

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (NEW) EXAMINATION - WINTER 2018

Subject Code: 2170713 Date: 29/11/2018

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.

| | | | MARKS |
|-----|------------|---|----------|
| Q.1 | (a) | Differentiate between client-server and distributed architecture. | 03 |
| | (b) | Draw and explain architecture model of web service in short. | 04 |
| | (c) | What is SOA? Explain characteristics of SOA in detail. | 07 |
| Q.2 | (a) | Explain challenges for service composition. | 03 |
| | (b) | Compare SOAP based web service and RESTful web service. | 04 |
| | (c) | Draw and explain .NET architecture. | 07 |
| | (c) | OR Explain in detail about XML document Structure and XML schema. | 07 |
| Q.3 | (a) | What are the promises of SOA? | 03 |
| | (b) | What is MEP? Explain common patterns in brief. | 04 |
| | (c) | Write a note on: Service life cycle. | 07 |
| | | OR | |
| Q.3 | (a) | What is RDF? Explain in brief. | 03 |
| | (b) | Write short note on following. | 04 |
| | | 1. Model driven architecture | |
| | | 2. Web services interoperability technologies | 0= |
| | (c) | What is importance of WSDL? Discuss various elements of WSDL | 07 |
| 0.4 | (a) | document with example. | 0.2 |
| Q.4 | (a) (b) | What is Orchestration? Explain in brief. Explain following in brief: | 03 04 |
| | (D) | JAXR, JAXB. | V4 |
| | (c) | Describe SOAP request and response model with an example. | 07 |
| | (C) | OR | 07 |
| Q.4 | (a) | What is choreography? Explain WS-CDL. | 03 |
| | (b) | Explain entity-centric business and task-centric business services. | 04 |
| | (c) | What is UDDI? Explain green, yellow and white pages. | 07 |
| Q.5 | (a) | Explain WS-security and WS-Policy. | 03 |
| | (b) | Differentiate followings: | 04 |
| | | 1. Interoperation vs. Integration | |
| | | 2. RPC vs. Document orientation | |
| | (c) | Draw and explain J2EE architecture with suitable diagram. | 07 |
| | | OR | |
| Q.5 | (a) | Explain role of XML in distributed computing. | 03 |
| | (b) | Draw and explain service modeling process steps. | 04 |
| | (c) | Explain WS-BPEL and WS-Addressing. *********************************** | 07 |