

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL THREE

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

MONDAY, 11 DECEMBER 2006

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 is not true about manufacturing overhead?
 - (a) It consists of costs of manufacturing.
 - (b) It includes all indirect labour, indirect material costs and indirect expenses.
 - (c) It consists of all direct costs of the product.
 - (d) It does not consist of direct labour, direct materials and direct expenses.
- (ii) The Economic Order Quantity (EOQ) model is used by a business to minimize the:
 - (a) combined costs of ordering and carrying inventory.
 - (b) unit purchase price.
 - (c) number of orders placed in a year.
 - (d) cost of placing orders.
- (iii) In job-order costing, the basic document used to accumulate and ascertain the cost of each order is the:
 - (a) purchase order.
 - (b) requisition sheet.
 - (c) invoice.
 - (d) job cost sheet.
- (iv) Which method of material pricing best approximates specific identification of actual flow of costs and units in most manufacturing situations?
 - (a) Average cost.
 - (b) First In First Out (FIFO).
 - (c) Last in First Out (LIFO).
 - (d) Base cost.
- (v) Alpha Co. has been using LIFO method of pricing materials for 15 years. In 2002 the closing inventory was Shs 15,000 but would have been Shs 26,000 if FIFO had been used. If FIFO had been used the company's net profit before taxes would have been Shs 11,000:
 - (a) less over the 15 year period.
 - (b) greater over the 15 year period.
 - (c) greater in 2002.
 - (d) less in 2002.

- (vi) Which of the following methods of apportionment is most suitable for apportioning rent of building between cost centres?
- (a) Number of employees.
 - (b) Machine hours.
 - (c) Kilowatt hours.
 - (d) Floor area.

Use the following information to answer questions (vii) and (viii):

The budgeted and actual data of Studio 1 Ltd. for the year ended 30 September 2006 are as follows;

	Budgeted	Actual
Direct labour hours	9,000	9,900
Direct wages (Shs)	340,000	355,000
Machine hours	10,100	9,750
Direct materials (Shs)	550,000	539,000
Units produced	120,000	122,970
Overheads (Shs)	630,000	615,000

Overheads are absorbed on the basis of labour hours.

- (vii) What is the absorption rate of studio 1 Ltd.?
- (a) Shs 70 per hour.
 - (b) Shs 62 per hour.
 - (c) Shs 64 per hour.
 - (d) Shs 60 per hour.
- (viii) Calculate the amount of under/over absorbed overheads for Studio 1 Ltd. for the year to 30 September 2006.
- (a) Shs 15,000 over absorbed.
 - (b) Shs 63,000 over absorbed.
 - (c) Shs 15,000 under absorbed.
 - (d) Shs 63,000 under absorbed.
- (ix) Which of the following characteristics applies to process costing but not job-order costing?
- (a) Identifiable batches of production.
 - (b) Equivalent units of production.
 - (c) Averaging of costs.
 - (d) Use of standard costs.

Use the following data to answer questions (x) and (xi).

A company maintains a margin of safety of 37.5% with an overall contribution to sales ratio of 40%. Its fixed costs amount to Shs 5,000,000.

- (x) What is its breakeven point sales?
 - (a) Shs 13,333,333.
 - (b) Shs 2,000,000.
 - (c) Shs 1,875,000.
 - (d) Shs 12,500,000.
- (xi) What is the company's total sales?
 - (a) Shs 7,812,500.
 - (b) Shs 5,000,000.
 - (c) Shs 20,000,000.
 - (d) Shs 20,833,333.
- (xii) A cost that cannot be changed by any decision made now or in future is called:
 - (a) an indirect cost.
 - (b) an uncontrollable cost.
 - (c) an opportunity cost.
 - (d) a sunk cost.
- (xiii) Materials usage variances are normally charged to the following department:
 - (a) Production.
 - (b) Purchasing.
 - (c) Finished goods.
 - (d) Materials storage.
- (xiv) Flexible budgets are useful for:
 - (a) planning purposes only.
 - (b) planning, performance evaluation and feedback control.
 - (c) control of performance only.
 - (d) ascertaining costs of production.
- (xv) A principal budget factor is:
 - (a) the directors' budget.
 - (b) a factor which limits the activities of an undertaking.
 - (c) a factor common to all budget centres.
 - (d) the director's salaries.

- (xvi) The double entry for the total of indirect wages is:
- (a) DR wages control a/c CR overhead a/c.
 - (b) DR expenses a/c CR profit and loss a/c.
 - (c) DR profit and loss a/c CR overhead a/c.
 - (d) DR overhead a/c CR wages control a/c.
- (xvii) Which of the following is **not** true about Activity Based Costing (ABC)? It:
- (a) involves first tracing costs to activities and later to products.
 - (b) assumes that activities are responsible for the incurrence of costs.
 - (c) uses several cost drivers to trace overheads to activities.
 - (d) uses only labour hours and machine hours to trace overheads to products.
- (xviii) What is buffer stock?
- (a) The stock of buffers.
 - (b) The maximum level of stock that can be held.
 - (c) A basic level of stock held for emergencies.
 - (d) The stock levels held in buffers.
- (xix) Kabs Ltd has a budgeted activity level of 50,000 direct labour hours and budgeted production overheads of Shs 100,000.
- Calculate the under / over absorbed overheads if 50,000 direct labour hours were worked and the actual overheads were Shs 94,000.
- (a) Shs 44,000 over absorbed.
 - (b) Shs 44,000 under absorbed.
 - (c) Shs 6,000 over absorbed.
 - (d) Shs 6,000 under absorbed.
- (xx) Which of the following is **not** true about methods of accounting for scrap in process costing?
- (a) The revenue from the scrap sales is added to total sales revenue in the period.
 - (b) The revenue from scrap is subtracted from the costs of production.
 - (c) The scrap value of normal loss is deducted from the cost of materials in the process.
 - (d) The income from scrap is often ignored and not recorded in any of the company's documents.

