

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**
