

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL THREE

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

WEDNESDAY, 23 JUNE 2004

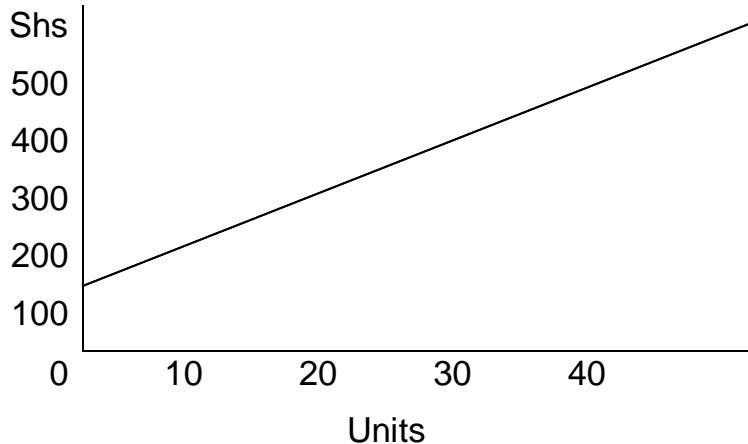
INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours**
2. Attempt all questions in Section **A**, **two** questions in Section **B** and any **three** in Section **C**.
3. Section **A** has **twenty** compulsory multiple choice questions each carrying 1 mark.
4. Section **B** has **three** questions and only **two** questions are to be attempted. Each question carries 25 marks.
5. Section **C** has **three** questions and only **two** questions are to be attempted. Each question carries 15 marks.
6. Please read further instructions on the answer book.

SECTION A

Question 1

- (i) Which type of cost does the following graph represent?



- (a) Fixed cost.
 (b) Variable cost.
 (c) Semi-variable cost.
 (d) Stepped cost.
- (ii) Which of the following costs are fixed?
 (a) Telephone costs.
 (b) Land rent.
 (c) Direct material.
 (d) Supervisory cost.
- (iii) What is a buffer stock?
 (a) The stock that is held for use in the business.
 (b) The maximum level of stock that can be held.
 (c) A basic level of stock for emergencies.
 (d) The stock levels held in buffers.
- (iv) A company uses the first in, first out (FIFO) method to price issues of materials to production and value its closing inventories. Which of the following methods best describes FIFO method?
 (a) The last materials received will be the first issued to production.
 (b) The first materials issued will be priced at the cost of the most recently received materials.
 (c) The last materials issued will be those that were most recently received.
 (d) The first materials issued will be priced at the cost of the earliest goods still in stock.

- (v) The objectives and procedures in the budgeting process are described in a budget:
- (a) Speech.
 - (b) Proposal.
 - (c) Manual.
 - (d) Review Report.
- (vi) A company operates a piecework scheme to pay its staff. The staff receive Shs. 200 for each unit produced. However, the company guarantees that every member of staff will receive at least Shs. 15,000 per day. Shown below is the number of units produced by Operator **A** during a recent week.

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Units produced	90	70	75	60	90

What are Operator **A**'s earnings for the week?

- (a) Shs 75,000.
- (b) Shs 77,000.
- (c) Shs 81,000.
- (d) Shs 87,500.

The following data should be used to answer questions (vii) and (viii):

Kato makes bread for which the standard cost card is as follows:

	Shs
Materials	20
Labour	30
Variable production overheads	30
Fixed production overheads	40
Variable selling cost	10
Fixed selling overhead	20
Profit	50
Sales price	200

Both types of fixed overheads were based on a budget of 10,000 loaves of bread a year. In the first year of production the only difference from the budget was that Kato produced 11,000 loaves and sold 9,000.

- (vii) What was the profit made under an Absorption Costing System?
- (a) Shs. 390,000.
 - (b) Shs. 430,000.
 - (c) Shs. 470,000.
 - (d) Shs. 510,000.

- (viii) What would the profit have been using a marginal costing system?
- (a) Shs. 350,000.
 - (b) Shs. 390,000.
 - (c) Shs. 420,000.
 - (d) Shs. 470,000.
- (ix) Which of the following are contained in a typical job cost?
- (i) Actual material cost.
 - (ii) Actual manufacturing overheads.
 - (iii) Absorbed manufacturing overheads.
 - (iv) Actual labour costs.
- (a) (i), (iii) and (iv).
 - (b) (i) and (iv).
 - (c) (i), (ii) and (iv).
 - (d) (iv).
- (x) Job costing will normally be used where a company undertakes:
- (a) Production of a given number of similar products.
 - (b) Continuous production.
 - (c) Production of a product for an extensive period of time.
 - (d) Production relating to a single special order.
- (xi) In process costing 'point of separation' is relevant to:
- (a) Abnormal losses.
 - (b) Joint products.
 - (c) Normal losses.
 - (d) Abnormal gains.
- (xii) Which of the following statements is false?
- (a) Normal loss is the amount of loss expected from a process.
 - (b) Normal loss is not expected and is given no cost.
 - (c) An abnormal gain occurs when actual loss is less than normal loss.
 - (d) Normal loss is not given a cost.
- (xiii) Which of the following statements is false?
- (a) Sunk costs can never be relevant costs.
 - (b) Relevant costs change according to the decision.
 - (c) Relevant costs are always future costs.
 - (d) Relevant costs are those specific to a decision.

