

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA (U) EXAMINATIONS

LEVEL TWO

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 7

MONDAY, 20 JUNE 2005

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 traditional method of evaluating investment projects which expresses the profit from an investment as a percentage of the Investment is called:
 - (a) Pay back.
 - (b) Accounting rate of return.
 - (c) Present value.
 - (d) Net Present Value.
- (ii) Inventories comprise the following:
 - (a) Raw materials, work in progress, components and finished goods.
 - (b) Raw materials, waste and work in progress.
 - (c) Purchases, components and waste.
 - (d) Obsolete inventory, packages and raw materials.
- (iii) Which of the following are not quantitative factors which influence make or buy decisions?
 - (a) Quality of goods supplied.
 - (b) Uninterrupted supply of goods.
 - (c) The price of the supplier.
 - (d) The secrecy of manufacturing know-how.
- (iv) is a product which is recovered incidentally from the material used in the manufacturing of recognized main product.
 - (a) Component.
 - (b) By-product.
 - (c) Joint product.
 - (d) Finished product.
- (v) The plant capacity which gives maximum possible capacity achievable without operating interruptions is called:
 - (a) Practical capacity.
 - (b) Theoretical capacity.
 - (c) Idle capacity.
 - (d) Normal capacity.
- (vi) If are the reward of, is a reward of
 - (a) capital, labour, interest, wages
 - (b) wages, capital, labour, interest
 - (c) wages, labour, capital, interest
 - (d) wages, labour, interest, capital

- (vii) If an expense can be linked with a specific cost unit then it is treated as:
- Fixed.
 - Direct.
 - Indirect.
 - Variable.
- (viii) Which of the following statements is false?
- In time wage system, the worker does not get any reward for the time saved.
 - In the piece work system, the worker gets full payment for the time saved.
 - In the premium plan, the worker does not get payment for the time saved.
 - In the premium plan, both the worker and the employer share the labour cost of the time saved.
- (ix) If product designing is undertaken for introducing a new product on a commercial basis, the cost of design should be charged:
- to the customer's order.
 - in installments over a number of years as part of research and development.
 - to the designer's management fees.
 - to the product cost.
- (x) The price is the basic standard price which has been adjusted to provide for permanent changes in cost on account of trends in the market.
- current standard.
 - future standard.
 - basic standard.
 - historical standard.

Use the following data to answer questions (xi) – (xv):

A company manufactures television sets and employs a standard costing system. The standard cost per set is shown below:

	Shs
Direct materials	
5 plastic sheets at Shs 2,000 per sheet	10,000
Copper wire 3 spools at Shs 3,000 per spool	9,000
Direct labour 4 hours at Shs 7,000 per hour	28,000
Variable overhead 4 hours at Shs 3,000 per hour	12,000
Fixed overhead 4 hours at Shs 2,000 per hour	<u>8,000</u>
	<u>67,000</u>

Overhead rates were based upon normal and expected monthly capacity which were 4,000 direct labour hours. Practical capacity is however 5,000 direct labour hours per month.

During the month, 800 TV sets were produced and the following costs were incurred:

Direct materials	Quantity purchased	Quantity used
Plastic	5,000 sheets at Shs 2,000 per sheet	3,900 sheets
Copper	2,200 spools at Shs 3,100 per spool	2,600 spools

Direct labour:

2,000 hours at Shs 7,000.

1,400 hours at Shs 7,200.

Overhead expenditure:

Variable overheads Shs 10,000,000.

Fixed overheads Shs 8,800,000

- (xi) Calculate the total material usage variance:
- (a) Shs. 200,000 A.
 - (b) Shs. 400,000 A.
 - (c) Shs. 600,000 A.
 - (d) Shs. 800,000 A.
- (xii) The labour rate variance is:
- (a) Shs. 280,000 A.
 - (b) Shs. 340,000 A.
 - (c) Shs. 1,680,000 A.
 - (d) Shs. 2,440,000 A.
- (xiii) The variable overhead expenditure variance is:
- (a) Shs. 200,000 F.
 - (b) Shs. 400,000 A.
 - (c) Shs. 600,000 A.
 - (d) Shs. 1,600,000 A.
- (xiv) The expenditure variance for fixed overheads is:
- (a) Shs. 2,400,000 A.
 - (b) Nil.
 - (c) Shs. 800,000 A.
 - (d) Shs. 1,000,000 F.

- (xv) The fixed overhead volume variance is:
- (a) Shs. 400,000 A.
 - (b) Shs. 2,200,000 A.
 - (c) Shs. 2,400,000 A.
 - (d) Shs. 1,600,000 A.
- (xvi) Production may be continued even if the selling price is below the marginal cost in the following circumstances except when:
- (a) a new product is introduced in the market.
 - (b) closure of business means loss of business connections.
 - (c) employees are retrenched.
 - (d) the goods are of a perishable nature.
- (xvii) The provides the information about the materials to be acquired from the market during the budget period.
- (a) material procurement budget.
 - (b) material requirement budget.
 - (c) production budget.
 - (d) plant utilization budget.
- (xviii) The following are the causes of labour efficiency variance except:
- (a) emergency purchases.
 - (b) ineffective supervision.
 - (c) poor quality of materials.
 - (d) poor working conditions.
- (xix) The following factors relate to the technical feasibility aspect of a project except:
- (a) technology used.
 - (b) sources of finance.
 - (c) location of the project.
 - (d) construction and installation schedules.
- (xx) Which of the following is not the responsibility of a management accountant?
- (a) Installing a cost audit system.
 - (b) Preparation of financial statements.
 - (c) Educating the executive of the need for control.
 - (d) Continuous appraisal of economic and social forces.

