

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL THREE

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

MONDAY, 16 JUNE 2008

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) Which of the following are qualities of good management accounting information?
- (i) It should be communicated to the right person.
 - (ii) It should always be completely accurate before it is used.
 - (iii) It should be understandable by the recipient.
 - (a) (i) and (ii).
 - (b) (i) and (iii).
 - (c) (ii) and (iii).
 - (d) (i), (ii) and (iii).
- (ii) A cost object is:
- (a) a unit of a product or service in relation to which costs are ascertained.
 - (b) a collection place of costs.
 - (c) an activity for which a separate measurement of cost is undertaken.
 - (d) an activity that causes costs.

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

Layibi Company Ltd deals in the manufacture of cups. During the six months ended June 2007, the following costs were incurred:

Month	Cups produced	cost Shs '000'
January	340	2,260
February	300	2,160
March	380	2,320
April	420	2,400
May	400	2,300
June	360	2,260

- (iii) Calculate the variable cost per cup.
- (a) Shs 1,667.
 - (b) Shs 1,500.
 - (c) Shs 2,500.
 - (d) Shs 2,000.

- (iv) Calculate the fixed cost for Layibi Company Ltd.
- (a) Shs 1,560,000.
 - (b) Shs 2,000,000.
 - (c) Shs 2,300,000.
 - (d) Shs 2,260,000.
- (v) What was the total cost for Layibi Company Limited if it produced 410 cups in July 2007?
- (a) Shs 820,000.
 - (b) Shs 2,380,000.
 - (c) Shs 1,560,000.
 - (d) Shs 2,000,000.
- (vi) Which of the following statements is correct?
- (a) A stores ledger account will be updated from a goods received note only.
 - (b) A stores requisition will only detail the type of product required by a customer.
 - (c) The lead time is the best used to describe the time between receiving an order and paying for it.
 - (d) To make an issue from stores authorization should be required.
- (vii) What would be the double entry for an issue of indirect production materials?

Debit

- (a) Materials control account
- (b) Production overhead control account
- (c) Work in progress control account
- (d) Work in progress control account

Credit

- Finished goods control account
- Materials control account
- Production overhead control account
- Materials control account

- (viii) Which of the following statements are correct?

There would be an increase in the total cost for labour as a result of;

- (i) additional labour being employed on a temporary basis
 - (ii) a department with spare capacity being made to work more hours
 - (iii) a department which is at full capacity switching from the production of one product to another.
- (a) (i).
 - (b) (ii).
 - (c) (iii).
 - (d) (i) and (iii).

- (ix) An overhead absorption rate is used to:
- (a) share out common costs over benefiting cost centres.
 - (b) find the total overheads for a cost centre.
 - (c) charge overheads to products.
 - (d) control overheads.

Use the following information to answer question (x) – (xi):

ABC Ltd produces product A. It has the following cost card:

	Shs
Direct labour: 2 hours @ Shs 5,000 per hour	10,000
Direct materials: 1kg @ Shs 5,000 per kg	5,000
Direct expenses	<u>1,000</u>
Prime cost	<u>16,000</u>

ABC Ltd produces and sells 1,000 units in a month. Based on past experience, ABC Ltd estimates that its monthly overheads will be as follows:

	Shs '000'
Heating	3,000
Power	2,000
Maintenance	<u>500</u>
Total	<u>5,500</u>

- (x) Calculate the overhead allocated to each unit of product A.
- (a) Shs 1,000.
 - (b) Shs 5,500.
 - (c) Shs 16,000.
 - (d) Shs 21,500.
- (xi) Calculate the total cost per unit produced.
- (a) Shs 5,500.
 - (b) Shs 15,000.
 - (c) Shs 21,500.
 - (d) Shs 20,500.

