Tutorial Letter 202/1/2018

Introduction to Management Accounting

MAC1501

Semester 1

Department of Management Accounting

IMPORTANT INFORMATION:

Please activate your myUnisa and myLife email addresses and make sure that you have regular access to the myUnisa module site MAC1501-18-S1.

Note: This tutorial letter is available online only and no printed copies will be mailed to students.

BAR CODE

Dear Student

We enclose the following for your attention:

		Page
ANNEXURE:	SUGGESTED SOLUTION TO ASSIGNMENT 02	3

Kind regards

Lecturer	**Office**	**Telephone no**	**E-mail**
Mr SKM Sithole	AJH v/d Walt Building, 1-06	012 429 4785	MAC1501-18-S1@unisa.ac.za
Ms SB Ntuli	AJH v/d Walt Building, 1-08	012 429 3895	MAC1501-18-S1@unisa.ac.za

ANNEXURE: SUGGESTED SOLUTION TO ASSIGNMENT 02

Please refer to page 9 of tutorial letter 101 with regards to the departmental practice on the marking of the written assignment. The marks are allocated on the calculations shown by the student. If you do not show the calculations, sadly you do not get the full marks. The following ticks are used to mark the written assignment:

✓ designates 1 mark

∧ designates ½ mark

QUESTION 1

1.1	T	(1)
1.2	F (the financial statements of government departments and public entities, not public companies, are audited by AGSA)	(1)
1.3	T	(1)
1.4	T	(1)
1.5	T	(1)
1.6	F (only direct material cost and direct labour cost can readily be traced to completed goods)	(1)
1.7	F (mixed costs are overhead costs that contain an element of both fixed and variable costs)	(1)
1.8	T	(1)
1.9	F (merchandise refers to the inventory of a merchandiser only)	(1)
1.10	T	(1)
		[10]

QUESTION 2

2.1	(c)	(1)
2.2	(d)	(1)
2.3	(d)	(1)
2.4	(c)	(1)
2.5	(b)	(1)
2.6	(d)	(1)
2.7	(b)	(1)
2.8	(c)	(1)
2.9	(c)	(1)
2.10	(a)	(1)
		[10]

QUESTION 3

PART 3.1

3.1.1 Product costs refer to the costs that a manufacturing company incurs in the conversion of direct materials into finished goods that can be sold at a profit. Product costs consist of material costs, labour costs and factory overhead costs.

Product costs are first capitalised as inventory and

expensing thereof is deferred until the goods that had been produced are sold; at which point the product costs attached to the sold goods are expensed as cost of sales.

Period costs refer to the costs that a manufacturing company incurs that **do not** relate to the conversion of direct materials into finished goods.

These costs are expensed in the period in which they occur.

Examples of period costs are advertising costs, audit fees, salaries of administration staff, etc.

Any valid point, maximum [5]

3.1.2 Production overheads are assigned to units of production by means of allocation and apportionment. (2)

PART 3.2

3.2.1 High-low formula to separate the fixed and variable costs of other overhead costs.

	Number of hotdogs sold	**Total cost (R)**	
January (low)	2 850	5 550	(½)
March (high)	3 550	6 390	(½)
Difference	700	840	

Variable cost per hotdog: R840 ÷ 700 = R1.20 per hotdog (1)

$y = a + bx$	OR	$y = a + bx$
R5 550 = a + (R1.20 x 2 850)		R6 390 = a + (R1.20 x 3 550) (1½)
a = R5 550 - R3 420		a = R6 390 - R4 260 (1)
Fixed element = R2 130 pm		Fixed element = R 2 130 pm (½)

[5]

3.2.2 Expected profit for April

	R	
Total sales (3 500 hotdogs x R15)	52 500	(1)
less total variable costs [3 500 hotdogs x (R4 + R1.20]	(18 200)	(1½)
less total fixed costs (R12 000 + R16 000 + R2 130)	(30 130)	(1½)
Expected profit for December	4 170	(1)
	maximum	[5]

QUESTION 4

PART 4.1

4.1.1

	R
Normal wages (R45 x 45 hours)	2 025,00
Add: Overtime wages (R45 x 1,5 x 6 hours)	405,00
Total gross wages	2 430,00
Less: Pension fund (R2 025 x 8%)	(162,00)
Taxable wages	2 268,00
Less: Other deductions	(554,04)
PAYE (R2 268 x 18%)	408,24
Medical aid (R2 025 x 6%)	121,50
UIF (R2 430 x 1%)	24,30
Net wage payable	1 713,96

(8)

4.1.2

Total hours worked	51
Less: idle time	3
Total productive time	48

∴ **Direct labour cost** = R45 x 48 hours
= R2 160 (3½)

4.1.3

	R
Fringe benefits – company contributions	510,30
Pension fund (R2 025 x 15%)	303,75
Medical aid (R2 025 x 9%)	182,25
UIF (R2 430 x 1%)	24,30
Add: Idle time (R45 x 3 hours)	135,00
Overtime premium (R45 x 0,5 x 6 hours)	135,00
Factory overheads	780,30

Max: (3½)

