



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

**ARUPPUKOTTAI**  
**DEPARTMENT OF BCA**  
**QUESTION BANK**

Name of the Department :	Computer Applications	UG / PG :	UG
Semester (UG - III & V; PG - III) :	V	Subject Code :	SCAJC51
Name of the Subject :	Database Management System		

**Section A (Multiple Choice Questions)**

**Unit I: (Overview of Database system)**

- \_\_\_\_\_ attribute may contain more than one values.  
(a) multi value (b) composite (c) derived (d) simple
- \_\_\_\_\_ level describes how the data are actually stored.  
(a) physical (b) complex (c) high (d) logical
- \_\_\_\_\_ command is used to give permission to the users.  
(a) grant (b) revoke (c) authorization (d) permit
- \_\_\_\_\_ command is used to delete all the values in the table.  
(a) truncate (b) drop (c) delete (d) drop out
- DCL stands for \_\_\_\_\_.  
(a) Data command language (b) Data control language (c) Data condition language (d) None

**Unit II: (Relational model)**

- A \_\_\_\_\_ integrity constraint is specified between two tables.  
(a) referential (b) domain (c) entity (d) key
- \_\_\_\_\_ is a virtual table based on the result set of an SQL statement.  
(a) View (b) Function (c) Entity (d) None
- \_\_\_\_\_ entity independent to any other entity in the schema.  
(a) strong (b) weak (c) key (d) address
- The \_\_\_\_\_ join operation is an extension of the join operation.  
(a) outer (b) inner (c) left (d) right
- \_\_\_\_\_ constraint enforces that values in a column must satisfy a specific condition.  
(a) check (b) unique (c) default (d) data type

**Unit III: (SQL: Queries, Constraints, Triggers)**

- The \_\_\_\_\_ operator will return unique rows from the left query that aren't present in the right query result.  
(a) except (b) except all (c) union (d) union all
- A \_\_\_\_\_ trigger is fired once for each row that is affected by DML command.  
(a) left (b) column (c) row (d) None
- \_\_\_\_\_ are stored programs which are automatically invoked.  
(a) procedure (b) function (c) trigger (d) None
- A field with a \_\_\_\_\_ value is a field with no value.  
(a) null (b) not null (c) is null (d) not
- \_\_\_\_\_ function return information about the data in a database.  
(a) aggregate (b) recursive (c) static (d) none

**Unit IV: (Schema refinement and normal forms)**

- \_\_\_\_\_ is a technique of organizing the data in the database.  
(a) normalization (b) aggregate (c) constraints (d) None
- \_\_\_\_\_ is the process of breaking down in parts or elements.



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- (a) aggregate                      (b) decomposition                      (c) constraints                      (d) None
18. When an indirect relationship causes functional dependency it is called as \_\_\_\_\_ dependency.  
(a) transposition                      (b) partial                      (c) transitive                      (d) None
19. \_\_\_\_\_ dependency occurs when a non-prime attribute is functionally dependent on part of a candidate key.  
(a) transposition                      (b) partial                      (c) transitive                      (d) None
20. In \_\_\_\_\_ normal form identify each set of related data with a primary key.  
(a) Answer                      (b) Answer                      (c)                      (d) None

**Unit V: (Overview of transaction management)**

21. A \_\_\_\_\_ lock on a data item can be either locked or unlocked states.  
(a) Binary                      (b) Exclusive                      (c) Shared                      (d) None
22. \_\_\_\_\_ command is used for storing changes performed by a transaction.  
(a) revoke                      (b) grant                      (c) commit                      (d) save point
23. Prevention of access of the database by authorized users is referred to as  
(a) integrity                      (b) productivity                      (c) security                      (d) reliability
24. \_\_\_\_\_ command is used to restore the database to the last committed state.  
(a) save point                      (b) rollback                      (c) commit                      (d) Both a & b
25. What is data encryption standard (DES)?  
(a) block cipher                      (b) stream cipher                      (c) bit cipher                      (d) byte cipher

**Section B (7 mark Questions)**

**Unit I: (Overview of Database system)**

26. Define DBMS and its functions.  
27. Explain about levels of abstraction.  
28. Explain the structure of DBMS and its functions.  
29. Define a queries in a DBMS.  
30. Explain about ACID properties in DBMS.

**Unit II: (Relational model)**

31. Define join operations & its types.  
32. Define relational algebra operations.  
33. Compare strong entity & weak entity.  
34. How the data integrity is enforced by database constraints.  
35. Define view and how create, replace and drop it.

**Unit III: (SQL: Queries, Constraints, Triggers)**

36. Explain the nested queries & aggregate operators.  
37. Define null value concepts.  
38. Define intersect and except operator.  
39. Explain about the SQL check constraints with example.  
40. Compare before and after triggers in SQL.

**Unit IV: (Schema refinement and normal forms)**

41. Explain the functional dependency and its rules.  
42. Explain the decomposition and its properties.  
43. Difference between lossless and lossy join decomposition.



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44. Define the fully functionally dependency and transitive dependency.
45. Define the multivalued dependency and partial dependency.

**Unit V: (Overview of transaction management)**

46. Explain about lock based protocols.
47. Explain about two phasing locking protocols.
48. Explain about crash recovery.
49. Explain about access control and its types.
50. Explain the different modes of security control.

**Section C (10 mark Questions)**

**Unit I: (Overview of Database system)**

51. Explain the additional features of ER model.
52. Discuss briefly about the ER model with diagram.

**Unit II: (Relational model)**

53. Discuss briefly about relational calculus.
54. Explain the integrity constraints & its types.

**Unit III: (SQL: Queries, Constraints, and Triggers)**

55. Explain about the triggers and its types.
56. Explain briefly about the SQL integrity constraints.

**Unit IV: (Schema refinement and normal forms)**

57. Explain briefly about Normalization.
58. Explain the types of functional dependencies in DBMS.

**Unit V: (Overview of transaction management)**

59. Explain about transaction support in SQL.
60. Describe briefly about cryptography.