4D2 Tutorial #6
XML, DTD and XSD

Question 1

i. Develop two separate Document Type Definitions (DTD) that represent the schemas of the following documents. [5]

```xml
<?xml version="1.0" ?>
<person>
   <name>
      <forename>Sean</forename>
      <surname>Brady</surname>
   </name>
   <dob>15th December 1984</dob>
</person>

<?xml version="1.0" ?>
 <student id="02123456">
  <course>CS (BA)</course>
  <year>SS</year>
  <electives>
     <subject>4BA12</subject>
     <subject>4BA14</subject>
  </electives>
 </student>
```

ii. Highlight the benefits of XML Schema Definition (XSD) over DTD as a means of describing the schema of XML documents. [4]

iii. Create two corresponding XSDs based on the DTDs you developed in part (i). [6]

iv. Describe how inheritance may be supported using XSD. Illustrate your answer using XML instances derived from your XSDs in part (iii). How is multiple inheritance handled? [5]