BE Semester-_IV_CE_ Question Bank

(Database Management Systems)

All questions carry equal marks (10 marks)

Q.1	Explain the following terms: Data Redundancy and consistency Explain Referential Integrity Data atomicity Domain constraints Data models
Q.2	Describe various disadvantages of file system compare to Data base management system.
Q.3	Discuss the candidate key, primary key, super key, composite key and alternate key.
Q.4	What do you mean by terms Aggregation and Generalization? Explain it with the help of example.
Q.5	What do you mean by Normalization? Explain BCNF, 3NF and 2NF with a suitable example.
Q.6	Explain the components of DBMS with a neat diagram.
Q.7	Write a short note on Two phase locking protocol. What are its advantages and disadvantages?
Q.8	Explain specialization and generalization concepts in ER diagram with Suitable example.
Q.9	What is Transaction? Explain its four important Properties.
Q.10	What is Functional dependency? Explain its usage in database design. Explain various types of Functional dependency.
Q.11	Explain the concept of Database Trigger, Cursor and Stored procedure with example in PL/SQL.
Q.12	Write a short note on Relational model.
Q.13	Write a short note on Entity-Relationship model.
Q.14	What is constraint in database? Explain types of constraints with suitable example.
Q.15	Explain the method of Query Optimization.
Q.16	Explain immediate database modification log based recovery method. Also Explain role of check point in log base.
Q.17	What is concurrency? What are the three problems due to concurrency? How the problems can be avoided, explain for one of the three problems.
Q.18	Explain the purpose of the database system. Explain different database users. What are the responsibilities of a DBA?
Q.19	Explain evaluation of expression process in query optimization.
Q.20	With example explain various mapping cardinalities and total participation.
Q.21	Define Database Management System. What is the role of Database administrator ?
Q.22	Draw and explain System structure of Database management system.
Q.23	What are the disadvantages of file-processing system?
Q.24	Define and explain following terms. Levels of data abstraction, Instances, Schema, Physical data independence, Logical data independence.
Q.25	What is dbms? List and explain various database user.
Q.26	Explain following terms in detail. Entity set, Simple attribute, Composite attribute, single-valued attribute, multivalued attribute, Null attribute, derived attribute.
Q.27	What is cardinality? Explain cardinality with example.
Q.28	Explain generalization, specialization and aggregation with example.
Q.29	List and explain fundamental operation of relational algebra.

Q.30	Write sql syntax for creating table EMP(EMPNO,ENAME,SALARY,JDATE,DIS).Write sql syntax for insert two rows in table, delete one row from table, update salary and view whole table.
Q.31	What are the pitfalls in relational database design? Explain 1NF, 2NF and 3NF.
Q.32	What is functional dependency? Explain FD and multivalued functional dependency with example.
Q.33	Draw E-R diagram for banking enterprise.
Q.34	Explain with example various keys used in Database management.
Q.35	What is recovery and atomicity of transaction? Explain Log based recovery.
Q.36	How do you recover in case of concurrent transactions?
Q.37	Write short note on Buffer management for management of data.
Q.38	Which are the modes of lock? Explain two phase locking protocol.
Q.39	What is deadlock? Explain deadlock prevention, deadlock detection.
Q.40	Explain Query Processing with example.