

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL THREE

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

WEDNESDAY, 9 DECEMBER 2009

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.

SECTION A:

Question 1

- (i) The cost for factory supplies for a manufacturing plant are generally:
- (a) prime costs.
 - (b) period costs.
 - (c) variable costs.
 - (d) excluded from product costs.
- (ii) Which of the following is **NOT** a characteristic of fixed costs?
- (a) They are fixed within a relevant range of output.
 - (b) They increase or decrease per unit when quantity of production changes.
 - (c) They are apportioned to departments on some arbitrary basis.
 - (d) They are easily allocated and apportioned to departments.
- (iii) Which of the following is **NOT** a responsibility of a management accountant in an organisation?
- (a) Preparation of cost statements.
 - (b) Participation in the budget preparation process.
 - (c) Preparation of financial statements.
 - (d) Coordinating activities of different departments.
- (iv) Which of the following methods of pricing materials issues has an effect of reducing taxable income when costs are rising?
- (a) LIFO.
 - (b) FIFO.
 - (c) Weighted average.
 - (d) Simple average.

Use the following information to answer questions (vi) and (vii).

A company engaged in the manufacture of shoes had the following data for the week ending 4 December 2009:

Weekly working hours	48
Hourly rate (Shs)	7,500
Piece rate per pair of shoes (Shs)	300
Normal output per week (pairs)	120
Actual output for the week just ended (pairs)	150

The differential piece rate was 80% of the piece rate when output was below normal and 120% of the piece rate when output was above normal.

Compute the workers' weekly earnings under the:

- (v) piece rate scheme:
 - (a) Shs 30,000.
 - (b) Shs 45,000.
 - (c) Shs 12,000
 - (d) Shs 7,200
- (vi) differential piece rate scheme:
 - (a) Shs 54,000
 - (b) Shs 43,200
 - (c) Shs 36,000
 - (d) Shs 112,500
- (vii) Which of the following bases is most suitable for apportioning lighting costs between departments and cost centres?
 - (a) Floor area.
 - (b) Number of employees.
 - (c) Replacement value of machinery.
 - (d) Number of kilowatts.
- (viii) Which of the following production activities would most likely employ job order costing?
 - (a) Candy manufacturing.
 - (b) Shipbuilding.
 - (c) Toy manufacturing.
 - (d) Crude oil refining.
- (ix) The use is the 'escalator clause' in contract costing is to:
 - (a) show the profit of the work done so far.
 - (b) provide for changes in the price of the contract due to the prevailing economic conditions.
 - (c) show the value of work certified.
 - (d) show alterations in the work originally done as per agreement.
- (x) In order to compute equivalent units of production using the FIFO method in process costing, work for the period must be broken down to units:
 - (a) completed during the period and units in ending inventory.
 - (b) completed from beginning inventory, started and completed during the month and units in closing inventory.
 - (c) processed during the period and units completed during the period.
 - (d) started during the period and units transferred out during the period.

- (xi) Which of the following is **NOT** a limitation of joint cost analysis of joint products?
- (a) Apportionment of joint costs to various products is arbitrary.
 - (b) Arbitrary apportionment of joint costs makes inter-firm comparisons difficult.
 - (c) There is no clear distinction between joint products and by-products
 - (d) Calculation of revenue from the production process.
- (xii) Joint costs are most frequently allocated based upon relative:
- (a) profitability.
 - (b) conversion costs.
 - (c) sales value.
 - (d) prime costs.
- (xiii) Under activity-based costing, overheads are attributed to cost units on the basis of:
- (a) volume of units produced.
 - (b) cost drivers.
 - (c) standard costs.
 - (d) marginal costs.
- (xiv) Cost allocation is the:
- (a) process by which whole cost items are charged direct to a cost unit / centre.
 - (b) procedure whereby indirect costs are spread fairly between departments.
 - (c) collection of costs attributable to cost centres and cost units using costing methods.
 - (d) process of establishing costs of units / centres.
- (xv) Under marginal costing principles, inventory is valued based on:
- (a) variable costs.
 - (b) variable and fixed production costs.
 - (c) contribution made.
 - (d) period costs.

Use the following information relating to ZED Ltd for the year ended 30 November 2009 to answer questions (xvi) and (xviii):

	Unit Cost (Shs)	Total (Shs '000')
Sales	500	5,000
Less variable costs	<u>280</u>	<u>2,800</u>
Contribution	220	2,200
Less fixed costs		<u>440</u>
Profit		<u>1,760</u>

- (xvi) Calculate ZED Ltd's breakeven point in monetary terms.
- (a) Shs 2,000,000.
 - (b) Shs 785,000.
 - (c) Shs 1,000,000.
 - (d) Shs 1,200,000.
- Xvii) Calculate the breakeven point in units.
- (a) 2,000.
 - (b) 1,000.
 - (c) 3,000.
 - (d) 4,000.
- (xviii) Which on of the following costs is not useful when considering a decision of manufacturing a given product?
- (a) Cost of raw materials to be used.
 - (b) Wages to be paid to production workers.
 - (c) Cost of land on which the manufacturing plant was built.
 - (d) Estimated cost of heating and lighting during the manufacturing process.
- (xix) A master budget consists of all the following **EXCEPT** a:
- (a) budgeted income statement.
 - (b) balance sheet.
 - (c) bank reconciliation.
 - (d) cash flow statement.
- (xx) A cost that cannot be changed by any decision made now or in future is:
- (a) an indirect cost.
 - (b) an uncontrollable cost.
 - (c) an opportunity cost.
 - (d) a sunk cost.

