

**Solution:**

Let us consider a case-by-case analysis:

**(A) FIFO (First in, First Out)**

Using the FIFO method for inventory valuation means that the items that are bought earlier are sold first, meaning that only the latest items remain in the inventory.

Thus, out of the 4,000 units remaining, FIFO assumes that

- 1,000 units of £2.50,
- 1,000 units of £2.30, and
- 2,000 units of £2.20

are left in the inventory.

Thus, the ending inventory valuation is given by £9,200.

The total valuation of the goods available for sale is £19,400.

Thus, we get the following:

$$\text{Ending Inventory Valuation} = \text{£9,200}$$

$$\text{Cost of Goods Sold} = \text{£10,200}$$

**(B) LIFO (Last in, First Out)**

Using the LIFO method for inventory valuation means that the items that are bought latest are sold first, meaning that only the earliest items remain in the inventory.

Thus, out of the 4,000 units remaining, LIFO assumes that

- 3,000 units of £2.00, and
- 1,000 units of £2.10

are left in the inventory.

Thus, the ending inventory valuation is given by £8,100.

The total valuation of the goods available for sale is £19,400.

Thus, we get the following:

$$\text{Ending Inventory Valuation} = \text{£8,100}$$

$$\text{Cost of Goods Sold} = \text{£11,300}$$

**(C) Weighted Average Method**

Using the weighted average method for inventory valuation, we first estimate the cost of goods that is available for sale and then evaluate the average cost of sales.

The total valuation of goods available for sale is £19,400 and the units that are available for sale was 9,000.

Thus, the average cost per unit comes out to be £2.16.

Thus, the total ending inventory valuation is  $£2.16 \times 4,000 = £8,640$ .

Thus, we get the following values:

Ending Inventory Valuation = £8,640

Cost of Goods Sold = £10,760