|R05|

Set No. 4

IV B.Tech II Semester Regular/Supplementary Examinations, May 2010 DISTRIBUTED DATABASES

Computer Science And Engineering

Time: 3 hours Max Marks: 80

Answer any FIVE Questions All Questions carry equal marks

1. Explain the following:

Code No: R05420504

- (a) Occur before relationship
- (b) "Deadlock Free"
- (c) Two phase locking
- (d) State the voting rule.

 $[4\times4]$

- 2. Write a short note on the following:
 - (a) Content of Catalogs
 - (b) Centralized catalogs
 - (c) Fully replicated catalogs
 - (d) Local catalogs.

[8+2+2+4]

- 3. Write about the following for Distributed Databases
 - (a) Developing an operator tree
 - (b) Semi-joins with an example.

[8+8]

4. How query execution is done in object query processing.

- [16]
- 5. (a) Write about the atomicity of transactions in distributed databases with emphasis on failures and logs and recovery methods.
 - (b) Explain the 2-phase commitment protocol.

[8+8]

- 6. (a) Discuss the objectives of Query processing optimization.
 - (b) Discuss how query optimization is done using AHY algorithm.

[8+8]

- 7. (a) Write about the completeness, reconstruction, and disjointness condition rules for defining fragmentation.
 - (b) Given a global relation
 EMP(EMPNUM,NAME,SAL,TAX,MGRNUM,DEPTNUM)
 Write the mixed fragmentation definition and fragmentation tree of relation
 EMP. [8+8]
- 8. Explain the following:
 - (a) Propagating updates

Code No: R05420504

R05

Set No. 4

(b) Client cache management.

[8+8]
