

DEPARTMENT OF INFORMATION TECHNOLOGY

IT9351-SERVICE ORIENTED ARCHITECTURE

(REGULATION 2009)

Part A

10X2=20

1. Differentiate CORBA and XML based web service.
2. List down the business benefits of SOA.
3. Highlight the importance of substitutability in an abstract interface.
4. What do you mean by Payload mapping and Protocol Bridging?
5. What are Greenfield services?
6. What is WS-addressing?
7. What are the JAXP Packages?
8. What do you mean by ws-deploy and ws-compile?
9. Compare WS-Policy, WSPL and WSDL.
10. What is SAML? List its basic components.

Part B

16X5=80

11. i. Describe the JAXB architecture. Write an JAXB code to read an XML document for an order processing system. (10)
- ii. Explain Service Deployment in JAX-RPC. (4)
- iii. Write the data type mapping between Java and WSDL with a sample extract code for the following:
 - i. Java Type: Interface (2)
 - ii. Java Type: Exceptions

- 12 a. i. Explain Occasionally connected architecture for mobile device (8)
- ii. Write the SOA principles and guidelines (8)

(OR)

- b. i. What is the key web service standard for security?
Explain the key factors in providing service-level security. (16)

- 13 a. i. Consider a telecom tech support company where customers place orders for products and services. This interaction consists of customer selecting the products and services and the tech support representative validating that the services can be provided followed by service provisioning. For this business scenario explain the types of interactions used for the accomplishment of business activities (10)
- ii. Compare the three approaches to SOA (6)

(OR)

- b. i. Explain the steps in Service enabling a CORBA server with an example (10)
- ii. Write the WSDL extract for a Stock quote web service (6)

- 14 a. i. Explain the Channel Access tier and Communication Infrastructure in the layered architecture of Multi Channel Access (12)

ii. What are the architectural challenges of Multi channel access (4)

(OR)

b.i. Compare BPEL with CDL (8)

ii. Describe the business process for processing payroll information of an employee . Explain the Line of Business, Business activities, services and operations with suitable WSDL (8)

15. a .i. Explain the Transaction Co-ordinator architecture with an example. (10)

ii. Write a WSDL extract to show a document style message sent with SOAP encoding for “SchedulePayment” operation. (6)

(OR)

b.i. What is WSPL? Draw the WSPL model which encloses rules within policies and explain. (8)

ii. Compare the different policy approaches in metadata management (8)