Reg. No. : | | | | | | | | | | | |

K 6129

M.E. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2007.

Elective

Computer Science and Engineering

CS 1626 — XML AND WEB SERVICES

(Common to M.E. – Computer and Communication and M.E. – Software Engineering)

(Regulation 2005)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is data revolution with respect to XML?

2. What is the difference between tightly and loosely coupled architecture?

3. Justify the need for namespaces in XML.

4. Define the terms XSL and XSLT.

5. What are SOAP faults?

6. What is the difference between SOAP and other binary protocols?

7. Define the basic framework of web services.

8. List the data structure specifications associated with UDDI.

9. List the basic security requirements for e-business.

10. Highlight the feature of X-KISS protocol.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Compare the implementation of enterprise applications with and without XML technologies. (8)

(ii) Name any four XML based markup languages and highlight their features. (8)

Or

(b) (i) What is SOA? List the convensional architectures and explain how it differs from SOA. (8)

(ii) Explain the role of XML in mobile applications. (4)

(iii) Compare HTML with XML. (4)

12. (a) (i) Create a DTD specification for the following schema : (8)

Customer (name, address, purchase info, Cus type)

Address (street name, place, city, phone)

Purchase Info (Order no, List of items)

List of Items (Item No, Item Name, Quantity)

Cus Type (Regular customer/visitor)

Note :

The customer may be regular or visitor. A customer can place order any number of times. Atleast one order must be associated with a customer.

(ii) Design a XML schema for the above mentioned specifications. (8)

Or

(b) (i) Write a style sheet to display the customer details mentioned above in a reasonable format with all details. (10)

(ii) Explain the role of XPath and XQuery. (6)

13. (a) (i) Explain the structure of SOAP message. (8)

(ii) List the attributes associated with SOAP and explain. (8)

Or

(b) (i) Highlight the features of SOAP RPC with suitable example. (10)

(ii) Explain the role of SOAP in WSDL. (6)

14. (a) (i) Explain the structure of WSDL. (8)

(ii) Summarize the features of UDDI. (8)

Or

(b) (i) Explain the steps involved in the ebXML-driven business process. (8)

(ii) Compare .NET and J2EE based web service implementation strategies. (8)

15. (a) (i) Explain the features of XML based security framework. (8)

(ii) List out the guidelines for signing XML documents. (8)

Or

(b) (i) Explain the encryption strategies associated with XML. (8)

(ii) Explain the role of XML in a secured B2B. (8)
