## Identifying cost prices

Major advantage of the perpetual inventory system is the continuous updating of stock. This is because the business can identify the cost price of goods sold at the point of sale. The following methods are used:

1. Specific identification from accounting records - looking up the cost price of goods sold from the business's accounting records.
2. Secret price code - e.g. using a 10 lettered word - method learnt on Grade 9.
3. Mark-up (MU) percentage - this is when a MU is given in order to calculate the cost price of an item sold. This method is limited in a supermarket as many items are sold at different MUs.
4. Bar code system - most widely used and effective method. Every single item in a shop has its own bar code. When is the item is scanned at the till the selling price and cost price are retrieved from the business's database. Thus making it easy to determine the balance of stock on hand at any time.

Periodic inventory system
Used when cost price is unknown or cannot be retrieved at the point of sale.
Why?

1. No bar code system is used
2. Not possible to look up cost price of each item sold - e.g. at the till it is difficult to look up the cost price of each item on the trolley.
3. MU percentage used is not the same for all items sold.

Trading account - periodic inventory system
Look at the TS a/c below. The entries struck out, we would not be able to write as we are unable to determine the CP in a periodic inventory system.

General ledger of Alpok operations
Dr
Trading stock
Cr

| 20.8 |  |  |  |  | 20.8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Jan | 1 | balance | $\mathrm{b} / \mathrm{d}$ | 20000 | Jan | 31 | cost of sales | GRd | 30000 |
|  | 31 | bank | CPJ | 50000 |  |  | eost of sales | D | 45000 |
|  |  | petty cash | PCJ | 200 |  |  | creditors control | CAJ | 1400 |
|  |  | creditors control | CJ | 80000 |  |  | donation | GJ | 500 |
|  |  | cost of sales | DAd | 1000 |  |  | drawings | GJ | 10000 |
|  |  |  |  |  |  |  | balance | e/d | 64300 |
|  |  |  |  | 151200 |  |  |  |  | 151200 |
| Feb | 7 | balance |  | 64300 |  |  |  |  |  |

1. Value of goods at the beginning of a period + goods bought are still on the Dr side. - info is from invoice/receipts when goods are bought.
2. Goods returned will still be on Cr side (info from debit note to creditor); donations + drawings as well.
3. COS unable to determine. Will have to count goods left + subtract from goods we had in the beginning of a period.
4. Therefore, no COS, then no balance on the $\mathrm{a} / \mathrm{c}$.
5. Since we don't have a balance TS in this system will have to change into another a/c.

In periodic system we use the Purchases $\mathrm{a} / \mathrm{c}$ instead of the TS a/c + reflect purchases of stock only. It reflects the cost price of goods coming in to the business. It is an expense $\mathrm{a} / \mathrm{c}+$ appears in the Nominal section of the General Ledger.

Sales a/c shows stock going out of the business but amounts are reflected at selling price.
Stock on hand is determined by a physical stocktake.
Now able to determine stock shortages by comparing the target MU with the actual MU achieved, if a constant MU was used.

An e.g. of a Purchases a/c

## General ledger of Icycool CC

Nominal accounts section
Dr
Purchases
Cr

| 20.8 |  |  |  |  | 20.8 |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- | ---: |
| Jan | 1 | balance | b/d | 20000 | Jan | 31 | creditors control | CAJ | 1400 |
|  | 31 | bank | CPJ | 50000 |  |  | donation | GJ | 500 |
|  | petty cash | PCJ | 200 |  |  | drawings | GJ | 10000 |  |
|  | creditors control | CJ | 80000 |  |  |  |  |  |  |

Note: no COS entries + therefore no balance on the purchases a/c a physical stock count must be done to determine amount of stock left over + how much has been sold.

## Exercise 1

Information is extracted from Turbo Stores on 28 Feb 20.9, the end of the financial year. The periodic inventory system is in operation. The target MU is $80 \%$.

Required:

1. Complete the purchases $\mathrm{a} / \mathrm{c}$ for the year ended 28 Feb 20.9

General ledger of Turbo STores
Nominal accounts section
Dr
Purchases

| 20.8 |  |  |  |  | 20.9 |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| Mar | 1 | Balance | b/f | 46000 | Feb | 27 | Drawings | GJ | 2700 |
| 20.9 | 28 | Bank | CPJ | 100240 |  | 28 | Donation | GJ | 1200 |
| Feb |  | Creditors control | CJ | 120650 |  |  |  |  |  |
|  | Drawings | GJ | 500 |  |  |  |  |  |  |
|  | Consumable <br> stores | GJ | 1450 |  |  |  |  |  |  |

2. Calculate the $\operatorname{COS}$
opening stock $=46000$
ADD:Purchases $=(100240+120650+500+1450)-(2700+1200)$
ADD:Carriage on purchases $=(12450+420+590)$
ADD:Customs duty $=1500$
MINUS:Closing stock = 56700
EQUALS: COS = 46 000 + 218940 +13 460 + 1500-56 700 = 223200
3. Calculate the GP for the year

GP = Sales - COS $=\{250000+150000-2400\}-223200=$ R174 400

## Extension - was not required by the question.

Achieved MU $=\frac{174400}{223200} X \frac{100}{1}=78 \%$ possible reasons for not achieving target - too many discounts, mark-downs, stock losses due to theft, damage or inaccurate calculations. Remember under the perpetual inventory system stock losses due to theft would not be a valid reason because stock is accounted for when making sales entries. It is the trading stock deficit which shows the amount of stock stolen

Info:
Summary of info for the period ended 28 Feb 20.9

| Opening stock (1 Mar 20.8) Opening balance of the Purchases a/c | 46000 |
| :--- | ---: |
| Cash sales | 250000 |
| Credit sales | 150000 |
| Debtors allowances | 2400 |
| Cash purchases | 100240 |
| Credit purchases | 120650 |
| Carriage on purchases Dr Carriage on purchases (E) | 12450 |
| Customs duty Dr Carriage on purchases (E) | 1500 |

## Additional info:

The following have not yet been recorded:

- The owner took merchandise for his personal use at cost price, R2 700, on 27 Feb 20.9 Dr Drawings Cr Purchases
- The owner returned merchandise which he had previously taken for his own use, R500 Cr Drawings Dr Purchases
- The business donated goods to a charity valued at R1 200 (cost price) Dr Donation Cr Purchases
- Errors discovered:
- Merchandise purchased on credit for R1 450 had been incorrectly recorded as consumable stores Dr Purchases Cr Consumable stores
- Transport charges on stock purchased R420 had been inadvertently charged to carriage on sales Dr Carriage on Purchases Cr Carriage on sales
- An invoice was received from Speed Freight for transporting merchandise:
- To Turbo Stores R590 Dr Carriage on purchases Cr Creditors control
- To customers R340 Dr Carriage on sales Cr Creditors control
- The stock on hand on 28 Feb 20.9 amounted to R56 700.

