

### **EXAMINATIONS COUNCIL OF ZAMBIA**

### DIPLOMA COMPUTER

SERIES: NOVEMBER/DECEMBER 2008

## Sintopertelector en la comparte de la comparte del comparte de la comparte de la comparte del comparte de la comparte del la comparte de la comparte del la comparte de la

TIME: THREE (3) Hours

**MARKS: 100** 

PASS MARK: 50%

#### **INSTRUCTIONS**

- 1. Write your Examination Number and National Registration Card Number in the answer booklet.
- 2. There are seven (7) questions in this paper
- 3. Answer any five (5) questions
- 4. All questions carry equal marks.
- **5.** Cell phones and programmable calculators are not allowed in the examination room.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

**1. (a)** State an appropriate basis of apportionment for each of the following overhead costs.

(i) Factory rent,

(ii) Staff canteen

(4 marks)

**(b)** Overheads allocated, apportioned and re-apportioned, to the two production cost centers in a factory for a period were:

#### **Production Cost Centre**

	X	Y
Budget	161 820	97 110
Actual	163 190	96 330

Overheads are absorbed using predetermined rates. A machine hour rate is used in production cost centre Y and a direct labour hour rate in production Cost centre Y. Machine and direct labour activity in each production cost centre is

X

Y

#### **Production Cost Centre**

	5.3	-
Budget	8 700	1 760
Actual	8 960	1 725
Direct labour hours		
• •		
	X	Υ
Budget	6 220	8 300
Actual	6 276	7 870

### Required

Calculate for each production cost centre for the period.:

(i)	the predetermined production overhead absorption rate;	(3 marks)
(ii)	the production overhead absorbed.	(3 marks)
(iii)	the over/under absorption of production overhead.	(4 marks)

(c) Tendai & Edwin Ltd has recorded the following total costs during last 5 years

Year	Output volume (units)	Total Cost (K)
20 x 0	130 000	290 000

20 x 1	160 000	358 200
20 x 2	180 000	418 200
20 x 3	129 000	403 200
20 x 4	150 000	496 000

What costs should be expected as 20 x 5 if output is 170 000 units

(6 marks)

(Total 20 marks)

2. On 1 Januray 2005, Chapa Kamfwa started business as a wholesaler. The following were among the balances extracted from his books on 31 December 2005. From this information prepare Chapa Kamfwa's trading and profit and loss account for the year ended 31 December 2005

	K'000
Purchases	15 750
Sales	20 500
Return inwards	456
Return outwards	278
Motor van expenses	320
Carriage on purchases	84
Advertising	240
Wages	2500
Office expenses	470
Insurance	125
Heat & light	75
Interest on loan(debit)	30
Discount allowed	210
Discount received	140
Rent & Rates	725

#### **NOTES**

- (i) Stock 31 December 2005 K4 750 000
- (ii) Provide K100 000 for doubtful debts
- (iii) A van which cost K1 500 000 is to be depreciated by 20% on cost.
- (iv) A half-year's interest; K30 000, is due on the loan
- (v) Rates prepaid amount to K70 000
- (vi) Insurance accrued K20 000.

(14 marks)

(b) Distinguish between:

(i) Cash and trade discount

(2 marks)

(ii) Bad debt and provision for bad debts.

(2 marks)

(iii) A trial balance and a balance sheet.

(2 marks)

(Total 20 marks)

3. Zimba Ltd has analysed its current product cost with the following results.

K,000 per ur
4.50
6.00
3.25
<u>5.25</u>
<u>19.00</u>

During October 2006 the number of units produced was 9 200. This was 800 units more than the quantity sold. The opening stock of finished goods at the beginning of October 2006 was 250 units.

The product has a selling price of K23 000

## Required

- (a) Prepare a profit statement for October 2006.
  - (i) Using absorption costing, and
  - (ii) Using marginal costing, from the information given above

(8 marks)

- (b) Explain the difference in the profit given by the two systems.
- (c) The company uses the following standard costs established at the start of the year, to monitor its performance.

