Code :R7420207

<div style="float:right">1</div>

IV B.Tech II Semester(R07) Regular Examinations, April 2011
DATABASE MANAGEMENT SYSTEMS
(Electrical & Electronics Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Define database management systems.
   (b) What are functions of databases administrator.
   (c) Explain about query processor?

2. (a) Explain about integrity constraints?
   (b) Explain about different types of joins.

3. (a) Explain about nested queries with examples.
   (b) Explain about complex integrity constraints in SQL.

4. Explain about normalization.

5. (a) Define lock? What are different types of locks.
   (b) Explain about lock based concurrency control.

6. (a) Explain about serializability & view serializability.
   (b) Explain about ARIES recovery technique.

7. (a) Explain about file organization and indexing.
   (b) Explain about tree based indexing.

8. (a) Explain about RAID.
   (b) Explain about extended hashing.

⋆ ⋆ ⋆ ⋆ ⋆

Code :R7420207

$\boxed{2}$

IV B.Tech II Semester(R07) Regular Examinations, April 2011
DATABASE MANAGEMENT SYSTEMS
(Electrical & Electronics Engineering)

Time: 3 hours   Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. (a) What are the main differences between file system and database system?

   (b) What are the applications of database system?

   (c) Explain about database languages.

2. (a) Explain about tuple relational calculus.

   (b) Explain about expressive power of algebra and calculus.

3. (a) Explain about SQL queries with examples.

   (b) Explain about logical comments.

4. Discuss about normalization.

5. (a) What are acid properties?

   (b) Explain about transaction & schedules.

6. (a) Explain about Write-Ahead log protocol.

   (b) Discuss about system crash recovery.

7. (a) Explain about hash based indexing.

   (b) Explain about performance tuning in indexes.

8. (a) Explain about files and records.

   (b) Differenciate between extendible verses linear hashing.

⋆ ⋆ ⋆ ⋆ ⋆

Code :R7420207

$\boxed{3}$

IV B.Tech II Semester(R07) Regular Examinations, April 2011
DATABASE MANAGEMENT SYSTEMS
(Electrical & Electronics Engineering)

Time: 3 hours　　　　　　　　　　　　　　　　　　　　　　　Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Explain about ER model.
   (b) Explain about DDL & DML commands.

2. (a) Explain about views.
   (b) Explain about algebraic relationships.

3. (a) Explain about basic SQL queries.
   (b) Explain about different types of joins.

4. (a) Explain about third normal forms.
   (b) Explain about fourth normal forms.

5. (a) Explain transaction and acid properties.
   (b) Explain about crash recovery.

6. (a) Explain about dead locks.
   (b) Explain ARIES.

7. (a) Explain about primary & secondary indexes.
   (b) Explain about tree based indexing.

8. (a) Explain about disk space management.
   (b) Explain about extendible hashing.

⋆ ⋆ ⋆ ⋆ ⋆

Code :R7420207

4

IV B.Tech II Semester(R07) Regular Examinations, April 2011
DATABASE MANAGEMENT SYSTEMS
(Electrical & Electronics Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
⋆⋆⋆⋆⋆

1. (a) Explain about query processor.

   (b) Explain about additional features of ER model.

2. (a) Explain about relational algebra.

   (b) Explain about joins.

3. (a) Explain about aggregative operators.

   (b) Explain about integrity constraints.

4. (a) Explain about lossless join decomposition.

   (b) Explain about multivalued dependencies.

5. (a) Explain about lock based concurrency control.

   (b) Explain about performance of locking.

6. (a) Explain about media recovery.

   (b) Discuss about other methods & interaction with concurrency control.

7. (a) Explain about file organization.

   (b) Explain about comparison of file organization.

8. (a) Explain about record formats.

   (b) Explain about static hashing.

⋆⋆⋆⋆⋆