

**DISTRIBUTED
SYSTEMS**

QP Code : 6326

(3 Hours)

[Total Marks : 80]

- N.B. (1) Question number 1 is compulsory.
(2) Solve any 3 from remaining.
(3) Assume suitable data where ever necessary.

Q.1. Attempt the following:

- Compare Stateful and Stateless server implementations
- Explain what is callback RPC
- What are the challenges in SOA
- List types of failures in message passing system and how to over come them.

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Q.2.

- Explain key components of DCE
- What is a thread and advantages of using them. What are different models for organizing threads

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Q3.

- Define Happened-Before relationship. Explain implementation of logical clocks with an example
- Describe .NET architecture with neat labeled diagram

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Q4.

- Explain various transparencies need to achieve in Distributed System.
- Explain Distributed Approach for providing mutual exclusion

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Q5.

- Explain desirable features of a good message passing system.
- How is sequential consistency model implemented if Replicated Migrating Blocks are used in distributed system for Distributed Shared Memory

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Q6 Write notes on following :

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- CORBA Components.
- Components of EJB framework
- Explain Message Buffering in IPC
- Use of External Data Representation for Process Migration in Heterogeneous systems