

SUGGESTED SOLUTIONS

QUESTION 1

- 1.1 T
- 1.2 F
- 1.3 T
- 1.4 T
- 1.5 T
- 1.6 T
- 1.7 T
- 1.8 T
- 1.9 F
- 1.10 T

QUESTION 2

- 2.1 (C)
- 2.2 (d)
- 2.3 (d)
- 2.4 (c)
- 2.5 (b)
- 2.6 (d)
- 2.7 (b)
- 2.8 (c)
- 2.9 (c)
- 2.10 (a)

QUESTION 3

PART 3.1

- 3.1.1 Product costs are referred to as the costs used to manufacture a product. These costs include direct labour, direct materials, consumable production supplies, and factory overheads. Product cost can also be considered the cost of the labour required to deliver a service to a customer. Period costs are expenses that are attributable to times and accounting periods than actual production processes or finished goods e.g. rent.
- 3.1.2 Actual costing basis
Standard costing basis
Normal costing basis

PART 3.2

Baboo Lall

3.2.1 High – low method

	Number of Hotdogs Sold (x) Units	Total Overhead Cost (y) R
November	3 550	6 390
September	<u>2 850</u>	<u>5 550</u>
	<u>700</u>	<u>840</u>

The high-low method assumes the variable portion of the costs causes the difference in the total costs, because fixed costs are assumed to be the same at all levels of activity within the relevant range. The variable cost per unit is therefore R1.20 (R840 ÷ 700units).

The equation **y = a + bx** to determine total fixed costs

$$y = a + bx$$

Total fixed cost, based on month of November Total fixed cost, based on month of September

$$6\ 390 = a + (1.20 \times 3\ 550)$$

$$5\ 550 = a + (1.20 \times 2\ 850)$$

$$a = 6\ 390 - 4\ 260$$

$$a = 5\ 550 - 3\ 420$$

$$= 2\ 130$$

$$= 2\ 130$$

Other Overhead Costs	Fixed R	Variable R
September	2 130	3 420
October	2 130	3 670
November	2 130	4 260

3.2.2 Expected Profit for December

Total Sales (R15 x 3 500)	R 52 500
Less: Variable Costs [(1.20 x 3 500) + (R4 x 3 500)]	(18 200)
Less: Fixed Costs (R12 000 + R16 000 + R2 130)	<u>(30 130)</u>
Profit	<u>4 170</u>

QUESTION 4

PART 4.1

4.1.1 Mr Mkhize's Net Wage Payable in a given week

Normal wages (45hrs X R45)	R 2 025
Overtime (6hrs X R45 X 1.5)	<u>405</u>
Total Gross Wages	2 430
Less: Pension Fund Contribution (R2 025 X 8%)	<u>(162)</u>
Taxable Wages	2 268
Less: Other Deductions	
PAYE (R2 268 x 18%)	(408)
UIF (R2 430 x 1%)	(24)
Medical Aid (R2 025 x 6%)	<u>(122)</u>
Net wages payable	<u>1 714</u>

4.1.2 Amount allocated to direct labour cost

	WIP/FG	POH (Pdn O/heads)
Direct Labour:		
45 Hours at normal rate of R45 per hr	2 025	
Overtime premium (6hrs x R45 x 1.5)		405
Total Employer Contributions (304 + 24 + 182)		<u>510</u>
		915

WORKINGS:

Journal Entries

	DR	CR
Work-in-progress/FG	2 025	
Production overheads clearance (405 + 510)	915	
Wages clearance account		2 940
Assignment of gross wages and benefits to production		

Journal Entries

Wages Clearance Account	2 430	
Wages payable		1 714
Pension Fund		162
PAYE		408
UIF		24
Medical Aid		122

Recording net wages and other liabilities

Wages Clearance Account	510	
Pension Fund (15% x 2 025)		304
UIF (1% x 2 430)		24
Medical Aid (9% x 2 025)		182

