GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – II • EXAMINATION – WINTER 2012

Subject code: 1722301   **Date: 29-12-2012**
Subject Name: Service Oriented Architecture
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)** Write and explain rules for well-formed XML document. Also write   **07**
              application of XML.
         (b) List and explain characteristics of good service.   **07**

Q.2 **(a)** What is role of registry in SOA. Write a note on UDDI.   **07**
         (b) Explain following SOA design principles.   **07**
                   1. Accommodation of change   2. Separation of concerns.
                                      OR
         (b) List and explain challenges to SOA.   **07**

Q.3 **(a)** Draw and explain SOA Reference Architecture.   **07**
         (b) Write a note on service Orchestration.   **07**
                                      OR
Q.3 **(a)** List and explain various activities involved in SOA methodology.   **07**
         (b) Write a note on BPEL.   **07**

Q.4 **(a)** Write and explain service life cycle.   **07**
         (b) What is full name of WSDL? Explain various parameters of WSDL file with   **07**
              example.
                                      OR
Q.4 **(a)** Write a note on Model driven architecture.   **07**
         (b) Explain various approaches available for service realization.   **07**

Q.5 **(a)** Student result is saved in XML file as shown below. Write XSL style sheet   **07**
              to show result in tabular format.
              <student id="1111'>
              <subject code="111'>77</subject>
              <subject code="112'>59</subject>
              <subject code="113'>63</subject>
              </student>
         (b) Write a program to create web service. It takes one number as parameter and   **07**
              replies with number is odd or even. Also write client program. Note: You
              can write in Java or .NET
                                      OR
Q.5 **(a)** Write XML and DTD to save employee details (name, city, phone no,   **07**
              email) with following constraints.
                   1. Name is compulsory field
                   2. Employee can have 0 or more phone no
         (b) Write notes on following.   **07**
                   1. WS-Addressing   2. WS-Policy
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