

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## ATC(U) EXAMINATIONS

### LEVEL THREE

#### INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

**MONDAY, 10 DECEMBER 2007**

#### INSTRUCTIONS TO CANDIDATES

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

## SECTION A

### Question 1

- (i) Management Accounting is concerned with identifying, presenting and interpreting information for the following uses **EXCEPT**:
- (a) planning and controlling activities.
  - (b) formulating strategy.
  - (c) decision making.
  - (d) acquisition of loans from banks.
- (ii) Which of the following is classified as indirect labour?
- (a) Assembly workers.
  - (b) Stores Assistant in a factory store.
  - (c) Painters in a construction company.
  - (d) An audit clerk in an accounting firm.

**Use the following information to answer questions (iii) – (iv):**

ABC Ltd, a company dealing in the production of accountancy text books, has an annual demand of 6,400,000 textbooks. Inventory carrying cost is Shs 1,500 per textbook per annum. The cost of ordering one textbook is Shs 7,500.

- (iii) Determine the Economic Order Quantity.
- (a) 8,000 textbooks.
  - (b) 5,657 text books.
  - (c) 800 text books.
  - (d) 3,200 text books.
- (iv) Calculate the number of orders made by ABC Ltd in a year.
- (a) 17,500.
  - (b) 5,300.
  - (c) 800.
  - (d) 8,000.
- (v) Which of the following is **NOT** a definition of overheads?
- (a) The aggregate of indirect materials, indirect wages and indirect expenses.
  - (b) Expenses that cannot be conveniently charged to specific cost units.
  - (c) Costs that do not result from the existence of individual cost units.
  - (d) Expenses which are specifically incurred in connection with a particular job.

(vi) The following items may be used for costing jobs:

- (i) Actual material cost.
- (ii) Actual manufacturing overheads.
- (iii) Absorbed manufacturing overheads.
- (iv) Actual labour cost.

Which of the above are contained in a typical job cost?

- (a) (i), (ii), and (iv).
- (b) (i) and (iv).
- (c) (i), (iii), and (iv).
- (d) (iii) and (iv).

(vii) The main problem encountered in accounting for joint products is:

- (a) apportioning of common costs to joint products.
- (b) dealing with process losses.
- (c) accounting for subsequent costs after split off point.
- (d) pricing the joint products.

(viii) Which of the following is an essential feature of marginal costing?

- (a) All manufacturing costs are absorbed into the cost of products produced.
- (b) Fixed factory overheads are absorbed on the basis of a predetermined rate based on normal capacity.
- (c) Fixed costs are written off in full against the aggregate contribution.
- (d) Total cost is charged as production cost.

(ix) Which of the following measures is used to determine the most profitable course of action where alternatives are possible?

- (a) Total profit.
- (b) Contribution per unit of a key factor.
- (c) Breakeven point.
- (d) Marginal profit.

(x) Which of the following is an irrelevant cost?

- (a) Sunk cost.
- (b) Opportunity cost.
- (c) Replacement cost.
- (d) Indirect cost.

**Use the following data to answer questions (xi) – (xiii):**

The data relates to a shop that currently sales 25,000 pairs of jungle boots per annum.

	<b>Shs '000</b>
Selling price per pair of boots	40
Variable purchase cost per pair of boots	25
<b>Total annual fixed costs:</b>	
Salaries	100,000
Advertising	40,000
Other fixed expenses	100,000

- (xi) What is the contribution per pair of jungle boots?
- (a) Shs 15,000.
  - (b) Shs 30,000.
  - (c) Shs 7,500.
  - (d) Shs 18,000.
- (xii) What is the breakeven point in units / pairs of boots?
- (a) 14,000.
  - (b) 16,000.
  - (c) 28,000.
  - (d) 32,000.
- (xiii) What is the margin of safety?
- (a) 0
  - (b) 8,000
  - (c) 9,000
  - (d) 10,000
- (xiv) Material price variance can arise due to the following reasons **EXCEPT**:
- (a) inefficient purchasing.
  - (b) change in market prices of materials.
  - (c) change in quality of materials.
  - (d) use of substitute materials.
- (xv) Under Activity Based Costing (ABC), costs are classified as:
- (a) fixed and variable costs.
  - (b) direct and indirect costs.
  - (c) short term variable costs and fixed costs.
  - (d) short term variable costs, long term variable costs and fixed costs.