PART 4.2

Journal entries of Tshinakaho according to the perpetual system

	DR	CR
Inventory of merchandise	125 400	
Trade creditors		125 400
Inventory purchased on account		
Inventory of merchandise	2 200	
Bank		2 200
Paid delivery cost of purchases		
Trade debtors	25 300	
Sales		25 300
Cost of sales	21 083	
Inventory of merchandise		21 083
Recording costs of sales (25 300/120 x 100)		
Delivery expenses	1 100	
Bank		1 100
Paid for delivery cost to customers		
Bank	12 650	
Sales		12 650
Cost of sales		10 542
Inventory of merchandise		10 542
Recording of cost of sales (12 650/120 x 100)		

	DR	CR
Trade debtors	88 550	
Sales		88 550
Cost of sales	73 792	
Inventory of merchandise		73 792
Recording of cost of sales (88 550/120 x 100)		
Inventory of merchandise	33 000	
Trade creditors		33 000
Purchases on account		
Inventory of merchandise	550	
Bank		550
Delivery cost of inventory		
Trade creditors	11 000	
Inventory of merchandise		11 000
Goods returned		

QUESTION 5

5.1 current ratio = current assets ÷ current liabilities

quick ratio = (current assets - inventories) ÷ current liabilities (2)

5.2 The current ratio indicates the company's ability to pay its current liabilities out of the proceeds of its current assets. (1)

5.3 The quick ratio indicates the company's ability to pay its current liabilities out of the proceeds of its liquid current assets, i.e. those assets that can be converted into cash within a reasonably short period of time. (1)

5.4 The current ratio for 2016 is well above the conventional norm of 2:1.

Whether this is a healthy ratio or not would depend on several factors, e.g. the industry in which the company operates, the industry averages, the trend within the company over time, etc.

The ratio indicates that the company should be able to pay its current liabilities out of the proceeds of its current assets. .

The ratio may also be an indication that inventory, debtors and/or cash are poorly managed. To determine if this is so, this ratio should be considered with the days' sales in debtors and the inventory turnover ratio.

Cash reserves in excess of what is required for business operations may results in missed opportunities for profitable investments.

Any valid point, maximum [3]

5.5 The difference between the current ratio and the quick ratio represents the amount invested in inventories.

In addition to a comparison of the current and quick ratios, the management of inventory is evaluated with reference to other ratios, e.g. the inventory turnover ratio, the days' sales held in inventory and the cash conversion cycle.

In 2016 the ratios indicate that inventories made up 56.3% of total current assets (3 - 1.3 ÷ 3) . This has reduced to 52.5% (1.2 - 0.57 ÷ 1.2) in 2017.

There thus seems to be a significant investment in inventory, although this has been managed down over the last financial year.

However, an evaluation of ratios should be accompanied by a comparison to industry norms and trends within the company over time..

Any valid point, maximum [5]

5.6 The risk of carrying too little inventory is that there will be inadequate inventory on hand to meet the demand for sales or production. (1)

5.7 The basic EOQ model assumes that

the number of units of inventory that will be required for sales or production is known and constant.

there is no lead time

ordering costs and holding costs are the only pertinent inventory costs

The model is used to determine the number of units of inventory that should be ordered at a time to minimise holding costs and ordering costs.

The formula applied to determine the number of units to be ordered is the square root of 2(the number of units of inventory required for sales or production for the year x the fixed cost of placing each order ÷ the variable holding cost per unit of inventory for one year] **OR** the square root of 2 × S × F ÷ C.

Any valid point, maximum [2]

total question [15]

QUESTION 6

6.1 Sales budget

	Quarter 1	**Quarter 2**
Budgeted sales	20 000	25 000
Selling price per unit	R250	R250
Total sales value	R5 000 000	R6 250 000

(2)

6.2 Production budget

	Q1	Q2
Budgeted sales	20 000	25 000
Add: closing inventory calc1	5 000	6 000
Total available	25 000	31 000
Less: opening inventory	2 000	5 000
Production required	23 000	26 000

Calculation 1:

Q1: 25 000 x 20% = 5 000; Q2: 30 000 x 20% = 6 000

Any valid point, maximum: (4)

6.3 Material purchase budget

	Q1	Q2
Production required	23 000	26 000
X 4kg	4	4
Production requirements	92 000	104 000
Add: closing inventory ^	10 400	11 200
Total needs	102 400	115 200
Less: opening inventory ^	10 000	10 400
Materials purchase (kg)	92 400	104 800
Cost per kg	R25	R25
Total material cost	R2 310 000	R2 620 000

	Q3
Budgeted sales	30 000
Add: closing inventory	4 000
Total available	34 000
Less: opening inventory	6 000
Production required	28 000

28 000 x 4 kg = 112 000; 112 000 kg x 10% = 11 200

Any valid point, maximum: (7)

6.4 Direct labour budget

	Q1	Q2
Production required	23 000	26 000
X labour hour per unit	3	3
Total labour required	69 000	78 000
Labour rate per unit	R30	R30
Total labour cost	R2 070 000	R2 340 000

(3)

6.5 Variable overhead budget

	Q1	Q2
Total labour required	69 000	78 000
Overhead rate	R10	R10
Total overhead	R690 000	R780 000

(2)