Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VIII • EXAMINATION – SUMMER 2013

Subject Code: 181605 **Date: 09/05/2013**

Subject Name: Service Oriented Computing

Time: 10:30 am TO 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)**	Answer the following questions.	
		1. Why peers are called ôservantsõ?	**01**
		2. What is strict scheduling?	**01**
		3. What is relaxing serialization?	**01**
		4. How does a co-operative system function?	**01**
		5. Write in brief ôSemantic Webô.	**02**
		6. Write a brief note on Model Driven Architecture.	**02**
		7. Write a note on Grid and Utility Computing.	**03**
		8. Define OWL ï RDF ï RDFS.	**03**
Q.2	**(a)**	Explain architectural model for Web service. Explain all terms in detail.	**07**
	(b)	Explain autonomy, heterogeneity & dynamism related to Open Environments.	**07**
		OR	
	(b)	Explain architecture for composed services with a suitable example.	**07**
Q.3	**(a)**	Describe SOAP request and response model with an example.	**07**
	(b)	Write a difference between J2EE and .NET architecture in detail.	**07**
		OR	
Q.3	**(a)**	How ACID properties are implemented in distributed transaction? Explain with an example.	**07**
	(b)	Explain BPEL4WS and ebXML.	**07**
Q.4	**(a)**	Write a note on Service life cycle.	**07**
	(b)	Explain WSDL structure.	**07**
		OR	
Q.4	**(a)**	List all execution models. Explain Messaging and Jini in detail.	**07**
	(b)	Explain Agent based architecture in detail, showing the de facto standard agent types.	**07**
Q.5	**(a)**	Discuss limitation of SOAP, WSDL and UDDI.	**07**
	(b)	Discuss Multi agent systems w.r.to Agent communication, languages and protocols.	**07**
		OR	
Q.5	**(a)**	Explain WS ï Coordination & BTP in detail.	**07**
	(b)	Answer the following questions.	
		1. Explain two-phase locking protocol for locking.	**04**
		2. Explain Rules for Collaboration.	**03**

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