- (xvi) Which of the following is necessary for the implementation of a successful budgetary control system?
- (a) preparation of an organization chart.
  - (b) Support of top management.
  - (c) Participation by responsible executives.
  - (d) Continuous budget education.
- (xvii) A company dealing in the manufacture of soap is very busy such that overtime is being worked. The amount of overtime premium contained in direct wages would normally be classified as
- (a) part of prime cost.
  - (b) factory overhead.
  - (c) direct labour cost.
  - (d) administrative overhead.
- (xviii) What is a conversion cost?
- (a) A hypothetical cost specifically computed for the purpose of making a decision.
  - (b) A cost that measures the benefit lost when a choice is made from alternatives.
  - (c) The sum of direct labour and factory overhead in the production of a product.
  - (d) The current market cost of replacing an asset.
- (xix) How are materials returned to the store treated in contract costing?
- (a) Debited to contract account.
  - (b) Credited to contract account.
  - (c) Added to the cost of a contract.
  - (d) Nothing is done until the materials are used.
- (xx) Which of the following statements is **FALSE**?
- (a) Relevant costs change according to the decision taken.
  - (b) Relevant costs are always future costs.
  - (c) Fixed costs can never be relevant costs.
  - (d) Relevant costs are those specific to a decision.

## SECTION B

### Question 2

- (a) Briefly explain the objectives of cost accounting. **(4 marks)**
- (b) Giving examples for each, distinguish the terms variable, semi-variable and fixed costs. **(6 marks)**
- (c) Sonic Furnitures Ltd uses the weighted average cost method for the valuation of inventory of materials to its jobs. The following were transactions of the company during November 2007:
- 1 Purchased 1,000 tonnes of timber at Shs 4,500 per tonne.
  - 5 Purchased 2,000 tonnes of timber at Shs 4,000 per tonne.
  - 8 Issued 800 tonnes to Job 021.
  - 15 Issued 1,200 tones to Job 021.
  - 19 Purchased 1,500 tonnes of timber at Shs 4,200 per tonne.
  - 22 Issued 1,000 tonnes to Job 022.
  - 24 Purchased 800 tonnes of timber at Shs 4,500 per tonne.
  - 27 Purchased 800 tonnes of timber at Shs 4,500 per tonne.
  - 28 Issued 800 tonnes to Job 022.
  - 30 Issued 400 tonnes to job 021.
  - 31 Purchased 500 tones of timber at Shs 4,600 per tonne.

#### Required:

Prepare a stores ledger account for Sonic Furnitures Ltd for November 2007.

- (10 marks)**
- (d) What is idle time? **(1 mark)**
- (e) Mention **four** effective managerial control measures for idle time. **(4 marks)**
- (Total 25 marks)**

### Question 3

- (a) Explain the concepts 'under absorption' and 'over absorption' of overhead. **(4 marks)**
- (b) Outline causes of "under or over absorption" of overheads. **(5 marks)**

- (c) The following direct costs were incurred on Job 511 of ABV Manufacturing Company Limited:

Materials Shs 60,100,000

Wages:

Department A: 60 hours at Shs 30,000 per hour.

Department B: 40 hours at Shs 20,000 per hour.

Department C: 20 hours at Shs 50,000 per hour.

Overheads for the three departments were estimated as follows:

Department A: Shs 15,000,000 for 1,500 labour hours.

Department B: Shs 4,000,000 for 200 labour hours.

Department C: Shs 12,000,000 for 300 labour hours.

Fixed overheads are estimated at Shs 40,000,000 for 2,000 normal working hours.

