

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL THREE

INTRODUCTION TO MANAGEMENT ACCOUNTING – PAPER 9

MONDAY, 19 JUNE 2006

INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours**
2. Attempt all questions in Section A, **two** questions in Section B and any **two** 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) Fixed costs are conventionally deemed to be:
- (a) constant per unit of output.
 - (b) constant in total when production volume changes.
 - (c) outside the control of management.
 - (d) those unaffected by inflation.
- (ii) Whose requirements should a company consider when setting their objectives?
- (a) Shareholders.
 - (b) Shareholders and managers.
 - (c) The whole population.
 - (d) Stakeholders.
- (iii) Which one of the following does not constitute a reason why organizations should design and adopt materials requirements planning system?
- (a) Instituting a good materials procurement system.
 - (b) Maintaining an optimal stock level.
 - (c) Setting an appropriate price for issued materials/pricing.
 - (d) Maintaining accurate financial records.
- (iv) What are the journal entries when materials received are bought on credit?
- | DR | CR |
|-----------------------|-------------------------------------|
| (a) Raw materials | Materials creditors |
| (b) Stores account | Trade creditors (Suppliers) account |
| (c) WIP | Material creditors |
| (d) Creditors account | Stores account. |
- (v) Incentive schemes are designed to reward workers for output achieved above a certain standard. Any incentive scheme should satisfy all the following except it should be:
- (a) planned by managers alone.
 - (b) related closely to the efforts.
 - (c) agreed by prior consultation between employees and employer.
 - (d) understandable and simple to operate.

- (vi) What is cost allocation?
- The collection of costs attributable to cost centres and cost units using costing methods, principles and techniques prescribed for a particular business entity.
 - The process of establishing the costs of cost centres or cost units.
 - Charging of overheads to cost centres that can be specifically identified as responsible for the overhead.
 - The process of establishing the costs of cost centres or cost units.
- (vii) Lee Ltd. wishes to minimize its stock costs. At the moment its reorder quantity is 10,000 units. Order costs are Shs. 100 per order and the holding costs are Shs.110 per unit per month. Lee Ltd. estimates annual demand to be 150,000 units. What is the optimal reorder quantity?
- 500 units.
 - 1000 units.
 - 1200 units.
 - 1700 units.
- (viii) Which of the following best describes the term equivalent units when using FIFO method?
- The number of units worked on during a period including the opening and closing stock units.
 - The number of whole units worked on during a period ignoring the levels on completion of opening and closing stock units.
 - The number of effective whole units worked on during a period allowing for the levels of completion of opening and closing stock units.
 - The total number of whole units stated during a period ignoring the opening stock units as these were stated in the previous period.
- (ix) Envart Ltd. operates a continuous process producing three products and one by-product. Output from the process for a month was as follows:

Product	Selling price per unit (Shs)	Units of output from process
A	1,800	100,000
B	2,500	200,000
C	2,000	200,000
D (by-product)	200	35,000

Total output costs were Shs. 27,700,000.

What was the unit valuation for product C using the sales revenue basis of allocating joint costs?

- (a) Shs 38.
- (b) Shs 48.
- (c) Shs 50.
- (d) Shs 51

- (x) A company manufactures and sells two products X and Y. Forecast data for a year are:

	Product X	Product Y
Sales (units)	80,000	20,000
Sales price (per unit)	Shs 12	Shs 8
Variable cost per unit	Shs 8	Shs 3

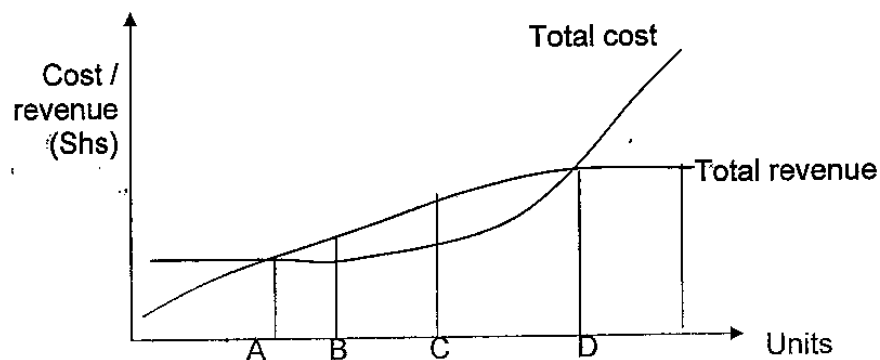
Annual fixed costs are estimated at Shs 273,000. What is the breakeven point, in sales revenue, with the current sales mix?

