



# **GRE TSA UNIVERSITY - THIKA**

## **UNIVERSITY EXAMINATIONS JANUARY - APRIL 2017 SEMESTER**

### **BACHELOR OF COMMERCE**

**COURSE CODE: BCAC 301**

**COURSE TITLE: MANAGEMENT ACCOUNTING**

**DATE: 3 APRIL 2017**

**TIME: 11.30 AM – 2.30 PM**

---

#### **INSTRUCTIONS TO CANDIDATES**

1. SECTION A IS **COMPULSORY**.
2. SECTION B: ANSWER ANY OTHER **THREE** QUESTIONS.
3. **DO NOT** WRITE ANYTHING ON THIS QUESTION PAPER AS IT WILL BE AN EXAM IRREGULARITY.
4. ALL ROUGH WORK SHOULD BE AT THE BACK OF YOUR ANSWER BOOKLET AND CROSSED OUT.

**CAUTION:** All exam rooms are under CCTV surveillance during the examination period.

## SECTION A

### QUESTION ONE

- a) Discuss the three main elements of strategic costs management. (6 marks)
- b) Explain the major characteristics of modern businesses that necessitate the introduction of a strategic cost management system. (6 marks)
- c) “If a manager searches for a system that will provide the ‘true costs’ of each service produced by his firm he is attempting the impossible”. Discuss. (8 marks)
  
- d) Briefly explain three methods that can be used to analyze uncertainty in cost-volume-profit (C-V-P) analysis. (3 marks)

Aberdares Company Ltd. is a manufacturing company which produces and sells a single product known as  $T_1$  at a price of Sh.10 per unit. The company incurs a variable cost of Sh.6 per unit and fixed costs of Sh.400,000. Sales are normally distributed with a mean of 110,000 units and a standard deviation of 10,000 units. The company is considering producing a second product,  $T_2$  to sell at Sh.8 per unit and incur a variable cost of Sh.5 per unit with additional fixed costs of Sh.50,000. The demand for  $T_2$  is also normally distributed with a mean of 50,000 units and standard deviation of 5,000 units. If  $T_2$  is added to the production schedule, sales of  $T_1$  will shift downwards to a mean of 85,000 units and standard deviation of 8,000 units. The correlation coefficient between sales of  $T_1$  and  $T_2$  is  $-0.9$ .

#### Required:

- i The company’s break-even point for the current and proposed production schedules. (7 marks)
  - ii The coefficient of variation for the two proposals. (8 marks)
  - iii Based on your computation’s in (i) and (ii) above advise the company on whether to add  $T_2$  to its production schedule. (2 marks)
- (Total: 40 marks)**

## SECTION B

### QUESTION TWO

“It is now fairly and widely accepted that conventional cost accounting, distorts management’s view of business through unrepresentative overhead allocation and inappropriate product costing. This is because the traditional approach usually absorbs overhead costs across products solely on the basis of the direct labour involved in their manufacture. As direct labour cost expressed as a proportion of total manufacturing cost continues to fall, this leads to more and more distortion and misrepresentation of the impact of particular products on total overhead costs” (from Financial Times)

**Required:**

- a) Briefly discuss the above statement and state what approaches are being adopted by management accountants to overcome such criticism. (8 marks)
- b) Traditional budgeting systems are incremental in nature and tend to focus on cost centers. Activity based budgeting (ABB) links strategic planning to the overall performance measurement aimed at continuous improvement.

**Required:**

- i Explain the weakness of traditional incremental budgeting systems. (4 marks)
- ii Describe the main feature of activity based budgeting system and comment on its advantages. (8 marks)

**(Total: 20 marks)**

**QUESTION THREE**

The following information has been extracted from the books of Solarcross Ltd for the year to 31 March 2000:

	<b>Units '000'</b>
Production	30
Sales	24
Production cost incurred:	<b>Sh '000'</b>
Direct material	7,200
Direct labour	1,800
Variable overheads	1,500
Fixed overheads	2,700
Selling and administrations costs:	
Sales and salaries	450
Variable sales commission	300
Promotion and advertising	480
Other fixed costs	720

The company's unit selling price is Sh 550.

**Required:**

- a) Profit and loss statement under direct costing approach. (8 marks)
- b) Profit and loss statement under indirect costing approach. (8 marks)
- c) An explanation of the difference in profit or loss in (a) and (b) above. (4 marks)

**(Total: 20 marks)**

## QUESTION FOUR

In preparing the cash budget for the next year, Kericho Tea Farm Limited finds that it has limited surplus funds of Sh.70,000,000 which the managing directors wishes to spend on one of two schemes.

