



SAIVA BHANU KSHATRIYA COLLEGE
(Aruppukottai Nadargal Uravinmurai Pothu Abi Viruthi Trustuku Pathiyapattathu)

ARUPPUKOTTAI
QUESTION BANK

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|------------------------------------|---------------------------------------|----------------|---------|
| Name of the Department : | Computer Science | UG / PG : | UG |
| Semester (UG - III & V; PG - III): | UG- V | Subject Code : | SCSJC51 |
| Name of the Subject : | Relational Database Management System | | |

Section A (Multiple Choice Questions)

Unit I: (Overview of Database System & Introduction to Database Design)

1. A description of data in terms of a data model is called.....
(a) Record (b) File (c) Schema (d) DBMS
2. A DBMS enables user to create, modify and query data through a.....
(a) DCL (b) DDL (c) DQL (d) TCL
3. In an ER diagram an entity set is represented by a.....
(a) Rectangle (b) Ellipse (c) Circle (d) Diamond box
4. Architecture of a database system external level is the.....
(a) Physical (b) Conceptual (c) View (d) Logical
5. Anis described using a set of attributes.
(a) Network (b) Schema (c) Entity set (d) Event

Unit II: (The Relational Model & Relational Algebra and Calculus)

6. Ais statement that a certain minimal subset of the field of a relation is a unique tuples.
(a) Primary key (b) Key constraint (c) Domain (d) Not null
7. Key to represent relationship between tables is called.....
(a) Primary key (b) Foreign key (c) Secondary key (d) Not null
8. A constraint is the condition specified on a database schema and restricted data.
(a) Integrity (b) Data (c) Domain (d) Network
9. The number of column in a table is it's.....
(a) Degree (b) Tuple (c) Relation (d) Record
10. In the relational model, cardinality is termed as.....
(a) Number of constraint (b) Number of attributes (c) Number of tables (d) Number of tuples

Unit III: (SQL Queries, Constraints, Trigger)

11. Count function in SQL, returns the number of.....
(a) Values (b) Groups (c) Columns (d) Distinct values
12. To remove a relation from an SQL database ,we usecommand
(a) Delete (b) Purge (c) Remove (d) Drop table
13. A database that has a set of associated trigger is called an.....
(a) Active database (b) Event database (c) Passive database (d) Action
14. Which of the following can initiate a trigger?
(a) Insert (b) Update (c) Delete (d) All of the above
15. Theoperator allows us to extract columns from a relation.
(a) Selection (b) projection (c) Package (d) Domain

Unit IV: (Schema Refinement Database Design & Normal Forms)

16. Fifth normal forms is concerned
a) (a) FD (b) MD (c) Join dependency (d) domain key
17. Dependency preservation is not guaranteed in.....
(a) BCNF (b) 3 NF (c) 2 NF (d) 4NF
18. A relation is in.....normal form if every field contain only atomic values.
(a) BCNF (b) 3 NF (c) 1 NF (d) 4NF



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19. is a tool that allows us to eliminate redundancy.
(a) Decomposition (b) Concurrency (c) Recovery (d) DQL
20. A relation schema is in first normal form if the all the attributes are.....
(a) Multiple (b) Derived (c) Composite (d) Atomic

Unit V: (Overview of Transaction Management)

21. A is a small book keeping object associated with a database object.
(a) Lock (b) Transaction (c) Concurrency (d) Recovery
22. Thecommand gives user privileges to base tables and views.
(a) Grant (b) Revoke (c) Select (d) Modify
23. is a well-known example of public key encryption.
(a) DES (b) RSA (c) AES (d) ARS
24. Exclusive mode refers to as.....operation.
(a) Read only (b) Write only (c) Read &write (d) All the above
25.is a ensure that once a transaction is committed that transaction update that do not get lost, even if there is system failure.
(a) Atomicity (b) Durability (c) Isolation (d) Concurrency

Section B (7 mark Questions)

Unit I: (Overview of Database System & Introduction to Database Design)

26. Discuss Drawback of file system.
27. Discuss Advantages of DBMS.
28. Explain Additional features of ER model with examples.
29. Discuss Level of abstraction in a DBMS.
30. Discuss Role of database administrator (DBA).

Unit II: (The Relational Model & Relational Algebra and Calculus)

31. Discuss specifying key constraints in SQL with examples.
32. How can create, modify and query tables using SQL.
33. Discuss Relational calculus with query examples.
34. Discuss Views and updated on views with query examples.
35. Explain Enforcing integrity constraints in SQL with examples.

Unit III: (SQL Queries, Constraints, Trigger)

36. What are the Aggregate operators in SQL? Explain them with examples.
37. Discuss outer joins and Null values in SQL with examples.
38. Explain Intersect, Union, Except in SQL with examples.
39. Discuss Complex integrity constraints in SQL with examples.
40. Discuss the basic form of SQL query with examples.

Unit IV: (Schema Refinement Database Design & Normal Forms)

41. Discuss Schema refinement in database design with query examples.
42. Discuss properties of decomposition with suitable illustrations.
43. Discuss BCNF normal forms with suitable illustrations.
44. Discuss Normalization concept with suitable illustrations.
45. Explain Functional and Multi-valued dependency rules with examples.

Unit V: (Overview of Transaction Management)

46. Discuss ACID properties with examples.



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47. Explain Transaction support in SQL with examples.
48. Discuss concurrent execution of transaction with examples.
49. Explain security for internet application with examples.
50. Discuss Additional issue of related security with examples.

Section C (10 mark Questions)

Unit I: (Overview of Database System & Introduction to Database Design)

51. Discuss structure (Architecture) of DBMS and its advantages.
52. Explain conceptual design with ER model with examples.

Unit II: (The Relational Model & Relational Algebra and Calculus)

53. Discuss Relational algebra with query examples.
54. Explain logical database design of ER to relational query with examples.

Unit III: (SQL Queries, Constraints, Trigger)

55. Discuss in detail, designing active database trigger with examples.
56. Discuss nested query with query examples.

Unit IV: (Schema Refinement Database Design & Normal Forms)

57. Discuss third, fourth, fifth normal forms in details.
58. Discuss Functional, join and multivalued dependencies with examples.

Unit V: (Overview of Transaction Management)

59. Discuss Discretionary and mandatory access control with examples.
60. Explain lock based concurrency control with examples.