**PRACTICE QUESTIONS**

**5.1** State whether the following are *true* or *false*. If *false*, explain why.

a) XML is a technology for creating markup languages.

b) XML markup text is delimited by forward and backward slashes (**/** and **\**).

c) Arabic characters can only be placed in to an XML document using an Arabic language

keyboard.

d) Unlike HTML, all XML start tags must have corresponding end tags.

e) Parsers check an XML document’s syntax and may support the Document Object Model

and/or the Simple API for XML.

f) An XML document is considered well formed if the XML document contains whitespace

characters.

g) URIs are strings that identify resources such as files, images, services, electronic mailboxes

and more.

h) When creating new XML tags, document authors must use the set of XML tags provided

by the W3C.

i) The pound character (**#**), the dollar sign (**$**), ampersand (**&**), greater-than (**>**) and lessthan

(**<**) are examples of XML reserved characters.

j) Any text file is automatically considered to be an XML document by a parser.

**5.2** Fill in the blanks in each of the following statements.

a) A/An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.processes an XML document.

b) Valid characters that can be used in an XML document are the carriage return, the line

feed and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_characters.

c) An entity reference must be proceeded by a/an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_character.

d) A/An\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is delimited by **<?** and **?>**.

e) Text in a/an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_section is not parsed.

f) An XML document is considered \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ if it is syntactically correct.

g) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_help document authors prevent element naming collisions.

h) Lines proceeding the root element in an XML document are collectively called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. .

i) A/An \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_tag does not contain character data.

j) XML documents commonly have the file extension\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. .

**5.3** Identify and correct the error(s) in each of the following:

a) **<my Tag>This is my custom markup<my Tag>**

b) **<!PI value!> <!-- a sample processing instruction -->**

c) **<myXML>I know XML!!!</MyXML>**

d) **<CDATA>This is a CDATA section.</CDATA>**

e) **<xml>x < 5 && x > y</xml> <!-- mark up a Java condition \*\*>**

**5.5** Create an XML document that marks up the nutrition facts for a package of Grandma Deitel’s Cookies. A package of Grandma Deitel’s Cookies has a serving size of 1 package and the following nutritional value per serving: 260 calories, 100 fat calories, 11 grams of fat, 2 grams of saturated fat, 5 milligrams of cholesterol, 210 milligrams of sodium, 36 grams of total carbohydrates, 2 grams of fiber, 15 grams of sugars and 5 grams of protein. Render the XML documents in Internet Explorer 5. [*Hint*: Your markup should contain elements describing the product name, serving size/amount, calories, sodium, cholesterol, proteins, etc. Mark up each nutrition fact/ingredient listed above. Use nested elements as necessary.]

**5.8**

**<?xml version = "1.0"?>**

**<!-- Fig. 5.10 : planner.xml -->**

**<!-- Day Planner XML document -->**

**<planner>**

**<year value = "2000">**

**<date month = "7" day = "15">**

**<note time = "1430">Doctor&apos;s appointment</note>**

**<note time = "1620">Physics class at BH291C</note>**

**</date>**

**<date month = "7" day = "4">**

**<note>Independence Day</note>**

**</date>**

**<date month = "7" day = "20">**

**<note time = "0900">General Meeting in room 32-A</note>**

**</date>**

**<date month = "7" day = "20">**

**<note time = "1900">Party at Joe&apos;s</note>**

**</date>**

**<date month = "7" day = "20">**

**<note time = "1300">Financial Meeting in room 14-C</note>**

**</date>**

**</year>**

**</planner>**

Fig. 5.10 Day planner XML document **planner.xml**.

Rewrite the XML document in Fig. 5.10 such that each **note** element has **year**, **month**, **day** and **time** attributes rather than child elements. The solution should contain only the root element and **note** child elements.

* 1. Give advantages and disadvantages of HTML.
  2. What is the difference between HTML 5 and HTML4.01?
  3. Discuss xml prolog in detail.
  4. What is XML Namespace? What is a CDATA section in XML? Clearly explain the advantages of XML schemas over DTDs.
  5. Describe Uniform Resource Identifier (URI) and URL with examples.
  6. What is WELL FORMED XML DOCUMENT. How is it different from a Valid XML Document.
  7. Describe Important components of web with the example.

a.Firewalls b. Routers c. Browsers d. Browser caches e. web search engines. f. web server g. Application servers.

5.16 Discuss the history of xml.

5.17 Write a short note over History of web/Internet.