1. What is superkey?
2. What is transaction in DBMS?
3. Define candidate key.
4. Which of the following is a query language used in relational database management systems?

A) SQL B) HTML C) Javascript D4) Python

1. A \_\_\_\_\_\_\_\_\_\_\_ in a database is a program that responds to database events.
2. ROLLBACK in a database \_\_\_\_\_\_\_\_\_\_statement.
3. A \_\_\_\_\_\_\_\_\_\_\_\_ in a database is a key used to link two tables together.
4. A \_\_\_\_\_\_\_\_\_\_\_ in a database is a virtual table based on the result of a query.
5. \_\_\_\_\_ is the initial value of index for a reverse for loop?
6. What is information about data called\_\_\_\_\_\_\_.
7. \_\_\_\_\_\_\_is known as the minimal super key?
8. An \_\_\_ representation of a query is best suited to relational Algebra.
9. \_\_\_\_\_\_\_\_\_\_ is a set of one or more attributes taken collectively to uniquely identify a Record.
10. By default, the order by clause lists item in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ order.
11. The number of attributes in is called as its \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. Data about data is termed as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
13. The Schema of a hierarchical database is \_\_\_\_\_\_\_\_\_\_\_.
14. Data integrity means \_\_\_\_\_.
15. ROLLBACK in a database is \_\_\_\_ statement.

(A) DDL (B) DML (C) DCL (D) TCL

1. Which database handles full text data, image, audio and video?

(A) Multimedia database (B) Video on demand database (C) Graphics database (D) Transaction database

1. Database \_\_\_\_\_\_\_\_\_\_ which is the logical design of the database, and the database \_\_\_\_\_\_\_
2. which is a snapshot of the data in the database at a given instant in time.

(A)Instance, Schema (B) Relation, Schema (C) Relation, Domain (D) Schema, Instance

1. The subset of a super key is a candidate key under what condition?

(A) No proper subset is a super key (B)All subsets are super keys (C) Subset is a super key (D)Each subset is a super key

1. This query can be replaced by which one of the following?

SELECT name, course\_id

FROM instructor, teaches

WHERE instructor\_ID= teaches\_ID;

(A) Select name,course\_id from teaches,instructor where instructor\_id=course\_id;

(B) Select name, course\_id from instructor natural join teaches;

(C) Select name, course\_id from instructor;

(D) Select course\_id from instructor join teaches;

1. Define the terms key? What are the types of it?
2. Define the term A) pipelining B) Normalization
3. Define the terms a) Prime Attribute b) Non-Prime Attributes.
4. Define the term PL/SQL cursor & trigger.
5. Define the term encryption & decryption?
6. In which of the following formats data is stored in the database management system?

a) Image b) Text c) Table d) Graph

1. To select some particular columns, which of the following commands is used?

a) PROJECTION b) SELECTION c) JOIN d) UNION

1. What type of schema objects are there in schema?

a) Primary Key b) Foreign Key c)Views d)All of the above

1. The file organization that provides very fast access to any arbitrary record of a file is :

a) Ordered file b) Unordered file c)Hashed file d)B-tree

1. Transaction Processing System components are \_\_\_\_.

a) Processing system b) Storage device c) I/O d) All

1. List out various roles of Data Administrator.
2. Explain Cartesian Product Operation with a suitable example?
3. Explain Full Join with a suitable example.
4. Explain advantages & disadvantage of object-oriented database?
5. Why Project Operation is used? Which symbol is used as a select operation notation? Explain with a suitable example.
6. Explain selection operation with linear search & binary search Algorithm?
7. Explain lossy join & lossless join decomposition with example?
8. What is primary indexing with example? Explain the classification of it? (Dense Index & Sparse Index)
9. Given relation R with attributes A,B,C,D,E,F and set of FDs,

F = {A → C, A → D, B → E, C → F}.

Find the Closure of A, AC & BF.

1. Explain the term predicates with IN, NOT, Between & like clauses with examples.
2. Which of the following is not a function of a database management system?
   1. A) Data Entry B) Data Retrieval C) Data Manipulation D) Data Analysis
3. What is an ER diagram?
4. What is a subquery in a database?
5. What is a database schema?
   1. A) A graphical representation of the database structure B) A set of rules for
   2. data entry
   3. C) A collection of tables in a database D) A blueprint of the
   4. database structure
6. Which of the following is an example of a database management system?

A) MS Excel B) MS Word C) MS Access D) MS Powerpoint

1. Define tuple.
2. Define relation in DBMS.
3. Answer the following questions. (Attempt any three)

A) List and brief advantages of Three-tier architecture.

B) Differentiate DDL and DML.

C) Explain two phase locking in details.

D) Explain types of joins in DBMS.

1. Explain ACID properties in details.
2. Explain Deadlock and Deadlock Detection in details.
3. Explain query processing in details.
4. What is Normalization? Brief different normal forms in details.
5. List out ER diagram symbols and Draw an E R Diagram for Printing Press Management System.
6. Explain view in details with example.
7. Give the difference between DML & DDL and give their suitable examples (07)
8. Explain relational algebra operations.
9. List types of DBMS and Explain distributed and Centralized DBMS.
10. What is Data Dictionary? Explain its types.