

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VIII (OLD) - EXAMINATION – SUMMER 2017

**Subject Code:180701**

**Date:02/05/2017**

**Subject Name: Distributed Systems**

**Time:10:30 AM to 01:00 PM**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** 1) What is Process Migration? What are the main steps involved in it. **04**  
2) Provide Difference between Message Passing and DSM **03**
- (b)** 1) Differentiate NOS and DOS **04**  
2) Explain Performance Metrics for Mutual Exclusion Algorithms **03**
- Q.2 (a)** What is Name Server? Describe the features for Good Naming System. **07**  
**(b)** Describe ATM Cell Format along with List of its features. **07**
- OR**
- (b)** Explain detailed working of Encoding and Decoding of Message Data. **07**
- Q.3 (a)** Define RPC. Describe Lightweight RPC. **07**  
**(b)** Elaborate various centralized system Algorithms. **07**
- OR**
- Q.3 (a)** Explain Problem Specification and also Describe Admissibility & Simulation. **07**  
**(b)** Explain RMI Implementation. **07**
- Q.4 (a)** Explain how logical clocks are implemented in distributed system. **07**  
**(b)** Differentiate Process and Thread. Also Explain Fault Tolerance. **07**
- OR**
- Q.4 (a)** Describe DSM Architecture **07**  
**(b)** Draw and Explain ATM Cell Format **07**
- Q.5 (a)** What is a name agent? What is namespace? Explain the name resolution **07**  
**(b)** Differentiate LAN and WAN. Also compare Bridge, Router and gateway. **07**
- OR**
- Q.5 (a)** Justify the following Terms: **07**  
1) Explicit Addressing  
2) Buffering  
3) Distributed System  
4) Resolution  
5) Process Migration  
6) FLIP  
7) Transfer on reference
- (b)** What is DFS Spanning Tree? Describe Flooding and Building a Spanning Tree. **07**

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