Recording employer's liability

Wages payable to Mr Mkhize	1 714	
Pension Fund (162 + 304)	466	
PAYE (18% x 2 268)	408	
UIF (24 + 24)	48	
Medical Aid (122 + 182)	304	
Bank		2 940

Recording payment of wage related liabilities

PART 4.2

Journal Entries

	DR	CR
Inventory	125 400	

Trade Creditors		125 400
<u>Being inventory purchased on credit</u>		
Inventory (Delivery Expenses)	2 200	
Bank		2 200
<u>Being payment of delivery of inventory in cash</u>		
Debtors	25 300	
Sales		25 300
<u>Being sales made on credit</u>		
Cost of Sales (COS)	21 083	
Inventory		21 083
<u>Being inventory sold on credit charged to Cost of Sales (COS)</u>		
Cost of Sales (COS)	1 100	
Bank		1 100
<u>Being payment of delivery of inventory to a customer in cash charged to COS.</u>		
Bank	12 650	
Sales		12 650
<u>Being sales made on cash</u>		
Cost of Sales (COS)	10 542	
Inventory		10 542
<u>Being inventory sold on cash charged to Cost of Sales (COS)</u>		
Debtors	88 550	
Sales		88 550
<u>Being sales made on credit</u>		
Cost of Sales (COS)	73 792	
Inventory		73 792
<u>Being inventory sold on credit charged to Cost of Sales (COS)</u>		
Inventory	33 000	
Trade Creditors		33 000
<u>Being inventory purchased on credit</u>		
Inventory (Delivery Expenses)	550	
Bank		550
<u>Being delivery expenses paid in cash</u>		
Trade Creditors (Supplier)	11 000	
Inventory		11 000
<u>Being unwanted goods being returned to the supplier</u>		

Inventory	17 967	
Trade Creditors		17 967
Being inventory purchased on credit		

Hint:

Calculation of Cost of Sales:

$$\text{Mark Up} = 20\% \text{ (given)} = \frac{1}{5}$$

Margin must be calculated so that it can be used on Sales Figures

$$\text{Margin} = \frac{1}{5+1} = \frac{1}{6}$$

E.g. Cost of Sales (COS) on the sales figure of R88 550 is calculated as follows:

$$= \text{R88 550} - \left(\frac{1}{6} \times \text{R88 550}\right)$$

$$= \text{R73 792}$$

QUESTION 5

5.1 Current Ratio and Quick Ratio formulas

Current Ratio formula

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Quick Ratio formula

$$\frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

- 5.2 Current ratio indicates the ability of the enterprise to meet its short term financial obligations; that is, commitments due in the current financial year.
- 5.3 Quick ratio indicates the entity's ability to meet its immediate financial obligations such as accounts payable from its immediately accessible or quickly converted assets such as cash and accounts receivable.
- 5.4 The current ratio for 2015 indicates that the entity was in a very strong position to meet its short term obligations. The generally recommended current ratio is 2 : 1. We are not told in the question the industry within which Abaphaki Limited falls but besides that the entity is performing very well in terms of its liquidity.
- 5.5 Based on current ratio, inventory seems to have been well managed in 2015 than in 2016. Minimal inventory was held in 2015 than in 2016. This appears to have made the current ratio to deteriorate in 2016. Quick ratio deteriorated from 2015 to 2016. It appears that the entity locked its cash in large quantities of inventory in 2016 than in 2015. This suggests poor inventory management in 2016. The recommended quick ratio for entities in general is 1 : 1.
- 5.6 The risk of carrying little inventory is loss of potential revenue due to stock outs.
- 5.7 Economic Order Quantity – is the amount of inventory to be ordered at one time for the purposes of minimizing annual inventory cost.

