

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL THREE

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

MONDAY, 13 DECEMBER 2004

INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours**
2. Attempt all questions in Section **A**, **two** questions in Section **B** and any **three** 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 inventory valuation methods are allowed under IAS 2: Inventories?
- (a) LIFO and FIFO
 - (b) FIFO.
 - (c) LIFO and Weighted Average.
 - (d) FIFO and Weighted Average.

The following information should be used to answer questions (ii) and (iii):

Date		Units	Unit Price (Shs)	Value (Shs)
1.1.04	Bal bf	100	500	50,000
3.3.04	Issue	40		
4.4.04	Receipt	50	550	27,500
5.5.04	Receipt	50	600	30,000
9.6.04	Issue	70		

- (ii) If the first in first out (FIFO) method of pricing had been used, the value of the issue on 9 June 2004 would have been Shs:
- (a) 35,000.
 - (b) 35,500.
 - (c) 39,500.
 - (d) 42,000.
- (iii) If the last in first out method of pricing had been used, the value of the issue on 9 June 2004 would have been Shs:
- (a) 35,000.
 - (b) 39,500.
 - (c) 41,000.
 - (d) 42,000.
- (iv) Prime cost is:
- (a) All costs incurred in manufacturing a product.
 - (b) The total of direct costs.
 - (c) The material cost of a product.
 - (d) The cost of operating a department.
- (v) What is the purpose of Retention Money in contract costing?
- (a) To ensure that the contractor corrects any faults that may develop.
 - (b) To ensure that the designers of the project are paid.
 - (c) To ensure that any insurance costs are covered.
 - (d) To ensure that inspection work can be completed and paid for.

The following data are to be used to answer questions (vi) and (vii):

Budgeted labour hours	8,500
Actual labour hours	7,928
Budgeted overheads	Shs 1,487,500
Actual overheads	Shs 1,462,000

- (vi) Based on the data above, what is the labour overhead absorption rate?
- (a) Shs. 175 per hour.
 - (b) Shs. 172 per hour
 - (c) Shs. 184.4 per hour.
 - (d) Shs. 187.6 per hour.
- (vii) Based on the data given above, what is the amount of overhead under/over absorbed?
- (a) Shs. 25,500 under absorbed.
 - (b) Shs. 25,290 over absorbed.
 - (c) Shs. 25,500 over absorbed.
 - (d) Shs. 74,600 under absorbed.
- (viii) Which of the following is false about job costing?
- (a) Rectification costs can be charged as a direct cost to jobs concerned.
 - (b) Rectification costs can be treated as production overheads.
 - (c) Labour times on each job are recorded on a job ticket.
 - (d) It is not possible to identify separate units of production when doing a certain job.
- (ix) Which of the following costing methods would be most suitable for a situation in which a company is involved in constructing a major bridge or motor way?
- (a) Job costing.
 - (b) Process costing.
 - (c) Batch costing.
 - (d) Contract costing.

- (x) When comparing profits reported under marginal costing (MC) and absorption costing (AC) during a period when the level of inventory increases:
- (a) AC profits will be higher and closing inventory valuations lower than those under MC.
 - (b) AC profits will be higher and closing inventory valuations higher than under MC.
 - (c) MC profits will be higher and closing inventory valuations lower than those under AC.
 - (d) MC profits will be lower and closing inventory valuations higher than those under AC.

The following information relates to questions (xi) and (xii):

The following details relate to Shauriyako Supermarket which sells 25,000 packets of biscuits per annum. Selling price per packet of biscuits is Shs 4,000 and its purchase cost is Shs. 2,500. Total fixed costs per annum are:-

	Shs
Salaries	10,000,000
Advertising	4,000,000
Other fixed costs	10,000,000

- (xi) What is the contribution per packet of biscuits?
- (a) Shs. 1,500.
 - (b) Shs. 3,000.
 - (c) Shs. 750.
 - (d) Shs. 1,800.
- (xii) What is the breakeven packets of biscuits?
- (a) 1,400.
 - (b) 1,600.
 - (c) 2,800.
 - (d) 3,200.
- (xiii) The costs most relevant to be used in decision-making are:
- (a) Sunk costs.
 - (b) Current costs.
 - (c) Estimated future costs.
 - (d) National and full costs.

