

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA (U) EXAMINATIONS

LEVEL TWO

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 7

MONDAY, 13 DECEMBER 2004

INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours**
2. Attempt all questions in Section **A**, **one** question in Section **B** and any **three** questions in Section **C**.
3. Section **A** has **twenty** compulsory multiple-choice questions each carrying 1 mark.
4. Section **B** has **two** questions and only **one** is to be attempted. Each question carries 20 marks.
5. Section **C** has **four** questions and only **three** questions are to be attempted. Each question carries 20 marks.
6. Please read further instructions on the answer book.

SECTION A

Question 1

- (i) A company's summary of costs and productivity data for each class of workers is part of its:
 - (a) Overhead cost analysis.
 - (b) Labour cost analysis.
 - (c) Services cost analysis.
 - (d) Production or service strategy.
- (ii) The point at which the total of the product sales profit contributions exactly equals a company's fixed costs is known as the:
 - (a) Contribution margin.
 - (b) Overhead rate.
 - (c) Level of maximum profits.
 - (d) Breakeven point.
- (iii) The sum of raw materials cost, direct labour and allocated overhead expenses is the:
 - (a) Prime cost.
 - (b) Fixed cost.
 - (c) Production cost.
 - (d) Inventory cost.
- (iv) The usage rate of raw materials multiplied by production requirements yields an estimate of:
 - (a) Inventory needs.
 - (b) Production costs.
 - (c) Raw materials requirements.
 - (d) Inventory value.
- (v) What level of planning are departmental managers generally responsible for?
 - (a) Strategic planning.
 - (b) Operational planning.
 - (c) Tactical planning.
 - (d) Directional planning.
- (vi) A manufacturing firm is very busy and overtime is being worked. The amount of overtime premium contained in direct wages is classified as:
 - (a) Part of prime cost.
 - (b) Factory overhead.
 - (c) Direct labour cost.
 - (d) Administrative overheads.

- (vii) Which of the following statements is false?
- (a) All service costs are indirect as far as units are concerned.
 - (b) The absorption of non-production overheads into production units helps control the cost.
 - (c) Some costs can be both a direct departmental cost and an indirect unit cost.
 - (d) Some service costs are included in unit costs.
- (viii) The following are involved in installing a cost accounting system except:
- (a) The acquisition of modern and efficient machines.
 - (b) The creation of an organizational structure.
 - (c) The selection of a product costing system.
 - (d) The choice of an appropriate cost control method.
- (ix) Which of the following is not a holding cost in Inventory Management?
- (a) Disposal cost.
 - (b) Interest on capital.
 - (c) Theft.
 - (d) Ordering cost.
- (x) Over-absorbed overheads occur when:
- (a) Absorbed overheads exceed actual overheads.
 - (b) Absorbed overheads exceed budgeted overheads.
 - (c) Actual overheads exceed budgeted overheads.
 - (d) Budgeted overheads exceed absorbed overheads.
- (xi) Idle capacity may be a result of the following avoidable reasons except:
- (a) Lack of demand.
 - (b) Lack of management planning.
 - (c) Lack of control.
 - (d) Change over of jobs.
- (xii) The process of cost apportionment is carried out so that:
- (a) Costs may be controlled.
 - (b) Cost units gather overheads as they pass through cost centres.
 - (c) Whole items of cost can be charged to cost centres.
 - (d) Common costs are shared among cost centres.

- (xiii) Which of the following best describes the term 'equivalent units' under FIFO?
- The number of units worked on during a period including the opening and closing units.
 - The number of whole units worked on during the period ignoring the levels on completion of opening and closing units.
 - The number of effective whole units worked on during a period allowing for levels of completion of opening and closing units.
 - The total number of whole units started during the period, ignoring the opening stock units as these were started in the previous period.
- (xiv) Which of the following statements is false?
- The absorption of non-production overheads into production units helps control the cost.
 - Some costs can be both a direct departmental cost and an indirect unit cost.
 - All service costs are indirect as far as units are concerned.
 - Some service costs are included in unit costs.

