JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech II Year II Semester Examinations, July/August - 2021
DATABASE MANAGEMENT SYSTEMS
(Common to CSE, IT)

Time: 3 hours   **Max. Marks: 75**

Answer any five questions
All questions carry equal marks
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1.a) Describe the database system structure with a neat diagram.
  b) How does a query get processed in query processor? Demonstrate with an example. [7+8]

2.   What is the significance of class hierarchies in ER data model? Give illustrations. [15]

3.a) What is a view? Discuss its role in database security.
  b) Differentiate between tuple relational calculus with domain relational calculus. [7+8]

4.a) Compare nested query and correlated query. Discuss suitable examples.
  b) What is a trigger? Why is it needed in DBMS? Explain various types of triggers. [7+8]

5.   Describe multi valued dependencies and the normal form associated with it. [15]

6.   Discuss about the performance of locking and intention locks. [15]

7.a) Explain buffer management along with page replacement policies for buffer.
  b) Briefly discuss write ahead log protocol for recovery. [8+7]

8.   What is an index? Differentiate between sparse and dense indices. [15]

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