Seat No.: _____ *Enrolment No._____*

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – SUMMER • 2014

Subject code: 710101 **Date: 13-06-2014**

Subject Name: Service Oriented Architecture

Time: 02:30 pm - 05:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full mark.**

Q.1	**(a)**	Give differences between valid and well-formed XML document with suitable example.	**07**
	(b)	What is the role of Governance in SOA development? List and explain various types of governance with respect to SOA reference architecture.	**07**
Q.2	**(a)**	Explain following characteristics of service - Modularity and Granularity - Dynamic discovery and binding	**07**
	(b)	Write a note on service orchestration.	**07**
		OR	
	(b)	Draw and explain life cycle of web service.	**07**
Q.3		**Attempt any two**	**14**
	(a)	Write sample WSDL file and explain various parts of it.	
	(b)	Give difference between 1. Business process versus Business services 2. Domain services versus Utility services	
	(c)	Draw and explain 4+1 software architectural views.	
Q.4		**Attempt any two**	**14**
	(a)	What is the role of WS-security in SOA? List and explain some important features of WS-Security.	
	(b)	What is the purpose of WS-Notification? Explain its features.	
	(c)	Differentiate between conductor-based and peer to peer based service composition techniques.	
Q.5		**Attempt any two**	**14**
	(a)	Write XML and DTD to save employee details (name, age, city, phone, email) with following constraints. 1. Company is root element 2. Company has one or more employee elements 3. Employee element has attributes like name, age, city, email and phone 4. Employee can have only one email	
	(b)	Write a program to create web service. It takes user name as parameter and replies with total number of characters in name. Also write client program. Note: You can write code in Java or .NET	
	(c)	Student information like class, roll number, name, age and city is stored in XML file. Write style sheet code to display all students in tabular fashion. Keep two different background colors for odd and even rows in table.	

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