

1. All banks use computers to help carry out day-to-day tasks. Outside most banks there are Automated Teller Machines (ATMs).

(a) Once you have inserted the bank card into the ATM you must enter your *Personal Identification Number (PIN)*.
Why is a *PIN* number needed?

(b) When customers use the ATM it produces receipts on *pre-printed stationery*.
What is *pre-printed stationery*?

(c) Complete the following sentences with the words given below.

Kimball Tag Magnetic Stripe Bar Code Character Recognition

(i) A _____ is a label with holes in it.
Lots of them are collected and then processed together.

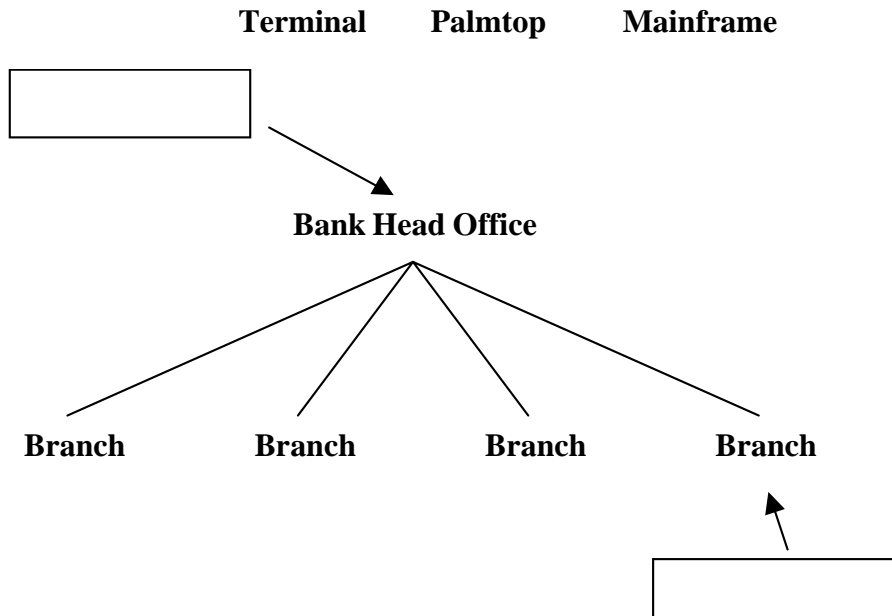
(ii) _____ is used to
detect the numbers at the bottom of a cheque.

(iii) A _____ has a 13 digit code and a
collection of white and black lines

KU	PS
1 0	
	1 0
3 2 1 0	

1. (continued)

(d) Using **two** of the words given below complete the diagram to show which type of computer would be used at head office and which type in each branch.



KU	PS
	2 1 0

KU	PS
1 0	1 0
1 0	1 0

2. (a) Freeways has a chain of supermarkets across the country. Each supermarket sends data regularly to a central computer at Head Office.

(i) The central computer is likely to be which one of the following types of computer?

Tick (✓) **one** only from the list below.

Palmtop computer

Mainframe computer

Laptop computer

Desktop computer

(ii) Give **one** reason why they would use this type of computer.

(b) The supermarket uses bar codes and a bar code reader to enter details about the products being sold.

(i) What data is read from a bar code?

Tick (✓) **one** box only.

The country of origin and the price

The item code and the country of origin

The item code and the name

The item name and the price

(ii) Give **one** advantage of using bar codes to enter data.

2. (continued)

- (c) Supermarkets process a lot of data. The five stages in a data processing cycle are listed below.
Enter the numbers 2 to 5 to show the steps in the correct order. The first one has been done for you.

- data preparation
- data output
- data processing
- data input
- data storage

KU	PS
3	
2	
1	
0	

3. (continued)

- (f) When the shop closes each day, the manager sends the file containing the daily sales figures and orders to head office.

What is the name of this type of file?

- (g) Head office makes its own backup copies of the file sent in by all the shops.

Which of the following types of media is most likely to be used for this purpose?

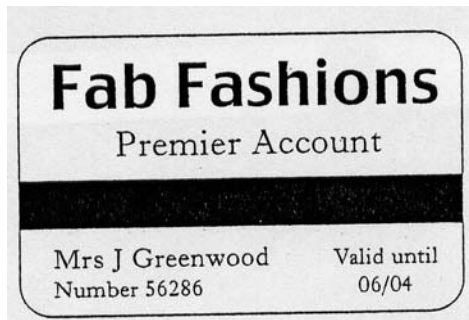
Tick (✓) **one** box only.

CD-ROM

Hard Disc

Magnetic Tape

- (h) New customers are invited to open an account with the shop. Account holders are issued with a special card which has a magnetic stripe on the back.



Name **two** pieces of data about the customer that might be stored on the magnetic stripe.

KU	PS
1 0	
	1 0
2 1 0	

4. Dave is a member of a local sports club which is part of a national organisation. They have a lot of paperwork to process.

(a) Place the following stages of the *Data Processing Cycle* in the correct order using **1** for the first step and **4** for the last.

Data Input	<input type="text"/>
Data Output	<input type="text"/>
Data Collection and Presentation	<input type="text"/>
Data Processing and Storage	<input type="text"/>

(b) When Dave first joined the club, give **one** method which may have been used to collect data about him.

(c) Once a member, Dave was issued with a membership card. On the back of the card is a *magnetic stripe*.

Give **two** pieces of data which may be held on the magnetic stripe.

(d) Each of the sports clubs has a terminal.

What type of computer do you think is at head office which supports all these terminals?

(e) If Dave uses a sun bed or has a massage he is presented with an invoice as these facilities are not included in his membership. The invoice makes use of *pre-printed stationery*.

What is the advantage of pre-printed stationery?

KU	PS
4	
3	
2	
1	
0	
	1
	0
	2
	1
	0
	1
	0
1	
0	

4. (continued)

(f) After being a member for a few months, Dave is asked to fill in a questionnaire. The questionnaire will be read by character recognition.

Give **two** advantages of character recognition.

(g) Complete the following sentences using the words given below.

File Field Record Updated

A _____ is a collection of data on all the members of the sports club.

There is a _____ for Dave containing his details.

Dave's name is an example of a _____ .

If Dave was to change his address, his details would have to be _____.

KU	PS
2	
1	
0	
4	
3	
2	
1	
0	