Name: Class: Mark:

1. Amelja has a small, successful chain of supermarkets and is expanding rapidly. She   
has instructed the architects for her latest store to make it as automatic and efficient as possible by using the latest technology.

(a) The stores will make use of self-service checkouts. These will consist of personal computers with touch screens.

(i) Identify **one** other type of computer that the self-service checkouts will need to communicate with to update stock and retrieve product prices. [1]

(ii) Explain **two** advantages of the supermarkets using a self-service checkout. [4]

(iii) Explain **one** disadvantage of using a supermarket using self-service checkouts. [2]

(b) Each supermarket has its own car park with free parking to customers for up to two hours. Amelja is concerned that people could park there for longer than two hours or park there but not use her shop. She doesn’t want to have to employ a car park attendant.  
  
Discuss possible methods that could be used to ensure that only people who   
use the shop obtain free parking of up to two hours. [6]

(c) The supermarket will make use of RFID cards for employees to access staff areas.

(i) State what is meant by RFID. [1]

(ii) Explain **one** advantage of using RFID cards over a PIN code system. [2]

(d) The store will make use of digital video cameras and the internet for their security system. Explain **two** advantages of using such a system. [4]

[Total 20 marks]