

Dronacharya College of Engineering, Gurgaon

Department of Electronics and Computers Engineering

Subject: Database Management System (CSE-202-F)

Semester: IV/ **Branch:** ECS

Short Answer Questions

Section A

1. Who is a DBA? What are the responsibilities of a DBA?
2. What is a data model? List the types of data model used
3. Define database management system?
4. What is data base management system?
5. List any eight applications of DBMS
6. What are the disadvantages of file processing system?
7. What are the advantages of using a DBMS?
8. Give the levels of data abstraction?
9. Define the terms 1) Physical schema 2) logical schema.
10. What is an entity relationship model?
11. Define the terms i) Entity type ii) Entity set
12. What is a candidate key?
13. What is a primary key?

Section B

1. What is the difference between tuple relational calculus and domain relational calculus?
2. Define the terms relation, tuple and attribute.
3. Define- relational algebra.
4. Write short notes on tuple relational calculus
5. What are the advantages and disadvantages of indexed sequential file?
6. What is database tuning?
7. Compare sequential access devices versus random access devices with an example
8. What is known as heap file organization?
9. What is hashing file organization?
10. What is known as sequential file organization?
11. What is B-Tree?

12. What is hashing?
13. Distinguish between static hashing and dynamic hashing
14. Differentiate open hashing and closed hashing (overflow chaining)

Section C

1. Define the terms i) DDL ii) DML
2. Define query language?
3. What are the parts of SQL language?
4. What are the categories of SQL command?
5. What are aggregate functions? And list the aggregate functions supported by SQL?
6. List the set operations of SQL? 1) Union 2) Intersect operation 3) The except operation.
What is the use of Union and intersection operation?
7. What is first normal form?
8. What are the uses of functional dependencies?
9. What is meant by normalization of data?
10. Define Boyce codd normal form

Section D

1. What are the ACID properties?
2. What are two pitfalls (problem) of lock-based protocols
3. What is transaction?
4. Give the reasons for allowing concurrency?
5. Define lock? What are the different modes of lock?
6. What is recovery management component?
7. When is a transaction rolled back?
8. What are the two types of serializability?