Total No. of Questions : 8]   [Total No. of Printed Pages : 2

Roll No ....

IT-710 (GS)

B.E. VII Semester

Examination, December 2017

Grading System (GS)

Advanced Concepts in Database System

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Discuss different types of database management systems with advantages and disadvantages of each. 7
   b) Explain in detail about specialization and generalization. 7

2. What are different types of relational query languages? Discuss the different techniques for optimizing the queries. 14

3. a) Design the steps involved in processing a query with suitable example. 7
   b) Explain in detail how to identify an Active and Deductive database with the help of an example. 7

4. a) Describe the different approaches for storing XML documents in databases. 7
   b) Describe the web based architecture with suitable example. 7

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5. a) Briefly explain about intra-operation parallelism and inter operation parallelism. 7
   b) Explain about ODBC and JDBC. 7

6. Write short notes on: 14
    a) Spatial Databases
    b) Multimedia Databases
    c) Temporal Databases
    d) Web Databases

7. What are the different advantages of a distributed database management system? Discuss in detail the different functions of a DDBMS to manage the complexity of data distribution. 14

8. a) Discuss the various indexing techniques for data management. 7
   b) Write short notes on: 7
      i) Parallel database and
      ii) Distributed databases.

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