R19

Code No: 862AC

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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