

COSTING QUESTIONS

1. Desdamona Ltd sells one product. The cost card for that product is given below:

Total Variable Costs	
Direct materials	£ 5
Direct labour	£ 6
Variable production overhead	£ 4
Fixed production overhead	3
Variable selling cost	£ 4

Do not include Fixed Cost Rule!

$$\begin{aligned}
 \text{Total variable Cost} &= £(5 + 6 + 4 + 4) = 19. \\
 &= \text{SP } £25 - 19 = £6 \text{ contribution} \\
 &= £6 \times 800 = 4,800
 \end{aligned}$$

The selling price per unit is £25. Budgeted fixed overheads are based on budgeted production of 1,000 units. Opening inventory was 200 units and closer inventory was 150 units. Sales during the period were 800 units and actual fixed overheads incurred were £1,500.

The total contribution earned during the period was:

- A £3,900
- ☒ B £4,800
- C £4,000
- D £4,500

2. Johnson sells one product. The cost card for that product is given below:

	£
Direct materials	* 7
Direct Labour	* 8
Variable Production Overhead	* 5
Fixed Production Overhead	4
Variable Selling Cost	* 5

$$\begin{aligned}
 \text{Total Variable Cost} &= (7 + 8 + 5 + 5) = 25 \\
 &= \text{SP } £60 - 25 = 35 \\
 &= £35 \times 2000 = 70,000
 \end{aligned}$$

The selling price per unit is £60. Budgeted fixed overheads are based on budgeted production of 1,500 units. Opening inventory was 500 and closing inventory was 400 units. Sales during the period were 2000 units and actual fixed overheads incurred were £5,000.

The total contribution earned during the period was:

- ☒ A 70,000
- B 79,000
- C 76,000
- D 77,000

3. Walkers Ltd sells one product. The cost card for that product is given below:

Direct materials

Direct Labour

Variable Production Overhead

Fixed Production Overhead

Variable Selling Cost

£

8

9

6

5

6

Total Variable Cost
 $\text{£ } (8 + 9 + 6 + 6) = 29$

SP $\text{£ } 40 - 29 = 11 \text{ cont}$

$= 11 \times 3500 = 38,500$

The selling price per unit is £40. Budgeted fixed overheads are based on budgeted production of 1,000 units. Opening inventory was 800 and closing inventory was 650 units. Sales during the period were 3500 units and actual fixed overheads incurred were £3,500.

The total contribution earned during the period was:

- A 32,500
- B 30,500
- C 35,500
- ☒ D 38,500

Contribution to Sales ratio is difference between sales and variable expenses expressed as a %.

4. An organisation manufactures and sells a single product that has a variable cost of £48 per unit and a contribution to sales ratio of 40%. Total monthly fixed costs are £900,000.

What is the monthly breakeven point (in units)?

- ☒ A 28,125
- B 20,000
- C 30,000
- D 35,000

How many they need to make

difference

Contribution per unit $= \left(\frac{\text{VC}}{\text{£ } 48 / 0.60 \times 0.40} \right) = \text{£ } 32$

Breakeven point $= 900,000 / 32 = 28,125 \text{ units}$

5. A company that uses marginal costing has a profit of £37,500 for a period. Opening inventory was 100 units and closing inventory was 350 units.

The fixed production overhead absorption rate is £4 per unit.

What is the profit under absorption costing?

- A £35,700
- B £36,500
- ☒ C £38,500
- D £39,300

Margin Costing Profit 37,500

Add: Fixed Costs in Closing inventory $1,400$

Less: Fixed Costs in opening inventory (400)

Absorption Costing Profit 38,500

6. A company produces and sells a single product whose variable cost is £7 per unit.

Fixed costs have been absorbed over the normal level of activity of 300,000 units and have been calculated as £3 per unit.

The current selling price is £20 per unit.

How much profit is made under marginal costing if the company sells 350,000 units?

- 3,650,000
- A £500,000
 - B £600,000
 - C £900,000
 - D £1,000,000

$$\text{Contribution per unit} = \frac{\text{SP} - \text{VC}}{1} = 13$$

$$\begin{array}{rcl} \text{Total Contribution (350,000} \times 13) & = & 4,550,000 \\ \text{Fixed Overheads (300,000} \times 3) & & 900,000 \\ \hline & & 3,650,000 \end{array}$$

7. A company has established a marginal costing profit of £82,000. Opening inventory was 400 units and closing inventory is 850 units. The fixed production overhead absorption rate has been calculated as £6/unit.

What was the profit under absorption costing?

- A £87,050
- B £80,050
- C £84,550
- D £84,700

$$\begin{array}{rcl} \text{Marginal Costing Profit} & & 82,000 \\ \text{Less: Fixed Costs in OI} & & \\ \quad (400 \times 6) \text{ OAR unit} & & (2,400) \\ \text{Add: Fixed Costs in CI} & & \\ \quad (850 \times 6) \text{ OAR unit} & & 5,100 \\ \hline & & 84,700 \end{array}$$

8. Which of the following are true of marginal costing?

- i) The marginal cost of a product includes an allowance for fixed production costs.
- ii) The marginal cost of a product represents the additional cost of producing an extra unit.
- iii) If the inventory increases over a year, the profits under absorption costing will be lower than with marginal costing.

- A i) only
- B ii) only
- C ii) and iii) only
- D i), ii) and iii)

9. An organisation manufactures and sells a single product. At the budgeted level of output of 4,000 units per week, the unit cost and selling price structure is as follows:

	£ per unit	£ per unit
Selling price		50
Less - variable production cost	10	
- other variable cost	5	
- fixed cost	20	
		(35)
Profit		15

What is the breakeven point (in units per week)?

- A 2,200
☒ B 2,286
 C 2,800
 D 2,400

Handwritten calculations for the breakeven point:

Contribution per unit: $SP - VC + OVC = 50 - 15 = 35$

Total FC: $FC \times \text{output units} = 20 \times 4000 = 80,000$

Breakeven point: $(80,000 / 35) = 2,286$

10. Which of these statements are true of marginal costing?

- i) The contribution per unit will be constant if the sales volume increases.
 ii) There is no under- or over-absorption of overheads.
 iii) Marginal costing does not provide useful information for decision making.

- ☒ A i) and ii) only
 B ii) and iii) only
 C ii) only
 D i), ii) and iii)