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20SCS13

First Semester M.Tech. Degree Examination, June/July 2023
Advanced Database Management Systems

Time: 3 hrs.

Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1 a. Define Relational Model. Explain Relational model constraints in details. (10 Marks)
   b. Discuss the update operations in relational model. (10 Marks)

OR

2 a. Discuss in brief, Object Database Extension to SQL. (05 Marks)
   b. What is ODL? Explain in detail ODMG Object Model. (10 Marks)
   c. Explain the concepts of Object Query Language OQL. (05 Marks)

Module-2

3 a. Explain Hardware description of Disk Devices, with a neat diagram. (10 Marks)
   b. Explain in detail Placing File Records on disk. (10 Marks)

OR

4 a. What is Parallel versus Distributed Technology? Explain the advantages of Distributed Databases. (10 Marks)
   b. Explain types of Distributed Database System. (10 Marks)

Module-3

5 a. Explain Document based NOSQL systems with example. (10 Marks)
   b. Describe Column based NO SQL system, with an example. (10 Marks)

OR

6 a. Define Big data. Explain Hadoop Distributed File System in detail. (10 Marks)
   b. Explain Additional details of Hadoop alias YARN. (10 Marks)

Module-4

7 a. Explain Design and Implementation issues for Active Databases. (10 Marks)
   b. Explain Temporal Database Concepts. (10 Marks)

OR

8 a. Write a brief description of Multi – Media Data Base Concept. (10 Marks)
   b. Explain Information Retrieval and types of Queries in Information Retrieval System. (10 Marks)

Module-5

9 a. Define Data Mining. Explain in detail Knowledge Discovery Process. (10 Marks)
   b. Explain in detail an Algorithm for finding Association rules with an example. (10 Marks)

OR

10 a. Define Clustering and discuss any one of the Clustering algorithm in detail. (10 Marks)
   b. What is Data WareHouse? Discuss the various data models for Data waterhouse. (10 Marks)

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