

## PREVIOUS YEARS QUESTIONS

### **UNIT-1**

#### **SAQ(2M)**

1. Tell about Database Applications? (Oct 2021-Main & Backlog)
2. Differentiate between file system and database system. (Oct 2021-Main & Backlog)
3. Distinguish between indexing and hashing? (Oct 2021-Main & Backlog)
4. Write about data mining analysis. (July 2021-Backlog)
5. Define DDL and DML. (July 2021-Backlog)
6. List out the three levels of Data Abstraction along with a neat diagram. (Dec 2020-Main)
7. What is static hashing? (Dec 2020-Main)

#### **LAQ(7M)**

1. Draw and explain Database Architecture. (Oct 2021-Main & Backlog ,Dec 2020-Main)
2. Give the comparison of ordered indexing and hashing bitmap indices. (Oct 2021-Main & Backlog)
3. Explain the concept of B-tree index files. (Oct 2021-Main & Backlog)
4. Write about storage structure. (Oct 2021-Main & Backlog)
5. Write a short notes on static and dynamic hashing. (Oct 2021-Main & Backlog)
6. Compare static and dynamic hashing show the extendable hash structure for the search key values 2,3,5,7,11,17,19,23,29,31 where  $h(x) = x \bmod 8$  and buckets can hold 3 records. (14M) (July 2021-Backlog)
7. List out the functions of DBA? Explain it briefly? (July 2021-Backlog)
8. Write short notes on: (14m) (July 2021-Backlog)
  - (a) Database system structure
  - (b) Database languages
9. List out the different types of users in a database system. (Dec 2020-Main)
10. Differentiate static hashing and dynamic hashing with examples. (Dec 2020-Main)
11. Write a short notes on Assertions. (Dec 2020-Main)

### **UNIT-2**

#### **SAQ(2M)**

1. What are Weak Entity Sets? (Oct 2021-Main & Backlog)
2. Tell about Normalization? (Oct 2021-Main & Backlog)
3. What is an attribute? (July 2021-Main)
4. What is RDBMS? (July 2021-Main)
5. Explain the difference between weak entity set and strong entity set. (Dec 2020-Main)
6. Demonstrate transitive dependency with an example. (Dec 2020-Main)

#### **LAQ(7M)**

1. Explain about Atomic domains & First Normal Form. (14M) (Oct 2021-Main & Backlog)
2. Write a short notes on E-R Model. (Oct 2021-Main & Backlog)
3. Explain the following with an example entities , attributes and relationship? (July 2021-Main)
4. Demonstrate Boyce Code Normal Form with examples. (Dec 2020-Main)
5. Write a short notes on (Dec 2020-Main)
  - (a) Weak Entities
  - (b)Aggregation

### **UNIT-3**

#### **SAQ(2M)**

1. Explain about Transaction. (Oct 2021-Main & Backlog)
2. Define transaction state. (Oct 2021-Main & Backlog)
3. Explain in what circumstances a transaction is rolled back. (Dec 2020-Main)
4. What is deadlock handling? (Oct 2021-Main & Backlog)
5. Differentiate between two phase locking and rigorous two phase locking protocols. (Dec 2020-Main)
6. What is meant by log based recovery? (Dec 2020-Main)

#### **LAQ(7M)**

1. Differentiate between sparse and dense indexing techniques. (Dec 2020-Main)  
Explain with examples.
2. Discuss in detail on testing for serializability. (Dec 2020-Main)
3. Explain in detail about Recoverability in DBMS. (Dec 2020-Main)

- 4. Differentiate between Timestamp based protocols & Validation based protocols. (Oct 2021-Main & Backlog)
- 5. Discuss in detail the log-based recovery? (14M) (July 2021-Main)
- 6. Write about weak levels of consistency with example. (July 2021-Main)
- 7. Explain about strict two phase locking protocol with a neat diagram. (Dec 2020-Main)

## **UNIT-4**

### **SAQ(2M)**

- 1. What is Set Operation? (Oct 2021-Main & Backlog)
- 2. What is join? (July 2021-Main)
- 3. Show how to create a View in SQL with an example. (Dec 2020-Main)
- 4. Classify the types of integrity constraints on a single relation. (Dec 2020-Main)

### **LAQ(7M)**

- 1. Explain about Fundamental Relational-Algebra Operations. (Oct 2021-Main & Backlog)
- 2. Explain in detail Extended Relational-Algebra Operations.(14M) (Oct 2021-Main & Backlog)
- 3. Demonstrate the fundamental relational algebra operations. (Dec 2020-Main)

## **UNIT-5**

### **SAQ(2M)**

- 1. What is Dynamic SQL? (Oct 2021-Main & Backlog)
- 2. What is SQL? (July 2021-Main)

### **LAQ(7M)**

- 1. Write about Nested Subqueries. (Oct 2021-Main & Backlog)
- 2. Discuss about Null values. (Oct 2021-Main & Backlog)
- 3. Discuss in detail the basic structure of SQL? (14M) (July 2021-Main)
- 4. Discuss in detail the advanced SQL features? (14M) (July 2021-Main)
- 5. Consider the following relations and the query. (Dec 2020-Main)
 

```
student(SID,name,section);
course(CID,Title);
takes(SID,CID,section);
select * from student natural full outer join takes natural full outer join course;
Under what circumstances would the query include tuples with Null values for the title attribute?
```