

<b>ACCOUNTING</b>	<b>Lesson: Notes, Tasks and solutions</b>
<b>Inventory Control System</b>	

### Learning Outcome 3: Managing Resources

11.3.4 Record transactions in the subsidiary journals and ledgers, utilising the periodic inventory system and compare it to the perpetual inventory system

#### What is Periodic Inventory system?

A **periodic inventory system** is a method of finding the value of merchandise at periodic intervals by taking a physical count of the stock. It provides inventory and cost of goods sold data only when inventory is counted (for example, at year end).

- Inventory purchase or sale is recorded in "Purchases" account.
- There is no continuous recording of trading stock movement. Trading Stock account is updated on a periodic basis, at the end of each accounting period (e.g., monthly, quarterly).
- It is not possible to ascertain from the books/inventory accounts, what the stock on hand should be.
- Costs of materials used and costs of goods sold cannot be calculated until stock at the end, determined by physical count, are subtracted from the sum of opening stock and purchases.
- The stock on hand is counted periodically, usually at the end of the accounting period.

#### Example 1:

On May 1, 2006: Purchased 1000 units of goods at R30 per unit. On May 6, 2006: Sold 200 units of goods at R50 per unit on credit. Record the transaction in the subsidiary journal and post to the purchases, sales, debtors and creditors accounts.

#### Periodic inventory system

		Debit	Credit
1/5/2006	Purchases	30 000	
	Creditors Control		30 000

\* Under periodic inventory system, all purchases during the accounting period are recorded in the "Purchases" account.

		Debit	Credit
6/5/2006	Debtors Control	10 000	
	Sales		10 000

\* Under periodic inventory system, the following journal entry is recorded at the end of accounting period.

31/5/06	Trading stock	24 000	
	Purchases		24 000

Quantity of merchandise on hand: = 1,000 units purchased - 200 units sold = 800 units left

Cost of merchandise on hand: = 800 units x R30 per unit cost = R24 000

31/5/06	Cost of goods sold	6 000	
	Purchases		6 000

Note: The **periodic inventory adjustment** at the end of the period adjusts inventory to the physical count, closes out any purchase accounts, and runs any difference through cost of goods sold.

**Cost of goods sold:** = Total purchases - stock at the end  
= 1,000 units x R30 per unit cost - 800 units x R30 per unit cost  
= R30 000 - R24 000 = R6 000

#### Stock on hand at the end and Cost of goods of sold:

**Stock at the end:** = Beginning stock + Purchases during the period - Cost of goods sold  
= R0 + R30 000 - R6 000 = R24 000

**Cost of goods sold:** = Beginning stock + Purchases during the period - Ending stock  
= R0 + R30 000 - R24 000 = R6 000

## POSTING TO THE LEDGER

Dr		Purchases Account				Cr	
1/5/06	Creditors control	CJ	30 000				

Dr		Creditors Control account				Cr	
				1/5/06	Purchases	GJ	30 000

Dr		Debtors Control Account				Cr	
6/5/06	Sales	GJ	10 000				

Dr		Sales Account				Cr	
31/5/06	Trading Account		10 000	6/5/06	Debtors Control	DJ	10 000

### Advantages

- This system is not costly and less work.

### Disadvantages

- Profit or loss is determined only at the end of period.
- Stock loss/gain is only noticed at the end of year when the physical count of the inventory is taken.
- Lacks readily available inventory data
- Sales revenues is booked when a sale is made, but not cost of goods sold
- Records documenting quantity and per unit cost of individual inventory items are not maintained
- Stock on hand is determined via a physical count, and then cost of goods sold is worked out.

### TASK

1. On June 5, 2006: Purchased 600 units of merchandise at R35 per unit. On June 16, 2006: sold 400 units of merchandise at R55 per unit on credit.

Required: Use periodic inventory system to record the above transaction in the subsidiary journal and post to the **purchases, sales, creditors and debtors ledger** accounts.

## SUMMARY: COMPARISON BETWEEN PERPETUAL AND PERIODIC INVENTORY SYSTEMS

### Entries in the general ledger when the two systems are used

NO	TRANSACTION	PERPETUAL INVENTORY SYSTEM		PERIODIC INVENTORY SYSTEM	
		Debit	Credit	Debit	Credit
1	Credit purchases of merchandise	Trading stock	Creditors control	Purchases	Creditors control
2	Merchandise purchases by cheque	Trading stock	Credit Bank	Purchases	Credit Bank
3	Merchandise returned to suppliers /purchases returns	Creditors control	Trading stock	Creditors control	Creditors allowances
4	Carriage on purchases – merchandise for credit/for cash	Trading stock	Bank/ creditors control	Carriage on purchases	Bank/creditors control
5	Merchandise withdrawn for personal use	Drawings	Trading stock	Drawings	Purchases
6	Credit sales of merchandise	Debtors control	Sales	Debtors control	Sales
		Cost of sales	Trading stock	No entry	No entry
7	Merchandise returned by	Debtors	Debtors control	Debtors	Debtors control

	customers/sales returns	allowances		allowances	
		Trading stock	Cost of sales		

**COMPLETED THE TASK? SOLUTION**

**TASK:**

On June 5, 2006: Purchased 600 units of merchandise at R35 per unit. On June 16, 2006: Sold 400 units of merchandise at R55 per unit on credit.

**Periodic inventory system**

		Debit	Credit
5/6/2006	Purchases	21 000	
	Creditors Control		21 000

\* Under periodic inventory system, all purchases during the accounting period are recorded in the "Purchases" account.

		Debit	Credit
16/6/2006	Debtors Control	22 000	
	Sales		22 000

\* Under periodic inventory system, the following journal entry is recorded at the end of accounting period.

30/6/06	Trading stock	7 000	
	Purchases		7 000

Quantity of merchandise on hand: = 600 units purchased - 400 units sold = 200 units left  
 Cost of merchandise on hand: = 200 units x R35 per unit cost = R7 000

30/6/06	Cost of goods sold	14 000	
	Purchases		14 000

Note: The periodic inventory adjustment at the end of the period adjusts inventory to the physical count, closes out any purchase accounts, and runs any difference through cost of goods sold.

**Cost of goods sold:** = Total purchases - stock at the end  
 = 600 units x R35 per unit cost - 200 units x R35 per unit cost  
 = R21 000 - R14 000 = R7 000

**Stock on hand at the end and Cost of goods of sold:**

**Stock at the end:** = Beginning stock + Purchases during the period - Cost of goods sold  
 = R0 + R21 000 - R7 000 = R14 000

**Cost of goods sold:** = Beginning stock + Purchases during the period - Ending stock  
 = R0 + R21 000 - R14 000 = R7 000

**POSTING TO THE LEDGER**

Dr		Purchases Account				Cr	
1/5/06	Creditors control	CJ	21 000				

Dr		Creditors Control account				Cr	
				1/5/06	Purchases	GJ	21 000

Dr		Debtors Control Account				Cr	
6/5/06	Sales	GJ	22 000				

Dr		Sales Account				Cr	
				6/5/06	Debtors Control	DJ	22 000