

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA(U) EXAMINATIONS

LEVEL TWO

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 7

MONDAY, 17 DECEMBER 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) The unit cost with normal spoilage is computed according to the formula:
- (a)
$$\frac{\text{Salvage value of normal spoilage.}}{\text{Total units produced}}$$
 - (b)
$$\frac{\text{Total process costs}}{\text{Total units produced} - \text{Normal spoilage in units}}$$
 - (c)
$$\frac{\text{Total process costs} - \text{salvage value of normal spoilage.}}{\text{Total units produced} - \text{Normal spoilage in units.}}$$
 - (d) Total process costs – Salvage value of normal spoilage.
- (ii) The transfer of output of one process to the other can either be at:
- (a) Cost or market price.
 - (b) Cost or discount.
 - (c) Cost or profit.
 - (d) Profit or market price.
- (iii) The statement (Actual number of partially completed units X Stage of completion) describes:
- (a) Work in progress.
 - (b) Equivalent units.
 - (c) Normal loss.
 - (d) Abnormal gain.

The following data should be used to answer questions (iv) - (vi) below:

Fixed expenses	Shs.1,000,000
Variable expenses	Shs 1,000 per unit.
Selling prices	Shs 1,500 per unit.

- (iv) Calculate the number of units to be manufactured and sold in order to break even.
- (a) Shs 3,000
 - (b) 2,500 units.
 - (c) 1,500 units.
 - (d) 2,000 units.
- (v) Calculate the number of units to be manufactured and sold to earn a profit of Shs 10,000.
- (a) 2,000 units.
 - (b) 2,020 units.
 - (c) 20,000 units.
 - (d) 22,000 units
- (vi) What additional units would be necessary to increase the above profit by Shs. 5,000?
- (a) 10 units.
 - (b) 20 units.
 - (c) 100 units.
 - (d) 250 units.
- (vi) The objective of the ...is to ensure that sufficient cash is available at all times to meet the level of operations in the various
- (a) Budgets, cash budget.
 - (b) Master Budget, Cash budget.
 - (c) Cash Budget, Budgets.
 - (d) Cash Budget, Master budgets.
- (viii) A is where managers are accountable for sales revenue and expenses.
- (a) Investment centre.
 - (b) Cost centre.
 - (c) Profit centre.
 - (d) Ideal centre.

- (ix) is a continuous process of measuring a firm's products, services or activities against other best performing organizations.
- (a) Benchmarking.
 - (b) Innovation.
 - (c) Responsibility accounting.
 - (d) Total Quality Management.
- (x) Period costs are those costs that are:
- (a) not included in the inventory valuation and as a result are treated as expenses in the period in which they occur.
 - (b) Identified with goods produced or purchased for resale.
 - (c) A hindrance to management accounting.
 - (d) Incurred only during idle times.
- (xi) A record of the quantity of materials in inventory for each stores' item is called.
- (a) Purchase Order.
 - (b) Goods Received Note.
 - (c) Purchase Requisition.
 - (d) Bin Card.
- (xii) When sales demand is in excess of a company's productive capacity, the scarce resources responsible for influencing the output are called
- (a) Opportunity costs.
 - (b) Limiting factors.
 - (c) Make or buy.
 - (d) Chances.
- (xiii)is used to describe events or forces that are significant determinants of the cost of particular activities.
- (a) Cost driver.
 - (b) Basis of apportionment.
 - (c) Cost centre.
 - (d) Relevant costs.

- (xiv) The is calculated by weighting each of the profit levels by its associated probability.
- (a) Standard deviation.
 - (b) Expected value.
 - (c) Variance.
 - (d) Range.
- (xv) The process of converting cash to be received in the future into a present value using a particular interest rate is called:
- (a) Present value.
 - (b) Cost of capital.
 - (c) Discounting.
 - (d) Cost-benefit analysis.
- (xvi) is the process by which whole cost items are charged direct to a cost unit or cost centre.
- (a) Allocation.
 - (b) Bases of apportionment.
 - (c) Absorption.
 - (d) Overheads.
- (xvii) The following costs are included in ordering cost except:
- (a) Clerical or administrative costs.
 - (b) Transport costs.
 - (c) Production run costs.
 - (d) Loss of future sales due to distinguished customers.
- (xviii) The costing method which involves the identification of the factors which cause the costs of an organisation's major activities is called:
- (a) Absorption costing.
 - (b) Activity based costing.
 - (c) Contract costing.
 - (d) Labour costing.