- (xii) Which of the following is true of marginal costing?
- (a) The marginal cost of a product includes an allowance for fixed production costs.
 - (b) The marginal cost of a product represents additional cost of producing an extra unit.
 - (c) If inventory increases over a year, the profits under absorption costing will be lower than profits under marginal costing.
 - (d) Opening and closing inventory are valued at full production cost.
- (xiii) Which of the following describes a flexible budget?
- (a) A budget that shows variable production costs only.
 - (b) A monthly budget which is changed to reflect the number of days in a month.
 - (c) A budget which shows sales revenue and costs at different levels of activity.
 - (d) A budget that is updated halfway through the year to incorporate the actual results for the first half of the year.
- (xiv) Which of the following are characteristics of a job costing system?
- (i) Homogeneous products.
 - (ii) Customer driven production.
 - (iii) Completion of production in a single accounting period.
- (a) (i).
 - (b) (i) and (ii).
 - (c) (ii) and (iii).
 - (d) (i) and (iii).
- (xv) Which one of the following statements is incorrect?
- (a) Job costs are collected separately whereas process costs are averages.
 - (b) In job costing the progress of a job can be ascertained from the materials requisition notes and job tickets or time sheets
 - (c) In process costing information is needed about work passing through a process and work remaining in each process.
 - (d) In process costing, but not job costing, the cost of normal loss will be incorporated into normal product costs.

- (xvi) A Ltd has fixed costs of Shs 60 million per annum. It manufactures a single product which it sells for Shs 20,000 per unit. Its contribution to sales ratio is 40%. What is A Ltd's breakeven point in units?
- (a) 1,200.
 - (b) 1,800.
 - (c) 7,500.
 - (d) 5,000.
- (xvii) When considering setting standards for costing, which of the following would **NOT** be appropriate?
- (a) The normal level of activity should always be used for absorbing overheads.
 - (b) Average prices for materials should be used, encompassing any discounts that are available.
 - (c) The labour rate used will be the rate at which labour is paid.
 - (d) Average material usage should be established based on generally accepted working practices.
- (xviii) The main purposes of budgeting are to:
- (i) give authority to spend.
 - (ii) control expenditure.
 - (iii) aid decision making.
- (a) (i).
 - (b) (i) and (ii).
 - (c) (ii).
 - (d) (i), (ii) and (iii).
- (xix) Which of the following statements is **FALSE**?
- (a) Relevant costs change according to the decision.
 - (b) Relevant costs are always future costs.
 - (c) Fixed costs can never be relevant costs.
 - (d) Relevant costs are those specific to a decision.
- (xx) A manufacturing company incurs costs relating to the following:
- (i) Commissions payable to salespersons.
 - (ii) Inspecting all products.
 - (iii) Packing the products at the end.

Which of these costs are classified as production costs?

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

SECTION B

Question 2

- (a) Prime Impex Ltd, a secretarial bureau, has estimated that it will need 1,000 boxes of paper next year. The purchasing officer of the bureau plans to arrange regular deliveries from a supplier who charges Shs 15,000 per delivery. It has been established that the cost of storing a box of paper for a year is Shs 2,700. Over a year the average number of boxes in storage is half the order quantity. Ordering cost is defined as delivery cost plus storage cost.

Required:

Calculate the delivery cost, ordering cost and storage cost for order quantities of 50 and 250 boxes.

(6 marks)

- (b) ABC Ltd is a manufacturing company that produces a main product, P and two by products, A and B. The joint costs for manufacturing the products are Shs 119,500,000. All the three products are processed further after separation and sold as per details below:

Product	P	A	B
Sales (Shs million)	90	60	40
Costs after separation (Shs million)	6	5	4
Profit as percentage of sales	25	20	15

Total selling expenses were 10% of total cost of sales and were apportioned to the three products in the ratio 1:2:2.

Required:

Prepare a statement showing the apportionment of joint costs to the main product and the by products.

(9 marks)

- (c) A workman's wage rate for a guaranteed 44 hour week is Shs 7,500 per hour. The estimated time to produce one article is 30 minutes and under the incentive plan time allowed is increased by 20%. During a week, a worker produced 100 articles.