## K'000 per unit

Direct materials 4.40 Direct wages 5.85 Variable overhead

3.35

Fixed overhead

5.40

The fixed overhead cost per unit is based on a minimum production of 10 000 units.

Calculate the following total cost variances

- (i) Direct materials
- (ii) Direct wages
- (iii) Overhead

(8 marks)

(Total 20 marks)

- **4.** Pass Journal entries for M Petal for the month of June 2007 from the following business transactions.
  - June 1 M Patel introduced capital K9 000 cash of which K7 500 was deposited in the bank.
    - 2 Bought office furniture for K280 & paid by cheque
    - 3 Paid for office stationary cash K65.
    - 4 Purchased goods, for K2 000 and paid by cheque
    - 6 Cash sales K1 400
    - 8 Purchased goods on credit from B Bells K 925, J Walker K 700
    - 10 Returned goods to B Bells K55.
    - 14 Sold goods for cash K600
    - 15 Sold goods on credit to H Hastings K700, B Batten K 820 C Curtis K640
    - 18 Returned goods by B Batter K40, C Curtis K 30
    - 20 Settled the a/c of B Bells by cheque less discount of K20.
    - 21 Paid to J walker K500 on account.
    - 24 H Hastings settled his account by cheque less discount of K 30.
    - 25 Received cash from B Batter K400, C Curtis K500 on account
    - 26 Deposited K600 the bank from office cash
    - 28 M Patel drew K 300 cash for personal use
    - 39 Paid cash for office rent K 95, sundry expenses K28, Electricity charges K18, telephone charges K32, wages & salaries K 250.

Total 20 marks)

5. X Ltd operates an absorption costing system. Its budget for the year ended 31 December 2006 shows that it expects its production overhead expenditure to be as follows.

	Fixed	Variable
Machining Department	K600 000	K480 000
Hand finishing department	K360 000	K400 000

During the year it expects to produce 200 000 units. These are expected to take 80 000 machine hours in the machining department and 120 00 labour hours in the hand finishing department.

The costs & activity are expected to arise evenly throughout the year, and the budget has been used as the basis of calculating the company's absorption rates.

During the March 2006 the monthly profit statement reported.

(a) that the actual hours worked in each department were

Machining 600 hours
Hand finishing 9 600 hours

(b) that the actual overhead costs incurred were

	Fixed	Variable
Machining	K48 500	K36 500
Hand finishing	K33 600	K33 500

(c) that the actual production was 15 000 units.

# Required

(a) Calculate appropriate predetermined absorption rate for 2006.

(5 marks)

(b) Calculate the under/over absorption (5 marks)

List any two disadvantages of using absorption rates. (5 marks)

- (c) State the reasons why absorptions costing is used by companies.

  (5 marks)
- 6. You are required to state briefly what you understand by any five.
  - (a) The going concern concept
  - (b) The 'accruals' concept
  - (c) The "consistency' concept
  - (d) The 'Dual' concept

- (e) The historical concept
- (f) The prudence concepts

(4 marks each)

(Total 20 marks)

7. The total costs incurred at various output levels for a process operation in a factory, have been measured as follows

Output (unites)	Total cost (K)
11 500	102 476
12 000	104 730
12 500	106 263
13 000	108 021
13 000	110 727
14 000	113 201

### Required

- (a) Using the high-low method, analyse the costs of the process operating into fixed and variable components. (8 marks)
- (b) Calculate the break-even output level of the process operation in (a) above, assuming a selling process of K10.60 per unit. (3 marks)
- (c) Calculate the target output if the company wishes to make a profit of K300 000. (4 marks)
- (d) (i) Define the term 'margin of safety' (2 marks)
  - (ii) Calculate the margin of safety if budgeted output is 12 500 units.

    (3 marks)