SECTION B**Question 2**

- (a) A factory has three production departments: A, B and C; and two service departments: Boiling and Pumping. The service departments depend on each other. Expenses incurred by the production departments during the period were: A Shs 800,000, B Shs 700,000 and C Shs 500,000. Expenses for the boiling department were Shs 234,000 and pumping department Shs 300,000. The expenses of the boiling and pumping departments are apportioned to production departments using the following bases.

Department	A	B	C	Boiling	Pumping
Boiling	20%	40%	30%	-	10%
Pumping	40%	20%	20%		20%

Required:

Use the algebraic method to show how the expenses of the boiling and pumping departments would be apportioned to production departments.

16 marks

- (b) ABC Ltd produces and sells three products; bags, shoes and boots. The operating statement for the company for the accounting period just ended was as follows:

	Bags	Shoes	Boots	Total
	Shs '000'	Shs '000'	Shs '000'	Shs '000'
Sales	32,000	50,000	45,000	127,000
Total costs	36,000	38,000	34,000	108,000
	(4,000)	12,000	11,000	19,000

Total costs comprise 67% variable and 33% fixed. Directors are of the view that since the production and sale of bags results into a loss, it should be discontinued.

Required:

Using computations, advise the directors as to whether the production of bags should be discontinued.

9 marks**(Total 25 marks)**

Question 3

- (a) Explain how normal loss and abnormal loss are dealt with in process costing.

(4 marks)

- (b) Explain how the following would be dealt with in contract costing.
- (i) Plant and machinery purchased and used on contract work.
 - (ii) Materials lying unused on site at the end of an accounting period.
 - (iii) Amounts received from the contractee.

6 marks

- (c) ABC Ltd manufactures product A which yields two by-products: B and C. The common costs for the period just ended totaled to Shs 8 million. It was estimated that profits on each product, as a percentage of sales, would be 30%, 25% and 15% respectively. Post-separation costs were as summarized below:

	A	B	C
	Shs '000'	Shs '000'	Shs '000'
Materials	100	75	25
Direct wages	200	125	50
Overheads	<u>150</u>	<u>125</u>	<u>75</u>
	450	325	150
Sales	6,000	4,000	2,500

Required:

- (i) Prepare a statement showing the apportionment of common costs of manufacture to the different products. Assume that selling expenses are apportioned over the products as percentage to sales.

(15 marks)

- (ii) Briefly explain how income from the sale of by-products is accounted for.

(5 marks)**(Total 25 marks)**

Question 4

- (a) Swift Manufacturing Ltd wishes to arrange for overdraft facilities with its bankers during the period April to June 2010 when it would be manufacturing mainly for inventory. You are provided with the data below for this period.

	Sales Shs '000'	Purchases Shs '000'	Wages Shs '000'
February	180,000	124,800	12,000
March	192,000	144,000	14,000
April	108,000	243,000	11,000
May	174,000	246,000	10,000
June	126,000	268,000	15,000

Additional information:

1. 50% of credit sales are realized in the month following the sale and the remaining 50% in the second month following the sale.
2. Creditors are paid in the month of purchase.
3. Cash at bank on 1 April 2010 is estimated to be at Shs 25 million.

Required:

Prepare a cash budget for the above period indicating the extent of the bank facilities the company will require at the end of each month.

(15 marks)

- (b) XYZ Ltd manufactured and sold 20,000 units of product Jireh in the month ended 30 November 2009. Costs and revenues were as follows:

	Shs ' 000'
Sales revenue	100,000
Production costs:	
Variable	35,000
Fixed	15,000
Administrative and selling overheads	25,000

Required:

Prepare operating statements for XYZ Ltd for the month of November based on:

- (i) Absorption costing.

(5 marks)

- (ii) Marginal costing.

(5 marks)**(Total 25 marks)**

SECTION C

Question 5

Write short notes on **each** of the following:

- Job card. (3 marks)
 - Continuous inventory counting. (3 marks)
 - Economic order quantity. (3 marks)
 - Indirect materials. (3 marks)
 - Abnormal loss. (3 marks)
- (15 marks)**

Question 6

- (a) (i) What is a functional budget? (1 mark)
 - (ii) Give **four** functional budgets that are commonly used by management. (4 marks)
 - (b) (i) By purchasing low grade materials, a company consistently experiences unfavourable materials quantity variances. Briefly explain the relationship between these conditions. (3 marks)
 - (ii) Give **two** problems that might be created by standards which are set too high? (2 marks)
 - (c) (i) Briefly plain **two** basic characteristics of costs involved in decision making. (2 marks)
 - (ii) Give **three** conditions that should be considered before shutting down a production line? (3 marks)
- (Total 15 marks)**

Question 7

- (a) (i) Distinguish between activity-based costing (ABC) and traditional costing systems (2 marks)
 - (ii) Briefly explain **two** benefits of ABC. (2 marks)
 - (b) Outline the main purposes of cost accounting. (4 marks)
 - (c) (i) Outline the procedure of issuing materials from stores. (4 marks)
 - (ii) Give **three** advantages of centralized stores. (3 marks)
- (Total 15 marks)**