

GUJARAT TECHNOLOGICAL UNIVERSITY**ME - SEMESTER- I (OLD course) • EXAMINATION – SUMMER 2015****Subject Code: 710101****Date: 11/05/2015****Subject Name: Service Oriented Architecture****Time: 10:30 am to 1:00 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) Draw and explain stages of service life cycle. **07**
 (b) What is WS Policy? Explain how it can overcome limitations of WSDL? Give proper example. **07**
- Q.2** (a) Draw and explain SOA reference architecture. **07**
 (b) Explain following challenges of SOA and discuss their architectural requirements. **07**
 1. Agility and Flexibility 2. Reuse and consistency
- OR**
- (b) What is DTD? Explain its importance with example. **07**
- Q.3** (a) Explain following with respect to web service. **07**
 1. WSDL
 2. UDDI
 (b) Explain following with respect to loose coupling in SOA. **07**
 1. Location Transparency
 2. Interface and Implementation
- OR**
- Q.3** (a) Explain relationship between EA and SOA. **07**
 (b) What do you mean by governance in SOA? List & Explain types of governance. **07**
- Q.4** (a) Write note on WS-Notification framework **07**
 (b) What do you mean by end to end integrity? Why SSL can't provide it? How XML signature is helpful in end to end integrity? Give proper example. **07**
- OR**
- Q.4** (a) What do you mean by service orchestration and choreography? Give differences between them. **07**
 (b) Explain various approaches for service realization. **07**
- Q.5** Attempt any two. **14**
- (1) Student result is saved in XML file as shown below. Write XSL style sheet to show result in tabular format.
 <student id=011110>
 <subject code=01110-77</subject>
 <subject code=01120-59</subject>
 <subject code=01130-63</subject>
 </student>
- (2) Write a program to create web service. It takes one number as parameter and replies with square of number. Also write client program. Note: You can write code in Java, .NET or any other framework.
- (3) Write XML and DTD to save employee details (name, city, phone no, email) with following constraints. Write sample employee xml file also.
 1. Name is compulsory field
 2. Employee is the root element.
 3. Phone no must be number
