Databases

Describe the ANSI/SPARC architecture for database management, and show how its use contributes to the enforcement of data independence. [6 marks]

Explain briefly the terms entity, attribute, relationship. [3 marks]

Both network and relational Database Management Systems provide Data Definition Languages so that a conceptual model can be expressed as a formal database schema. Explain the ways in which the primitives supplied for data representation differ between the two models. Illustrate your answer by considering the following database scenario:

The employees of a company are grouped into a number of departments. Each department has its own director, who is not necessarily a member of that department. Independently, many employees are assigned a manager who is responsible for their career development.

[Any assumptions that you make about the nature of the data should be stated explicitly.] [11 marks]