

EXAMINATION NO. _____



2016 EXAMINATIONS

ACCOUNTING TECHNICIAN PROGRAMME

PAPER TC9: COSTING AND BUDGETARY CONTROL

FRIDAY 2 DECEMBER 2016

**TIME ALLOWED: 3 HOURS
9.00 AM - 12.00 NOON**

INSTRUCTIONS

1. You are allowed **15 minutes** reading **time before the examination begins** during which you should read the question paper and, if you wish, make annotations on the question paper. However, you are not allowed, **under any circumstances**, to open the answer book and start writing or use your calculator during this reading time.
2. Number of questions on paper – 5
3. **Answer ALL** questions
4. Each question carries 20 marks.
5. Show all your workings in order to gain full marks.
6. Marks will be awarded for clarity, correctness and logical presentation.
7. Use of non-programmable calculators is allowed.
8. Begin each answer on a fresh page.
9. **DO NOT OPEN THIS PAPER UNTIL YOU ARE INSTRUCTED BY THE INVIGILATOR**

This question paper contains 6 pages.

1. A company reapportions the costs incurred by its two service cost centres, Canteen and Stores, to the four production cost centres.

The following are the overhead costs allocated to the six cost centres:

	K'000
Production Department A	200
Production Department B	500
Production Department C	300
Production Department D	400
Canteen	50
Stores	100

Estimates of the benefits received by each cost centre are as follows:

	A	B	C	D	Canteen	Stores
	%	%	%	%	%	%
Canteen	10	30	20	30	-	10
Stores	20	10	30	20	20	-

Required:

- (a) Define the following terms:

- (i) Cost allocation **2 Marks**
- (ii) Cost apportionment **2 Marks**
- (iii) Cost absorption **2 Marks**

- (b) Calculate the charge for overheads to **each** of the production cost centres, including the amounts reapportioned from the two service cost centres, using:

- (i) the continuous allotment (repeated distribution) method; **8 Marks**
- (ii) the algebraic method. **6 Marks**

(TOTAL: 20 MARKS)

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2. The Sales Director of Mphamvu Limited has received the following profit statement for May 2016. The statement has been prepared on a marginal costing basis, which the firm has just adopted for internal reporting purposes.

	K'000	K'000
Sales		2,400
Less variable costs		1,200
Contribution		1,200
Less: Fixed manufacturing costs	580	
Fixed selling and administration costs	<u>400</u>	<u>980</u>
Net profit		<u>220</u>

The accountant attached the following notes to the statement:

- (1) The unit sales price for May averaged K24.
- (2) Production for May was 45,000 units in excess of sales.
- (3) The closing stock at May 31 consisted of 80,000 units
- (4) Production costs in April were substantially the same as those incurred in May.
- (5) Mphamvu values its stocks using the FIFO method.

The Sales Director is not comfortable with the marginal costing basis and wonders what profit would be under the absorption costing basis.

Required:

- (a)
 - (i) State any **two** advantages of marginal costing **2 Marks**
 - (ii) State any **two** disadvantages of marginal costing **2 Marks**
- (b)
 - (i) Calculate the number of units produced in May 2016 **2 Marks**
 - (ii) Calculate the cost of sales per unit using marginal costing **1 Mark**
- (c) Using absorption costing:
 - (i) Calculate the total production cost **2 Marks**
 - (ii) Calculate the cost of sales per unit **1 Mark**
 - (iii) Calculate the quantity of opening stock (units) **1 Mark**
 - (iv) Present the profit statement for May 2016 **7 Marks**
- (d) Reconcile the difference between the marginal costing and absorption costing profit figures. **2 Marks**

(TOTAL: 20 MARKS)

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3. Zagwazatha Ltd manufactures three products L, M and N. The company that supplies the two raw materials A and B, which are used in the manufacture of all the three products, has informed Zagwazatha that their employees are refusing to work overtime. This means that the supply of raw materials will be limited to the following quantities in the next period:

Material A	1,030 kg
Material B	1,220 kg

No other source of supply can be found for the next period.

Information relating to the three products manufactured by Zagwazatha Ltd is as follows:

Quantity of material used per unit manufactured	L	M	N
Material A (kg)	2	1	4
Material B (kg)	5	3	7
Maximum sales demand	120	160	110
Contribution per unit sold	MK15	MK12	MK17.50

Owing to the perishable nature of the products, no stocks of finished goods are held.

Required:

- (a) Define the term 'limiting factor'. **2 Marks**
- (b) (i) Calculate the surplus or shortage for each of material A and B, if Zagwazatha is to meet the maximum demand. **8 Marks**
- (ii) State which of the two materials is a limiting factor, based on the calculations in (b)(i) above. **2 Marks**
- (c) Recommend the production mix that will maximise the profits of Zagwazatha Ltd for the forthcoming period. **8 Marks**
- (TOTAL: 20 MARKS)**

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4. A company manufactures a single product. The budgeted and actual results for the recent period are as follows:

	Budget	Actual	Variance
Production and sales (units)	7,500	8,200	
	K	K	K
Sales revenue	75,000	81,000	6,000 (F)
Direct materials	22,500	23,500	1,000 (A)
Direct labour	15,000	15,500	500 (A)
Production overhead	22,500	22,800	300 (A)
Administration overhead	<u>10,000</u>	<u>11,000</u>	<u>1,000 (A)</u>
	<u>70,000</u>	<u>72,800</u>	<u>2,800 (A)</u>
Profit	<u>5,000</u>	<u>8,200</u>	<u>3,200 (F)</u>

The information about cost behaviour is also available for the following:

- (1) Direct materials and direct labour are variable costs.
- (2) Production overhead is a semi-variable cost, the budgeted cost for an activity level of 10,000 units being K25,000.
- (3) Administration overhead is a fixed cost.
- (4) Selling prices are constant at all levels of sales

Required:

- (a) State any **one** cause of each of the following variances:
 - (i) Material price variance **1 Mark**
 - (ii) Material usage variance **1 Mark**
 - (iii) Labour rate variance **1 Mark**
 - (iv) Labour efficiency variance **1 Mark**
 - (v) Overhead expenditure **1 Mark**
 - (b) Prepare a budgetary control statement using flexible budgeting principles. **13 Marks**
 - (c) Reconcile the profit based on fixed budget to the actual profit. **2 Marks**
- (TOTAL: 20 MARKS)**

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5. (a) In relation to decision-making:
- (i) Define the term “margin of safety”. **2 Marks**
 - (ii) State any **four** assumptions behind the cost-volume-profit (CVP) analysis. **4 Marks**
 - (iii) Give **four** situations where marginal costing can be used as a decision-making aid. **4 Marks**
- (b) In the context of budgeting:
- (i) Define the term ‘incremental budget’ . **2 Marks**
 - (ii) Mention any **two** disadvantages of incremental budgets. **2 Marks**
 - (iii) Mention any **two** benefits of budgeting. **2 Marks**
- (c) In the context of standard costing, state:
- (i) Any **two** advantages of standard costing. **2 Marks**
 - (ii) Any **two** disadvantages of standard costing. **2 Marks**
- (TOTAL: 20 MARKS)**

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