Required:

Calculate the wages under each of the following methods:

- (i) Time rate.
- (ii) Rowan system.
- (iii) Halsey system.

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

Afro-Asia Co Ltd has three production departments X, Y and Z and two service departments A and B. The following are estimated costs for a certain period.

	Shs '000'
Rent and rates	10,000
Lighting	1,200
Indirect wages	3,000
Power	3,000
Depreciation of machinery	20,000
Other expenses and sundries	20,000

The following further details are also available:

		Departments				
		Production			Service	
	Total	X	Y	Z	A	B
Floor space (M ²)	10,000	2,000	2,500	3,000	2,000	500
Number of Lighting points	120	20	30	40	20	10
Direct wages (Shs '000')	20,000	6,000	4,000	6,000	3,000	1,000
Horsepower of machines	300	120	60	100	20	-
Cost of machinery (Shs '000')	100,000	24,000	32,000	40,000	2,000	2,000
Working hours	-	4,670	3,020	3,050	-	-

The expenses of the service departments A and B are to be allocated as follows:

	X	Y	Z	A	B
A	20%	30%	40%	-	10%
B	40%	20%	30%	10%	

Required:

- (a) Calculate the overhead absorption rate per hour for each of the production departments

(20 marks)

- (b) What will be the cost of an article with material cost of Shs 80,000 and indirect labour cost of Shs 40,000 which passes through departments X, Y and Z for 2, 3 and 4 hours respectively?

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

Question 4

- (a) Outline the purposes of a standard costing system to an organisation. **(4 marks)**
- (b) Mango Company Ltd manufactures mango soft drink. The standard direct labour cost of producing one packet of mango is Shs 120. Its manufacture involves the following:

Grade of workers	Hours	Rate (Shs)
A	3,000	2,000
B	2,000	3,000

During May 2008, 10,000 packets of mango were produced and the actual labour cost incurred was as follows;

Grade of workers	Hours	Rate (Shs)
A	3,200	1,500
B	1,900	4,000

Required:

Calculate the labour:

- (i) cost variance **(5 marks)**
- (ii) rate variance **(4 marks)**
- (iii) efficiency variance **(4 marks)**
- (c) Wilbert Construction Company won a contract to construct a school administration block. By the end of the company's financial year on 30 May 2008, the block was 80% complete.

The following information has been provided about the contract:

	Shs '000'
Total expenditure as at 30 May 2008	85,000
Estimated expenditure to completion	17,000
Contract price	153,000
Work certified	100,000
Work not certified	8,500
Cash received	81,600

Required:

Calculate the notional profit and the estimated profit on the contract.

(8 marks)
(Total 25 marks)

SECTION C

Question 5

- (a) Distinguish between job costing and contract costing. (2 marks)
 - (b) State the features of contract costing. (5 marks)
 - (c) What are the functions of a cost accountant in an industrial organisation? (4 marks)
 - (d) Outline any **four** advantages of Zero Based Budgeting over the traditional budgeting approach. (4 marks)
- (Total 15 marks)**

Question 6

- (a) (i) Distinguish between normal and abnormal process losses. (2 marks)
 - (ii) Outline any **three** possible causes of abnormal process losses. (3 marks)
 - (b) Distinguish between joint products and by products. (2 marks)
 - (c) State **two** methods used to account for sales from a by product. (2 marks)
 - (d) Discuss the role of a budget committee. (6 marks)
- (Total 15 marks)**

Question 7

- (a) Breakeven analysis assumes that variable costs and revenues are linear and that fixed costs are fixed.
Required:
Briefly describe why these assumptions may not be realistic. (3 marks)
 - (b) Explain the characteristics of costs used for decision making. (3 marks)
 - (c) What factors will have to be considered in taking decisions for making or buying a product in a manufacturing organisation? (3 marks)
 - (d) Distinguish between normal and abnormal idle time. (2 marks)
 - (e) How is idle time and overtime treated in cost accounts? (4 marks)
- (Total 15 marks)**