

Inventory

lecture 3



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Inventory

Inventory is a current asset because the company sells it during the year or operating cycle .

Types of inventory:

The company classifies its inventory depending on whether the firm is a merchandiser or a manufacturer as follows :

1 -Merchandising Inventory :

Wholesale and retail companies purchase goods that are primarily in finished form. These companies are intermediate in process of moving goods from manufacture to the end- user. They often are referred to as merchandising companies. In a merchandising company, such inventory consists of many different items. For example, in a grocery store, canned goods, dairy products, meats, are just a few of the inventory items on hand. These items have two common characteristics :

تقوم شركات البيع بالجملة والتجزئة بشراء البضائع التي تكون في المقام الأول في شكلها النهائي. تقوم هذه الشركات بدور الوسيط في عملية نقل البضائع من التصنيع إلى المستخدم النهائي. وغالبا ما يشار إليها باسم شركات التجارة. في شركة تجارية، يتكون هذا المخزون من العديد من العناصر المختلفة. على سبيل المثال، في متجر البقالة، تعتبر السلع المعلبة ومنتجات الألبان واللحوم مجرد عدد قليل من عناصر المخزون المتوفرة. هذه العناصر لها خاصيتين مشتركتين:

a)They are owned by the company.

b)They are in a form ready for sale to customers in the ordinary course of business.

أ) مملوكة للشركة.

ب) أن تكون في شكل جاهز للبيع للعملاء في سياق العمل العادي.



2 -Manufacturing Inventories :

Manufacturing companies produce the goods they are sell to wholesalers, retailers, or other manufacturers. Inventory for a manufacturer consists of three types:

تنتج شركات التصنيع البضائع التي تبيعها لبائعي الجملة أو تجار التجزئة أو الشركات المصنعة الأخرى. يتكون مخزون الشركة المصنعة من ثلاثة أنواع :

a) Raw materials (goods used in making products) (المواد الأولية (البضائع المستخدمة (في صنع المنتجات) .

Refers to the companies purchased from other manufacturers that will become part of the finished product .

يشير إلى الشركات التي تم شراؤها من الشركات المصنعة الأخرى والتي ستصبح جزءًا من المنتج النهائي.

b) Work- in- process (Partially completed products) (البضاعة تحت التشغيل (المنتجات (الكاملة جزئيا)

Refers to the products that are not yet complete. The cost of work-in- process includes the cost of raw materials used in production, the cost of labor that can be directly traced to the goods in process, and allocated portion of other manufacturing costs, called manufacturing overhead .

يشير إلى المنتجات التي لم تكتمل بعد. تشمل تكلفة العمل قيد التشغيل تكلفة المواد الخام المستخدمة في الإنتاج، وتكلفة العمالة التي يمكن إرجاعها مباشرة إلى البضائع قيد التصنيع، والجزء المخصص من تكاليف التصنيع الأخرى، والتي تسمى تكاليف التصنيع غير المباشرة.

c) Finished goods for sale . (البضاعة جاهزة للبيع .

Manufactured items that completed and ready for sale.

العناصر المصنعة التي اكتملت وجاهزة للبيع.

