

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 7

CPA(U) EXAMINATIONS

JUNE 2001

INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours**
2. Attempt all questions in Section **A**, **one** question in Section **B** and any **three** in Section **C**.
3. Section **A** has **twenty** compulsory 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.

SECTION A

Question 1:

- (i) Budgets can be classified according to the following factors except:-
 - (a) The Coverage they encompass.
 - (b) The capacity to which they are related.
 - (c) The periods which they cover.
 - (d) The ability to compare actual costs with the standard costs.
- (ii) Which of the following independent situations will not affect a P/V Ratio?
 - (a) A decrease in the variable cost per unit.
 - (b) An increase in fixed cost.
 - (c) A decrease in contribution margin.
 - (d) An increase in selling price per unit.
- (iii) Which one of the following statements is correct?
 - (a) Normal wastage is avoidable.
 - (b) Wastage can be realised whereas scrap cannot be realised.
 - (c) Abnormal wastage should be part of the cost of production.
 - (d) The cost of primary packing is a part of prime cost whereas cost of secondary packing is a selling and distribution overhead.
- (iv)is calculated by dividing the cost of materials consumed by the cost of average stock held.
 - (a) Break-even.
 - (b) Reorder quantity.
 - (c) Material turnover ratio.
 - (d) Lead time.
- (v) Which one of the following statements is false?
 - (a) Financial accounts provide information for income determination.
 - (b) Cost accounting is an instrument of management control.
 - (c) Cost accounting is nothing more than a detailed analysis of expenditure.
 - (d) Cost accounting helps in the ascertainment of cost before hand.

- (vi) Profit volume graph is an improvement over the break-even chart because:-
- (a) It shows the relationship of profit to volume of sales.
 - (b) It shows the break-even point.
 - (c) It shows there is no relationship between contribution and sales.
 - (d) The effect of various product mixes on profits cannot be studied from a single break-even chart.
- (vii) In a year in which the closing stock of finished goods is larger than the opening stock.....costing will show a higher profit compared to that under.....costing.
- (a) Absorption, marginal.
 - (b) Differential, absorption.
 - (c) Marginal, absorption.
 - (d) Differential, marginal.
- (viii) In spreadsheets, two windows appear on the screen which are nested one within the other. The smaller window is called:-
- (a) The workbook.
 - (b) Application window.
 - (c) Document window.
 - (d) Menu bar.
- (ix) The system which determines what should be the cost in advance of production is called:-
- (a) Theoretical standard system.
 - (b) Standard costing system.
 - (c) Basic standard system.
 - (d) Post costing system.

Use the following data to answer questions (x) – (xii) below:-

Ndawura, a food vendor in Owino Market vividly recorded the following summary about his business for the period January-February 2000.

Total sales	Shs.150,000.
Variable costs	Shs.75,000.
Fixed costs	Shs.50,000

- (x) Calculate his break-even sales.
- (a) Shs.200,000.
 - (b) Shs.150,000.
 - (c) Shs.100,000.
 - (d) Shs.250,000.
- (xi) Calculate his net profit.
- (a) Shs.25,000.
 - (b) Shs.20,000.
 - (c) Shs.50,000.
 - (d) Shs.70,000.
- (xii) Compute Ndawura's margin of safety.
- (a) Shs.30,000.
 - (b) Shs.50,000.
 - (c) Shs.20,000.
 - (d) Shs.15,000.
- (xiii) Which of the following statements is true?
- (a) There are no mathematical techniques available for dealing with risk and uncertainty factors involved in determining future cashflows from a project.
 - (b) Tax concessions have no role to play in estimating the cashflows from a project.
 - (c) Payback method takes into account the cashflows after the payback period.
 - (d) Cashflows from a project can be worked out only on the basis of certain probabilities.
- (xiv) The costing method in which fixed factory overheads are added to inventory is called:-
- (a) Absorption costing.
 - (b) Prime costing.
 - (c) Differential costing.
 - (d) Break-even analysis.

