# B. Tech Degree VIII Semester Examination, April 2010

## CS 802 DISTRIBUTED COMPUTING

*(2002 Scheme)*

Time : 3 Hours
Maximum Marks : 100

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| I. | (a) | Describe the design and user requirements of distributed systems. | (10) |
| | (b) | Explain interprocess communication in UNIX. | (10) |

**OR**

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| II. | (a) | Explain remote procedure call with diagram. | (10) |
| | (b) | Explain JAVA RMI. | (10) |

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| III. | (a) | Differentiate between process and threads. | (5) |
| | (b) | What do you mean by monolithic and micro kernel. | (5) |
| | (c) | Explain virtual memory implementation in distributed system. | (10) |

**OR**

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| IV. | (a) | Explain the design issues in distributed file services. | (10) |
| | (b) | Write short note on DNS. | (10) |

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| V. | (a) | What is the difference between a physical clock and logical clock? | (10) |
| | (b) | Explain Cristian's method for synchronizing clocks. | (10) |

**OR**

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| VI. | (a) | What is distributed mutual exclusion? | (5) |
| | (b) | Explain bully algorithm for election. | (15) |

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| VII. | (a) | What do you mean by nested transaction? | (5) |
| | (b) | Explain different concurrency control techniques. | (15) |

**OR**

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| VIII. | (a) | Explain distributed transactions. | (10) |
| | (b) | How can we prevent distributed deadlocks? | (10) |

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| IX. | | What is a fault? Explain the various types of faults that can occur in distributed system. | (20) |

**OR**

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| X. | (a) | Explain any one method of cryptography used in distributed environment to ensure security. | (10) |
| | (b) | Write short notes on fault tolerance. | (10) |

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