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 $2^{\text {ND }}$ SEMESTER 2023/2024 ACADEMIC YEAR

## COURSE CODE: BAB1407

## COURSE TITLE: MANAGEMENT ACCOUNTING-I

DATE:
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) Discuss the ethical standards of management accountants (8 marks)
b) Enumerate the Cost estimation methods ( $\mathbf{1 0}$ marks)
c) 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 ( $\mathbf{3}$ marks)
b) Compute the margin of safety in \% and in shillings ( $\mathbf{3}$ marks)
c) Compute the number of units that must be sold to earn a profit before tax of 20\% of sales ( $\mathbf{3}$ 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 $30 \%$ ( $\mathbf{3}$ marks)

## QUESTION TWO (20 MARKS)

a) Enumerate the Characteristics of linear regression (6 marks)
b) Discuss the limitations of the Learning curve theory ( $\mathbf{8}$ marks)
c) A company has some inventory that was bought for sh.10, 000 . It could be sold for sh. 4,000 or used to make a product that would sell for sh. 15,000 . There is no other use for the inventory. Additional costs needed to convert the inventory into the product are sh. 9,000 . The material could be bought now for sh. 8,000

Required;-
What should the company do? ( 6 marks)

## QUESTION THREE (20 MARKS)

a) Prepare a budget for 2006 for the direct labour costs and overhead expenses of a production department at the activity levels of $80 \%, 90 \%$ and $100 \%$, -using the information listed below. ( $\mathbf{1 7}$ marks)
i) The direct labour hourly rate is expected to be Shs.3.75:
ii) $100 \%$ activity represents 60,000 direct labour hours,
iii) Variable costs

Indirect labour Consumable supplies
Canteen and other welfare services.

Shs 0.75 per direct labour hour. Shs 0,375 per direct labour hour $6 \%$ of direct and indirect labour costs
iv) Semi-variable costs are expected to relate to the direct labour hours in thesame manner as for the last five years.

| Year | Direct <br> hours | labour | Semi- <br> variable <br> costs <br> "Shs" |
| :---: | :--- | :--- | :--- |


| $20 \times 1$ | 64,000 | 20,800 |
| :--- | :--- | :--- |
| $20 \times 2$ | 59,000 | 19,800 |
| $20 \times 3$ | 53,000 | 18,600 |
| $20 \times 4$ | 49,000 | 17,800 |
| $20 \times 5$ | 40,000 | 16,000 |
| (estimate) |  |  |

v) Fixed overhead per labour hour at $100 \%$ activity

|  | Shs |
| :--- | :---: |
| Depreciation | 0.30 |
| Maintenance | 0.20 |
| Insurance | 0.10 |
| Rates | 0.25 |
| Management salaries | 0.40 |

vi) Inflation is to be ignored.
b) Calculate the budget cost allowance (i.e. expected expenditure) for $20 \times 6$ assuming that 57,000 direct labour hours are worked. ( $\mathbf{3}$ marks)

## QUESTION FOUR (20 MARKS)

a) What are the rules of Game Theory ( $\mathbf{8}$ marks)
b) Christian pass limited operates in an entirely different industry. However, it also produces to order and carries no inventory. Its demand function is estimated to be $\mathrm{P}=$ $100-2 \mathrm{Q}$

Where;
$\mathrm{P}=$ unit selling price in shillings
$\mathrm{Q}=$ quantity demanded in thousands of units
TC functions is estimated to be $\mathrm{C}=\mathrm{Q}^{2}+10 \mathrm{Q}+500$
Where $\mathrm{C}=$ Total cost in thousand shillings
You required in respect of Christian pass Limited to:
i. Calculate the output in units that will maximize total profit and to calculate the corresponding unit selling price, total profit and the total sales revenue
ii. Calculate the output in units that will maximize total revenues and total sales revenue ( 6 marks)

## QUESTION FIVE (20 MARKS)

a) Discuss the methods used to determine the optimal cash balances ( $\mathbf{8}$ marks)
b) The management of Bondo Ltd has set safety cash balance of $\$ 100,000$. The standard deviation ( $\sigma$ ) of the daily cash balance during the last year was $\$ 68,000$, and the transaction cost was $\$ 55$. The company also has the opportunity to invest idle cash in marketable securities at an annual interest rate of $15 \%$. Use 360 days as the annual number of days.

## Compute:

i) The Daily interest rate ( $\mathbf{3}$ marks)
ii) The Spread (3 marks)
iii) Return Point (3 marks)
iv) Upper Limit (3 marks)