(xix) In spreadsheets, applications mean:

- (a) A memory chip into which fixed data is written permanently at the time of manufacture.
- (b) A device which will accept input data, process it, store and output data.
- (c) Ready made programs written to perform a particular job for the user rather than operate the computer.
- (d) A device used with screen graphics and sometimes as an alternative to using the keyboard to input instructions.

(xx) Muko Industries Ltd had a staff totalling 800 at the beginning of 1999 and 1,200 at the end of that year. 400 employees resigned and were immediately replaced by 400 new employees during the year. What is the Labour Turnover rate for the company?

- (a) 25%
- (b) 40%
- (c) 45%
- (d) 20%

SECTION B

Question 2

As a Management Accountant in a Company that has just started its operations in Uganda, you have been asked by your Finance Manager to prepare a report for presentation to top company management. The top company management is considering installing a costing system and is examining ways in which different cost classifications can assist them in the management of the company.

Required:

Prepare a report to the Finance Manager outlining different cost classifications and how these classifications can assist in the management of the company.

(20 marks)

Question 3

- (a) (i) Define budgetary control. **(2 marks)**
(ii) Budgetary control as a management control device suffers from limitations. State five such limitations. **(5 marks)**
- (b) (i) What is a cash budget? **(1 mark)**
(ii) What are its advantages? **(4 marks)**
- (c) Exigency Co. Ltd. wishes to arrange overdraft facilities with Bank of Baroda during the period January to March 2002, when it will be manufacturing mainly for stocking. The following data relates to the company's records:-

MONTH	SALES SHS (000)	PURCHASES SHS (000)	WAGES SHS (000)
November 2001	180,000	124,000	12,000
December 2001	192,000	144,000	14,000
January 2002	108,000	243,000	11,000
February 2002	174,000	246,000	10,000
March 2002	126,000	268,000	15,000

Additional information:

- (i) All purchases and sales are on credit.
- (ii) 50% of the credit sales are realised in the month following the sale and the remaining sales in the second month following the sale.
- (iii) Creditors are paid in the month following the purchase.
- (iv) Cash at bank on 1 January 2002 is Shs. 25,000,000.

Required:

Prepare a cash budget for the above period indicating the extent of the bank facilities the company will require at the end of each month.

(8 marks)
(Total 20 marks)

Question 4

Below is a summary of Amarula manufacturing company budgeted profit statement for the year 2002 when it expects to be operating at 75% of its installed capacity:

	Shs million	Shs. million
Sales 9000 units at Shs. 32,000 @		288
Direct Materials	54	
Direct Wages	72	
Production Overheads:		
Fixed	42	
Variable	<u>18</u>	<u>186</u>
Gross Profit		102
Administration, Selling & Distribution:		
Fixed	36	
Variable	<u>27</u>	<u>63</u>
Net Profit		<u>39</u>

Required:

- (a) (i) Calculate the break even point in units and sales value. **(4 marks)**
- (ii) Draw a contribution volume (profit) chart to illustrate the above. **(2 marks)**
- (b) (i) If the selling price per unit were reduced to Shs. 28,000, the increased demand would utilize 90% of the company's capacity without any additional advertising expenditure, and
- (ii) To attract enough demand to utilize full capacity would require a 15% reduction in current selling price and a Shs 5 million special advertising campaign.

You are required to:

Present a statement showing the effect of the two alternatives above compared with the original budget and advise management which of the three possible plans ought to be adopted i.e. the original budget or plans (i) or (ii) above.

(10 marks)

- (c) An independent market research study shows that if Shs. 15 million is spent on advertising, the company could operate at full capacity and maintain the selling price at Shs. 32,000 per unit.

