

II B.TECH II SEM–REGULAR/SUPPLEMENTARY EXAMINATIONS MAY - 2010
DATABASE MANAGEMENT SYSTEMS**Common to Information Technology, Computer Science And Engineering****Time: 3 hours****Max Marks: 80****Answer any FIVE Questions**
All Questions carry equal marks

1. (a) What is Normalization? What are the various normal forms.
(b) Explain First NF with examples?
(c) Explain Second NF with examples? [4+6+6]
2. (a) Explain Clustered Indexes?
(b) Explain primary & Secondary Indexes? [8+8]
3. Explain the following in SQL with examples.
(a) Nested Queries
(b) Correlated Queries
(c) Group by and Having Clauses
(d) Triggers [16]
4. (a) How many types of recovery techniques with concurrent transactions?
(b) Differentiate Transaction Rollback & Restart recovery? [8+8]
5. (a) Define the divisible operation in terms of the basic Relational Algebra operations. Describe a typical query that calls for division. Unlike join, the division operation is not given special treatment in database systems. Explain why.
(b) Relational calculus is said to be a declarative language, in contrast to algebra, which is a procedural language. Explain the distinction. [8+8]
6. What is a cascade less schedule? Why is cascade less ness of schedules desirable? Are there any circumstances under which it would be desirable to allow non cascade less schedules? Explain your answer? [16]
7. (a) List four significant differences between a File processing system and a DBMS.
(b) Explain the difference between Logical and Physical data independence.[8+8]
8. (a) What is a partial key? How is it represented in ER diagram? Give an example.
(b) What is a descriptive attribute? Explain.
(c) Discuss the usage of ISA feature in ER diagrams. [6+4+6]
