## Code No: D0505, D5805, D4002

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD M.TECH II - SEMESTER EXAMINATIONS, APRIL/MAY 2012 WEB SERVICES

## (COMMON TO COMPUTER SCIENCE, COMPUTER SCIENCE & ENGINEERING, INFORMATION TECHNOLOGY)

Time: 3hours Max. Marks: 60

## Answer any five questions All questions carry equal marks

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- 1. Explain the following technologies in brief with reference to web based applications:
  - a) Client/Server
  - b) Java RMI
  - c) Role of XML in distributed computing
  - d) CORBA
- 2.a) Explain the concept of Service Oriented Architecture(SOA).
  - b) Briefly explain how the distributed computing evolved and matured?
- 3.a) What are the key benefits and challenges associated with web services?
  - b) Discuss the core web services standards.
- 4.a) Explain briefly the tools and technologies used in web service implementation.
  - b) What are the core building blocks of web services? Explain the basic steps of implementing web services.
- 5.a) Explain the structure of a SOAP message with attachments using a block diagram.
  - b) Explain the basic SOAP message exchange model.
- 6.a) Explain with a suitable example, the steps involved in writing a java client with Apache Axis (open source Java based SOAP implementation).
  - b) What are the known limitations of SOAP?
- 7.a) With a block diagram describe the life cycle of a web service indicating the role of WSDL and UDDI.
  - b) With suitable code snippets explain the sections of a WSDL file.
- 8.a) Briefly describe the .NET framework with respect to web services.
  - b) Explain XML encryption.