- (xiv) ABC Ltd sells a single product. In the coming month it is budgeted that this product will generate a total revenue of Shs. 3,000,000 with a contribution of Shs. 1,250,000. Fixed costs are budgeted at Shs. 1,000,000 for the month. What is the margin of safety?
- (a) 0%.
 - (b) 10%.
 - (c) 20%.
 - (d) 25%.
- (xv) Which of the following is not a stage in the decision making process?
- (a) Identification of objectives.
 - (b) Responding to divergences from plan.
 - (c) Alter results.
 - (d) Identify alternative action plans.
- (xvi) Which of the following statements is correct?
- (a) An adverse direct material variance will always be a combination of an adverse material price variance and an adverse material usage variance.
 - (b) An adverse direct material cost variance will always be a combination of an adverse material price variance and a favourable material usage variance.
 - (c) An adverse direct material variance can be a combination of a favourable material price variance and favourable material usage variance.
 - (d) An adverse direct material cost variance can be a combination of a favourable raw material price variance and an adverse material usage variance.
- (xvii) A master budget consists of all the following except:
- (a) Budgeted income statement.
 - (b) A balance sheet.
 - (c) Bank reconciliation.
 - (d) A cash flow statement.
- (xviii) What is an ideal standard?
- (a) A standard which can be attained if a standard unit of work is carried out efficiently.
 - (b) That which can be attained under the most favourable conditions.
 - (c) A standard that has to be established for use over a short period of time.
 - (d) A standard established for use over a long period from which a current standard is developed.

- (xix) Which of the following are acceptable bases for absorbing production overheads?
- (i) Direct labour hours.
 - (ii) Machine hours.
 - (iii) As a percentage of prime cost.
 - (iv) Per unit.
 - (a) Methods (i) and (ii).
 - (b) Methods (iii) and (iv).
 - (c) Methods (i), (ii), (iii) and (iv).
 - (d) Methods (i), (ii), and (iii)
- (xx) Cost allocation is:
- (a) The process by which whole cost items are charged direct to a cost unit or cost centre.
 - (b) The procedure whereby indirect costs are spread fairly between departments.
 - (c) The collection of costs attributable to cost centres and cost units using costing methods, principles and techniques prescribed for a particular business entity.
 - (d) The process of establishing costs of cost centres or cost units.

SECTION B**Question 2**

- (a) List five objectives of store keeping. **(5 marks)**
- (b) A company uses 2,600 units of a component per year in the manufacture of one of its products. The bought-in cost of the component is Shs. 40 per unit. Each purchase order costs Shs. 650. The cost of carrying stock is 20% of the bought in cost per annum.

Required:

Calculate the economic order quantity of the component.

(4 marks)

- (c) Musa Motors Ltd is a manufacturer of a product used in the motor industry. The product is assembled from various parts and the employees involved are paid on a piecework basis. The piecework scheme is applied to all good production in a week as follows:

0-100 units	Shs. 400 per unit.
101-200 units	Shs. 480 per unit.
201-300 units	Shs. 560 per unit.
Over 300 units	Shs. 640 per unit.

Rejected production does not qualify for any payment. Note that only additional units qualify for the higher rates. Given below is the output for three employees for the week.

Employee	Amos	Beda	Charles
Total output (units)	520	600	480
Rejects (units)	19	62	10

Required:

- (i) Calculate the earnings of each employees (i.e. Amos, Beda and Charles) for the week ending 30 May 2004. **(9 marks)**
- (ii) Give one advantage and one disadvantage that an employer would derive from using a piecework scheme. **(2 marks)**
- (d) Amigo is a carpenter and normally works 36 hours per week. The standard rate of pay is Shs. 3,600 per hour. A premium of 50% of the basic hourly rate is paid for all overtime hours worked. During the last week of December 2003, he worked for 42 hours. The overtime hours worked were for the following reasons:
- Machine breakdown: 4 hours.
- To complete special job at request of customer: 2 hours.