- (a) Shs 570,000.
- (b) Shs 606,667.
- (c) Shs 679,467.
- (d) Shs 728,000.

- (xi) A cost is described as staying constant over a certain range of activity, then increases but remains stable over a revised activity range in the short term. What type of cost is this?

- (a) Fixed cost.
- (b) Variable cost.
- (c) Semi variable cost.
- (d) Stepped cost.

- (xii) Consider the following graph for total costs and total revenue.



At which point on the graph is it most likely that profits will be maximized?

- (a) A.
 - (b) B.
 - (c) C.
 - (d) D.
- (xiii) When considering setting standards for costing which of the following would **not** be appropriate?
- (a) The normal level of activity should always be used for absorbing overheads.
 - (b) Average prices for materials should be used including discounts available.
 - (c) The labour rate used will be the rate at which labour is paid.
 - (d) Average material usage should be established based on generally accepted working practices.
- (xiv) In activity based costing, the factors that determine the size of costs of an activity are referred to as:
- (a) cost pools.
 - (b) cost units.
 - (c) cost drivers.
 - (d) activity costs.
- (xv) A principal budget factor is:
- (a) the director's budget.
 - (b) a factor which limits the activities of an undertaking.
 - (c) a factor common to all budgets.
 - (d) the director's salaries.
- (xvi) A manufacturing firm is very busy and overtime is being worked. The amount of overtime premium contained in direct wages would normally be classed as:
- (a) part of prime cost.
 - (b) factory overheads.
 - (c) direct labour costs.
 - (d) administrative overheads.
- (xvii) Which of the following are purposes of a budget?
- (i) Establishing strategic options.
 - (ii) Motivating management.
 - (iii) Establishing long term objectives.
 - (iv) Planning operations.

- (a) (i) and (iii).
- (b) (i) and iv).
- (c) (ii) and (iv).
- (d) (ii), (iii) and (iv).

Use the following information to answer questions (xviii) and (xix).

A company has a budgeted material cost of Shs. 125,000 for the production of 25,000 units per year. Each unit is budgeted to use 2kg of material. The standard cost of material is Shs 2.5 per kg. Actual materials in the year cost Shs 136,000 for 27,000 units and 53,000 kg were purchased and used.

(xviii) What was the adverse material price variance?

- (a) Shs 3,500.
- (b) Shs 1,000.
- (c) Shs 7,500.
- (d) Shs 11,000.

(xix) What was the favourable material usage variance?

- (a) Shs 2,500.
- (b) Shs 4,000.
- (c) Shs 7,500.
- (d) Shs 10,000.

(xx) In short term decision making context, which of the following would be a relevant cost?

- (a) Specific development costs already incurred.
- (b) The cost of special material which will be purchased.
- (c) Depreciation on existing fixed assets.
- (d) The original cost of raw materials currently in stock which will be used on the project.

SECTION B

Question 2

- (a) Explain the meaning of the following in the context of a material control system:

- (i) Continuous stock taking.
- (ii) Perpetual inventory

(5 marks)

- (b) Explain how the following documents are used in a job costing system.

- (i) Materials requisition.
- (ii) Job cost card.

(6 marks)

- (c) (i) During the month of May 2006, a company purchased 1000 kg of materials X and used 800 kg as follows:

1 May 2006 bought 400 kg at Shs 600 per kg.

5 May 2006 used 200 kg of materials.

11 May 2006 bought 300 kg at Shs 700 per kg.

14 May 2006 used 200 kg of material.

21 May 2006 bought 300 kg at Shs 800 per kg.

22 May 2006 used 200 kg of material.

31 May 2006 used 200 kg of material.

Determine the value of each issue of materials and closing inventory as at 31 May 2006 using FIFO.

