

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER-IV • EXAMINATION – WINTER • 2014

Subject Code: 640006

Date: 06-12-2014

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)** Explain various form of computing. **07**
(b) Explain steps for building an RMI application. **07**
- Q.2 (a)** Discuss the strength and weaknesses of Distributed Computing. **07**
(b) List various paradigms for distributed applications and explain any one. **07**
- OR**
- (b)** Write a note on data representation and data encoding. **07**
- Q.3 (a)** Explain iterative server, concurrent server, and stateful server. **07**
(b) Write a program which sends a message and receives a message using connectionless datagram socket. **07**
- OR**
- Q.3 (a)** Explain reliable multicasting. Discuss any 3 classifications of reliable multicast systems. **07**
(b) Write a program which uses a multicast socket to sends a single message to a multicast group and joins a multicast group and receives a single message send to the group. **07**
- Q.4 (a)** Write a short note on REST. **07**
(b) Explain iterative server, concurrent server, and stateful server. **07**
- OR**
- Q.4 (a)** Explain the following Java RMI terms: **07**
Remote, stub, skeleton, rmiregistry
(b) Write a short note on the following. **07**
(i) Concurrent Programming.
(ii) The internet network architecture.
- Q.5 (a)** Explain how hidden form-fields can be used for transferring session state data. Draw appropriate event/interaction diagram. **07**
(b) Explain the Naming Service and basic architecture of CORBA. **07**
- OR**
- Q.5 (a)** What is RMI? Draw and explain Java RMI architecture. Show stub skeleton interactions using interaction diagram. **07**
(b) Explain the role of WSDL in SOA. **07**