Required:

Compute Amigo's earnings for the last week of December that would be treated as direct wages?

(3 marks)

- (e) Explain the term payback period as used in decision making.

(2 marks)**(Total 25 marks)****Question 3**

- (a) Suggest two possible methods of attributing non-manufacturing overheads to products.

(2 marks)

- (b) The following information provides details of costs, volume and cost drivers for a particular period in respect to Bestways Ltd.

	Product X	Product Y	Product Z	Total
Production & sales (units)	30,000	20,000	8,000	-
Raw material usage (units)	5	5	11	-
Direct material cost*	Shs. 250	Shs. 200	Shs. 110	12,380,000
Direct labour hours	1 1/3	2	1	88,000
Machine hours	1 1/3	1	2	76,000
Direct labour cost	Shs. 80	120	60	-
No. of production runs	3	7	20	30
No. of deliveries	9	3	20	32
No. of receipts	15	35	220	270
No. of production orders	15	10	25	50

* The amounts shown under the individual products are unit costs.

Overhead costs:	Shs.
Set up	300,000
Machines	7,600,000
Receiving	4,350,000
Packing	2,500,000
Engineering	<u>3,730,000</u>
	<u>18,480,000</u>

The company has recently changed its costing system of recovering overheads using volume related bases to using major activities in order to compute activity based costs.

Required:

- (i) Compute product costs using an activity based costing system.

(14 marks)

- (ii) What is the advantage of using cost drivers instead of traditional absorption basis?

(2 marks)

- (c) What is the problem of using a single factory overhead absorption rate?
(2 marks)
- (d) What is meant by service costing?
(2 marks)
- (e) Distinguish between cost accounting and management accounting systems.
(3 marks)
- (Total 25 marks)**

Question 4

- (a) Explain the following terms in the context of process costing:
(i) Joint products.
(ii) By products.
(iii) Defective units
(6 marks)
- (b) Describe the four methods of accounting for income from by-products.
(6 marks)
- (c) Rida Ltd Manufactures two joint products **M** and **N** in a common process. A by-product **R** is also produced. The following data is for the month ended 31 May 2004.

	Shs
Opening inventory	Nil
Cost of Processing:	
Direct materials	2,550,000
Direct labour	1,000,000

Production overheads are absorbed at the rate of 300% of direct labour costs.

	Production (Units)	Sales (Units)	Sales Value Per unit (Shs.)
Output & Sales			
Product M	8,000	7,000	400
Product N	8,000	6,000	600
By product R	1,000	1,000	50

The saleable value of the by-product is deducted from process costs before apportioning costs to each joint product. Costs of common processing are apportioned between products **M** and **N** on the basis of sales value of products.

Required:

Calculate the profit for the month of May 2004 for each of the individual products.

(13 marks)
(Total 25 marks)

SECTION C**Question 5**

- (a) "Budgets and standards are similar but they are not the same."

Explain the above statement giving differences between the two.

(7 marks)

- (b) Katumwa Ltd manufactures three products A, B and C. The information in the table below relates to this company for the month of May 2004:

	Product	Quantity Units	Price Shs.	
Sales	A	1,000	10,000	
	B	2,000	12,000	
	C	1,500	14,000	
Materials used in cost of sales of products				
Unit cost		M₁ Shs. 400	M₂ Shs. 600	M₃ Shs. 900
Quantities used (units)				
A		4	2	-
B		3	3	2
C		2	1	1
Finished stocks (units)				
Quantities		Product A	Product B	Product C
1 May		1,000	1,500	500
31 May		1,100	1,650	550
Material Stocks				
		M1 (Units)	M2 (Units)	M3 (Units)
1 May		26,000	20,000	12,000
31 May		31,200	24,000	14,000

Required:

Derive:

- (i) Sales in quantity and value including total value. **(3 marks)**
- (ii) Production quantities. **(5 marks)**
- (Total 15 marks)**

Question 6

- (a) Using illustrations, explain of the following terms:
- (i) Sunk cost. (3 marks)
 - (ii) Opportunity cost. (3 marks)
 - (iii) Incremental cost. (2 marks)
- (b) Distinguish between marginal costing and absorption costing. (5 marks)
- (c) What is a limiting factor? (2 marks)
- Total 15 marks)**

Question 7

- (a) With the aid of graphs distinguish between the accountants and economists models of CVP analysis. (10 marks)
- (b) A company makes and sells a product called Giant. The product has a variable cost of Shs. 3,000 and sells for Shs. 4,000 per unit cost. Budgeted fixed costs are Shs. 7,000,000 and budgeted sales are 8,000 units.

Required:

Calculate the breakeven point and the margin of safety.

(5 marks)
(Total 15 marks)