# Homework 6 Client server model

1. A dynamic web page has been developed to allow users to see which seats for a concert performance have been booked and which are still free.
   1. The WebSocket protocol is used. Explain why this is useful when tickets are   
      selling quickly. [2]
   2. Explain how WebSocket improves the responsiveness of the web page   
      compared to using the HTTP protocol. [3]
   3. The web page interacts with the database to perform CRUD operations. Identify how the four operations could interact with reservations in the ticket database. [4]
   4. Using the following table, show how the HTTP methods DELETE, GET, POST and PUT can be mapped to these CRUD operations. [4]

|  |  |
| --- | --- |
| **HTTP request method** | **CRUD operation** |
| DELETE |  |
| GET |  |
| POST |  |
| PUT |  |

1. A small business is designing a new network for its office.
   1. The network manager is interested in centralising administration tasks so he does not have to install updates on individual machines.

Explain how a thin client architecture can help her. [2]

* 1. The company uses many bespoke applications that interact with the various databases they have. The following is an example of how some data are encoded:

<customer>

<customerID>AJG5787</customerID>

<customerName>Jill Turner</customerName>

<customerBirth>1980-05-04</customerBirth>

<customerMobile>07464738260</customerMobile>

<pastOrderCount>10</pastOrderCount>

</customer>

State the name of the data formatting language used to encode the data. [1]

* 1. Explain **two** advantages of using JSON over XML code format. [2]

[Total 18 Marks]