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

Subject code: 710101N   **Date: 08-01-2013**
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 marks.**

Q.1	**(a)**	Write five challenges to SOA. Explain SOA Reference Architecture.	**07**
	(b)	Explain : SOAP , UDDI	**07**
Q.2	**(a)**	Build BPM for Online Shopping Mall for Electronics items.	**07**
	(b)	Explain Service Life Cycle and Service Characteristics' in SOA	**07**
		OR	
	(b)	Explain Service Dimensions of SOA.	**07**
Q.3	**(a)**	Explain : BPEL , Enterprise Service Bus	**07**
	(b)	Compare EA and SOA	**07**
		OR	
Q.3	**(a)**	Explain : WSDL , Message Exchange Pattern	**07**
	(b)	Service Execution and Monitoring in SOA	**07**
Q.4	**(a)**	Explain RPC vs Document Orientation.	**07**
	(b)	Explain Security measures for any SOA application of your choice.	**07**
		OR	
Q.4	**(a)**	Differentiate: Orchestration vs. Choreography	**07**
	(b)	Ws-Security (XML-Encryption and XML-Signature)	**07**
Q.5	**(a)**	Compare DTD and XTD. Also write DTD for Library books with well formatted XML file.	**07**
	(b)	Indian Railway Reservation System provides Online ticket booking services to users at various railways stations across country, at home , on mobile and thru various registered ticket booking Agents. Passengers can check schedules of train , book modify cancel print tickets, Use TatKal scheme etc.. Railway provides supports by help desk, call centers and thru SMS for train inquiry and Latest Updates. Identify Key Services for the different business processes and build SOA for Indian Railway.	**07**
		OR	
Q.5	**(a)**	Why XML used in SOA? Create XSL file for Student Mark sheet which display students data in tabular format.	**07**
	(b)	Educational University like GTU has web portal and is interconnected across different zones in country and is accessed by different colleges in different cities. Identify different processes used for students enrollment , exam schedule , students results, students mark sheet , circulars etc - For different students studied in different semesters of various courses (Diploma, UG, PG etc..) and different branches (Civil, Electrical etc..)It has call centers and helpdesk for query of students in zones..Identify Key Services for the different business processes and design SOA for this Educational University	**07**

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