- Scheme A** - Pay Sh.70,000,000 immediately to reputable sales promotion agency which would provide extensive advertising and planned 'reminder' advertising over the next ten years. This is expected to increase the net operational cash flows by sh.200,000,000 per annum for the first five years and Sh.100,000,000 for the following five years. Thereafter, the effect would be zero.
- Scheme B** - Buy immediately labour saving machinery at a cost of Sh.70,000,000 which would reduce the operating cash outflows by sh.150,000,000 per annum for the next ten years, at the end of which the equipment will have a salvage value of zero.

### Required

- (i) The average accounting rate of return (ARR) per annum for each scheme over 10 years. (2 marks)
- (ii) The net present value (NPV) for each scheme assuming the desired rate of return is 18%. (4 marks)
- (iii) The internal rate of return (IRR) for each alternative. (4 marks)
- (b) The paradox is that, "while cost plus pricing is devoid of any theoretical justification, it is widely used in practice". Discuss the possible justification for its use. (6 marks)
- (c) Explain the factors to be taken into consideration when establishing the length of a budget period. (4 marks)
- (Total: 20 marks)**

In preparing the cash budget for the next year, Kericho Tea Farm Limited finds that it has limited surplus funds of Sh.70,000,000 which the managing directors wishes to spend on one of two schemes.

- Scheme A** - Pay Sh.70,000,000 immediately to reputable sales promotion agency which would provide extensive advertising and planned 'reminder' advertising over the next ten years. This is expected to increase the net operational cash flows by sh.200,000,000 per annum for the first five years and Sh.100,000,000 for the following five years. Thereafter, the effect would be zero.
- Scheme B** - Buy immediately labour saving machinery at a cost of Sh.70,000,000 which would reduce the operating cash outflows by sh.150,000,000 per annum for the next ten years, at the end of which the equipment will have a salvage value of zero.

**Required**

- (i) The average accounting rate of return (ARR) per annum for each scheme over 10 years. (2 marks)
- (ii) The net present value (NPV) for each scheme assuming the desired rate of return is 18%. (4 marks)
- (iii) The internal rate of return (IRR) for each alternative. (4 marks)
- (b) The paradox is that, “while cost plus pricing is devoid of any theoretical justification, it is widely used in practice”.  
Discuss the possible justification for its use. (6 marks)
- (c) Explain the factors to be taken into consideration when establishing the length of a budget period. (4 marks)
- (Total: 20 marks)**

**QUESTION FIVE**

A processing company, Timao Co. Ltd., is extremely busy. It has increased its output and sales from 12,900 kg in 1<sup>st</sup> quarter of the year to 17,300 kg in the 2<sup>nd</sup> quarter. Although demand is still rising, it cannot increase its output more than an additional 5% from its existing labour force, which is now at its maximum.

Data for its four products in 2<sup>nd</sup> quarter were:

	<b>Product P</b>	<b>Product Q</b>	<b>Product R</b>	<b>Product S</b>
Output (Kg)	4560	6960	3480	2300
Selling price (Sh. Per kg)	162	116.40	99.20	136.80
<b>Costs (Sh. Per kg)</b>				
Direct labour @ Sh.60 per hour)	19.60	13.00	9.90	17.00
Direct materials	65.20	49.00	41.00	54.20
Direct packaging	8.40	7.40	5.60	7.00
Fixed overhead (Absorbed on basis of direct labour cost)	<u>39.20</u>	<u>26.00</u>	<u>19.80</u>	<u>34.00</u>
	<b><u>132.40</u></b>	<b><u>95.40</u></b>	<b><u>76.30</u></b>	<b><u>112.20</u></b>

The Kagocho Company has offered to supply 2000 kg of product Q at a delivered price of 90% of Timao's Co. Ltd. Selling price. Timao Co. Ltd., will then be able to produce extra of product P instead of product Q to the plant's total capacity.

**Required:**

- a) State with supporting calculations, whether Timao Co. Ltd should accept the Kagocho Company's offer. (15 marks)
- b) Which would be the most profitable combination of subcontracting 2000kg of one product at a price of 90% of its selling price and producing extra quantities of another product up to the plant total capacity?  
Assume that the market can absorb the extra output. (5 marks)

**(Total: 20 marks)**