The information below relates to Tidings Ltd. for the year 2004.

No. of units sold: 10,000.

	Per Unit	Total
	Shs.	Shs. '000
Sales	300	3,000
Less: Variable costs	<u>180</u>	<u>1,800</u>
Contribution	120	1,200
Less: Fixed costs		<u>240</u>
Profit		<u>960</u>

Use the above data to answer questions (xv) to (xviii).

- (xv) Calculate the breakeven point in value terms.
- Shs. 1,200,000.
 - Shs. 700,000.
 - Shs. 600,000.
 - Shs. 1,000,000.
- (xvi) Calculate the breakeven point in units.
- 4,000 units.
 - 20,000 units.
 - 40,000 units.
 - 30,000 units.

- (xvii) Calculate the margin of safety in value terms.
- (a) Shs. 2,000,000.
 - (b) Shs. 4,000,000.
 - (c) Shs. 4,800,000.
 - (d) Shs. 2,400,000.
- (xviii) Calculate the margin of safety in units.
- (a) 80,000 units.
 - (b) 70,000 units.
 - (c) 60,000 units.
 - (d) 90,000 units.
- (xix) Standard costs are:
- (a) Ideal costs.
 - (b) Normal costs.
 - (c) Average costs.
 - (d) Reasonably attainable costs.
- (xx) The difference between fixed and variable costs has a special significance in the preparation of:
- (a) Flexible budget.
 - (b) Master budget.
 - (c) Cash budget.
 - (d) Budget manual.

SECTION B

Question 2

- (a) Define the following terms:
- (i) Variance. (1 mark)
 - (ii) Ideal Standard. (1 mark)
 - (iii) Attainable Standard. (1 mark)
- (b) Explain three major benefits of Budgets to an organization. (6 marks)
- (c) Outline four possible human relations problems caused by budgets. (4 marks)
- (d) Distinguish between Economic Order Quantity (EOQ) and Economic Batch Quantity (EBQ). (4 marks)
- (e) Define avoidable, controllable and sunk costs. (3 marks)
- (Total 20 marks)**

Question 3

- (a) In order to do their job properly, managers should receive information from management accountants in form of reports.
- (i) Briefly explain four characteristics of quality information. **(4 marks)**
- (ii) Give four examples of management accounting reports and any two examples of production reports. **(3 marks)**
- (b) Distinguish between Cost Accounting and Management Accounting. **(4 marks)**
- (c) Give two examples of non-financial information that management accountants may provide to their seniors. **(2 marks)**
- (d) Spreadsheet is a very useful computer program to a management accountant. Outline four areas of management accounting where spreadsheets are widely used. **(4 marks)**
- (e) Define and give examples of:
- (i) Cost centre.
- (ii) Revenue centre.
- (iii) Profit centre. **(3 marks)**
- (Total 20 marks)**

SECTION C

Question 4

- (a) Define the term Limiting Key Factor. **(1 mark)**
- (b) Outline three reasons why limiting factors may arise. **(3 marks)**
- (c) Kololo University conducts a special course on ICT training for a year. It invites applications from graduates. An entrance test is taken and based on the same; a final selection of 100 candidates is made. The test consists of four objective type examinations and is spread over four days with one examination per day. Each candidate is charged a fee of Shs. 100,000 for appearing for the entrance test. The data below relates to the past two years:

Statement of Net Revenue from the Entrance Test

	Year 1	Year 2
	Shs. '000'	Shs. '000'
Gross revenue (fees collected)	100,000	150,000
Costs:		
Valuation	14,000	18,000
Question booklets	20,000	30,000
Hall rent at Shs. 500,000 per day	2,000	2,000
Honorarium for Administrator	13,600	13,600
Supervision charges (one for every 100 @ Shs. 50,000 per day)	12,400	12,600
General administration expenses	<u>16,000</u>	<u>16,000</u>
Total costs	<u>78,000</u>	<u>90,200</u>
Net revenue	<u>22,000</u>	<u>59,800</u>