- (xiv) Which of the following techniques would be useful for controlling costs?
- (i) Actual versus flexed budget.
 - (ii) Variance analysis.
 - (iii) Trend of cost analysis.
 - (a) (i) and (ii).
 - (b) (i) and (iii),
 - (c) (ii) and (iii).
 - (d) (i), (ii) and (iii).
- (xv) When considering setting standards for costing, which of the following would not be considered relevant?
- (a) The normal level of activity should always be used for absorbing overheads.
 - (b) The average prices for materials should be used encompassing any discounts that are regularly available.
 - (c) The labour rate used would be the rate at which labour is paid.
 - (d) The average material usage should be established based on generally accepted working practices.
- (xvi) A company uses two similar types of bolts XX and YY. The bolts are purchased from an outside supplier. When the company carried out stock taking it found some differences as shown below:

Product	Stock record	Stock Count
XX	100	79
YY	80	101

What is the most likely reason for the differences between stock record and stock count for each type of bolt?

- (a) Production was higher than expected.
 - (b) Some bolts were damaged during production.
 - (c) A customer asked the company to supply some extra bolts of both types.
 - (d) Some bolts are put in incorrect storage racks.
- (xvii) A fixed budget is:
- (a) A budget for a single level of activity.
 - (b) Used when the mix of products is fixed in advance of the budget period.
 - (c) A budget which ignores inflation.
 - (d) Used only for fixed costs.

- (xviii) Which of the following statements is correct?
- (a) Idle time cannot be controlled because it is always due to external factors.
 - (b) Idle time is always controllable because it is due to internal factors.
 - (c) Idle time is always due to inefficient production.
 - (d) Idle time is not always the fault of production staff.
- (xix) Under activity based costing (ABC), overheads are attributed to cost units on the basis of:
- (a) Volume of units produced.
 - (b) Cost drivers.
 - (c) Standard costs.
 - (d) Marginal costs.
- (xx) Which of the following are characteristics of just in time manufacturing technique?
- (i) Elimination of non-value added activities.
 - (ii) Zero inventory.
 - (iii) Continuous improvement.
 - (iv) Zero defects.
 - (v) Limited authority to workers.
- (a) (i), (ii) and (iii).
 - (b) (i), (ii) and (v).
 - (c) (i), (ii), (iii) and (iv).
 - (d) (ii), (iii) and (v).

SECTION B

Question 2

- (a) Outline the characteristics of industries in which a process costing system is used and give 2 examples of such industries. (5 marks)

- (b) Distinguish between normal loss and abnormal loss. (4 marks)

- (c) Mukwa Industries manufactures three chemicals Vim, Jireh and Jik from a single joint process. The information below relates to the month of November 2004:

Input into Process:

Direct material - 4000 litres at Shs. 64,000

Direct labour Shs. 52,000

Factory overheads are absorbed at 150% of prime cost of inputs.

Outputs from process:

Vim 1,500 litres.

Jireh 400 litres.

Jik 500 Litres

By-products normally account for 15% of input.

During the month of November 2004, by-products were actually 15% of input. They were sold for Shs. 150 per litre and the proceeds from the sale were credited to the process account.

Selling prices:

Vim Shs. 101.16 per litre.

Jireh Shs. 126.45 per litre.

Jik Shs. 67.44 per litre.

Required:

Calculate the total cost of each of the chemicals using the following methods for splitting joint costs:

- (i) Volume. (7 marks)
- (ii) Relative sales revenue. (6 marks)
- (d) Briefly explain how the valuation of work in process is done at the year-end. (3 marks)

(Total 25 marks)

Question 3

- (a) List five methods of reducing labour turnover. **(5 marks)**

- (b) A company operates a factory which employed 40 direct workers throughout the four week period just ended. Direct employees were paid at a basic rate of Shs. 400 per hour for a 38 hour week. Total hours of direct workers in the four week period were 6528. Overtime which is paid at a premium of 35% is worked in order to meet general production requirements. Employee deductions total 30% of gross wages. 188 hours of direct workers time were registered as well.

Required:

Prepare Journal entries to account for the labour costs of direct workers for the period.

