X = 5

10. A business purchased two rivet-making machines on 1 January 2020 at a cost of $15,000 each. Each had an estimated life of five years and a nil residual value. The straight line method of depreciation is used. Owing to an unforeseen slump in market demand for rivets, the business decided to reduce its output of rivets, and switch to making other products instead. On 31 March 2022, one rivet-making machine was sold (on credit) to a buyer for $8, X00. Later in the year, however, it was decided to abandon production of rivets altogether, and the second machine was sold on 1 December 2022 for $2, X00 cash.

a) Prepare the machinery account, depreciation of machinery account and disposal of machinery account for the accounting year to 31 December 2022. (4 marks)

Machinery

1 Jan 2022	B/d	30000	31 March 2022	Disposal of machinery Account	15000
			1 Dec 2022	Disposal of machinery Account	15000
		30000			30000

Accumulated depreciation

31 March	Disposal of machinery	6750	1 Jan 2022	b/d	12000
			31 Dec	31 Dec	3500
1 Dec	Disposal	8750			
		15500			15500

working

$\frac{\cancel{15000}}{\cancel{5}} = 3000$

machinery 1
2020 = 3000
2021 = 3000
march 2022 = $\frac{3000}{12} \times 3$
= 750
$\boxed{= 6750}$

2020 + 2021 + 2023 (11 months)
$3000 + 3000 + \frac{3000}{12} \times 11$
8750

Disposal of Machinery

31 March 2022	Machinary Account	15000	31 March	A/R	8500
			1 Dec	Acc dep	6750
1 Dec	Machinery	15000	1 Dec	cash	2500
			1 Dec	Accdep	8750
			31 Dec	P/L	3500
		30000			30000

3. An inventory record card shows the following details. [3 marks]

February

1 50 units in stock at a cost of $40 per unit

7 100 units purchased at a cost of $45 per unit

14 80 units sold

21 50 units purchased at a cost of $50 per unit

28 60 units sold

What is the value of inventory at 28 February using the FIFO method? (Show calculation)

a) $2,450

b) $2,700

c) $2,950

d) $3,000

1

4. What is the value of Cogs for February using the FIFO method (Show calculation) [2 marks]

((50×40)) + [(30×45)] + (~~(60×35)~~) 3350

(60+45)

= 6050

0 2

5. **A firm has the following transactions with its product R.**

1 January 2024 Opening inventory: nil

1 February 2024 Buys 10 units at $300 per unit

11 February 2024 Buys 12 units at $250 per unit

1 April 2024 Sells 8 units at $400 per unit

1 August 2024 Buys 6 units at $200 per unit

1 December 2024 Sells 12 units at $400 per unit

The firm uses periodic weighted average cost (AVCO) to value its inventory.

What is the value of inventory? (Show calculation) [2 marks]

6. **What is the COGS? (Show calculation) [2 marks]**

7. **Also draw up the trading account for the year showing the gross profits [2 marks]**

8. An item of inventory was purchased for $10. However, due to a fall in demand, its selling price will be only $8. In addition, further costs will be incurred prior to sale of $1. What is the NRV? [3 marks]

c. Work in progress

5. A company spends $5X0 on raw materials, $3X0 on direct labour, and $200 on advertising. What is the total *product cost*? [2 Marks]

1040 is the total product cost

6. A company manufactures 1,000 units of a product in one month. The following costs were incurred:

- Raw Materials: $4,X00 4,200
- Direct Labour: $3,000 3000
- Factory Rent: $2,X00 2200
- Factory Insurance: $5X0 520
- Office Rent: $1,200 1200
- Sales Commission: $1,000 1000
- Advertising: $8X0 820
- Machine Purchase Price: $10,000 10,000
- Installation Cost (for machine): $1,000 1000

Required:

(a) Calculate the total product cost. [2 Marks]

23940

(b) Calculate the total period cost. [2 Marks]

(c) What is the historical cost of the machine? [2 Marks]

10,000

7. A company produces 500 units in a month.
   Costs:
   - Direct material = $5/unit
   - Direct labour = $3/unit
   - Variable production overhead = $2/unit
   - Fixed production overhead = $1,000 total per month.

Required:

Find **cost per unit** under Marginal Costing. **[2 Marks]**

Find **cost per unit** under Absorption Costing. **[2 Marks]**

8. **Each unit requires 3 kg of material.**
   - Planned production = **1,000 units** 3000
   - Material opening stock = **500 kg** 1500
   - Material closing stock = **700 kg** 2100

   6600

   How much material should be purchased? [2 Marks]

   6600 kg of material is required.

9. A company budgeted material cost at $6 per unit for 1,000 units. Actual material cost was $6,500. What is the variance? **[3 Marks]**