JARAMOGI OGINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF BUSINESS AND ECONOMICS UNIVERSITY EXAMINATION

FOR DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH IT $4^{\text {TH }}$ YEAR $1^{\text {ST }}$ SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

## COURSE CODE: BAB1407

COURSE TITLE: MANAGEMENT ACCOUNTINGI
DATE: 07/12/2022
SESSION: 15.00-17.00PM
TIME: 2.00 HOURS

## INSTRUCTIONS:

1. Answer Question ONE (Compulsory) and ANY other 2 Questions
2. Candidates are advised not to write on the Question paper
3. Candidates must hand in their answer booklets to the invigilator while in the examination room

## QUESTION ONE(30 MARKS)

a) Explain the differences between full cost plus and Marginal cost plus, giving their strengths and weaknesses?(6 marks)
b) Examine the Rules and limitations of Game Theory (6 marks)
c) Identify and analysethe various types of decision making environments.
(6 marks)
d) Anyango supplies homemade mandazis to various customers in a city. Each mandazi is sold to a customer for sh. 10 and costs sh. 8 to prepare. Therefore, the contribution per mandazi is sh.2. Based upon past demands, it is expected that, during the 250 day working year, the customers will require the following daily quantities:

- On 25 days of the year, 40 mandazis.
- On 50 days of the year, 50 mandazis.
- On 100 days of the year, 60 mandazis.
- On 75 days 70 mandazis.

He must provide the mandazis when they are fresh in batches of 10 in advance.
Required:
i) The probability that demand will be 40, 50, 60 and 70 mandazis (1 mark)
ii) Construct a payoff table to determine the values of profit or losses depending on how many mandazis are supplied and sold by Anyango (4 marks)
iii) Applying the expected value formula, assist her to decide on how many mandazis she should supply for each day of the forthcoming year.(4 marks)
iv) Calculate the Value of perfect information (3 marks)

## QUESTION TWO(20 MARKS)

a) Discuss the advantages and disadvantages of the following cost estimation methods:
i) Engineering method
ii) High low method
iii) Account analysis
iv) Visual fit method
v) Regression analysis (10 marks)
b) Usenge Chemicals Ltd manufactures a single type of liquid chemicals. The company's production overheads vary with volume of production in litres. Volume of production and the amount of overheads for 10 months that ended $31^{\text {st }}$ October 2004 are presented below.

| Month | Volume of production <br> overheads (litres '000') | Production overheads <br> (shs ‘000') |
| :--- | :--- | :--- |
| January | 150 | 1800 |
| February | 120 | 1400 |
| March | 200 | 2300 |
| April | 170 | 1900 |
| May | 120 | 1600 |
| June | 250 | 3000 |
| July | 220 | 2700 |
| August | 90 | 1100 |
| September | 180 | 2400 |
| October | 300 | 3200 |

## Required:

i) Use the high-low method to determine an equation in the form $y=a+b x$
ii) Using the equation in (i) above determine the overheads for production of 350,000,000 units. (2 marks)

## QUESTION THREE(20 MARKS)

a) Discuss the distinguishing features between Zero based and Activity based budgeting, clearly showing their benefits and limitations( 8 marks)
b) What are the limitations of Cost Volume Profit (CVP) Model?(6 marks)
c) Other environmental management tools work well if integrated with Environmental Management Accounting (EMA). Discuss (6 marks)

## QUESTION FOUR(20 MARKS)

a) Ethics in accounting is of utmost importance to accounting professionals and those who rely on their services. Examine this statement (8 marks)
b) Assume that you are planning to sell 600 badges at the forthcoming Nairobi show at a sh. 9 each. The badges cost sh. 5 to produce and you incur sh. 2000 to rent a booth in the showground

## Required;-

a) Compute the break-even point in units and in shillings (2 marks)
b) Compute the margin of safety in units $\%$ and I shillings (3 marks)
c) Compute the number of units that must be sold to earn a profit before of $20 \%$ of sales (3 marks)
d) Compute the number of units that must be sold to earn an after tax profit of sh. 1,640 assuming that the tax rate is $30 \%$ ( 4 marks)

## QUESTION FIVE(20 MARKS)

Roasters Limited is a coffee-blending firm. It produces a special blend of coffee known as "Utopia
Blend" by mixing two grades of coffee " AB " and " QP " as follows:

| Material | Standard mix ratio | Standard <br> price per <br> Kg |
| :--- | :---: | :--- |
| AB | $40 \%$ | Sh 120 |
| QP | $60 \%$ | Sh 100 |

A standard loss of $15 \%$ is expected. During the month of March 2002, the company produced $2,500 \mathrm{~kg}$ of "Utopia Blend". The actual quantities blended were as follows:

| AB | $1,400 \mathrm{~kg}$ | 175,000 |
| :--- | :--- | :--- |
| QP | $1,600 \mathrm{~kg}$ | 152,000 |

## Required:

Calculate the following variances
i) Material price variance (4 marks)
ii) Material usage variance (4 marks)
iii) Material mix variance (4 marks)
iv) Material yield variance (4 marks)
v) Material cost variance (4 marks)