(12 marks)

- (ii) What are the advantages of the FIFO method of stock valuation?

(2 marks)

(Total 25 marks)

Question 3

- (a) What are the distinguishing features of process costing?

(4 marks)

- (b) Describe four methods of accounting for income from by-products.

(4 marks)

- (c) Identify two main differences between process costing and job costing.

(2 marks)

- (d) A company which has been in existence for several years, manufactures a single product with a unit selling price of Shs 34. Production and sales data of the product over three months have been as below:

Month	1	2	3
Production (units)	12,000	10,500	10,000
Sales (units)	12,000	10,000	11,000
Total production costs per unit (Shs)	23.75	25	25.5

Variable production costs per unit and fixed production costs per month were the same throughout the period. Selling and administration overheads totaled Shs 87,000 in each month.

Required:

- (i) Calculate the variable cost per unit and the fixed production costs per month over the three months. **(6 marks)**
- (ii) Prepare a profit statement for month 2 using absorption costing method. Assume that the fixed production overhead absorption rate is based upon normal production of 12,000 units per month. **(6 marks)**
- (iii) Explain, with supporting figures, the difference in month 2 if marginal costing method had been used instead of absorption costing method. **(3 marks)**

(Total 25 marks)

Question 4

The preparation of budgets is a lengthy process which requires great care if the ultimate master budget is to be useful for purposes of management control within an organisation.

- (a) Identify and briefly explain the stages involved in the preparation of budgets. **(6 marks)**
- (b) 'Budgets and standards are similar but they are not the same'. Explain the above statement highlighting the differences and similarities between them. **(10 marks)**
- (c) Mebo Ltd. obtained the following information regarding costs and revenue for the past financial year.

Original Budget

Sales	10,000 units
Production	12,000 units
Standard cost per unit	Shs.
Direct material	5,000
Direct labour	9,000
Fixed production overheads	<u>8,000</u>
	<u>22,000</u>
Selling price	30,000

Actual Results

Sales	9,750 units
Revenue	Shs 325,000,000
Production	11,000 units
Material cost	Shs 65,000,000
Labour cost	Shs 100,000,000
Fixed production overheads	Shs 95,000,000

There were no opening stocks.

Required:

Produce a flexed budget statement showing the flexed budget and actual results. Calculate the variances between actual and flexed figures for the following:

- (i) Sales.
- (ii) Materials.
- (iii) Labour.
- (iv) Fixed overhead

(7 marks)

- (d) Explain how the sales and material variances in (c) above may have arisen.

(2 marks)

(Total 25 marks)

SECTION C

Question 5

- (a) The accounting system basically contains three core branches of accounting namely:

- (i) Financial accounting.
- (ii) Cost accounting.
- (iii) Management accounting.

Briefly describe each of the branches.

(6 marks)

- (b) Describe the role of a management accountant in an organisation.

5 marks)

- (c) Outline four differences between financial and management accounts.

(4 marks)

(Total 15 marks)

Question 6

- (a) Breakeven analysis is a useful technique for managers but has got some limitations. Outline the limitations of breakeven analysis.

(5 marks)

- (b) Breakeven and profit-volume charts are commonly associated with cost-volume-profit analysis.

- (i) Sketch a breakeven chart and indicate where the breakeven point would be for a single product firm. Clearly label the axes and indicate the following lines:

- total revenue.
- total cost.
- variable cost.
- fixed cost.

(6 marks)

- (c) Distinguish between:

- (i) avoidable and unavoidable costs.
(ii) cost centres and cost units.

(4 marks)

(Total 15 marks)

Question 7

- (a) (i) Define labour turnover.

(1 mark)

- (ii) Star Light Supermarket had a staff numbering 800 at the beginning of the year 2005 and 1200 at the end of the year. 400 employees resigned on 30th June and were immediately replaced on 1 July. 400 extra employees were also recruited at that time. What is the labour turnover rate?

(3 marks)

- (b) As a result of a high labour turnover, a company that previously paid its workers on a time basis is now contemplating moving over to an incentive scheme. Draft a memo to the Chief Accountant outlining the general characteristics and advantages of employing a successful incentive scheme.

(11 marks)

(Total 15 marks)