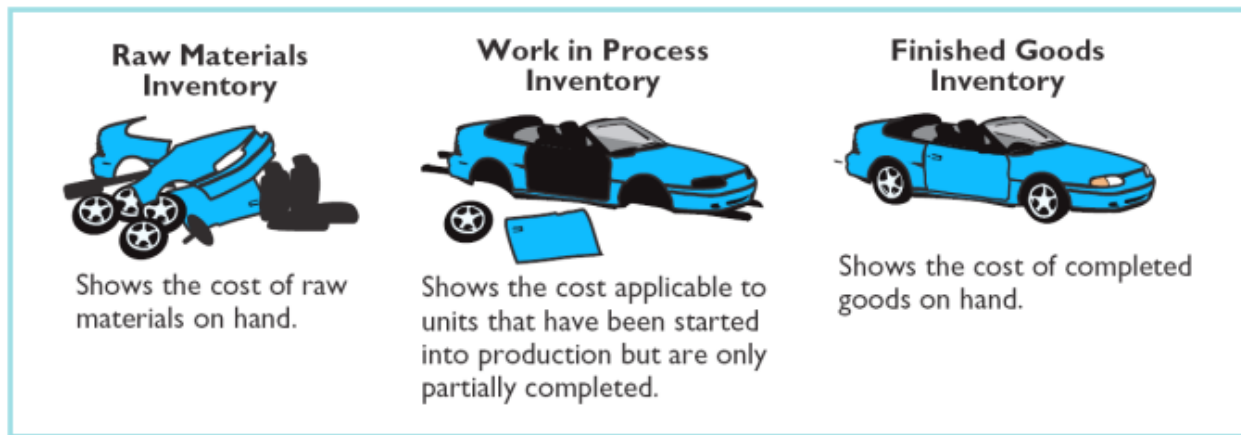
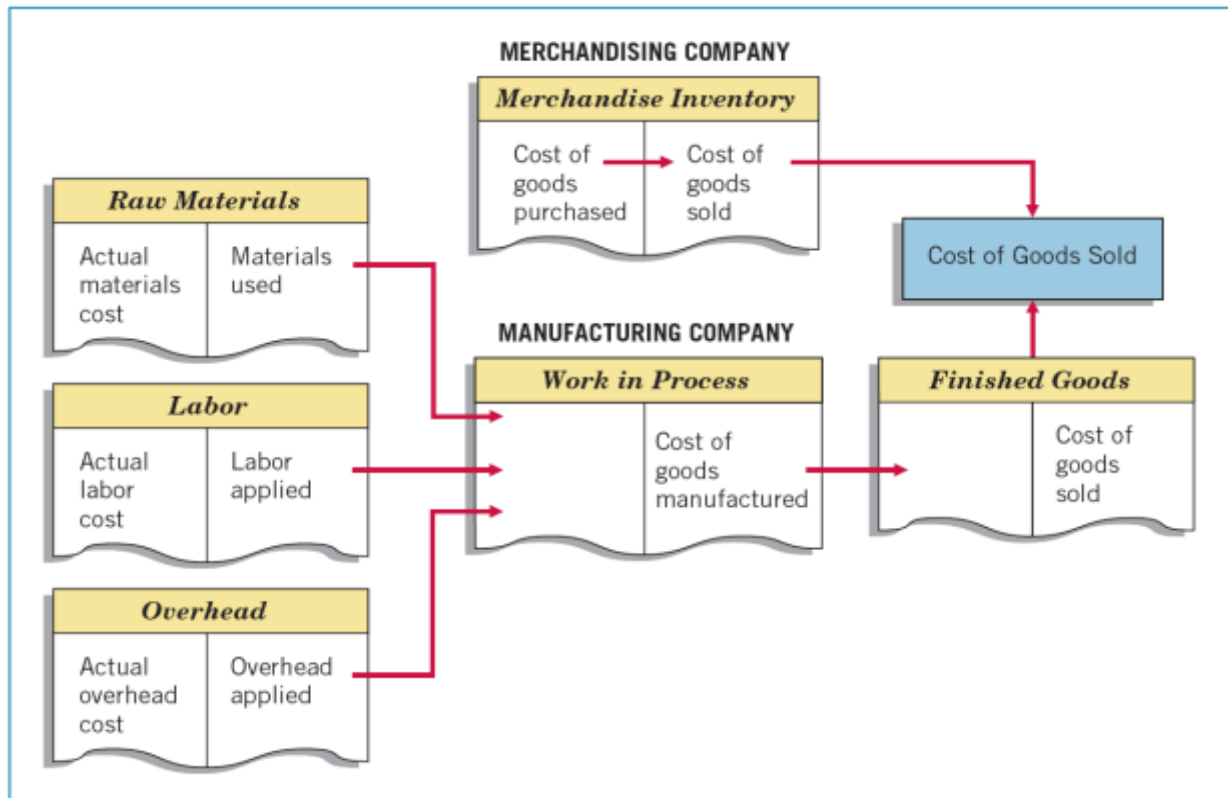


Illustration shows the differences in the flow of costs through a merchandising company and a manufacturing company :

يوضح الرسم التوضيحي الاختلافات في تدفق التكاليف من خلال شركة تجارية والشركة الصناعية :





Determining and recording Inventory Transactions:

Distinguish between perpetual and periodic inventory systems .

