

2

Materials costs

2.1 You have the following information for boxes of 500 C5 envelopes:

- annual usage 200 boxes
- ordering cost £30.00 per order
- inventory holding cost £1.20 per box per year

What is the Economic Order Quantity (EOQ)?

(a) 25 boxes	
(b) 50 boxes	
(c) 100 boxes	
(d) 200 boxes	

2.2 Which **one** of these is an example of ethical behaviour by accounting staff in respect of inventory valuation?

(a) Inventory is valued so as to maximise profits	
(b) Inventory is valued in accordance with IAS2, <i>Inventories</i>	
(c) Inventory is valued in a subjective way	
(d) Inventory is valued using the basis decided by the business owner	

2.3 The supplies department of Peoples Bank has the following movements of an item of inventory for June 20-3:

		Units	Cost per unit £	Total cost £
1 June	Balance	2,000	2.00	4,000
15 June	Receipts	1,500	2.35	3,525
21 June	Issues	3,000		

You are to complete the following table for FIFO and AVCO:

Date 20-3	Description	FIFO £	AVCO £
21 June	Total issue value		
30 June	Total closing inventory value		

- 2.4 Wyezed Limited manufactures a product using two types of materials, Wye and Zed. The accounting policy of the company is to issue material Wye to production using the FIFO method, and material Zed on the AVCO method.

The following are the inventory movements of materials during the month of August 20-1:

Material Wye – FIFO method

20-1		Kilos (kg)	Cost per kg £
1 Aug	Balance	5,000	5.00
10 Aug	Receipts	2,000	5.25
18 Aug	Receipts	3,000	5.50
23 Aug	Issues	8,000	

Material Zed – AVCO method

20-1		Kilos (kg)	Cost per kg £
1 Aug	Balance	10,000	4.00
6 Aug	Receipts	5,000	4.30
19 Aug	Receipts	6,000	4.45
24 Aug	Issues	12,000	

You are to complete the inventory records, on the next page, for material Wye and material Zed (showing the cost per kilogram to two decimal places).

- 2.5** Wyevale Tutorial College is a private college which runs courses for local companies on business and management subjects. The inventory records of photocopying paper are maintained on the FIFO method at present. The College's accountant has suggested that a change should be made to the AVCO method.

As an accounts assistant you have been asked to prepare information based on the movements of photocopying paper for February 20-8 which are as follows:

1 February	Opening inventory	100 reams* at £2.00 per ream
5 February	Issues	50 reams
10 February	Purchases	150 reams at £2.20 per ream
15 February	Issues	100 reams
18 February	Purchases	200 reams at £2.30 per ream
24 February	Issues	120 reams

*a ream is 500 sheets

You are to:

- (a)** Complete the inventory record on the next page for February, using the FIFO method.
- (b)** Complete the inventory record on page 15 for February, using the AVCO method.

Show the costs per ream in £ to two decimal places.

2.6 SummerDaze Limited manufactures plastic garden furniture. Its best seller is the 'Calypso' seat made from white plastic.

The company uses the first in, first out (FIFO) method of issuing inventories.

As an accounts assistant at SummerDaze you have been given the following tasks.

Task 1

Complete the following inventory record for white plastic for April 20-9. Show the cost per kilogram to three decimal places and the total costs in whole £. Only one entry is permitted per inventory cell.

INVENTORY RECORD: FIFO								
Product: White plastic								
Date	Receipts			Issues			Balance	
	Quantity (kgs)	Cost per kg	Total Cost	Quantity (kgs)	Cost per kg	Total Cost	Quantity (kgs)	Total Cost
20-9		£	£		£	£		£
Balance at 1 April							20,000	20,000
7 April	10,000	1.10	11,000				30,000	31,000
12 April				25,000				
20 April	20,000	1.20	24,000					
23 April				15,000				

Task 2

All issues of white plastic are for the manufacture of the 'Calypso' seat. The following cost accounting codes are used to record materials costs:

code number	description
2000	inventory – white plastic
2100	production – Calypso seats
3000	trade payables/purchases ledger control

Complete the following table to record the journal entries for the two purchases and two issues of white plastic in the cost accounting records.

20-9	Code number	Debit £	Credit £
7 April			
7 April			
12 April			
12 April			
20 April			
20 April			
23 April			
23 April			

2.7 The following information is available for metal grade X8:

- Annual demand – 36,125 kilograms
- Annual holding cost per kilogram – £3
- Fixed ordering cost – £30

(a) **You are to** calculate the Economic Order Quantity (EOQ) for X8.

EOQ =kg

The inventory record shown below for plastic grade X8 for the month of May has only been fully completed for the first three weeks of the month.

- (b) Complete the entries in the inventory record for the two receipts on 24 and 27 May that were ordered using the EOQ method.
- (c) Complete ALL entries in the inventory record for the two issues in the month and for the closing balance at the end of May using the AVCO method of issuing inventory.

Show the costs per kilogram (kg) in £ to three decimal places, and the total costs in whole £. Only one entry is permitted per inventory cell.

Inventory record for metal grade X8

Date	Receipts			Issues			Balance	
	Quantity (kg)	Cost per kg £	Total Cost £	Quantity (kg)	Cost per kg £	Total Cost £	Quantity (kg)	Total Cost £
Balance as at 22 May							420	1,512
24 May		3.711						
26 May				900				
27 May		3.755						
30 May				800				

2.8 Harvie Limited uses the following accounts to record inventory transactions in its cost bookkeeping system:

- inventory
- purchases ledger control
- bank
- production

For each of the five transactions in the following table show the account which will be debited and the account which will be credited.

Transaction	Account debited	Account credited
1 Receipt of materials into inventory, paying immediately by BACS		
2 Issue of materials from inventory to production		
3 Receipt of materials into inventory, purchased from a credit supplier		
4 Return of poor quality materials to a credit supplier		
5 Return of surplus materials from production to inventory		

- 2.9 Indicate the statements which apply to the method(s) of inventory valuation. **Note:** statements may apply to more than one method.

Statement	FIFO	LIFO	AVCO
Issues from inventory are from the most recent receipts			
In times of rising prices, reported profits will usually be lower than with other methods			
Closing inventory is based on more recent costs of goods received			
Issues from inventory are from the earliest receipts			
Acceptable for tax purposes			
Closing inventory is valued at a weighted average cost			
Permitted by IAS 2, <i>Inventories</i>			
In times of rising prices the cost of sales figure will usually be lower than with other methods			
Closing inventory is based on older costs of goods received			