

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## ATC(U) EXAMINATIONS

### LEVEL THREE

#### INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

**FRIDAY, 17 JUNE 2011**

#### INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours 15 minutes**.

The first 15 minutes of this examination have been designated for reading time. You may not start to write your answer during this time.

2. Attempt **all** questions in Section **A**, **two** questions in Section **B** and any **two** 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, before attempting any question.

## SECTION A

### Question 1

- (i) Cost accounting is a branch of accounting concerned with:
  - (a) providing information for both external and internal users.
  - (b) recording all costs relating to products and operations.
  - (c) providing information used in decision making.
  - (d) summarizing the cost of inventory in a manufacturing firm.
- (ii) Which one of the following cost units gives the best measure for the cost of power?
  - (a) Number of bulbs.
  - (b) Cubic meter.
  - (c) Kilowatt hour.
  - (d) Square feet of an area.
- (iii) Which common element of total cost do prime costs and conversion costs share?
  - (a) Variable overhead.
  - (b) Fixed overhead.
  - (c) Direct material.
  - (d) Direct labour.
- (iv) Economic Order Quantity (EOQ) refers to the:
  - (a) level below which stock should not be allowed to fall.
  - (b) maximum stock level a company should have.
  - (c) amount of stock to be bought at a particular time.
  - (d) most favorable quantity of stock which should be purchased each time.
- (v) A material pricing method in which the oldest cost incurred rarely has an effect on the closing inventory valuation is:
  - (a) first-in-first-out.
  - (b) last-in-first-out.
  - (c) simple average.
  - (d) weighted average.
- (vi) The following are steps to control idle time in an organization **EXCEPT**:
  - (a) planning production.
  - (b) regular repairs and maintenance of plant and machinery.
  - (c) tight supervision of workers.
  - (d) scraping lunch breaks.

- (vii) Indirect costs can also be described as:
- (a) overhead costs.
  - (b) prime costs.
  - (c) variable costs.
  - (d) total costs.
- (viii) Indirect costs which cannot be identified with a particular cost centre are shared out using:
- (a) a recovery rate.
  - (b) an absorption rate.
  - (c) a method of apportionment.
  - (d) a method of allocation.
- (ix) In job order costing, the basic document to accumulate and ascertain the cost of each order is the:
- (a) purchase order.
  - (b) requisition sheet.
  - (c) invoice.
  - (d) job cost sheet.
- (x) Which the following is **FALSE** about contract costing?
- (a) Production is of heterogeneous outputs.
  - (b) Work is undertaken to meet customer's specific requirements.
  - (c) Contracts are usually of long duration.
  - (d) All costs incurred on a contract are debited to the contract account.
- (xi) Which of the following statements is **FALSE**?
- (a) In job costing, the cost of each job is ascertained separately.
  - (b) Job costing should be used in toy manufacturing.
  - (c) Contracts are usually of long duration.
  - (d) Batch costing is used where production involves repetitive work.
- (xii) When should process costing be used in assigning costs to products?
- (a) If the product is manufactured on the basis of each order received.
  - (b) When production is only partially completed during the accounting period.
  - (c) If the product is composed of mass produced homogeneous units
  - (d) In situations where standards are set.

- (xiii) The following are methods of allocating joint costs to products **EXCEPT**:
- (a) relative sales value.
  - (b) relative profitability.
  - (c) physical quantity.
  - (d) average unit cost.
- (xiv) The break-even analysis may be described as comparison between:
- (a) production and sales.
  - (b) profit and costs.
  - (c) target set and actual achievement.
  - (d) sales and costs.
- (xv) Margin of safety refers to the excess of:
- (a) actual sales over fixed expenses.
  - (b) actual sales over variable expenses.
  - (c) actual sales over break-even sales.
  - (d) budgeted sales over fixed costs.
- (xvi) Profit under absorption costing and marginal costing system will be the same if there:
- (a) is no opening and closing inventories.
  - (b) is opening inventory and no closing inventory.
  - (c) is closing inventory and no opening inventory.
  - (d) are both opening and closing inventories.
- (xvii) The measurable value of an alternative use of resources is referred to as:
- (a) an opportunity cost.
  - (b) an imputed cost.
  - (c) a differential cost.
  - (d) a sunk cost.
- (xviii) Cost variance includes all the following **EXCEPT**:
- (a) direct material variance.
  - (b) direct labour variance.
  - (c) variable overhead variance.
  - (d) sales variance.

- (xix) Which of the following is a budget designed to furnish budgeted costs for any level of activity actually attained?
- (a) Fixed budget.
  - (b) Flexed budget.
  - (c) Master budget.
  - (d) Production budget.
- (xx) Which of the following is the cost driver for delivering groceries in a company?
- (a) Number of customers.
  - (b) No of delivery orders.
  - (c) Sales volume.
  - (d) Number of advertising campaigns.

