

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER-IV • EXAMINATION – SUMMER • 2015

Subject Code: 640006**Date: 20-05-2015****Subject Name: Distributed Computing (DC1)****Time: 10:30 am - 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) What is servlet? **02**
 (b) What do you mean by toolkits? **02**
 (c) XNS Stands for? **02**
 (d) The main purpose of RFC 1 was? **02**
 (e) What do you mean by child process? **02**
 (f) What is the mean of network services? **02**
 (g) What is data marshalling **02**
- Q.2** (a) Define Distributed Computing. Briefly explain following terms: Monolithic Computing, distributed Computing, Parallel Computing. **07**
- (b) What do you mean by concurrent programming? Explain three types of concurrent programming. **07**
- OR
- (b) Briefly explain distributed application architecture and network resources . **07**
- Q.3** (a) Explain message system paradigm with its subtypes. **07**
 (b) What is JAVA multicast API & reliable multicast? Write a short definition with example any two reliable multicast techniques? **07**
- OR
- Q.3** (a) Explain Mobile Agent paradigm and ORB paradigm in detail. **07**
 (b) What is IPC? Explain briefly? Explain an Archetypal IPC Program Interface. **07**
- Q.4** (a) What do you mean by paradigm? Explain distributed system paradigms and their level of abstraction. **07**
 (b) Briefly explain stateful server and stateless server. **07**
- OR
- Q.4** (a) Explain Datagram Sockets and its implementation in Java. **07**
 (b) What is RPC? Write an algorithm for developing a RMI application and testing & debugging technique? **07**
- Q.5** (a) Discuss the SOAP Model. How request is handled by SOAP? **07**
 (b) Write a short note on Cookies for transferring session state data. **07**
- OR
- Q.5** (a) What is REST? What is the use of REST? Explain any 3 basic principals possessed by Restful service **07**

- (b) Define CORBA and CORBA architecture? Explain the following terms related to CORBA: 07
- A. IIOP
 - B. IOR
 - C. POA
