THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

INTRODUCTION TO MANAGEMENT ACCOUNTING
PAPER 7

DECEMBER 1998

INSTRUCTIONS TO CANDIDATES

1. Time allowed: 3 hours
2. Attempt all questions in Section **A**, **one** question from Section **B** and any **three** questions from Section **C**.
3. Section **A** has **twenty** compulsory questions each carrying 1 mark.
4. Section **B** has two questions carrying 20 marks each.
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) Management Accounting is:

- (a) concerned with the provision of information to people within the organisation to help them make better decisions.
- (b) concerned with the provision of information to external parties outside the organisation.
- (c) concerned with the provision of information to help people within an organisation and to external parties to show performance trends.
- (d) is concerned with cost accumulation for stock valuation to meet the requirements of internal reporting.

(ii) The following characteristics are true of "Jobbing Shop Production":

- (a) Products are made to meet customer demands.
- (b) Products are especially made to meet requirements of individual customers.
- (c) The manufacturer maintains stocks of components or finished products.
- (d) There are medium-volume production runs of medium range of standardised products.

(iii) What is a cost centre?

- (a) a measure of output in standard units per centre.
- (b) where managers are accountable for sales revenue and expenses.
- (c) where managers are responsible for some capital investment decision and thus influence the size of the investment.
- (d) where managers are accountable for the expenses that are under their control.

(iv) In determining 'Costs for Stock Valuation', which of the following is **not** a possible method of cost classification?

- (a) Period and products costs.
- (b) Elements of manufacturing costs.
- (c) Cost behaviour.
- (d) Job and process costs.

Information for Questions (iv) to vii

Jix Ltd. manufactures a single product, the budgeted selling price and variable cost details are as follows.

	Shs.
Selling price:	15,000
Variable costs per unit	
Direct materials	3,500
Direct Labour	4,000
Variable overhead	2,000

Turn Over .

Budgeted fixed overhead costs are UShs. 60m/- p.a. charged at a constant rate each month. Budgeted production is 30,000 units per annum.

(v) What is the budgeted total cost per unit?

(a) Shs. 11,500.
(b) Shs. 9,500.
(c) Shs. 5,500
(d) None of these.

(vi) What would be the gross profit under absorption costing?

(a) Shs. 7,570,000
(b) Shs. 7,770,000
(c) Shs. 13,750,000
(d) Shs. 5,500,000

(vii) Following the statement in question (vi) above, calculate the (under) /over absorption of overheads.

(a) (Shs. 560,000)
(b) Shs. 200,000.
(c) Nil.
(d) (Shs. 200,000).

Data for Questions (viii) to (xi).

Kajumba Ltd. manufactures a single product the selling price and costs are as follows.

	Shs. per Unit.
Selling Price	18,000
Direct materials	7000
Variable overheads	2000
Fixed overheads	2000

Expected production volume - 15,000 units.

(viii) The Breakeven point of Kajumba Ltd is

(a) 8000 units.
(b) Shs. 135m/- revenue.
(c) Shs. 90m/- revenue.
(d) 4500 units.

Turn Over .

(ix) The Company's expected margin of safety is

a) 33%
b) 67%
c) Shs. 90m/= revenue
d) 10.000 units.

(x) If Kajumba Ltd wants a profit of U Shs. 9m/=, how many visits must be sold?

(a) 6500 units.
(b) 5000 units.
(c) 15000 units.
(d) 9750 units.

(xi) If all costs increase by 10% but selling prices remain unchanged by how much must sales change from the original expected volume (15000 units) to achieve a profit of U Shs. 9m/=.

(a) 45.8% decrease.
(b) 54.2% decrease.
(c) 58.3% decrease.
(d) 41.7% decrease.

(xii) A job carries a monthly salary of U.Shs. 1m/= payable in arrears. The net present value now of next year's salary, assuming an annual rate of interest of 12% is:

(a) Shs. 9,470,000/=
(b) Shs. 8,900,000/=.
(c) Shs. 11,260,000/=
(d) Shs. 10,370,000/=

Turn Over .

Data for questions (xiii) -(xv):

John Bosco Plc manufactures and sells sweets. The sweets are sold in packet units, with each packet unit costing Shs. 600/= Estimates of demand and sales are as follows:-

Variable Cost per unit Shs.	Probability	Demand packet units	Probability
300	0.1	5000	0.3
350	0.3	6000	0.6
400	0.5	8000	0.1
450	0.1		

The unit variable costs do not depend on the volume of sales and fixed costs are estimated to be U. Shs. 1,000,000/=.

(xiii) The expected value (EV) of demand is:-

(a) 9,500 units.
(b) 5,900 units.
(c) 19,000 units.
(d) 6,300 units.

(xiv) The expected value (EV) of the variable cost per packet unit is

(a) Shs. 400/=
(b) Shs. 375/=
(c) Shs. 1500/=
(d) Shs. 380/=

(xv) The expected profit is:-

(a) Shs. 298,000/=
(b) Shs.12,980,000/=
(c) Shs.1,090,000/=
(d) Shs.327,500/=

(xvi) The following statement is true of a mode.

(a) The mode is the value of the middle member of an array.
(b) The mode of a grouped frequency distribution can not be estimated approximately.
(c) The mode is the most frequently occuring value.
(d) The mode is the best known type of average and is widely understood. It is also used for further statistical analysis.

(xvii) The most important measure of spread used in statistics is:-

(a) mean deviation.
(b) standard deviation.
(c) quartile deviation.
(d) inter quartile range.

(xviii) What is the present value of Shs. 60m/- at year 6 if a return of 15% per annum is obtainable.

a) Shs. 69,000,000
b) shs. 54,000,000
c) Shs. 60,000,000
d) Shs. 25,920,000

Data for questions (xix) and (xx).