Formula

$$EOQ = \sqrt{\frac{2 \times \text{Annual Demand} \times \text{Ordering cost}}{\text{Storage (holding) cost per unit}}}$$

Assumptions

1. Demand is known, constant and independent
2. Lead time is known and constant
3. Receipt of inventory is instantaneous and complete
4. Quantity discounts are not possible
5. Only variable costs are set up and holding
6. Stock outs can be completely avoided.

EOQ is a model which is used as an inventory management strategy to mitigate the risk of holding too much or too little inventory at hand. This model is however difficult to apply in real world. Based on the assumptions, demand cannot be determined with certainty and can never be constant. There are cyclical and seasonal changes in demand. The lead time will vary and will not be the same in real world due to factors such as availability of inventory from suppliers. Practically, receipt of inventory can never be instantaneous and complete. Economies of scale will apply in real world, hence discounts are granted for bulk buying. However, citing all the EOQ assumptions, the model can be used to a lesser extent due to the fact that the most of the assumptions are impractical.

QUESTION 6

MaNdlovu Limited

6.1 Sales Budget

	QUARTERS			
	1	2	3	4
Budgeted sales volume	20 000	25 000	30 000	20 000
Selling price per unit	R250	R250	R250	R250
Gross Sales	<u>R5 000 000</u>	<u>R6 250 000</u>	<u>R7 500 000</u>	<u>R5 000 000</u>

6.2 Production Budget

	QUARTERS			
	1	2	3	4
Projected sales in units	20 000	25 000	30 000	20 000
Plus: Planned closing inventory	5 000	6 000	4 000	5 000
Total units required	25 000	31 000	34 000	25 000
Less: Opening Inventory	<u>2 000</u>	<u>5 000</u>	<u>6 000</u>	<u>4 000</u>
Units to be manufactured	<u>23 000</u>	<u>26 000</u>	<u>28 000</u>	<u>21 000</u>

6.3 Material Purchase Budget

QUARTERS

	1	2	3	4
Projected sales in units	23 000	26 000	28 000	21 000
Requirement per Unit (Material) (Kg)	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>
Total material required (Kg)	92 000	104 000	112 000	84 000
Plus: Planned Closing Inventory (Kg)	<u>10 400</u>	<u>11 200</u>	<u>8 400</u>	<u>10 400</u>
Total materials needed (Kg)	102 400	115 200	120 400	94 400
Less: Opening Inventory (Kg)	<u>10 000</u>	<u>10 400</u>	<u>11 200</u>	<u>8 400</u>
Purchases required	112 400	125 600	131 600	102 800
Cost per Kg	<u>R25</u>	<u>R25</u>	<u>R25</u>	<u>R25</u>
Total Purchase Cost	<u>R2 810 000</u>	<u>R3 140 000</u>	<u>R3 290 000</u>	<u>R2 570 000</u>

6.4 Direct Labour Budget

	QUARTERS			
	1	2	3	4
Production required (units)	23 000	26 000	28 000	21 000
Direct Labour Hours per Unit (Hrs)	3	3	3	3
Total Direct Labour Hours (Hrs)	69 000	78 000	84 000	63 000
Direct Labour Cost per Hr (R)	<u>R30</u>	<u>R30</u>	<u>R30</u>	<u>R30</u>
Total Direct Labour Cost (R)	<u>R2 070 000</u>	<u>R2 340 000</u>	<u>R2 520 000</u>	<u>R1 890 000</u>

6.5 Variable Manufacturing Overhead Budget

	QUARTERS			
	1	2	3	4
Production required (units)	23 000	26 000	28 000	21 000
Direct Labour Hours per Unit (Hrs)	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>
Total Direct Labour Hours (Hrs)	69 000	78 000	84 000	63 000
Overhead rate per Hr (R)	<u>R10</u>	<u>R10</u>	<u>R10</u>	<u>R10</u>
Total Variable Manuf O/head (R)	<u>R690 000</u>	<u>R780 000</u>	<u>R840 000</u>	<u>R630 000</u>