(7 marks)

- (c) A company required 25,000 units of a commodity each year, at a steady rate. It costs Shs. 400 to place an order and storage costs are Shs. 20 per year.

Required:

Calculate the period of time between deliveries.

(4 marks)

- (d) Explain the term “material coding system” and give two advantages of materials coding.

(4 marks)

- (e) Give three reasons why businesses carry out periodic physical inventory taking exercises instead of relying on their perpetual inventory record updates.

(3 marks)

- (f) Suggest two possible courses of action that management should take when inventory records do not tally with the results of the physical stock take?

(2 marks)

(Total 25 marks)

Question 4

- (a) Using three examples, describe the key features of specific order costing systems. **(6 marks)**
- (b) Explain how the following documents are used in the job costing system:
- (i) Materials requisition. **(3 marks)**
 - (ii) Job costing card. **(3 marks)**

- (c) A company uses a job costing system in order to identify the production costs incurred in carrying out a range of work to customers' specifications in its factory. The system allocates costs to each job whenever these can be identified directly as long as they are considered being 'normal'. Abnormal costs are analysed by cost centre and charged directly to jobs.

In completion of job XYZ Shs. 17,560,000 of raw materials were initially allocated to the job. This included Shs 620,000 of raw materials that were wasted and a further Shs. 756,000 that were used for rectification work on the job. Normal wastage and rectification costs (raw material only) are allowed at 2% and 3% respectively of direct raw material cost of each job.

During the period raw materials totalling Shs. 234,720,000 were initially allocated to jobs including Shs. 5,164,000 and Shs 6,105,000 for wastage and rectification respectively.

Required:

- (i) Identify the 'Normal' raw material costs that are to be allocated to job XYZ. **(3 marks)**
 - (ii) Evaluate the efficiency of the company in respect to wastage and rectification both on job XYZ and for the period as a whole. **(5 marks)**
- (d) Outline 3 factors to consider before accepting a special order from a customer. **(3 marks)**
- (e) Explain the term Principal Budget Factor. **(2 marks)**

(Total 25 marks)

SECTION C**Question 5**

- (a) Outline the principal purposes of running the standard costing system. **(4 marks)**
- (b) Gatsby Ltd is a manufacturer of a component for the motor industry. The standard costing card for the component is shown below.

	Shs.
Direct material 5 kg at Shs. 500 per kg	2,500
Direct labour 2 hours at Shs 400 per hour	800
Variable factory overheads - Shs 200 per direct labour hour	400
Fixed factory overheads - Shs. 550 per direct labour hour	1,100

Actual production for the month ended 30 April 2004 was 200 units and actual costs incurred were:

	Shs.
Direct material: 900kg at a total cost of	540,000
Direct labour: 420 hours at a total cost of	163,800
Variable factory overheads	78,000
Fixed factory overheads	230,000

Required:

Calculate the following variances for the month of April 2004:

- (i) Material price **(1 mark)**
 (ii) Material usage **(1 mark)**
 (iii) Labour rate **(1 mark)**
 (iv) Labour efficiency **(2 marks)**
 (v) Variable overhead expenditure **(2 marks)**
- (c) Give two reasons for the existence of each of the following variances:
 (i) Material price **(2 marks)**
 (ii) Labour rate **(2 marks)**
(Total 15 marks)

Question 6

- (a) Distinguish between fixed, flexible and flexed budgets. **(3 marks)**
- (b) Give three potential behavioural implications associated with implementing budgetary control. **(3 marks)**
- (c) Give three arguments for and three arguments against the use of absorption costing. **(6 marks)**
- (d) State three merits of Activity Based Costing. **(3 marks)**
(Total 15 marks)

Question 7

(a) Distinguish between:

- (i) Avoidable and unavoidable costs.
- (ii) Product and period costs.

(6 marks)

(b) Shine Ltd has recorded the following costs during the last five years.

Year	Output Volume (Units)	Total Cost (Shs)	Average Price Level Index
1999	65,000	145,000	100
2000	80,000	179,200	112
2001	90,000	209,100	123
2002	60,000	201,600	144
2003	75,000	248,000	160

Required:

Calculate the total cost that should be expected in 2004 if output is 85,000 units and the average price level index 180.

(9 marks)**(Total 15 marks)**