## SECTION B

### Question 2

- (a) The following information has been provided by L&M Industries Ltd regarding the way it manages its raw materials:

Annual demand	4,800 units
Ordering cost	shs 480
Unit price	shs 800
Storage cost	2% of unit price
Interest rate (cost of funds)	10% of unit price
Lead time	½ month

**Required:**

Calculate:

- (i) Economic Order Quantity **(4 marks)**
  - (ii) Re- order level **(2 marks)**
  - (iii) Total inventory costs **(2 marks)**
  - (iv) What will be the total inventory costs if L & M Industries Ltd is to acquire materials at a 5% discount? **(4 marks)**
- (b) An operator engaged in machining certain components receives an ordinary rate of Shs 16,000 per day for 8 hours. The standard output for machining the components has been fixed at 80 pieces per hour. On a certain day, the output of the work on this machine is 800 pieces.

**Required:**

Find the total wages that would have been actually earned by the workman under the following cases:

- (i) If the bonus rate of Shs 2,500 is paid per 100 pieces of extra output.  
(4 marks)
- (ii) If the work is paid for on straight piece work basis at a standard rate.  
(4 marks)

- (c) Outline the major benefits of store keeping.  
(5 marks)

**(Total 25 marks)**

**Question 3**

- (a) Becks Ltd produces product B which passes through three processes 1, 2, and 3. Budgeted costs for the coming month are given below:

Cost item	Total costs (Shs)	Processes		
		1 (Shs)	2 (Shs)	3 (Shs)
Direct material	880,000	720,000	120,000	40,000
Direct wages	160,000	40,000	80,000	40,000
Direct expenses	200,000	120,000	-	80,000

Production overhead incurred is Shs 320,000 and is to be recovered on 200% of direct wages. Units introduced to process 1 amount to 10,000 units. No loss is expected at any stage. There was no closing or opening work in progress.

**Required:**

Prepare processes 1 and 2 accounts.

**(12 marks)**

- (b) A company dealing in production of bathing soap has provided you with the following data:

	Shs
Selling price per tablet	2,000
Variable manufacturing cost per tablet	1,100
Variable selling costs per tablet	300
Fixed factory overheads per month	5,400,000
Fixed selling costs per month	2,520,000

**Required:**

Compute

- (i) The break-even point in revenue. **(2 marks)**
  - (ii) How many soap tablets must be sold to earn a profit of Shs 6 million per month? **(2 marks)**
  - (iii) How many soap tablets must be sold to earn a net income of 10% of sales? **(3 marks)**
  - (c) Outline any **six** underlying assumptions of break-even analysis. **(6 marks)**
- (Total 25 marks)**

**Question 4**

ABC Ltd has supplied you with the following data for the year ending 31 May 2011. Production was 1100 units and sales 1000 units. There was no opening inventory.

	Shs
Variable manufacturing cost per unit	700
Fixed manufacturing overhead (total)	220,000
Variable selling & administration overhead per unit	50
Fixed selling and administration overhead	40,000
Selling price per unit	1,500

**Required:**

- (a) Prepare ABC Ltd's income statement using:
    - (i) Marginal costing. **(9 marks)**
    - (ii) Absorption costing **(10 marks)**
  - (b) How does the profit under the two methods in (a) above differ when:
    - production equals to sales?
    - production is more than sales?
    - production less than sales?**(6 marks)**
- (Total 25 marks)**

**SECTION C:**

**Question 5**

- (a) Define the following standards:  
(i) Basic standards.  
(ii) Current standards.  
(iii) Ideal standards.  
**(3 marks)**
- (b) Outline the limitations of standard costing.  
**(5 marks)**
- (c) Identify and explain the stages involved in the decision making process.  
**(7 marks)**  
**(Total 15 marks)**

**Question 6**

- (a) Distinguish between cost allocation, cost apportionment and cost absorption.  
**(3 marks)**
- (b) State special features of contract costing that distinguishes it from other types of costing methods.  
**(4 marks)**
- (c) (i) Briefly outline the role of a management accountant in an organization.  
**(5 marks)**  
(iii) Explain how income from a by-product in a production process is accounted for.  
**(3 marks)**  
**(Total 15 marks)**

**Question 7**

- (a) Draw sketch graphs to represent the following cost behavior patterns.  
(i) Unit fixed cost. **(1 mark)**  
(ii) Total variable costs. **(1 mark)**  
(iii) Semi variable costs. **(1 mark)**  
(iv) Step costs. **(1 mark)**
- (b) Outline the advantages and disadvantages of activity-based costing.  
**(6 marks)**
- (c) Briefly state the functions of a budget committee in an organization.  
**(5 marks)**  
**(Total 15 marks)**