- 1. Identify and briefly describe four types of requirements that may be defined for a computer based system.
- 2. Indicate whether the following is considered functional or non-functional requirement:
  - a) The system enables users to place lunch orders.
  - b) The system always responds to user clicks in less than one tenth of a second.
  - c) The system displays a list of hotel vacancies.
  - d) The system notifies the user when a new order arrives.
- 3. Which of the following is non-functional requirement:
  - a) What does the system do?
  - b) When does the system do it?
  - c) Where does the system do it?
  - d) Why does the system do it?
  - e) How well does the system do it?
- 4. Write a set of non-functional requirements for the ticket-issuing system, setting out its expected reliability and its response time:

An automated ticket-issuing system sells rail tickets. Users select their destination and input a credit card and a personal identification number. The rail ticket is issued and their credit card account charged. When the user presses the start button, a menu display of potential destinations is activated, along with a message to the user to select a destination. Once a destination has been selected, users are requested to input their credit card. Its validity is checked and the user is then requested to input a personal identifier. When the credit transaction has been validated, the ticket is issued.

- 5. Suggest how an engineer responsible for drawing up a system requirements specification might keep track of the relationships between functional and non-functional requirements.
- 6. Describe four types of non-functional requirements that may be placed on a system. Give examples of each of these types of requirement.
- 7. Suggest who might be stakeholders in a university student records system. Explain why it is almost inevitable that the requirements of different stakeholders will conflict in some way.