

GUJARAT TECHNOLOGICAL UNIVERSITY**BE – SEMESTER- VII EXAMINATION-SUMMER 2023****Subject Code: 2170713****Date: 21/06/2023****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.
4. Simple and non-programmable scientific calculators are allowed.

MARKS

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|------------|--|-----------|
| Q.1 | (a) Define: Autonomy, Heterogeneity and Dynamism. | 03 |
| | (b) Explain benefits of Service Oriented Computing. | 04 |
| | (c) List Common Characteristics of Service Oriented Computing. | 07 |
| Q.2 | | |
| | (a) Explain Semantic Web and Pragmatic Web in brief. | 03 |
| | (b) Differentiate between Integration vs. Interoperation. | 04 |
| | (c) Discuss Model Driven Architecture with UML, MOF and CWM components in detail. | 07 |
| OR | | |
| | (c) Explain Configuration, Dynamic Selection and Software Fault Tolerance in detail. | 07 |
| Q.3 | | |
| | (a) Draw and Explain web service architecture in short. | 03 |
| | (b) Discuss goals of Service Composition with examples. | 04 |
| | (c) Write a WSDL file for a phone book service that supports the operation GetPhoneNumber. The operation GetPhoneNumber accepts a name parameter of type String and returns a phone number of type String. | 07 |
| OR | | |
| Q.3 | | |
| | (a) Explain different elements of SOAP in short. | 03 |
| | (b) What is UDDI? Explain Green, yellow and White Pages. | 04 |
| | (c) Write XML document for Students Information System and also write XSD to validate it. | 07 |
| Q.4 | | |
| | (a) Discuss JAXR Architectural Components. | 03 |
| | (b) Discuss how Marshaling and Un-marshaling concepts work in JAXB. | 04 |
| | (c) Differentiate J2EE and .NET platform. | 07 |
| OR | | |
| Q.4 | | |
| | (a) Differentiate between JAXP and JAXB. | 03 |
| | (b) Explain JAXB life Cycle. | 04 |
| | (c) Discuss various components of JAX-WS in brief. | 07 |
| Q.5 | | |
| | (a) Explain working of Single Sign On in WS-Security. | 03 |
| | (b) How WS-ReliableMessaging is useful in service oriented computing and what is use of RM Source, RM Destination, Application Source, and Application Destination? | 04 |
| | (c) What is Choreography? Explain WS-CDL in short. | 07 |
| OR | | |
| Q.5 | | |
| | (a) Explain XML-Encryption and its significance. | 03 |
| | (b) How WS-Addressing is useful in service oriented computing? Analyze & Explain use of endpoint reference in WS-Addressing. | 04 |
| | (c) What is Coordination? Explain activation and registration processes in brief. | 07 |