التمييز بين أنظمة الجرد المستمر والجرد الدوري

1) A perpetual inventory system: in this system continuously records both changes in inventory quantity and inventory cost. Therefore, a perpetual inventory system tracks both inventory quantities and inventory costs.

نظام الجرد المستمر: يقوم هذا النظام بتسجيل التغيرات في كمية المخزون وتكلفة المخزون بشكل مستمر. لذلك، يقوم نظام المخزون المستمر بتتبع كل من كميات المخزون وتكاليف المخزون.

Example (1) : Baghdad Company purchases soft drinks from producers and then sells them to retailers. The company begins 2006 with merchandise inventory of 120,000 ID on hand; during 2006 additional merchandise is purchased on account at a cost of 600,000 ID . Sales for the year (all on account) totaled 820,000 ID. The cost of the soft drinks sold is 540,000 ID .

Required: Record the journal entries of the above transactions in Baghdad's company records by using perpetual inventory system.

Solution :

Inventory	600,000
Accounts Payable	600,000

To record the purchase of merchandise inventory

Accounts Receivable	820,000
Sales revenue	820,000

To record sales on account



Cost of goods sold	540,000
Inventory	540,000

To record the cost of sales

2) A periodic inventory system : is not designed to track the quantity or cost of merchandise. Therefore, a periodic inventory system adjusts inventory and records cost of goods sold only at the end of each reporting period .

نظام الجرد الدوري : غير مصمم لتتبع كمية أو تكلفة البضائع. ولذلك، يقوم نظام الجرد الدوري بضبط المخزون وتسجيل تكلفة البضائع المباعة فقط في نهاية كل فترة التقرير.

Example (2) : Baghdad Company purchases soft drinks from producers and then sells them to retailers. The company begins 2006 with merchandise inventory of 120,000 ID on hand; during 2006 additional merchandise is purchased on account at a cost of 600,000 ID. Sales for the year (all on account) totaled 820,000 ID . A physical count determined the cost of inventory at the end of the year to be 180,000 ID .

Required: record the journal entries of the above transactions in Baghdad's company records by using periodic inventory system .

Solution :

Purchases	600,000
Accounts Payable	600,000

To record the purchase of merchandise inventory

Accounts Receivable	820,000
Sales revenue	820,000

To record sales on account

* No entry is recorded for the cost of inventory sold.



Because cost of goods sold isn't determined automatically and continually by the periodic system, it must be determined indirectly after physical inventory count by using:

Cost of goods sold = Beginning inventory + Net purchases – Ending inventory

Beginning inventory	120,000
Plus: Net purchases	600,000

Cost of goods available for sale	720,000
Less: Ending inventory	(180,000)

Cost of goods sold	540,000

31/12 each year

Ending inventory	180,000	
Cost of goods sold	540,000	
		Beginning inventory
		120,000
		Purchases
		600,000



Which cost flow assumption to adopt ?

Indeed, the actual physical flow of goods and the cost flow assumption often greatly differ. There is no requirement that the cost flow assumption adopted be consistent with the physical movement of goods. A company's major objective in selecting a method should be to choose the one that, under the circumstances, most clearly reflects periodic income , There are three assumed cost flow methods :

1- First-in, first-out (FIFO) methods: this method assumes that items sold are those that were purchased first.

2- Last-in, first-out (LIFO) methods: this method assumes that items sold are those were most recently acquired.

3- Average-cost methods: this method assumes that items sold and items in ending inventory come from a mixture of all the goods available for sale.

Example : The following information for Baghdad's company records during 2008.