SECTION B

Question 2

- (a) Distinguish between process costing and output costing. (2 marks)
 - (b) What is the “split-off-point”? (1 mark)
 - (c) Briefly explain four main bases of apportioning joint costs. (4 marks)
 - (d) Define the term equivalent units as used in valuing work in progress under process costing. (2 marks)
 - (e) Compare Activity Based Costing System with the traditional Absorption Costing System. (5 marks)
 - (f) Outline the effects of the introduction of Activity Based Costing Systems in Business Organisations. (6 marks)
- (Total 20 marks)**

Question 3

- (a) Define the following terms:
 - (i) Pay Back Period. (1 mark)
 - (ii) Net Present Value. (1 mark)
 - (iii) Internal Rate of Return. (1 mark)
 - (b) Management decision making must follow a rational approach.
 - (i) Outline six steps in rational decision making process. (6 marks)
 - (ii) Describe any three decision making tools that managers use. (3 marks)
 - (c) Outline four functions of the Budget Committee in an organisation. (4 marks)
 - (d) Give four benefits of introducing and operating a budgetary system in an organization. (4 marks)
- (Total 20 marks)**

SECTION C**Question 4**

- (a) Define Inventory Control? (1 mark)
- (b) What are the essentials of a good Inventory Control system? (3 marks)
- (c) Prado Ltd, a small textile industry took into stock and issued to production the following raw materials:

Date	Receipts			Issues
	Quantity	Price per unit	Total Value	Quantity
2004	Kg	Shs	Shs	Kg
January	800	8,000	6,400,000	-
March	-	-	-	400
April	2,000	12,000	24,000,000	-
June	-	-	-	1,200
July	3,200	16,000	51,200,000	-
October	-	-	-	1,600
November	3,600	20,000	72,000,000	-
December	-	-	-	5,600
			<u>153,600,000</u>	

Additional information:

- Other costs involved in converting the raw materials into the finished products amounted to Shs. 28,000,000,000.
- There was no opening inventory of raw materials.
- Sales for the finished product for the year amounted to Shs. 180,000,000,000.

Required:

- (i) Using the following methods determine the cost of issues to production:
- LIFO. (6 marks)
 - FIFO. (6 marks)
- (ii) Compute the gross profit for the year for each of the above methods. (4 marks)
- (Total 20 marks)**

Question 5

- (a) (i) Define marginal costing. **(1 mark)**
- (ii) How are variable costs and fixed costs treated in marginal costing? **(2 marks)**
- (b) Illustrate the following terms on a break-even chart:
- (i) Angle of incidence.
- (ii) Break-even point.
- (iii) Margin of safety **(4 marks)**
- (c) Boda Boda Riders Ltd. would like to increase their sales during the year ending 31 May 2006. They have presented to you the following options:
- (I) Reduce the selling price per unit by 20%.
- (II) Spend Shs. 30,000,000 on advertising.
- (III) Purchase more machinery at a fixed extra annual cost of Shs. 50,000,000 in order to improve the factory efficiency.

During the year ended 31 May 2005, the company sold 50,000 units. The following were the cost details:

	Shs. millions
Sales	400
Variable costs	<u>300</u>
Contribution	100
Fixed costs	<u>50</u>
Profit	<u><u>50</u></u>

The underlying cost relationships are expected to hold in the year ending 31 May 2006.

Required:

Which of the above options would you recommend? Give justification.

(13 marks)
(Total 20 marks)

Question 6

- (a) (i) What is budgetary control? **(1 mark)**
- (ii) Why do responsible people in an organization accept budgetary control but resist it in practice? Give any six reasons. **(3 marks)**
- (b) The following information has been prepared for Mpungu Ltd. for the six months to 31 December 2004.

Month:	July	August	September	October	November	December
Units:	280	560	1400	780	600	480

Product T uses two units of components L6 and three units of component L7. At 1 July 2004, there were expected to be 200 units of L6 in stock and 400 units of L7. The desired closing inventory levels of each component were as follows:

Month ending	July	August	September	October	November	December
L6 (Units)	220	440	1,120	600	480	400
L7 (Units)	500	1,260	680	600	400	360

During the six months, Component L6 was expected to be purchased at a cost of Shs. 10,000 per unit and Component L7 at Shs. 20,000 per unit.

Required:

For each of the six months, prepare the following budgets:

- (i) Direct Materials Usage Budget. **(4 marks)**
- (ii) Direct Materials Purchase budget. **(12 marks)**
- (Total 20 marks)**

Question 7

- (a) Why are Capital Investment decisions important? **(3 marks)**
- (b) Outline the principles of Discounted Cash Flow approach to Capital Investment appraisal. **(2 marks)**
- (c) Turn Key Investments Ltd. is considering marketing a new product with a four-year life. The company will need to install new equipment to manufacture the product. It has to choose between two possible alternative machines that would be suitable.

Machine A would cost Shs. 460,000,000 to purchase and install and would have a residual value of Shs. 120,000,000 at the end of 4 years.

Machine B would cost Shs. 630,000,000 to purchase and install with a residual value of Shs. 130,000,000 at the end of 4 years.

The following cashflow projections have been prepared from product sales and operating costs for the two machines:

Year	Machine A		Machine B	
	Sales Income	Costs	Sales Income	Costs
	Shs. '000	Shs. '000	Shs. '000	Shs. '000
1	194,300	74,140	291,700	61,600
2	194,300	64,140	394,400	54,100
3	184,400	54,220	384,600	84,240
4	181,900	31,820	181,900	81,750

The company's cost of capital is 12% per annum. All capital investments have to achieve a payback period of 3 years or less.

Required:

Advise management on the project which should be accepted.

(15 marks)
(Total 20 marks)