

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII EXAMINATION – SUMMER 2016****Subject Code:181605****Date:16/05/2016****Subject Name:Service Oriented Computing (Department Elective - II)****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) Explain the ACID properties reviewed in the Context of Service Oriented Architectures and in the Context of distributed transaction **07**
(b) Describe SOAP request and response model with an example. **07**
- Q.2** (a) Draw the schematic general architectural model for Web Service. Explain SOAP request scenario for a customer orders goods from a supplier **07**
(b) Define Composing Service and also discuss challenges for Service composition **07**
- OR**
- (b) Write a short note on : OWL **07**
- Q.3** (a) Explain Multiagent architecture and its life cycle management **07**
(b) What are the basic elements of SOA? How does SOA impose Loose Coupling, Granularity and Long life time in realizing the requirements? **07**
- OR**
- Q.3** (a) Explain UDDI API for registry access. **07**
(b) Write a WSDL file for a phone book service that supports the operations GetPhoneNumber and SetPhoneNumber. The operation GetPhoneNumber accepts a name parameter of type String and returns a phone number of type String, whereas SetPhoneNumber accepts a name parameter of type String and a phone number parameter of type String and returns nothing. **07**
- Q.4** (a) What is RDF? Explain RDF document in detail **07**
(b) Answer the following questions. **07**
1. Explain two-phase locking protocol for locking.
2. Explain Rules for Collaboration.
- OR**
- Q.4** (a) What is peer-to-peer computing? Explain in brief the models of peer-to-peer computing. **07**
(b) What is ontology? Explain OWL constructor and Axioms with suitable example **07**
- Q.5** (a) Explain the Agent based system architecture showing the de facto standard agent types. **07**
(b) List importance of BPEL4WS **07**
- OR**
- Q.5** (a) Differentiate between .Net Architecture and J2EE Architecture in the context of Enterprise Architecture. **07**
(b) Explain role of XML in distributed computing **07**
