

Examination No. \_\_\_\_\_

**THE PUBLIC ACCOUNTANTS EXAMINATION**  
**COUNCIL OF MALAWI**  
**2009 EXAMINATIONS**  
**ACCOUNTING TECHNICIAN PROGRAMME**  
**PAPER TC9: COSTING AND BUDGETARY CONTROL**

FRIDAY 4 DECEMBER 2009

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 will **not** be 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 – 7.
3. **FIVE** questions **ONLY** to be answered.
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 7 pages

This question paper must **not** be removed from the examination hall.

1. **Kidstuff** is a company established recently to sell children's clothing. The company's cost accountant has been monitoring the activities associated with purchasing and receiving materials. The high and low levels of resource usage for three different resources associated with purchasing and receiving were observed where the number of purchase orders is the cost driver.

The total costs of the **three** resources and the activity output, as measured by the purchase orders are presented as follows:

	<b>Low</b>	<b>High</b>
	10,000	25,000
Supplier verification	K360,000	K360,000
Receiving	K560,000	K1,400,000
Purchase order processing	K432,000	K1,032,000

**Required:**

- (a) Using the high-low method to assess the fixed and variable components, determine the cost behaviour of each resource. **8 Marks**
- (b) Predict the cost of each resource for an activity output level of 20,000 purchase orders. **6 Marks**
- (c) (i) Construct a cost formula that can be used to predict the total cost of the **three** resources combined. **3 Marks**
- (ii) Use the formula to predict the total cost of purchasing and receiving when the activity output is 22,000 purchase orders. **3 Marks**

**(TOTAL = 20 MARKS)**

2. **Smart Toys** manufactures toys for children. During the last calendar year, a total of 200,000 toys were made and 207,000 were sold for K95.00 each. The actual unit cost of a toy is as follows:

	K
Direct materials	32.50
Direct labour	15.00
Variable overheads	9.00
Fixed overheads	<u>12.00</u>
Total unit cost	<u>68.50</u>

Selling expenses consisted of a commission of K2.50 per unit sold and advertising expenses amounting to K360,000. Administrative expenses, all fixed, totaled K740,000.

There were no opening or closing work-in-progress inventories. Opening finished goods inventories amounted to K924,750 constituting 13,500 toys.

**Required**

- (a) Calculate the number and value of closing finished goods inventory of toys.

**6 Marks**

- (b) Prepare a cost of goods sold statement.

**4 Marks**

- (c) Prepare an absorption costing income statement.

**10 Marks**

**(TOTAL = 20 MARKS)**

3. **Home Decorators** designs and installs custom made kitchen units in homes in Blantyre city and the surrounding areas. Each job is different, requiring different materials and labour for the installation of the units.

For the year ended 30 June 2009, Home Decorators made the following estimates:

Number of installations	250
Number of direct labour hours	5,000
Direct materials cost	K600,000
Direct labour cost	K750,000
Overheads	K650,000

During the year, the following actual amounts occurred:

Number of installations	245
Number of direct labour hours worked	5,040
Direct materials cost incurred	K593,500
Direct labour cost incurred	K756,000
Overheads incurred	K641,500

**Required:**

- Describe an appropriate costing method that should be used by Home Decorators clearly stating the reasons for your choice. **6 Marks**
- If Home Decorators uses a normal absorption costing system where overheads are absorbed on the basis of direct labour hours, what would be the cost of a unit that takes K35,000 of direct materials and 50 direct labour hours? **8 Marks**
- Explain why Home Decorators would have difficulty using an actual costing system. **6 Marks**

**(TOTAL = 20 MARKS)**

4. **Handcrafts Limited** makes and sells high quality reed baskets. Tione Lusolawo, the accounts assistant is responsible for preparing the company's budgets and has gathered the following data for the year 2010.

	2010			
	January	February	March	April
Estimated unit sales	20,000	24,000	16,000	18,000
Sales price per unit	K800	K800	K750	K750
Direct labour hours per unit	4	4	3.5	3.5
Direct labour hourly rate	K150	K150	K160	K160
Direct materials cost per unit	K100	K100	K100	K100

Handcrafts Limited expects to have 10,000 baskets in inventory at 31 December 2009. The company has a policy of carrying 50% of the following month's projected sales in inventory.