**Required:**

- (i) Calculate the cost of Job 511. (11 marks)
- (ii) Calculate the price to give a profit of 25% on selling price. (2 marks)
- (d) How is profit on contracts ascertained in the following scenarios?
- (i) When the contract is completed. (1 mark)
- (ii) When the contract is not completed. (1 mark)
- (iii) When the contract is nearing completion. (1 mark)
- (Total 25 marks)

**Question 4**

- (a) What is zero-based budgeting? (1 mark)
- (b) What are the advantages of a zero-based budgeting approach over the traditional approach? (4 marks)
- (c) What is standard costing? (1 mark)
- (d) Clearly state the relationship between standard costing and budgetary control. (6 marks)

- (e) The information below relates to Prime Ltd, a company dealing in systems installation for the quarters of 2007:

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
	<b>Shs</b>	<b>Shs</b>	<b>Shs</b>	<b>Shs</b>
Opening cash balance	10,000	-	-	-
Collection from customers	125,000	150,000	160,000	221,000
<b>Payments:</b>				
Purchase of materials	20,000	35,000	35,000	54,200
Other expenses	25,000	20,000	20,000	17,000
Salaries & wages	90,000	95,000	95,000	109,200
Income tax	5,000	-	-	-
Purchase of machinery	-	-	-	20,000

- The company desires to maintain a cash balance of Shs 15,000 at the end of each quarter.
- Cash can be borrowed or repaid in multiples of Shs 500 at an interest rate of 10% per annum.
- Management does not want to borrow more than is necessary.
- Interest is computed and paid when the principal is paid.
- Assume that borrowings take place at the beginning and repayments are made at the end of quarters.

**Required:**

Prepare a cash budget for Prime Ltd.

(13 marks)  
(Total 25 marks)

**SECTION C**

**Question 5**

- (a) State the distinction between marginal cost and absorption cost as regards valuation of finished goods inventory.
- (b) Outline the features of relevant costs.
- (c) State the factors you would consider before evaluating the closure of part of a business.

(2 marks)

(3 marks)

(4 marks)



- (d) Reko Industries has a capacity to produce 5,000 mattresses but actually produces only 2,000 mattresses for the home market at the following costs:

	<b>Shs '000</b>
Materials	40,000
Wages	36,000
Factory overheads - Fixed	12,000
Variable	20,000
Administrative overheads- Fixed	18,000
Selling & Distribution overheads - Fixed	10,000
- Variable	<u>16,000</u>
<b>Total</b>	<b><u>152,000</u></b>

The home market can consume 2,000 mattresses at a selling price of shs 80,000 per mattress. An additional order for the supply of 3,000 mattresses is received from Rwanda at Shs 65,000 per mattress.

**Required:**

Should this order be accepted or not if the execution of the order entails an additional packaging cost of Shs 8,000,000?

**(6 marks)**

**(Total 15 marks)**

**Question 6**

- (a) Describe the concept of equivalent production and state how it is calculated.

**(3 marks)**

- (b) How are the following accounted for in process costing?

- (i) Normal loss. **(1 mark)**
- (ii) Abnormal loss. **(1 mark)**
- (iii) Abnormal gain. **(1 mark)**

- (c) In a process line of Yokana Company, three joint products were produced during the month of November 2007. The following data were available;

	<b>Products</b>		
	<b>L</b>	<b>M</b>	<b>N</b>
Sales price per kg (Shs '000)	5	10	20
Post separation point costs (Shs '000)	10,000	5,000	15,000
Output (Kg)	2,500	1,000	1,500

Pre-separation point costs amounted top Shs 20,000,000. The pre-separation costs are apportioned to joint products according to weight.

**Required:**

Prepare a statement showing the estimated profit or loss for each product.

**(9 marks)**

**(Total 15 marks)**

**Question 7**

- (a) As a management accountant you are supposed to provide to management information relevant for decision making.

Give **eight** characteristics of good information for decision making.

**(8 marks)**

- (b) What is meant by Cost-Volume-Profit (C-V-P) analysis?

**(2 marks)**

- (c) Explain the usefulness of C-V-P analysis to the management of a company.

**(5 marks)**

**(Total 15 marks)**