

04117

**BCA (Pre-revised)**  
**Term-End Examination**  
**December, 2013**

**CS-06 : DATABASE MANAGEMENT SYSTEM**

*Time : 3 hours*

*Maximum Marks : 75*

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**Note :** Question no. 1 is *compulsory* and carries 30 marks.  
Answer *any three* from the rest.

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1. (a) Define Data Manipulation Language (DML). List the various types of DML commands used in DBMS. Explain any four DML commands, their usage and example SQL statement. 10
- (b) Draw an ER diagram for an Insurance company covering the following aspects : 10
  - (i) Various policies available
  - (ii) Applying for a new policy
  - (iii) Insurance claim
  - (iv) Claim after maturity
  - (v) Renewal clearly indicate the entities, attributes, relationship and the key constraints.
- (c) What are the main features of client/server model ? Explain the stages involved in the development of an application using client/server model. 10

2. (a) With the help of an example relation and the dependency diagram, explain the concept of functional dependency. 8
- (b) Write the significance of the evaluation of DBMS. List the technical and administrative issues respectively, required to be taken care by the evaluation team. 7
3. (a) Mention the features w.r.t the speed usage, storage and access efficiency for the following file organisation : 7
- (i) Sequential
- (ii) Indexed sequential
- (iii) Direct
- (b) Explain the concept of Enhanced Entity - Relationship diagram (EER). Describe the aggregation and specialization, with the help of a suitable example for each and how they are represented in EER. 8
4. (a) Explain the following Relational Algebraic operations : 9
- (i) Projection (ii) Selection
- (iii) Cartesian Product
- Also give an example for each.
- (b) Explain all the rules to qualify a database product as Relational DBMS. 6
5. Write short notes on : 5x3=15
- (a) Dynamic Data Exchange
- (b) Object Oriented DBMS
- (c) Hierarchical database model