GUJARAT TECHNOLOGICAL UNIVERSITY M. E. - SEMESTER – I • EXAMINATION – WINTER • 2013

Subject code: 710101N Date: 23-12-2013 **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) What are the important aspects of Enterprise SOA reference 07 Architecture? Also explain its major components? Write Benefits to IT and Business by using SOA? (b) What is the role of BPM in SOA? Draw a Service hierarchy of a business 07 process to provide quotes for Automobile Insurance policies. (a) Define SLA, UDDI, SOAP, XSLT in terms of SOA. **07 Q.2** 07 (b) What is ESB? Explain role of ESB and ESB architecture in SOA. OR (b) A Mobile Phone Company (A multi national company-Like Nokia/LG) has different processes spread over different countries, different department, different brands, B2B partners and customers. Company is using current CRM systems which are made of call centers (.NET platform), web portals (JAVA platform), B2B gateways for resellers to fulfill customer orders and also using logistic systems for shipping of Goods. Use SOA to enable all processes and identify key services and technical aspects to implement SOA for this Mobile Phone Company. Q.3 (a) Explain 4+1 Software Architectural view and also compare it with EA in 07 context of service. **(b)** Explain agility and flexibility in terms of SOA with example. 07 **Q.3** How Coupling effects on SOA? How we can achieve Loose Coupling in 07 SOA and what about it's effect on traditional Object Oriented Design? Explain Mandatory Access Control filtering in brief with example in 07 SOA. **Q.4** 07 Compare: Orchestration and Choreography in SOA. **(b)** Explain Service Life Cycle. 07 OR (a) Explain SOA Design-time Governance and Change-time Governance. 07 **Q.4** (b) Explain: Atomic Service, Dynamic Discovery, Difference between 0.4 07 Registry and Repository. **Q.5** (a) Why XML document is used in SOA? Create XSL file for Railway 07 Ticket for Passengers for displaying it in Browser. (b) Explain WS- Reliable Messaging, WS-Addressing & WS- Policy in 07 detail. OR Give Difference between DTD and XSD. Create DTD file Library Book Q.5 information and create also well-formed XML file for Library Book information against this DTD file. **(b)** Explain Service Characteristics and Service Dimensions in SOA. 07