- 1- Balance of beginning inventory **300** units at cost of **10** ID.
- 2- On 1/3/2008 sold **100** units of **15** ID per unit.
- 3- On 1/6 /2008 purchased **200** units at cost of **11** ID per unit.
- 4- On 1/8/2008 sold **300** units by **15** ID per unit.
- 5- On 1/10/2008 the company purchased **550** units at cost of **12** ID per unit.
- 6- On 1/11/2008 the company sold **300** units by **15** ID per unit.

Required: Compute the cost of goods sold and ending inventory under the following situations :



1. The perpetual system by using the following methods;

a. FIFO , b. LIFO, c. Weighted Average (WA).

2. The periodic system by using the following methods;

a. FIFO , b. LIFO, c. Weighted Average (WA).

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1- The perpetual system by a. FIFO

Date	Purchased			Sold			Balance		
	Units	Unit cost	Total	Units	Unit cost	Total	Units	Unit cost	Total
1/1/2008							300	10	3000
1/3/2008				100	10	1000	200	10	2000
1/6/2008	200	11	2200				200	10	2000
							200	11	2200
1/8/2008				200	10	2000	100	11	1100
				100	11	1100			
1/10/2008	550	12	6600				100	11	1100
							550	12	6600
1/11/2008				100	11	1100	350	12	4200
				200	12	2400			
				700		7600	350		4200



1- The perpetual system by **b. LIFO**

Date	Purchases			issued(Sold)			Balance		
	Units	Unit cost	total	Units	Unit cost	Total	Units	Unit cost	Total
1/1/2008							300	10	3000
1/3/2008				100	10	1000	200	10	2000
1/6/2008	200	11	2200				200	10	2000
							200	11	2200
1/8/2008				200	11	2200	100	10	1000
				100	10	1000			
1/10/2008	550	ID 12	ID 6600				100	ID 10	ID 1100
							550	12	6600
1/11/2008				300	12	3600	100	10	1000
							250	12	3000
				700		7800	350		4000



1-The perpetual system by c. Weighted Average (WA).

Date	Purchases			Cost of Goods Sold			Balance		
	Units	Unit cost	Total	Units	Unit cost	Total	Units	Unit cost	Total
1/1/2008							300	10	3000
1/3/2008				100	10	1000	200	10	2000
1/6/2008	200	11	2200				200 200 400	10.5	2000 2200 4200
1/8/2008				300	10.5	3150	100	10.5	1050
1/10/2008	550	12	6600				100 550 650	11.7	1050 6600 7650
1/11/2008				300	11.7	3510	350	11.7	4095
				700		7660	350		4095



2. The periodic system a. FIFO

Details	Units	Total
beginning inventory	300	ID 3000
+purchases(200*11)+(550*12)=ID8800	<u>750</u>	<u>ID 8800</u>
= Cost of goods available for sale	1050	ID 11800
- Ending inventory(350*12)=ID4200	<u>(350)</u>	<u>(ID 4200)</u>
= Cost of goods sold	<u>700</u>	<u>ID 7600</u>

2. The periodic system b. LIFO

Details	Units	Total
beginning inventory	300	ID 3000
+ purchases(200*11)+(550*12)=ID8800	<u>750</u>	<u>ID 8800</u>
= Cost of goods available for sale	1050	ID 11800
- Ending inventory(300*10)+(50*11)=ID3550	<u>(350)</u>	<u>(ID 3550)</u>
= Cost of goods sold	<u>700</u>	<u>ID 8250</u>

2. The periodic system c. Weighted Average (WA).

Details	units	Total
beginning inventory	300	ID 3000
+ purchases(200*11)+(550*12)=ID8800	<u>750</u>	<u>ID 8800</u>
= Cost of goods available for sale(11800/1050)= 11,238	1050	ID 11800
- Ending inventory(350*11,238)=ID3933	<u>(350)</u>	<u>(ID 3933)</u>
= Cost of goods sold 11,238	<u>700</u>	<u>ID 7867</u>