CBCS Scheme

First Semester M.Tech. Degree Examination, June/July 2018
Advances in Data Base Management System

Time: 3 hrs.   Max. Marks: 80

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

Module-1

1. a. Discuss the Entity Integrity and referential integrity constraints. Why each one considered important. **(06 Marks)**
   b. Explain the violation of the integrity constraint in each of the three types of update operations. **(10 Marks)**

OR

2. a. Define the following terms with respect to object oriented Data base Terminology :
      i) Method   ii) Signature   iii) Message   iv) Collection   v) Extent. **(10 Marks)**
   b. Explain specifying object persistent via naming and reachability. **(06 Marks)**

Module-2

3. a. What are the functions of the Object definition Language and Object manipulation Language in the ODMG standard? **(06 Marks)**
   b. Explain the mapping an EER schema to an ODB schema. **(10 Marks)**

OR

4. a. Discuss the general principle behind the C++ binding of the ODMG standard. **(06 Marks)**
   b. i) Explain the concept of complex object.
      ii) What is object and literal? What is the difference between them? **(06 Marks)**
   c. Explain the Nested relational model. **(04 Marks)**

Module-3

5. a. Describe the three main architectures for parallel DBMS. **(08 Marks)**
   b. Explain fragmentation and replication of relation in distributed DBMS. **(08 Marks)**

OR

6. a. Discuss the concept of parallelizing individual operations. **(10 Marks)**
   b. Explain synchronous and asynchronous replication. Also explain the terms capture and apply with respect to asynchronous replication. **(06 Marks)**

Module-4

7. a. Explain OLAP operations in the multidimensional Data model. **(10 Marks)**
   b. Explain Top N queries and online aggregation. **(06 Marks)**

OR

8. a. Explain the role of Data mining in the KDD process. **(06 Marks)**
   b. What is Apriori property? Describe an algorithm for finding frequent item sets. **(10 Marks)**

Module-5

9   a.   Explain the components of ECA model.   (05 Marks)
    b.   What are the difference between Valid time and transaction time and bitemporal relations?
                                                                                            (06 Marks)
    c.   Explain Infrastructural based mobile flat form, with a neat diagram.   (05 Marks)

OR

10 a.   List and explain the data management issues.   (08 Marks)
    b.   Explain the types of multimedia data's available and multimedia applications.   (08 Marks)

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