

**B.E/ B.TECH DEGREE EXAMINATIONS: NOV/DEC 2012**

Seventh Semester

**ITY116: XML AND WEB SERVICES**

(Common to Computer Science and Engineering and Information Technology)

**Time: Three Hours**

**Maximum Marks: 100**

**Answer all the Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. The syntax of the DOCTYPE tag is \_\_\_\_\_.  
a) `</DOCTYPE root element name .....>`    b) `.<?DOCTYPE root element name ....>`  
c) `<!DOCTYPE root element name ....>`    d) `<!DOCTYPE root element name ....!>`
2. Which of the following is the strength of XML?  
a) Data dependence    b) Operating system dependent  
c) Data independence    d) Programming dependent
3. If we specify the default value for an attribute, then its type must be \_\_\_\_\_.  
a) fixed    b) required  
c) prohibited    d) optional
4. What is X-Smiles?  
a) Java based XML browser    b) Web development software  
c) Web Server    d) Web services framework
5. XML-RPC payload request contains a single \_\_\_\_\_ structure.  
a) `<methodRequest>`    b) `<methodCall>`  
c) `<methodInvocation>`    d) `<methodNames>`
6. If we do not use SOAP, Web Services use the mechanism known as \_\_\_\_\_.  
a) REST    b) AOP  
c) SOA    d) DCOM
7. JAXP stands for \_\_\_\_\_.  
a) Java API for XML Processing    b) Java Architecture for XML Processing  
c) Java API for XML Programming    d) Java Application for XML Processing
8. The \_\_\_\_\_ protocol is used for communication between the Web Service client and the server.  
a) CORBA    b) WSDL  
c) UDDI    d) SOAP
9. Which of the following are the elements of digital signature?

- a) SignedInfo and Reference
  - b) Reference and Sign
  - c) Key and Reference
  - d) KeyInfo and Sign
10. Which of the following protocol is used for distributing and registering public keys?
- a) ebXML
  - b) XKMS
  - c) X.KISS
  - d) X-KRSS

**PART B (10 x 2 = 20 Marks)**

11. What are the advantages of using XML?
12. What is the role of XML in web applications?
13. What is the difference between XML schema and DTD?
14. Define namespace. Give its usage.
15. What are the three parts of SOAP?
16. How SOAP differs from other protocols?
17. What is the use of UDDI protocol?
18. Which are the important classes in ASP.NET when dealing with XML?
19. What is XKMS?
20. What is Canonicalization?

**PART C (5 x 14 = 70 Marks)**

21. a) (i) Explain the software revolution of XML. (8)
- (ii) Write brief notes on Service Oriented Architecture. (6)
- (OR)**
- b) (i) Write an XML document to illustrate elements, attributes and CDATA section. (6)
- (ii) Explain the Web Services architecture with a neat diagram. (8)
22. a) (i) Write in detail about the various presentation technologies. (8)
- (ii) With a diagram explain the how VoiceXML documents are stored in web servers. (6)
- (OR)**
- b) (i) Discuss about the role of XLink, XPath and Xquery in XML. (6)
- (ii) Write the schema and DTD for the following XML document. (8)

. <book sign="0836217462">

<title> True Crime </title>

<author hobby= 'writing'> Charles M. Schulz </author>

<character>

```

        <name> Snoopy</name>
        <friend-of>Peppermint Patty</friend-of>
        <since> 1950-10-04</since>
        <qualification> extroverted beagle</qualification>
    </character>
    <character>
        <name> Peppermint Patty </name>
        <since> 1966-08-22 </since>
        <qualification> bold, brash and tomboyish
    </qualification>
    </character>
</book>

```

23. a) (i) Explain the message structure of SOAP with an example. (8)
- (ii) Discuss in detail about the various design patterns of SOAP. (6)

**(OR)**

- b) (i) What is XML RPC? Explain in detail with the help of a diagram. (8)
- (ii) What is SOAP? What are the advantages of using SOAP? (6)

24. a) (i) With a neat sketch explain the Web services architecture with key technologies involved. (8)

**(OR)**

- b) (i) Explain the components of ebXML technology. (8)
- (ii) What is UDDI? Summarize the features of UDDI. (6)

25. a) (i) Discuss the guidelines for signing XML documents (6)
- (ii) Explain the steps used in XML encryption. (8)

**(OR)**

- b) (i) Discuss the XML canonicalization process with an example. (8)
- (ii) What is XML Digital Signature? Explain the steps involved in XML signature generation. (6)

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