R19

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA II Semester Examinations, July/August - 2021
DATABASE MANAGEMENT SYSTEMS

Time: 3 Hours   Max.Marks:75

Answer any five questions
All questions carry equal marks
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1.a) Explain the Database system structure.
 b) Discuss conceptual database design for large enterprises.   [7+8]

2.a) Explain the role of file manager and buffer manager in DBMS.
 b) Describe the components of query processor and query evaluation engine with necessary diagram.   [7+8]

3.a) What is a view? Discuss its role in Database security.
 b) Explain in detail the Division operation in Relational Algebra.   [7+8]

4.a) What is relational database. Illustrate Tuple relational calculus.
 b) Explain domain relational calculus.   [7+8]

5.a) Compare Nested query and correlated query. Discuss suitable examples.
 b) What is a Trigger? How do they enforce Integrity constraints?   [7+8]

6.a) Describe Multi-valued dependencies with examples.
 b) Explain the various problems caused by Redundancy.   [7+8]

7.a) Explain the concept of log based recovery.
 b) Explain advanced recovery systems.   [7+8]

8.a) What is an index? Differentiate between Sparse and dense indices.
 b) Make a comparison of Sorted file organization.   [7+8]

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