

**COLLEGE OF ENGINEERING, PUNE**  
(An Autonomous Institute of Govt. of Maharashtra)

End Sem – Nov, 2013

**(CT-410)Advanced Database Management  
Systems**

**Class: - B.Tech (Information Technology)**

**Year: - 2013-14**

**Semester: - VII**

**Duration: - 3 hrs**

**Max. Marks: - 60**

**Instructions:**

- 1. Solve any six questions.**
  - 2. Assume suitable data whenever necessary.**
  - 3. Draw neat figures wherever required**
  - 4. Figures to right indicate full marks**
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|---|----|
| 1. a) Describe advantages and disadvantages of pipelined parallelism.   | 5  |
| b) Write a short note on Parallel Query Optimization.   | 5  |
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| 2. a) Write a short note on majority based protocol.  | 5  |
| b) Describe deadlock in distributed databases.  | 5  |
|   |    |
| 3. How are queries processed in Distributed databases? Explain with example semi-join technique with its advantages.    | 10 |
|   |    |
| 4. a) Discuss what is meant by the following terms when describing the characteristics of the data in a data warehouse. | 4  |
| 1. Subject Oriented   |    |
| 2. Integrated   |    |
| 3. Time-variant   |    |
| 4. Non-volatile   |    |
| b) Write a short note on OLAP queries.  | 6  |
|   |    |
| 5. What is well formed and valid XML document? With example explain an XML Schema file.                                 | 10 |
|   |    |
| 6. a) Design a classification model using Decision Tree classifier with suitable example.                               | 5  |
| b) Describe Incremental mining algorithm for computing Frequent Itemsets with suitable example.                         | 5  |
|   |    |
| 7. a) Write a short note on TP Monitor Architecture.  | 5  |
| b) Explain in detail workflow systems.  | 5  |
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| 8. a) Define data mining and list its three applications.   | 4  |
| b) Explain different schema types with examples for a data warehouse.   | 6  |
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