

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA(U) EXAMINATIONS

LEVEL THREE

MANAGEMENT DECISION AND CONTROL - PAPER 12

THURSDAY, 24 JUNE 2004

INSTRUCTIONS TO CANDIDATES:

1. Time allowed: **3 hours**
2. Section **A** has two compulsory questions. Question **one** carries 30 marks and question **two** carries 10 marks.
3. Section **B** has **four** questions and only **three** questions are to be attempted. Each question carries 20 marks.
4. Please read further instructions on the answer book.

SECTION A**Question 1**

Planet Ltd is a manufacturing concern with two divisions namely **Mars** and **Venus**. Division **Mars**, a profit centre produces 3 products X, Y and Z. Each item has an external market and data on prices, costs and labour hours are as follows:

Product:	X	Y	Z
• External market price per unit	Shs. 4,000	Shs. 5,000	Shs. 3,500
• Variable cost of production in Mars	Shs 3,500	Shs. 2,500	Shs. 2,000
• Labour hours required per unit in Mars Division.	5	10	10

Product Y can be transferred to Division **Venus**, but the maximum quantity that might be required for transfer is 200 units of Y.

The External market sales are:

X	700 units.
Y	600 units.
Z	400 units.

Instead of receiving transfers of product Y from Division Mars, Venus could buy similar units on the open market at a slightly cheaper price of Shs. 4,000 per unit.

Required:

- (a) Advise the management of **Mars** on the transfer price for each unit if the total labour hours available are:
- 12,000 hours.
 - 15,000 hours.
- (15 marks)**
- (b) **Venus** division has argued that full cost basis does not meet the objectives of setting transfer prices. Outline the objections which can be levied against the full cost basis.
- (6 marks)**
- (c) Write a memo to the CEO of Planet Ltd explaining the advantages and disadvantages of using a transfer price between divisions based on:
- cost.
 - market price.

(9 marks)
(Total 30 marks)

Question 2

In learning organisations, modern managers are faced with fast changes in the market place and are required to keep ahead of the competitors in the arena in which they operate.

Required:

Advise management of an industry of your choice how modern tools like **value analysis and business process re-engineering** could be used to enhance operational efficiency, improve customer satisfaction and boost profits.

(10 marks)

SECTION B

Question 3

The Executive Director (ED) of Kampala Hospital, a hospital that provides both community and inpatient services recently attended a seminar on Zero Based Budgeting (ZBB). He has since decided to introduce ZBB during the budget for 2005 financial year.

Required:

You are the Management Accountant of Kampala Hospital and the ED wants the some information before he implements his decision. Write a memo to the ED on the following:

- (a) Explain how ZBB differs from incremental budgeting.
(5 marks)
 - (b) Describe the stages of ZBB giving specific examples relating to budgeting for a non-profit hospital.
(5 marks)
 - (c) Explain the role of committed, engineered and discretionary costs in the operation of ZBB, giving examples of each.
(6 marks)
 - (d) Give the benefits of ZBB over the traditional methods of budgeting.
(4 marks)
- (Total 20 marks)**

Question 4

A company is considering a choice between two mutually exclusive projects. The Finance Manager (FM) thinks that the project with the higher NPV should be chosen whereas the Managing Director (MD) thinks that the one with a higher IRR should be undertaken especially as both projects have the same initial outlay and length of life. The company anticipates a cost of capital of 10% and the net after tax cash flows of the projects are as follows:

	Project X	Project Y
Year	Shs million	Shs million
0	-200	-200
1	35	218
2	80	10
3	90	10
4	75	4
5	20	3

Required:

- (a) Using NPV and IRR computations, recommend to the MD the project that the company should undertake. Give reasons for your recommendations.
(10 marks)
 - (b) Explain the consistency in ranking of the two projects in view of the remarks of the MD and FM.
(4 marks)
 - (c) Identify the cost of capital at which your recommendation in (a) would be reversed.
(6 marks)
- (Total 20 marks)**

Question 5

The Lions Club of Arua East, a charity organization, has held an annual dinner and dance for the last twenty years that it has been in existence. The primary objective is to raise funds. The Club always prints a brochure for the function where companies and individuals advertise and this is sold to both its members and the public.

This year there is concern that an economic recession may adversely affect both the number of persons attending the function and the advertising space that will be sold out.

Based on past experience, current prices and quotations, it is expected that the following costs and revenues will apply for the function:

			Shs' 000
Costs:	Dinner & Dance:	Hire of Premises	700
		Band & Entertainers	2,800
		Raffle prizes	800
		Photographer	200
		Food per person (with a minimum guarantee of 400 persons)	12
	Programme	A fixed cost of Shs 2,000,000, plus 5,000 per page.	
Revenues:	Dinner & Dance:	Price of ticket is Shs 20,000 per person.	
		Raffle ticket is Shs 5,000 per person.	
		Photographs are Shs 1,000 per person.	
	Programme:	Average revenue from advertising is Shs 70,000 per page.	

A sub committee, formed to examine more closely the likely outcome of the function, discovered the following from previous records and accounts:

No. of tickets sold	No. of past occasions
250 to 349	4
350 to 449	6
450 to 549	8
550 to 649	<u>2</u>
	<u>20</u>

No. of programme pages sold	No. of past occasions
24	4
32	6
40	8
48	<u>2</u>
	<u>20</u>

Several members of the sub committee are in favour of using a market research consultant to carry out a quick enquiry into the likely number of tickets and the likely number of pages of advertising space that would be sold for this year's dinner and dance.

Required:

Calculate the expected value of the profit to be earned from the dinner this year.

Note: All workings for tickets should be in steps of 100 tickets and for advertising in steps of 8 pages.

(20 marks)

Question 6

In November 2003, the students of Trinity Accountancy College (TAC) agreed to hold an end of year party after the December 2003 ICPAU Examinations.

A Committee was set up to plan, budget and make all the necessary arrangements for the party. Many types of drinks were planned for including Booster which improves concentration and alertness.

Booster is a new and popular drink with students of TAC; it is a mixture of Cinnamon and Crest Soda.

From experience, a standard mixture was agreed upon; five litres of Booster are normally produced using four litres of Crest Soda and two litres of Cinnamon liquid. Both Soda and Booster evaporate at the same rate.

The standard cost of five litres of Booster as agreed in November was as follows:

Input	Volume in litres	Price per Litre Shs	Value Shs
Crest Soda	4	1,000	4,000
Booster	2	8,000	<u>16,000</u>
			<u>20,000</u>

Kapere, a CPA (U) student, was in charge of drinks. During the party he bought eight litres of Crest Soda at Shs 1,200 per litre and six litres of Booster at Shs 7,000 per litre. Out of these inputs, he produced 10 litres of Booster.

Kapere failed to convince the Committee as to why he used more money, and why there was a difference between what was agreed upon before your party and what actually happened during the party.

Required:

Assume you are in Kapere's position. Define and calculate each of the following variances in Uganda shillings as part of the explanation to the Committee.

- (a) Price Variance (5 marks)
 - (b) Usage Variance (5 marks)
 - (c) Mix Variance (5 marks)
 - (d) Yield Variance (5 marks)
- (Total 20 marks)**