CHAPTER 8

Summary

Inventory systems

Perpetual	Periodic
Inventory is updated each time a purchase or sale is made	Inventory is updated when a physical stock-take is done.
Records transactions in the TRADING INVENTORY account for the purchasing and selling of trading inventory	Records transactions in the PURCHASES account for the purchasing of trading inventory. Cost of sales is only calculated at the end of a financial year
Gross profit Sales - cost of sales = gross profit	Gross profit Sales - cost of sales* = gross profit * (opening inventory + purchases + carriage on purchases + export duties) – closing stock

Valuation systems

Specific identification: This method determines specific costs for each unit in stock. This method is suitable when the inventory is not homogenous, less in quantity and high in value.

First in, first out (FIFO)	Weighted-average
The inventory received first is consumed/sold first. Hence the inventory at hand at the end of the year is from the latest purchase.	Here the average cost is applied i.e after every purchase an average cost is computed from the cost of purchases and the cost of inventory.
In case of rising prices, this may lead to overvaluation of inventory and overstatement of profits and in case of falling prices this method leads to understatement of inventory and profits.	This method tries to even out the effects of price fluctuations.

1 January – 31 December 20.9	Units	Unit price R	Total R
Opening inventory 1 January	50	100	5 000
Purchases	150		29 500
31 March 20.9	50	150	7 500
31 August 20.9	60	200	12 000
20 December 20.9	40	250	10 000
Sales	150	300	45 000

First in, first out (FIFO)	Weighted-average
Number of units on hand: 50 + 50 + 60 + 40 – 150 = 50	**Number of units on hand:** 50 + 50 + 60 + 40 - 150 = 50
Value of trading inventory on hand: 40 × R250 = R10 000 10 × R200 = R 2 000 R12 000	**Value of trading inventory on hand** $= \dfrac{\text{Cost of goods available for sale}}{\text{Total units available for sale}}$ $= \dfrac{\text{R5 000 + R7 500 + R12 000 + R10 000}}{50 + 50 + 60 + 40}$ $= \dfrac{\text{R34 500}}{200} = \text{R172.50}$ 50 × R172.50 = R8 625

First in, first out (FIFO)	Weighted-average
Cost of sales (50 x R100) + (50 x R150) + (50 x R200) = R5 000 + R7 500 + R10 000 = R22 500	**Cost of sales** 150 x R172,50 R25 875
Gross profit using the perpetual inventory system Sales - Cost of sales = Gross profit R45 000 - R22 500 = R22 500	**Gross profit using the perpetual inventory system** Sales - Cost of sales = Gross profit R45 000 - R25 875 = R19 125

Gross profit using the periodic inventory system Sales - Cost of sales = Gross profit R45 000 - *R22 500 = R22 500 Cost of sales R5 000 + R29 500 - R12 000 = R22 500	Gross profit using the periodic inventory system Sales - Cost of sales = Gross profit R45 000 - * R25 875 = R19 125 Cost of sales = R5 000 + R29 500 - R8 625 = R25 875
Conclusion FIFO shows higher closing inventory value than weighted average. FIFO shows a greater profit than weighted average These comparisons can also look at other advantages and disadvantages of using one e.g. tax.	**Conclusion** Weighted average shows a lower closing inventory than FIFO. Weighted average shows a smaller profit than FIFO These comparisons can also look at other advantages and disadvantages of using one e.g. tax.

Ethical considerations: Manipulation of inventory methods will lead to manipulation of profit. The method used must be disclosed. Therefore a business cannot change from one method to another to increase/decrease profits.

Internal control

Preventive controls are proactive controls, designed to prevent a loss, error, or omission. Examples of preventive controls are:

- **separation of duties** e.g. different persons for receiving, recording and sale of trading inventory
- **proper authorisations** – for the buying and selling of trading inventory
- **adequate documentation** – recording and checking of trading inventory done accurately and timeously
- **physical security** – inventory kept in safe storage with proper security

Detective controls attempt to detect a loss or error has occurred, but do not prevent them from occurring.

- Regular **supervisory review** of account activity, reports, reconciliations
- Routine **spot-checking** of transactions, records and reconciliations (do things make sense and look reasonable)
- **Variance analysis** – checking the budgeted values against the actual and recording the variances
- **Physical inventories** – stocktaking at the end of the financial year
- **Internal audit** – review to ensure proper controls were done in relation to trading inventory.