

R07

Code: R7311205

III B. Tech I Semester (R07) Supplementary Examinations, May 2012

**DISTRIBUTED DATABASES**

(Information Technology)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions  
All questions carry equal marks  
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- 1 How does the distributed of data across multiple databases effects the normalization process?
- 2 (a) What is equivalence? How can two transformations are said to be equivalent? Explain.  
(b) State and explain the properties that are used in equivalence transformations for the relational algebra.
- 3 (a) Explain the problems in query language.  
(b) Write the objectives in query processing optimization.
- 4 Explain the properties of transaction management.
- 5 (a) Show that "Occurred Before" relationship in a two site system is partial ordering.  
(b) How to derive a potential global deadlock cycle from a local wait-for-graph? Explain.
- 6 Discuss commitment protocols and network partitions.
- 7 Discuss object server architecture and page server architecture in detail.
- 8 (a) Describe the dimensions of merging and restructuring.  
(b) Discuss various types of asymmetry and their impact on the data delivery mechanism.

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