

B V RAJU INSTITUTE OF TECHNOLOGY
(UGC AUTONOMOUS)

B.Tech 2 Year 2 Semester Regular/Supplementary Examinations, Feb 2021
DATABASE MANAGEMENT SYSTEMS

Time: 3 Hours

Max Marks: 100

I. Answer the Following Questions

Marks: 20

1. . What do you understand by the terms Entity, Entity Type, and Entity Set in DBMS?
2. . Mention the different languages present in DBMS
3. . What do you understand by aggregation and atomicity?
4. . What are the advantages of DBMS?
5. . Do we consider NULL values the same as that of blank space or zero?
6. . Explain the terms database and DBMS. Also, mention the different types of DBMS.
7. . What do you understand by query optimization?
8. . What are the different levels of abstraction in the DBMS?
9. . What is normalization and what are the different types of normalization?
10. . Explain Database partitioning and its importance.
11. . What are the ACID properties in DBMS?
12. . What is the difference between two and three-tier architectures?
13. . What do you understand by functional dependency and transitive dependency in DBMS?
14. . What do you understand by correlated subqueries in DBMS?
15. . Mention the differences between Unique Key and Primary Key
16. . What are the different types of keys in the database?
17. . What is concurrency control?
18. . What are the differences between Hash join, Merge join and Nested loops?
19. . What are the different integrity rules present in the DBMS?
20. . What do you understand by cursor? Mention the different types of cursor
21. . What do you understand by Data Independence?
22. . Mention the differences between Trigger and Stored Procedures
23. . What are indexes? Mention the differences between the clustered and non-clustered index
24. . Explain the terms specialization and generalization

II. Answer the Following Questions

Marks: 20

1. . Mention the differences between UNION and UNION ALL
2. . What are the differences between network and hierarchical database model?
3. . What are the differences between DROP, TRUNCATE and DELETE commands?
4. . Write a query to retrieve the last day of next month in Oracle.
5. . What are joins in SQL and what are the different types of joins?
6. . How can you perform pattern matching in SQL?

III. Answer the Following Questions

Marks: 30

1. . What is Data Abstraction in DBMS and what are its three levels?
2. . What is Data Model in DBMS and what are its types?
3. . What is Data integrity?
4. . What is an attribute?
5. . What is Specialization in DBMS?
6. . What is SQL?
7. . What is a Query and Subquery in DBMS?
8. . What are various types of constraints in SQL?
9. . What is the difference between SQL and NoSQL?
10. . What is a Trigger in DBMS?
11. . What is View in SQL?
12. . What are UNION, MINUS, and INTERSECT commands in DBMS?
13. . What is Data independency?
14. . What is dirty read and unrepeatable read problem in DBMS?
15. . What is the difference between OLTP and OLAP?

IV. Answer any three of the following

Marks: 10

1. . Differentiate between Clustered and non-Clustered indexes.
2. . What is normalization?
3. . What is stored procedure?

V. Answer any Two of the following Questions

Marks: 20

1. . What are the disadvantages of file processing systems?
2. . What is a degree of Relation?
3. . What is DDL (Data Definition Language)?
4. . What is System R? How many of its two major subsystems?
5. . What are the integrity rules in DBMS?
6. . What do you mean by extension and intension?