**NAME: DEEBIKA M**

**DEPT-SECTION: IT-A**

**REG.NO: 312217205019**

**1.Write a use case in SOA and fit a XML data to be used in the scenario.**

**USE CASE SCENARIO:**

**Ans:** This scenario for SOA consists of School database.

The entities involed are the: For instance, a student may be characterized by an id, name,

Date of birth and marks.

**XML CODE:**

<? XML version= “1.0” encoding=”UTF-8”?>

<school>

<student>

<id> 01</id>

<name>Deebika</name>

<dob>24-03-2000</dob>

<marks>

<tamil>97</tamil>

<english>98<english>

<maths>100</maths>

<science>99<science>

</marks>

</student>

</school>

**2. For the XML data write the corresponding DTD used for vallidation**

**DTD CODE:**

<? XML Version=”1.0” encoding= “UTF-8” ?>

<!DOCTYPE note [

<!ELEMENT school (( student ->id, name, dob) (marks->tamil, english, maths, science))>

<!ELEMENT id (#PCDATA)>

<!ELEMENT name (#PCDATA)>

<!ELEMENT dob (#PCDATA)>

<!ELEMENT tamil (#PCDATA)>

<!ELEMENT english (#PCDATA)>

<!ELEMENT maths (#PCDATA)>

<!ELEMENT science (#PCDATA)>

]

**3. Make at least 5 improvements to the XML validation done with DTD using schema.**

**DTD validation using Schema**

<xs:element name=”student”>

<xs:complexType>

<xs:sequence>

<xs:element name=”id” type=”xs:positive integer”/>

<xs:element name=”name” type=”xs:string”/>

<xs:element name=”dob” type=”xs:date”/>

<xs:element name=”tamil” type=”xs: positive integer”/>

<xs:element name=”english” type=”xs: positive integer”/>

<xs:element name=”maths” type=”xs:positive integer”/>

<xs:element name=”science” type=”xs:positive integer”/>

</xs:sequence>

</xs:complexType>

</xs:element>