Required:

- (i) Advise management whether this proposal should be adopted. **(3 marks)**
 - (ii) State any reservation that you may have. **(1 mark)**
- (Total 20 marks)**

Question 5

- (a) Nakawa Soap Works had the following data relating to one of their items of raw materials for soap manufacture:

Cost of raw material	Shs. 100,000 per barrel
Usage per day	10 barrels
Minimum lead time	20 days
Maximum lead time	30 days
Cost of ordering materials	Shs. 4,000,000 per order
Carrying costs	10% per annum

Required:

Calculate:

- (i) Re-order level **(2 marks)**
- (ii) Re-order quantity **(4 marks)**
- (iii) Maximum level **(2 marks)**
- (iv) Minimum level **(2 marks)**

- (b) On 1 October 2000 Nakawa Soap Works had 400 barrels of the raw material in store at a cost of Shs. 8 million. The following receipts and issues of the raw material were recorded during the next three months to 31 December 2000.

	Receipts into store		Issues to Factory
	Units	Shs	Units
October 2	500	22,000	
October 8			600
November 1	250	24,000	
November 14	400	25,000	
November 16			600
December 4	400	26,000	
December 25			600

A physical count of the raw material in store on 31 December 2000 showed that there were only 50 barrels left.

Required:

- (i) Prepare a perpetual Inventory Account for the raw material for the three months to 31 December 2000 using the weighted average method of valuation.
(8 marks)
- (ii) State the action you would take if you discovered a discrepancy between the physical inventory count and the inventory record.
(2 marks)
(Total 20 marks)

Question 6

The following statement was produced by a Junior Cost Accountant for presentation to the Manager Production and operations of Kawa Industries Ltd. for the month ending 31 October, 2001.

	Original Budget Shs. (000)	Actual Results Shs (000)	Variance Shs. (000)
Sales	<u>60,000</u>	<u>55,000</u>	<u>(5,000)</u>
Direct Materials	15,000	13,000	2,000
Direct Labour	20,000	18,900	1,100
Production Overheads:			
Variable with direct labour	5,000	4,600	400
Fixed	2,500	2,900	(400)
Variable selling overhead	7,500	7,200	300
Fixed selling overhead	<u>5,000</u>	<u>4,600</u>	<u>400</u>
	<u>55,000</u>	<u>51,200</u>	<u>3,800</u>

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Profit	<u>5,000</u>	<u>3,800</u>	<u>(1200)</u>
Direct labour hours	50,000	47,500	
Sales and production units	5,000	4,500	

- There are no opening and closing inventories.
- The Manager, Production and Operations feels that this type of statement does not give him information relevant for decision making and control of operations. Besides, he is of the view that the reported profit for the month would be well up to the budget and was surprised with a large adverse profit variance.

As a Senior Management accountant, you are required to:

- (a) Re-draft the above statement in a form which would be more relevant to the Manager.

(14 marks)
- (b) Produce a short report explaining the principles upon which you redrafted the above statement.

(6 marks)

(Total 20 marks)

Question 7

- (a) What are the factors to be considered at the time of making a choice for a suitable capital project?

(5 marks)
- (b) M/s Gumba and Co. Ltd. wants to replace its old machine with a new automatic superior machine. Two models Zig and Zag are available at the same cost of Shs. 500,000 each.

The salvage value of the old machine is Shs. 100,000. The utilities of the existing machine can be used if the company purchases Zig. Additional cost of utilities to be purchased in that case are Shs. 100,000.

If the company purchases Zag, then all the existing utilities will have to be replaced with new utilities costing Shs. 200,000. The salvage value of the old utilities will be Shs. 20,000.

The earnings after taxation are expected to be:

YEAR	CASH FLOWS	
	ZIG (SHS)	ZAG (SHS)
1	100,000	200,000
2	150,000	210,000
3	180,000	180,000
4	200,000	170,000
5	170,000	40,000
Salvage value at end of Year 5	50,000	60,000

The targeted return on capital is 15%

Required:

- (i) Compute the net present values of each of the two machines
(14 marks)
 - (ii) Which of the two machines should be bought and why?
(1 mark)
- (Total 20 marks)