



# MUTHAYAMMAL ENGINEERING COLLEGE

(An Autonomous Institution)

(Approved by AICTE, New Delhi, Accredited by NAAC & Affiliated to Anna University)

Rasipuram - 637 408, Namakkal Dist., Tamil Nadu.

## Department of Computer Science and Engineering Question Bank - Academic Year (2020-21)

Course Code & Course Name : 19CSC13 & Service Oriented Architecture

Year/Sem/Sec : III / VI / B

### Unit-I: XML Introduction

#### Part-A (2 Marks)

1. Define is XML?
2. List the important characteristics of XML.
3. How the namespace is declared?
4. What is meant by Document Type Definition?
5. What is the purpose of DTD?
6. Give an example for External DTD
7. Define is CDATA?
8. What is meant by well-formed XML document?
9. State Internal DTD?
10. What is meant by “Valid XML document”?

#### Part-B (16 Marks)

1. List and explain theXML syntax rules in detail. (16)
2. Explain how a XML document canbe displayed on a browser. (16)
- 3.(i). Explain the role of XMLname spaces with examples. (8)  
(ii). Describe ,what are the features of elements and attributes in XML. (8)
- 4.(i). What is DTD? Explain types. (8)  
(ii). Write short notes on X-Files. (8)
5. Illustrate the various data types used in XML Schema with suitable example. (16)

### Unit-II : Building XML - Based Applications

#### Part-A (2 Marks)

1. What is meant by XML DOM?
2. What is meant by DOM Parser?
3. What are the two types of XML parsers?
4. How is XML parsing done with SAX? (or) What is event-oriented parsing?

5. Define XSL
6. Explain two types of XSL information.
7. What are all the XSL components?
8. Name any four XSL elements and Mentions its use.
9. How does XSLT works?
10. Define XPATH

**Part-B (16 Marks)**

1. Explain about DOM. (16)
2. Give an XSLT document and a source XML document and explain the XSLT transformation process that produces a single result XML document. (16)
3. Explain in detail about XML parsers. (16)
4. Explain in detail about XSL. (16)
- 5.(i). Distinguishes between DOM and SAX Parsers. (8)
- ii) Write XML document for checking well for medness of XML document using DOM API. (8)

**Unit-III : Service Oriented Architecture**

**Part-A (2 Marks)**

1. What are the roots of SOA?
2. Define Service orientation.
3. What are the characteristics of SOA?
4. List the potential benefits of adhering SOA.
5. How SOA differs from client server architecture?{(
6. State the difference between SOA and distributed Computing.
7. What is meant by composite service component?
8. List out the logical components of automation logic
9. What is the need for design standards in building SOA?
10. Define service statelessness.

**Part-B (16 Marks)**

- 1.(i) Explain the basic building blocks of Service Oriented Architecture. (8)
- (ii) List the characteristic feature of SOA and explain each in detail. (8)
2. Illustrates the service layers of SOA in detail.(or)Discuss about different service layer in detail. (16)
3. Explain briefly about web services as component wrappers. (16)
- 4 Explain the principles of Service orientation in detail. (16)
- 5.(i) Summarizes the benefits of SOA. (8)
- (ii) Describe how SOA can be compared to distributed internet architectures? (8)

## **Unit-IV : Web Services**

### **Part-A (2 Marks)**

1. What is meant by Web Services?
2. Define UDDI.
3. What is meant by SOAP?
4. How web services are implemented?
5. How the Messages are processed using SOAP?
6. State the SOAP Processing Model.
7. Define MEP.
8. Give the processing steps to coordinate web service.
9. Define Orchestration.
10. Define Choreography.

### **Part-B (16 Marks)**

1. Explain the standards of Web services and its support to various technologies. (16)
2. Explain in detail about Request and Response services in MEP. (16)
3. Explain in detail about Request and Response services in MEP. (16)
4. Explain the role of Orchestration and illustrate with architecture. (16)
- 5.(i) Write short notes on:
  - (i)Messaging with SOAP. (8)
  - (ii)Business activities in web services. (8)
- (ii) Briefly explain about:
  - (i)Service layer abstraction (8)
  - (ii) Application Service Layer (8)

## **Unit-V : Building SOA-Based Applications**

### **Part-A (2 Marks)**

1. What is meant by WS-BPEL?
2. List the three basic components for WS-BPEL.
3. Define Control flow.
4. What is the role of WS-Coordination with its requirement?
5. What is the role of Registration process in WS-Coordination?
6. Distinguish between the identifier and expires elements.
7. How the security will work in WS-Security?
8. What do you know about policy Alternative?
9. Write any four XML signature elements.
10. What is Digest Method and Digest Value?

**Part-B (16 Marks)**

1. Explain in detail about basic architecture of WS-BPEL. (16)
2. Discuss WS-BPEL language basics in detail. (16)
3. Explain WS-security language basics in details. (16)
4. Describe with an example to illustrate WS-Coordination. (16)
- 5.(i) How the WS-Security will lead to SOA in accessing the web services? (8)
- (ii) List the type of WS-Security with their salient features in detail. (8)

**Course Faculty**

**HoD**