

**Web Services****(Computer Science and Engineering)****Date: 30-07-2025****Time: 3 Hours.****Max. Marks: 70****Answer ONE Question from each UNIT and each question carries 14 Marks****UNIT-1**

1. A) Compare Micro services with Web Services? [7 Marks;CO1; Understand]  
B) List and define Advantages of Micro services? [7 Marks;CO1; Remember]

**(OR)**

2. A) What are advantages and disadvantages of SOAP Web Services? [7 Marks;CO1;Understand]  
B) Explain about SOAP Web Services? [7 Marks;CO1;Understand]

**UNIT-2**

3. A) Write a java program to Demonstrate the Annotations? [7 Marks;CO2; Apply]  
B) Develop a program for @Override annotation to check the parent class method at sub class. [7 Marks;CO2; Apply]

**(OR)**

4. A) How to implement a Generic stack class in Java? [7 Marks;CO2;Apply]  
B) Compare and contrast super vs extends with example? [7 Marks;CO2;Understand]

**UNIT-3**

5. A)Build a Java Class to convert the Java Object into JSON? [7 Marks;CO3;Apply]  
B)How to parse JSON Objects using Jackson APIs? [7 Marks;CO3;Remember]

**(OR)**

6. A)Define JSON object? Explain with an example? [7 Marks;CO3; Apply]  
B)Describe JSON array? Explain with an example? [7 Marks;CO3; Apply]

**UNIT-4**

7. A)With a neat diagram explain SOAP Architecture? [7 Marks;CO4; Understand]  
B)What is WSDL? Explain Features of WSDL? [7 Marks;CO4; Remember]

**(OR)**

8. A)List and Explain Operations in WSDL? [7 Marks;CO4; Remember]  
B)Describe role of “definitions” in WSDL? [7 Marks;CO4; Remember]

**UNIT-5**

9. A) How to create RESTful web services? [7 Marks;CO5; Apply]  
B) What the differences is between REST and SOAP? [7 Marks;CO5; Remember]

**(OR)**

10. A) Explain in detail with a program for Publishing REST based on JSON web services? [7 Marks;CO5; Apply]

- B) Explain in detail with a program for Consuming REST based on JSON web services?

[7 Marks;CO5; Apply]

**---The End---**