship, Weak entity set, Identify owner, Aggregation.   [7+8]

8. (a) Consider the following instance of sailor's relation.

Sid	Sname	Rating	Age
16	Raghu	1	27
22	Srinivas	2	24
15	Nagendar	Null	25
4	Ravi	3	24

   i. Write SQL queries to compute the average rating using AVG, the sum of the ratings using SUM and the number of ratings using COUNT.

   ii. If you divide the sum just computed by the count, would the results be the same as the average? How would your answer change if these steps were carried out with respect to the age field instead of rating?

   (b) What are NULL values? What is its impact on SQL constructs?   [11+4]

⋆ ⋆ ⋆ ⋆ ⋆