- (xv) In marginal costing, stock of finished goods is valued at.....cost.
- (a) Direct.
 - (b) Marginal.
 - (c) Break-even.
 - (d) Variable.
- (xvi) The concept of learning curve states that time required for repeated performance is.....the time required to perform it originally.
- (a) Greater than.
 - (b) Equal.
 - (c) Less than.
 - (d) Within.
- (xvii) Cost reduction involves:-
- (a) Reduction in costs on permanent basis.
 - (b) Keeping costs within limits.
 - (c) Reduction in costs on temporary basis.
 - (d) Recognition that there is no room for reduction in cost.
- (xviii) Cost accounting mainly helps management in:-
- (a) Earning extra profits.
 - (b) Fixing prices of the products.
 - (c) Providing information to management for decision-making.
 - (d) Preparation of financial statements.
- (xix) The basic function of management accounting is to:-
- (a) Record all business transactions.
 - (b) Interpret the financial data.
 - (c) Record economic data.
 - (d) Assist the management in performing its functions effectively.
- (xx) The computer as a machine and related equipment used in an electronic data processing system are called:-
- (a) Software.
 - (b) CPU.
 - (c) EDP.
 - (d) Hardware.

SECTION B

Question 2:

(a) State any four items of:-

- (i) Expenses or losses; (2 marks)
- (ii) Incomes or gains; which are shown in Financial Profit and Loss account but not in Costing Profit and Loss account. (2 marks)

(b) The Bivamuntuyo Chair Manufacturing Co. Ltd. which commenced manufacturing chairs from 1 April 2000 supplied the following information and asks you to prepare a cost sheet showing the profit per chair sold.

- (i) Materials and wages are to be charged at actual cost.
- (ii) Works expenses at 75% of the wages.
- (iii) Office expenses at 20% of the works expenses.
- (iv) Two types of chairs are manufactured: Patterns “Comfortable” and “Luxurious”
- (v) There were no stock of chairs unsold nor was there any in the course of manufacture by 30 September.
- (vi) Number of chairs sold during the year pattern “Comfortable” 720 and pattern “Luxurious” 504.
- (vii) Other particulars are:-

	Pattern Comfortable Shs.’000	Pattern Luxurious Shs.’000
Material per chair	38	64
Wages per chair	24	32
Selling price per chair	120	180

Required:-

- (i) Prepare necessary statements showing the actual profit for the year if actual works expenses were Shs.28,000,000 and office expenses Shs.2,200,000. (13 marks)
 - (ii) Prepare a statement reconciling the profit as shown by the cost accounts with the profit and loss as shown by the financial accounts for the year ended 31 March 2001. (3 marks)
- (Total 20 marks)**

Question 3:

- (a) What is process costing? **(1 mark)**
- (b) Name any six industries in which process costing is used. **(3 marks)**
- (c) From its past records, Lunguja Chemicals Ltd. provided the following data in 1999.

Number of units introduced in the process. 4,000

Number of units completed and transferred to Process II 3,200

Number of units in process at the end of the period 800

Stage of completion:-

Material	80%
Labour	70%
Overheads	70%

Normal process loss at the end of the process 200 units

Value of scrap	Shs.1,000 per unit
Value of raw materials	Shs.7,480,000
Wages	Shs.10,680,000
Overheads	Shs.7,120,000

Required:

Calculate:

- (i) Equivalent production. **(4 marks)**
- (i) Cost per unit of equivalent production. **(6 marks)**
- (ii) Prepare the necessary accounts. **(6 marks)**

(Total 20 marks)

SECTION C

Question 4:

- (a) What is contribution? (2 marks)
- (b) How are variable costs and fixed costs treated in marginal costing? (2 marks)
- (c) Kotido Industries Ltd. manufactures and sells one product only. The budgeted volume of production and sales is 80,000 units per month. The standard selling price is Shs.100 per unit. The break-up of the standard cost per unit is given below:-

	Shs.
Variable	
Material	300
Labour	100
Fixed overheads	<u>500</u>
Total	<u>900</u>

The company carries a substantial stock of finished items at all times. The company prepares the following statement indicating the results of the first two months of trading.

