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# END-TERM EXAMINATION

THIRD SEMESTER [BCA] DECEMBER-2007

Paper Code: BCA-205

Subject: Database Management System

Paper Id: 20205

Batch: (2001-2004)

Time : 3 Hours

Maximum Marks : 75

Note : Attempt Five questions in all, including Q.No.1 which is compulsory. Q.No.1 carries 25 marks and Q.No.2 to Q.No.7 carry 12.5 marks each.

- Q.1 Define the following terms:-
- (i) Foreign Key
  - (ii) Hashing
  - (iii) Data-base
  - (iv) Data-base recovery
  - (v) Inheritance
  - (vi) Constructors
  - (vii) Data Dictionary
  - (viii) SQL
  - (ix) Normalization
  - (x) Full functional dependency
- Q.2 What is database tuning? How is it useful and used? How is it related with database design? Explain in detail with suitable examples.
- Q.3 Describe various hashing functions with their relative merits and demerits. What problems we may face in hashing and how these can be resolved? Discuss briefly.
- Q.4 Design any three tables of your choice related to your college and normalize them upto 3NF (at least).
- Q.5 What is Query Processing? How is it useful and Implemented? Explain in detail with examples.
- Q.6 Differentiate between simple data-base and object-oriented data-base with examples in terms of following:-
- (i) Design
  - (ii) Uses
  - (iii) Advantages
  - (iv) Disadvantages
- Q.7 Write short notes on the following:-
- (i) Relational algebra
  - (ii) Data base security
  - (iii) Programming using SQL

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