Required:

Compute the:

- (i) Budgeted net revenue if 4,000 candidates are expected to sit for the test next year.
(8 marks)
 - (ii) Break-even number of candidates.
(6 marks)
 - (iii) Number of candidates to be admitted if the net revenue desired is Shs. 20,000,000.
(2 marks)
- (Total 20 marks)**

Question 5

- (a) Identify two costs associated with labour retention.
(1 mark)
- (b) Suggest how labour turnover can be reduced.
(4 marks)
- (c) The following information relates to the wages paid to workers for a four-week period in a factory weaving department where two products; blankets and bed sheets are produced.

All workers are paid at hourly rates. Basic rates (gross) are Shs. 800 per hour for direct workers and Shs. 600 per hour for indirect workers for a 40-hour week.

The department employs 24 direct workers and 9 indirect workers. Overtime is regularly worked to meet general production requirements, and

is paid at a premium of 25% over basic rate for all workers. Overtime hours in the four-week period were 256 and 84 for direct and indirect workers respectively.

Production of the two products during the four week period was:

Blankets: 9,640 units in 1,620 hours for direct workers' time.

Bed sheets : 22,800 units in 2,270 hours of direct workers' time.

The balance of the direct workers' time in the period was non-productive time.

The net wages paid (i.e. net of employee deductions) in the period were:

Direct workers Shs. 2,509,000.

Indirect workers Shs. 715,000.

The factory uses a batch costing system, based on actual costs which is integrated with the financial accounts.

Required:

- (i) Calculate the gross wages, for the four-week period in the Weaving Department for both direct and indirect workers.

(13 marks)

- (ii) Prepare the Weaving Department's Wages Control Account for the period showing detailed workings to justify the calculation of both direct and indirect wages.

(2 marks)

(Total 20 marks)

Question 6

- (a) (i) What is sales volume variance? **(2 marks)**
 (ii) What are the possible causes of sales volume variance? **(2 marks)**
 (iii) Who is responsible for (ii) above? **(2 marks)**
- (b) Cool Head Ltd. has furnished you with its cost accounting records for review. The following are the particulars about its sales for products A and B.

Product	Budgeted Sales			Actual Sales		
	Quantity	Price	Amount	Quantity	Price	Amount
	(units)	Shs '000	Shs '000	(units)	Shs '000	Shs '000
A	10,000	4	40,000	18,000	3	54,000
B	30,000	6	180,000	42,000	8	210,000
Total	40,000		220,000	60,000		264,000

Required:

Calculate:

- (i) Total sales volume variance. (4 marks)
 - (ii) Sales price variance. (4 marks)
 - (iii) Sales mix variance. (4 marks)
 - (iv) Sales quantity variance. (2 marks)
- (Total 20 marks)**

Question 7

- (a) Define capital expenditure. (2 marks)
- (b) Give three examples of capital expenditure. (3 marks)
- (c) Outline how capital expenditure proposals can be financed. (2 marks)
- (d) Clay and Sand Ltd has investigated the possibility of investing in a more advanced technology machine. The data below were extracted from their project report:

Cost of machine as at 1 January 2005: Shs 500,00,000

Life: 4 years.

Estimated scrap value: Nil.

Depreciation method: Straight line.

Year	Profit After Tax Shs million	Net Cash Flows Shs million
1	100	50
2	250	200
3	250	225
4	200	225
5	-	100

The company's return on investment is 15%.

Required:

- (i) Calculate the Payback Period. (2 marks)
 - (ii) Calculate the Accounting Rate of Return. (3 marks)
 - (iii) Calculate the Net Present Value. (8 marks)
- (Total 20 marks)**