Name: Class:

Task 1

An online bank allows users to log in if they have the following information:

* Their identification number
* A security number
* A password

(a) Explain why this is a one-factor authentication

(b) When the user wishes to make a payment, the bank requires them to use a card reader and then enter the security code given. How many factors are used in the whole system?

(c) (i) Write down another example where users need to be identified before being allowed access to a digital system, or physical access to a particular location.

(ii) How many factors are used in authenticating users?

(iii) Explain how this system authenticates the user.

Task 2

Describe **five** advantages and **three** disadvantages of biometric methods as a method of access control to areas of a building.

Use the website <https://biometrictoday.com/10-advantages-disadvantages-biometrics-technology/> to help to answer the question.

Task 3

(a) Fisher Electronics is a large electronics factory. They have recently installed a new biometric security system, which uses fingerprint recognition to permit authorised individuals to access certain areas.

 The system is also used to record employees checking in and out at the beginning and end of their shift.

 Some employees are complaining about this system.

 Suggest reasons why some employees are complaining.

(b) Describe the procedure that will need to carry out when a new employee joins the company and what details they are likely to store about them.

**Task 4**

Leaf Living is a company that produce wooden tree houses. They have a number of designs for their houses that need to be kept confidential to only those who are in the factory manufacturing the tree houses. They also have financial records that should only be seen by the finance team.

Explain **two** ways that using file permissions helps the company to keep their documents secure.

Task 5

Look up the website <https://en.wikipedia.org/wiki/Disaster_recovery_plan> to read about creating a disaster recovery plan.

A small online retailer with six employees works out of rented offices. Each employee has a PC on their desk.

Describe ways in which the company can reduce the risk of disruption or data loss in the event of a natural disaster such as a fire or flood.