SECTION B**Question 2**

- (a) How does marginal costing differ from absorption costing in each of the following aspects?

- | | | |
|-------|-------------------------------|------------------|
| (i) | Cost element in product cost. | (2 marks) |
| (ii) | Inventory. | (2 marks) |
| (iii) | Net income. | (4 marks) |

- (b) Wamulo Motors assembles and sells motor vehicles. It uses an actual costing system in which unit costs are calculated on a monthly basis. Data relating to the months of September and October 2006 is as below:

	September (Units)	October (Units)
Opening inventory	0	150
Production	500	400
Sales	350	520

Variable cost data	Shs '000	Shs '000
Manufacturing cost per unit produced	10,000	10,000
Distribution cost per unit sold	3,000	3,000

Fixed cost data		
Manufacturing costs	2,000,000	2,000,000
Marketing costs	600,000	600,000

The selling price per motor vehicle is Shs 24,000,000.

Required:

Prepare an income statement for Wamulo Motors in September and October using:

- | | | |
|------|---------------------|------------------|
| (i) | marginal costing. | (6 marks) |
| (ii) | absorption costing. | (8 marks) |

- (c) Compare and contrast Absorption Costing and Activity Based Costing.
(3 marks)
(Total 25 marks)

Question 3

- (a) Define budgetary control and explain its objectives. (5 marks)
- (b) Standard costs and budgets are both vital tools in planning, operation and control of a business enterprise but differ in some aspects. Outline how they differ. (5 marks)
- (c) The following standard costs apply in Bakwano Industries for the manufacture of soap.

Standard weight to produce 1 carton of soap	12 kg
Standard price per kg.	Shs 90
Standard hours to produce 1 carton	10
Standard rate per hour	Shs 40

Actual production and cost for the accounting period ended 30 June 2006 were as below:

Materials used	3770 kg
Materials cost	Shs 3,581,500
Hours worked	2755
Wages paid	Shs 1,157,100

Actual output was 290 cartons of soap.

Required:

- (i) Calculate the following variances: (8 marks)
- Materials usage.
 - Materials price.
 - Labour rate.
 - Labour efficiency.
- (ii) State **four** possible reasons for the materials usage variance calculated in (i) above. (4 marks)
- (d) Give **three** limitations of standard costing (3 marks)

(Total 25 marks)

Question 4

- (a) Outline **four** limitations of breakeven charts and CVP analysis. **(4 marks)**
- (b) Hornsleth Pharmaceutical Industries (HPI) Ltd. manufactures three types of drugs; Aspirin, Panadol and Septrin. For the year ended 30 September 2006, the financial statements showed that Panadol had made a loss. Management are considering dropping the production of Panadol.

The income statement for Hornsleth Pharmaceutical Industries for the year ended 30 September 2006 was as follows:

	Aspirin Shs '000	Panadol Shs '000	Septrin Shs '000	Total Shs '000
Sales Revenue	50,000	7,500	12,500	70,000
Cost of sales				
Direct material	7,500	1,000	1,500	10,000
Direct labour	15,000	2,000	2,500	19,500
Indirect Manufacturing cost (50% of direct labour)	<u>7,500</u>	<u>1,000</u>	<u>12,500</u>	<u>9,750</u>
	30,000	4,000	5,250	39,250
Gross profit	20,000	3,500	7,250	30,000
Selling and administration expenses	<u>12,500</u>	<u>4,500</u>	<u>4,000</u>	<u>21,000</u>
Net profit / (loss)	7,500	(1,000)	3,250	9,750

Additional information:

- Factory overhead costs are made up of fixed costs of Shs 5,850,000 and variable costs of Shs 3,900,000.
- Variable costs by products are Aspirin Shs 3,000,000, Panadol Shs 400,000 and Septrin Shs 500,000.
- Fixed costs and expenses will not change if Panadol is eliminated.
- Variable selling and administration expenses of up to Shs 11,000,000 can be traced to products as Aspirin Shs 7,500,000, Panadol Shs 1,500,000 and Septrin Shs 2,000,000.
- Fixed selling and administration expenses are Shs 10,000,000.

Required:

- (i) Advise the management of HPI Ltd. whether they should drop Panadol or continue manufacturing it.
(13 marks)
 - (ii) Explain the basic characteristics of costs involved in decision making.
(4 marks)
 - (iii) Distinguish between:
 - Direct and indirect materials cost.
 - Controllable and uncontrollable costs.
(4 marks)
- (Total 25 marks)**

SECTION C

Question 5

- (a) Outline **four** methods which a manufacturing company can use to reduce costs.
(4 marks)
 - (b) Outline any **five** conditions that should be considered when adopting a method for pricing materials.
(5 marks)
 - (c) Explain circumstances under which FIFO method of pricing material issues can be used.
(3 marks)
 - (d) What are the advantages of using FIFO method in pricing material issues?
(3 marks)
- (Total 15 marks)**

Question 6

- (a) Distinguish between contract costing and batch costing.
(2 marks)
 - (b) State **four** special features of contract costing.
(4 marks)
 - (c) Enumerate the causes of labour turnover.
(5 marks)
 - (d) What is idle time? Distinguish between 'normal' and 'abnormal' idle time.
(4 marks)
- (Total 15 marks)**

Question 7

- (a) Distinguish between process costing and job costing. (4 marks)
 - (b) What are joint products and what problems do they create in process costing? (3 marks)
 - (c) What are the **three** common methods of allocating joint product costs? (3 marks)
 - (d) Briefly explain the methods of accounting for by-products. (5 marks)
- (Total 15 marks)**