

## Ex.No: 3-Part I : Validation of XML Documents using DTD, Schema and Conversion of XML to XHTML using XSLT

a. Write the XML Schema for the following XML document.

```
<?xml version="1.0" encoding="UTF-8" ?>

<bank>
<accounts>
  <savings_accounts>
    <savings_account id="a1" interest="0.03">
      <balance>2500</balance>
    </savings_account>
    <savings_account id="a2" interest="0.03">
      <balance>15075</balance>
    </savings_account>
  </savings_accounts>
<checking_accounts>
  <checking_account id="a3">
    <balance>4025</balance>
  </checking_account>
  <checking_account id="a4">
    <balance>-125</balance>
  </checking_account>
  <checking_account id="a5">
    <balance>325</balance>
  </checking_account>
</checking_accounts>
</accounts>
<customers>
  <customer id="c1">
    <name>Ben Richerdson</name>
    <address>Park Drive 2</address>
  </customer>
  <customer id="c2">
    <name>Marc Wretcher</name>
    <address>Mill Drive 75</address>
  </customer>
<customer id="c3">
  <name>Angel Steady</name>
  <address>Lake Sight 15</address>
</customer>
</customers>
  <customer_accounts>
    <customer_account c_id="c1" ac_id="a2" />
    <customer_account c_id="c1" ac_id="a3" />
    <customer_account c_id="c2" ac_id="a4" />
    <customer_account c_id="c3" ac_id="a1" />
    <customer_account c_id="c3" ac_id="a5" />
  </customer_accounts>
</bank>
```

b. Write the DTD for the following XML document.

```
<Books>

  <Book>

    <Isbn> 0 - 8447 - 768 </Isbn>

    <Title> XML in a Nutshell </Title>

    <Author> Harold, Elliotte Rusty </Author>

  </Book>

  <Book>

    <Isbn> 978 - 81 - 317 - 6235 - 6 </Isbn>

    <Title> Service - Oriented Architecture </Title>

    <Author> Thomas Erl </Author>

  </Book>

  <Book>

    <Isbn> 978 - 81 - 317 - 1869 - 8 </Isbn>

    <Title> XML and WebServices </Title>

    <Author> Ron Schmelzer </Author>

  </Book>

</Books>
```

c. Convert the following XML document into an XHTML table using XSLT.

```
<? Xml version = "1.0" ?>

<? Xml : stylesheet type = "text/xsl" href = "Students.xsl" ?>

<Students>

  <Student>

    <name>John</name>

    <rollno>CS101</rollno>

    <department>CSE</department>

    <cgpa>9.5</cgpa>

  </Student>

  <Student>

    <name>Williams</name>

    <rollno>CE034</rollno>

    <department>CIVIL</department>
```

```

        <cgpa>7.4</cgpa>

    </Student>

    <Student>

        <name>Rohit</name>

        <rollno>EC087</rollno>

        <department>ECE</department>

        <cgpa>8.7</cgpa>

    </Student>

</Students>

```

d. Write the DTD and XML Schema for the following XML document.

```

<? Xml version = "1.0" ?>
<? Xml : stylesheet type = "text/xsl" href = "Students.xsl" ?>

<Employee>

    <Emp>
    <name>Roshan</name>
    <eid>E101</eid>
    <department>HR</department>
    <doj>09-SEP-1999</doj>
    <salary>68,000</salary>
    </Emp>

        <Emp>
        <name>Mary</name>
        <eid>E233</eid>
        <department>Accounts</department>
        <doj>06-AUG-2001</doj>
        <salary>24,000</salary>
        </Emp>

            <Emp>
            <name>Sunil</name>
            <eid>E521</eid>
            <department>Engineering</department>
            <doj>04-NOV-2009</doj>
            <salary>42,000</salary>
            </Emp>

    </Employee>

```

e. Convert the XML document given in Ex.b into an XHTML document for tabular presentation Using XSLT.

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