

- Introduction to Database
- Introduction to DBMS
- Advantages and Disadvantages of DBMS
- SQL | DDL, DML, DCL Commands
- Domain
- Entity and Attribute
- Relationship among entities
- Attribute
- DBMS Keys
- Schema
- Twelve rules of CODD
- Normalization
- Functional Dependency
- Transaction processing concepts
- Schedules
- Serializability
- OODBMS vs RDBMS
- RDBMS
- RDBMS Security
- SQL queries for various join types
- SQL Join
- SQL Functions
- Trigger
- Triggers: mutating errors, instead of triggers
- Concept of table spaces, segments, extents and block
- Oracle cursor
- Cursor management: nested and parameterized cursors

- Oracle exception handling mechanism
- Introduction to Concurrency control
- Dedicated Server vs Multi-Threaded Server
- Distributed database, database links, and snapshot
- Data Dictionary and Dynamic Performance Views
- Stored Procedures and Parameters

## DBMS Previous Years Solved

- What is database management system (DBMS) ? What are the tasks performed by users in DBMS ?
- What are the advantages and disadvantages of DBMS ?
- What do you understand by database users ? Describe the different types of database users.
- Who are data administrators ? What are the functions of database administrator ?OR Discuss the role of database administrator.
- What is data abstraction ? Explain different levels of abstraction.
- Explain the differences between physical level, conceptual level and view level of data abstraction.
- Explain the difference between database management system (DBMS) and file system.
- Discuss the architecture of DBMS. What are the types of DBMS architecture ?
- What are data models ? Briefly explain different types of data models.
- Describe data schema and instances.
- Describe data independence with its types
- Describe the classification of database language. Which type of language is SQL ?

- Explain DBMS interfaces. What are the various DBMS interfaces ?
- What is ER model ? What are the elements of ER model ? What are the notations of ER diagram ?
- What do you understand by attributes and domain ? Explain various types of attributes used in conceptual data model.
- Construct an ER diagram for University system.
- Construct an ER diagram for the registrar's office
- Explain the primary key, super key, foreign key and candidate key with example. OR Define key. Explain various types of keys.
- What do you mean by a key to the relation ? Explain the differences between super key, candidate key and primary key.
- Explain generalization, specialization and aggregation. OR Compare generalization, specialization and aggregation with suitable examples.
- What is Unified Modeling Language ? Explain different types of UML.
- What is relational model ? Explain with example.
- Explain constraints and its types.
- Consider the following relations:
- What are the additional operations in relational algebra ?
- Explain integrity constraints.
- Describe mapping constraints with its types.

## DBMS PYQs Hindi Videos

- 01 What is DBMS, data, database, characteristics, advantages, disadvantages in Hindi video
- 02 RDBMS in Hindi video

- 03 DBMS System Architecture in Hindi video
- 04 DBMS VS RDBMS in Hindi video
- 05 DBMS Users classification in Hindi video
- 06 Domain Tuple Attribute in Hindi video
- 07 Data Independence in Hindi video
- 08 Schema in Hindi video
- 09 Relational Data Model in Hindi video
- 10 Hierarchical Data Model in Hindi video
- 11 Integrity Constraints in Hindi video
- 12 Domain of Database | Create domain in Hindi video
- 13 Codd Rules in Hindi video
- 14 Theta join (Hindi) | Inner join in Hindi video
- 15 Natural join in Hindi video
- 16 Left outer join in Hindi video
- 17 Right outer join in Hindi video
- 18 Full outer join in Hindi video
- 19 1 NF | First Normalisation in Hindi video
- 20 2NF | Second Normal Form | Normalization in Hindi video
- 21 3NF | Third Normal Form | Normalization in Hindi video
- 22 Functional dependency in Hindi video
- 23 Relation and its characterstics in Hindi video
- 24 Number of possible Super keys in Hindi video
- 25 DBMS Concurrency control | Problems in Concurrency control | Lost update Dirty Unrepeatable in Hindi video
- 26 Serializability in DBMS | Conflict serializability | View serializability | Examples in Hindi video
- 27 DBMS Transaction processing system | States | Properties | ACID | Operations

Example in Hindi video

- 28 DBMS Schedule | Definition | Types | Serial schedule | Non serial schedule | Example in Hindi video
- 29 Lock based concurrency protocol in DBMS | Simplistic | Pre claiming | Two phase | Strict two phase in Hindi video
- 30 Time stamp protocol in DBMS| Concurrency control protocol | advantages | disadvantages in Hindi video
- 31 Validation based protocol in DBMS | Concurrency control protocol | read validation write phase in Hindi video
- 32 Multiple granularity in Hindi video
- 33 ER model | ER model to table to ER model | Relationship | Entity | Attribute in Hindi video
- 34 Types of attributes in ER diagrams | key, simple, composite, single, multivalued, derived, examples in Hindi video
- 35 Cardinality in ER Diagram | symbols | example |1 to 1 | 1 to many | many to many | many to 1 in Hindi video
- 36 ER diagram symbols | for entity, attribute, relationship, participation constraints, cardinality in Hindi video
- 37 ER diagrams to tables | composite, simple, multiuvalued, relationship, cardinality to tables in Hindi video
- 38 Participation constraints in DBMS | total and partial participation, examples, relation in Hindi video
- 39 Constraints in DBMS | Key, domain, entity integrity, referential integrity, tuple uniqueness,example in Hindi video
- 40 Closure in DBMS | steps to find closure in attribute set in Hindi video