**Required:**

- (a) Prepare the following monthly budgets for Handicrafts Limited for the first quarter of 2010.
- (i) Production budget in units
  - (ii) Direct labour budget in hours
  - (iii) Direct materials cost budget
  - (iv) Sales budget.

Clearly show your calculations.

**15 Marks**

- (b) Calculate the total budgeted contribution for Handcraft Limited for the first quarter of 2010.

**5 Marks**

**(TOTAL = 20 MARKS)**

5. **Kabula Medical Laboratory** employs skilled technicians to perform comprehensive blood tests for doctors at clinics in the Southern Region of Malawi. The laboratory uses a standard process costing system where equivalent units are calculated using the FIFO method.

The standard cost card for a blood test used during the year is given below:

	K
Direct materials 4ml @ K45	180
Direct labour 2 hours @ K180	360
Variable overheads 2 hours @ K50	100
Fixed overheads 2 hours @ K100	<u>200</u>
Standard cost per test	<u>840</u>

For the month of August, Kabula Medical Laboratory reported the following actual results:

- (i) Opening work-in-progress was 1,250 tests which were 60% complete.
- (ii) 25,000 tests were started during the month
- (iii) Closing work-in-progress was 2,500 tests which were 40% complete.
- (iv) 47,000 direct labour hours were worked at K190 per hour.
- (v) 102,000 ml of materials were purchased at K42.50 per ml.
- (vi) Variable overheads incurred were K144,000.
- (vii) Fixed overheads amounted to K300,000.

Direct materials are added at the beginning of the process.

**Required:**

- (a) Calculate the cost of tests completed during the month of August. **10 Marks**
- (b) Explain why the FIFO method is used for process costing when a standard costing system has been adopted and comment on whether this simplifies process costing. **4 Marks**

(c) Calculate price and quantity variances for:

- (i) Direct materials;
- (ii) Direct labour.

**6 Marks**  
**(TOTAL = 20 MARKS)**

6. **Mayamiko Tsabola**, a friend of yours bought a used pick-up motor vehicle six months ago. She wanted to use the vehicle for a business venture she had planned to start. The vehicle cost K1,000,000. Mayamiko has since changed her mind about starting a business as she has secured a lucrative job with an international non-governmental organization. So far she has spent K120,000 on repairs and anticipates that the following costs will have to be incurred to restore it to good running condition:

	K
Engine overhaul	70,000
Spray painting	80,000
Tyres	36,000
Upholstery	50,000
Miscellaneous maintenance	34,000

Recently, she visited the used car market in Blantyre to look for a vehicle that she will be using for her new job. She found a Toyota RAV4 in excellent condition selling at K1,000,000. Mayamiko must sell the pick-up vehicle in order to pay cash for the RAV4. The pick-up can sell for K360,000 only.

**Required:**

- (a) Define the following terms giving examples from the scenario above:
  - (i) Relevant cost;
  - (ii) Sunk cost;
  - (iii) Opportunity cost.

**9 Marks**

- (b) List all costs that are relevant to Mayamiko's decision.

**6 Marks**

- (c) What advice would you give to Mayamiko?

**5 Marks**

**(TOTAL = 20 MARKS)**

7. (a) The accounting information system can be divided into two major subsystems; *the financial accounting information system* and *the cost accounting information system*. Ideally, the two systems should be integrated where output of each of the two systems can be used as input for the other system.

**Required:**

Briefly describe each system, stating its targeted users and the main outputs. **4 Marks**

- (b) (i) Define the term *cost behaviour*.  
 (ii) Briefly describe the **three** major cost behaviour patterns giving relevant examples for each. **8 Marks**
- (c) (i) Define the budgeting process.  
 (ii) Discuss any **two** roles of budgeting. **4 Marks**
- (d) (i) What is a standard cost and how is it derived? **2 Marks**  
 (ii) Briefly describe any **two** uses of standard costs. **2 Marks**

**(TOTAL = 20 MARKS)**

**END**