

- a. Given XML is not correct because it has a record tag inside the artist tag. The following is the corrected XML.

Corrected XML:

```
<!DOCTYPE record [  
    <!ELEMENT record (artist|year|contributor)*>  
    <!ELEMENT artist (#PCDATA)>  
    <!ELEMENT year (#PCDATA)>  
    <!ELEMENT contributor (#PCDATA)>  
]>  
<record>  
    <artist>text</artist>  
    <year>text</year>  
    <contributor>text</contributor>  
</record>
```

b. Corresponding XML Schema:

```
<?xml version="1.0" encoding="UTF-8"?>  
<xs:schema attributeFormDefault="unqualified"  
    elementFormDefault="qualified"  
    xmlns:xs="http://www.w3.org/2001/XMLSchema">  
    <xs:element name="record" type="recordType"/>  
    <xs:complexType name="recordType">  
        <xs:sequence>  
            <xs:element type="xs:string" name="artist"/>  
            <xs:element type="xs:string" name="year"/>  
            <xs:element type="xs:string" name="contributor"/>  
        </xs:sequence>  
    </xs:complexType>  
</xs:schema>
```