

# P P SAVANI UNIVERSITY

Fifth Semester of B. Tech. Examination

December 2022

SECE3520 Service Oriented Architecture (Elective-I)

06.12.2022, Tuesday

Time: 10:00 a.m. To 12:30 p.m.

Maximum Marks: 60

## Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

### SECTION - I

Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]	CO	BTL
(i)	Define Service		1	1
(ii)	How services relate and communicate?		2	2
(iii)	Discuss Distributed Computing		1	1
(iv)	What is XML?		1	1
(v)	UDDI stands for _____?		3	1
(vi)	WSDL written in XML. True/ False?		3	1
(vii)	Define SOAP		3	1
Q - 2 (a)	Discuss any five design principles of SOA	[05]	2	1
Q - 2 (a)	Enlist Advantages and Disadvantages of SOA	[05]	2	6
OR				
Q - 2 (a)	Explain SOA Reference Model: Layered Architecture of SOA	[05]	2	2
Q - 2 (b)	Discuss case study of insurance claim application with the context of SOA	[05]	3	1
Q - 3 (a)	What is XML? Develop marksheet XML document and specify its way to display.	[05]	3	6
Q - 3 (b)	Draw neat diagram of J2EE Architecture and explain its components.	[05]	1	1
OR				
Q - 3 (a)	Discuss the Case Study of RailCo and TLS by giving proper example of their SOA implementation.	[05]	3	4
Q - 3 (b)	Discuss service composition with suitable example.	[05]	2	2
Q - 4	Attempt anyone.	[05]		
(i)	What is Web Service? Explain each step of Web Service Framework by giving suitable example.		3	1,6
(ii)	What is WSDL? Give structure of WSDL document with proper example.		3	1

### SECTION - II

Q - 1	MCQ/Short Question/Fill in the Blanks (Any Five)	[05]		
(i)	What is WS-Addressing?		2	1
(ii)	What is WS-Policy?		2	1
(iii)	What is reusable service?		2	1
(iv)	Define Enterprise architecture.		1	1
(v)	Define Client / Server architecture.		1	1
(vi)	What is architecture?		1	1
(vii)	What are ACID transactions?		2	1
Q - 2 (a)	What are the types of Message Exchange Patterns? Explain them with a suitable example.	[05]	2	1
Q - 2 (b)	What is Service Activity? Give example of primitive service and complex service activity.	[05]	2	1

**OR**

- Q - 2 (a) What is service Coordination? Give suitable example. [05] 2 2  
 Q - 2 (b) Compare Service registry and Service repository. [05] 2 2  
 Q - 3 (a) What is Orchestration? How it is being implemented in SOA? [05] 3 1  
 Q - 3 (b) What is Choreography? What is its significance? [05] 2 1

**OR**

- Q - 3 (a) Explain practical importance of J2EE and .NET? Explain with example. [05] 1 1  
 Q - 3 (b) With neat sketch explain and Draw life cycle of web service. [05] 3 1  
 Q - 4 Attempt anyone. [05]  
 (i) Create web calculator service using JAX-WS and create Java client to consume this web service. 3 6  
 (ii) Create DTD file for student information and create a valid well-formed XML document to store student information against this DTD file. 3 6

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CO : Course Outcome Number                      BTL : Blooms Taxonomy Level

Level of Bloom's Revised Taxonomy in Assessment

1: Remember	2: Understand	3: Apply
4: Analyze	5: Evaluate	6: Create