The budgeted sales of Product Y in January 1998 was 2400 units. Gonzaga Ltd. the company which manufactures product Y uses a standard costing system, and the standard cost per unit of Product Y is Shs. 210/=. The company recorded the following variances for the month of January 1998.

Sales price variance	U Shs. 3,000 (A)
Sales volume profit variance	U Shs. 12,000(F)

During January 1998 2, 700 units were actually sold.

(xix) What was the budgeted Profit for Product Y in January 1998?

(a) U Shs. 96,000=
(b) U Shs. 12,000=
(c) U Shs108,000=
(d) U Shs. 72,000=

(xx) What was the actual sales revenue for Product Y in January 1998.

(a) U Shs. 576,000=
(b) U Shs. 675,000=
(c) U Shs. 672,000=
(d) U Shs. 670,000=

Turn Over .

SECTION B

Question 2:

Briefly explain the following terms which are associated with changing trends in manufacturing systems and what they aim to achieve.

(a)	Just-in-time (JIT) production methods	*(4 marks)*
(b)	Benchmarking	(4 marks)
(c)	Total Quality Management	*(4 marks)*
(d)	Economies of scope	*(4 marks)*
(e)	Advanced Manufacturing Technologies (AMT)	*(4 marks)*
		[TOTAL = 20 marks]

Question 3

Various activities within a company should be coordinated by the preparation of plans of actions for future periods. These detailed plans are usually referred to as Budgets (Drury)

Required:

Discuss the importance of producing budgets.

SECTION C

Question 4

Watsa Ltd is considering which of the two mutually exclusive projects it should undertake. The Finance Director thinks that the project with the higher Net Present Value (NPV) should be chosen whereas the Managing Director thinks that the one with the higher Internal Rate of Return (IRR) should be undertaken especially as both projects have the same initial capital outlay and life. The company's Cost of Capital is 10%. The projected net after tax cash flows of the projects are:

		PROJECT TN	PROJECT BP
		U Shs. '000	U Shs. '000
Year	0	(200,000)	(200,000)
	1	35,000	218,000
	2	80,000	10,000
	3	90,000	10,000
	4	75,000	4,000
	5	20,000	3,000

Required:

(a)	Calculate the NPV and IRR of each project.	*(6 marks)*
(b)	Recommend with reasons which project you would undertake.	*(4 marks)*
(c)	Explain the inconsistency in ranking of the two projects in view of the Directors' remarks.	*(4 marks)*
(d)	Identify the cost of capital at which the recommendation in (b) would be reversed.	*(6 marks)*

[Total = 20 mark]

Question 5

Kyolaba manufactures Ltd re-apportions the costs incurred by two service cost centres, materials handling and inspection, to the three production cost centres of machining, finishing and assembly.

The following data are the overhead costs which have been allocated and apportioned to the five cost centres.

	U Shs '000
Machining	400,000
Finishing	200,000
Assembly	100,000
Material handling	100,000
Inspection	50,000

Estimates of the benefits received by each cost centre are as follows:-

	Machining	Finishing	Assembly	Materials handling	Inspection
	%	%	%	%	%
Materials handling	30	25	35	-	10
Inspection	20	30	45	5	-

Required:

a) Calculate the overhead charge for each of the three production cost centres, including the amounts re apportioned from the two service centres using the continuous allotment (or repeated distribution) method. *(10 marks)*

b) Give your views on whether re-apportioning service cost centre costs is generally worthwhile and suggest an alternative treatment of such costs. *(4 marks)*

c) In some cases under/over absorption of overhead should be apportioned between the cost of goods sold in the period to which it relates and to closing stocks. However in some cases it is treated as a period cost. Discuss. *(6 marks).*

Question 6

Make or Buy Ltd manufactures and sells three components, but has requested its Purchasing Manager to investigate the prices of an overseas producer. The following costs and prices are available.

Component	M	N	O
Production Units	20,000	40,000	80,000
	U Shs	U Shs.	U Shs.
Direct material cost. per unit.	800	1000	400
Direct labour cost per unit.	600	1800	800
Direct Expenses Cost per unit	400	600	200
Fixed Costs per unit	800	1000	400
Selling price each.	4000	5000	2000
Imported price each.	2750	4200	2000

Required:

(a) Give recommendations to management as to whether any component should be purchased on the basis of cost only. *(6 marks)*

(b) Calculte the profit the company will make by producing all the components itself. *(5 marks)*

(c) State if your recommendation in (a) above is likely to affect the profit and by how much. *(4 marks)*

(d) Assuming management proposes to go a head and import some of the components, describe matters that you would bring to the attention of management. *(5 marks)*

[Total 20 marks]

Question 7

Mulago Chemical plant produces three joints products in one common process but each product is capable of being further processed separately after the split off point. The estimated data for the month of December 1998 is as follows:-

	Product Viag	Product Kino	Product Tot
Selling price at split off point @ litre.	Shs. 600	Shs. 800	Shs. 900
Selling price after further processing @ litre.	Shs. 1000	Shs. 2000	Shs. 3000
Post separation point costs.	Shs. 2,000,000	Shs. 1,000,000	Shs.2,250,000
Output in litres.	3500	2500	2000

Pre separation point joint costs are estimated to be Shs. 40,000 and it is current practice to apportion these to the three products according to litres produced.

Required.

(a) Prepare a statement of estimated profits or loss for each product and in total for December 1998 if all the three products are processed further. *(6 marks)*

(b) Advise on how profits could be maximised if one or more products are sold at the split-off point. Your advice should be supported by a profit statement. *(6 marks)*

(c) Explain the accounting treatment of normal and abnormal losses and by products. *(8 marks).*

END .