

GUJARAT TECHNOLOGICAL UNIVERSITY**M.C.A -IVth SEMESTER-EXAMINATION – MAY- 2012****Subject code: 640006****Date: 19/05/2012****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 reasons for the popularity and most significant disadvantages of Distributed Computing. **07**
(b) Introduce sequence diagram. Draw sequence diagram for HTTP. **07**
- Q.2** (a) Write a note on data representation and data encoding. **07**
(b) List various paradigms for distributed applications and explain any one. **07**
- OR**
- (b) Explain Secure Socket API and its implementation in Java. **07**
- Q.3** (a) With diagram and code fragment, explain connectionless datagram socket. **07**
(b) According to three layer software architecture, explain daytime client-server using connectionless datagram socket. **07**
- OR**
- Q.3** (a) Explain iterative server, concurrent server, and stateful server. **07**
(b) With code fragment explain Java multicast API. **07**
- Q.4** (a) Explain steps for building an RMI application. **07**
(b) Discuss how to transfer session state data using cookies. **07**
- OR**
- Q.4** (a) Explain the Naming Service and basic architecture of CORBA. **07**
(b) How to build CORBA application using Java IDL? Discuss. **07**
- Q.5** (a) With diagram explain Web Service infrastructure and stepwise communication. **07**
(b) Discuss advantages and limitations of Web Services compare to other technologies - Java RMI, .NET Remoting, and CORBA. **07**
- OR**
- Q.5** (a) With code fragment explain how to get EIS record from a REST service without using JWS? **07**
(b) Explain the role of WSDL in SOA. **07**