	Month 1	Month 2	Month 3
Units produced	80,000	60,000	70,000
Units sold	<u>80,000</u>	<u>70,000</u>	<u>60,000</u>
	Shs.(millions)		
Sales	<u>80</u>	<u>70</u>	<u>60</u>
Standard cost of production	72	54	63
Stock transfer	<u>-</u>	<u>+9</u>	<u>-9</u>
Standard cost of sales	<u>72</u>	<u>63</u>	<u>54</u>
Standard profit	<u>8</u>	<u>7</u>	<u>6</u>

The Sales Manager reports that sales for the rest of the year may continue at an average rate of 60,000 units per month. The General Manager though worried over the fall in sales contends that a monthly profit of Shs.6 million can be retained.

Required:

As a cost accountant, write a note pointing out the problem, if any, in the General Manager's view and give an estimate of profit for the year assuming that the Sales Manager's estimate of future sales is correct.

(16 marks)
(Total 20 marks)

Question 5:

- (a) (i) What is meant by the term “Present Value”? **(1 mark)**
- (ii) State the two usual methods of capital expenditure appraisal using DCF techniques. **(2 marks)**
- (iii) Write short notes on the methods in (a) (ii) above. **(4 marks)**
- (b) “Generally individuals show a time preference for money”.
Give any four reasons for such a preference. **(4 marks)**
- (c) Joanita Hatchery has a cost of capital of 5% and is contemplating investing Shs.340,000, recently received from the “YES” scheme, in a chicken rearing project which has a 25% chance of being a big success and producing cash flows of Shs.210,000 after one and two years. There is however, a 75% chance of the project not being quite so successful, in which case the cash flows will be Shs.162,000 after one year and Shs.174,000 after two years.

Required:

- (i) Calculate the ENPV (Expected Net Present Value) **(7 marks)**
- (ii) Advise Joanita Hatchery accordingly. **(2 marks)**

The Present Value of Shs. 1 at 5% P/V factor due at the end of the year is as follows:-

Year	0	1	2
Factor	1.000	0.952	0.907

(Total 20 marks)

Question 6:

- (a) (i) What is stock control? **(1 mark)**
- (ii) What are the three stock control levels and how are they calculated? **(3 marks)**
- (b) Distinguish between perpetual inventory and continuous stock taking. **(2 marks)**

- (c) A wholesaler supplies 30 stuffed dolls each week day to various shops around Kampala. Dolls are purchased from the manufacturer in lots of 120 each at Shs.12,000 per lot. Every order incurs a handling charge of Shs.600 plus a freight charge of Shs.2,500 per order. Multiple and fractional lots can be ordered and all orders are filled the next day. The incremental cost is Shs.60 per year to store a doll in inventory. The wholesaler finances inventory investment by paying its holding company 2% monthly for borrowed funds.

- (i) How many dolls should be ordered at a time to minimise the total annual inventory cost. Assume that there are 250 week days in a year.

(10 marks)

- (ii) How frequently should the wholesaler order?

(4 marks)

(Total 20 marks)

Question 7:

Mavid Pharmacy Ltd has the following budgeted cash flow data for the period November 2001 to June 2002.

	Nov. 2001 Shs. m	Dec. 2001 Shs. m	Jan. 2002 Shs. m	Feb. 2002 Shs. m	Mar. 2002 Shs. m	Apr. 2002 Shs. m	May 2002 Shs. m	Jun. 2002 Shs. m
Sales	80	100	110	130	140	150	160	180
Purchases	40	60	80	90	110	130	140	150
Wages	10	12	16	20	24	28	32	36
Overheads	10	10,	15	15	15	20	20	20
Dividends		20						40
Capital expenditure			30			40		

The following additional information is provided:-

- (a) Sales are 40% cash and 60% credit. Credit sales are paid two months after the month of sale.
- (b) Purchases are paid the month following the purchase.

- (c) 75% of the wages are paid in the current month and 25% the following month.
- (d) Overheads are paid the month after they are incurred.
- (e) Dividends are paid three months after they are declared.
- (f) Capital expenditure is paid two months after it is incurred.
- (g) The opening cash balance is Shs.15 million.

The Managing Director is happy with the cash flow forecast and has arranged a bank overdraft with a ceiling of Shs.50 million to accommodate the increased stock levels and wage bill for overtime worked.

Required:

- (a) Prepare a cash budget for the six months period of January to June 2002. **(12 marks)**
 - (b) Comment on your results and in the light of the Managing Director arrangements, offer advice. **(8marks)**
- (Total 20 marks)**