Reg. No.

B.E./B.Tech. DEGREE EXAMINATIONS NOVEMBER/DECEMBER 2020

Seventh Semester

Computer Science and Engineering

IT8074 – SERVICE ORIENTED ARCHITECTURE

(Common to Information Technology)

(Regulations 2017)

Time : 3 Hours   Answer ALL Questions   Max. Marks: 100

PART-A (10 x 2 = 20 Marks)

1. List out any two advantages of XML schema.

2. Differentiate between Xpath and Xquery.

3. Define primitive SOA.

4. Justify how Contemporary SOA promotes architectural composability.

5. Define service model.

6. List out the major elements in WSDL.

7. What is policy assertion?

8. Identify the purposes of XML signature.

9. List out the goals of service-oriented analysis.

10. Define business process design.

Part – B (5 x 13 = 65 Marks)

11. a) Elucidate the use of DTD for structuring the XML document.   (13)

OR

b) Outline the process of parsing the XML document using SAX parser.   (13)

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12. a) Compare SOA with client-server architecture and distributed architecture. (13)

OR

b) Describe the common principles of service orientation. (13)

13. a) Explain the process of messaging with SOAP protocol. (13)

OR

b) Explain the technical requirements of Orchestration and Choreography in detail. (13)

14. a) Outline the various elements involved in web services reliable messaging process. (13)

OR

b) Explain WS-security language in detail. (13)

15. a) Explain the steps involved the process of service modelling in detail. (13)

OR

b) Outline the various service design guidelines for business service design. (13)

PART C (1 X 15 = 15 Marks)

16. a) Create an XML schema document with intricate characteristics about university faculty's (Sample database is given below). Use f_id as an attribute.

f_id	f_name	f_dob	f_age
101	Ram	14/2/2000	21
102	Raj	16/8/1998	23
103	Ravi	15/7/2001	20

(15)

Write a XSLT to display the sorted information based on f_id. Also outline a DTD for the created university faculty's database.

OR

b) Outline the steps involved in the creation of web services to return a string to the application. (15)

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