



Kasarani Campus
Off Thika Road
Tel. 2042692 / 3
P. O. Box 49274, 00100
NAIROBI
Westlands Campus
Pamstech House
Woodvale Grove
Tel. 4442212
Fax: 4444175

KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
SECOND YEAR, SECOND SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE
(BUSINESS ADMINISTRATION)

Date: 15th April, 2024
Time: 11.30am – 1.30pm

KAC 102 - INTRODUCTION TO MANAGEMENT ACCOUNTING

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE (30 MARKS)

CASE STUDY: ALPHA MANUFACTURING LTD.

Alpha Manufacturing Company is a global conglomerate with divisions spanning across various industries, including electronics, automotive, and healthcare. The company operates under a decentralized management structure, where each division has significant autonomy in decision-making. The company's decentralized structure allows each division to tailor its strategies according to the unique needs and market conditions of its respective industry. However, this autonomy has led to some challenges in coordinating resources and aligning objectives across divisions. Recently, the electronics division of Alpha Manufacturing Company has been accused of environmental violations in one of its overseas factories. The division's management must decide whether to prioritize cost-cutting measures, potentially compromising environmental standards, or invest in sustainable practices, which may increase production costs but align with the company's ethical values.

Additionally, one of the flagship products of this division is widgets. The standard cost to produce one widget is as follows:

- Direct materials: Kshs. 1,000
- Direct labor: Kshs. 800
- Variable overhead: Kshs. 500
- Fixed overhead: Kshs. 700

During the month of January, the company produced 5,000 widgets and incurred the following actual costs:

- Direct materials: Kshs. 5,200,000
- Direct labor: Kshs. 4,200,000
- Variable overhead: Kshs. 2,750,000
- Fixed overhead: Kshs. 3,500,000

The automotive division of Alpha Manufacturing Company is experiencing high demand for a new line of electric vehicles. However, the division is constrained by limited resources, including skilled labour and raw materials. The management must allocate resources efficiently to meet customer demand while optimizing profitability. The healthcare division of Alpha Manufacturing Company produces medical devices used in hospitals worldwide. The division purchases components from the electronics division for its products. There is a debate over the appropriate transfer price for these components, as the electronics division wants to maximize its profits, while the healthcare division aims to minimize costs to remain competitive in the market. The management of Alpha Manufacturing Company faces various decision-making scenarios, ranging from routine operational choices to strategic long-term planning. They must utilize decision-making theories such as the rational decision-making model or bounded rationality to analyse options, evaluate risks, and make informed decisions that align with the company's objectives and values.

In conclusion, Alpha Manufacturing Company operates in a complex business environment where decentralization, ethics, resource allocation, transfer pricing, and decision-making theory intersect. Effective management accounting practices are essential for addressing these challenges and ensuring the company's long-term success and sustainability.

- a) Visibly, despite its usefulness, decentralisation also has its challenges. Evaluate the disadvantages of decentralisation in Alpha Manufacturing and propose solutions for each. (6 marks)
- b) With the automotive division facing resource constraints, briefly explain the resource allocation decisions that a manager at AMC would implement. (6 marks)
- c) Discuss the importance of transfer pricing as adopted by AMC. (6 marks)
- d) Calculate the following variances from the electronics division of Alpha Manufacturing:
 - i) Direct materials price variance (2 marks)
 - ii) Quantity variance. (2 marks)
 - iii) Variable overhead spending variance. (2 marks)
 - iv) Efficiency variance. (2 marks)
- e) According to the case study above, adhering ethical standards helps build and maintain integrity and credibility of the firm. Highlight some of the key ethical considerations that a management accountant at the above firm should be aware of. (4 marks)

QUESTION TWO (20 MARKS)

- a) In cost estimation, the linear regression model is commonly used to forecast costs and aid in budgeting and planning.
 - i) Write down the cost function and describe each item/parameter used in the model. (6 marks)
 - ii) Discuss three assumptions of this model. (6 marks)

- b) The following information was obtained from Amaco Ltd. Activities for the year just ended:

Month	Labor Hours (Activity)	Service Costs (Kshs)
July	300	68,000
August	350	72,000
September	400	84,000
October	350	74,000
November	500	98,000
December	480	92,000

Required:

- i) Using the high-low method, prepare the cost function for Amaco's activities. (6 marks)
- ii) How much will the company incur if the activity level is 450 hours. (2 marks)

QUESTION THREE (20 MARKS)

- a) There are various methods and approaches used in resource allocation and planning by companies depending on factors such as scale, scope, objectives, targets and type of activity among others. Discuss the methods used in resource allocation. (8 marks)
- b) The main objective of transfer pricing is to determine a fair and appropriate price for intercompany transactions that reflect the true economic value of the goods transferred while optimising the performance of the company as a whole. Describe the various transfer pricing methods used by firms and their applications. (6 marks)
- c) Explain on the importance of standard costing. (6 marks)

QUESTION FOUR (20 MARKS)

- a) ABC Corporation is considering launching a new product line and wants to evaluate its potential profitability using decision tree analysis. The company has identified two possible outcomes: success and failure. If the product succeeds, it could generate a profit of \$500,000, but if it fails, it would result in a loss of \$200,000. The probability of success is estimated to be 60%. However, the company can also conduct market research before making a final decision, which would cost \$50,000. If the market research indicates a high likelihood of success, the probability of success would increase to 80%. If it indicates a low likelihood of success, the probability of success would decrease to 40%.

Required:

- i) Using decision tree analysis, determine whether the company should conduct market research before launching the product line. (8 marks)
- ii) Discuss the importance of sensitivity analysis in decision analysis and how it enhances the robustness of decision-making under uncertainty. (6 marks)
- b) Management accounting is considered a unique and distinct branch of accounting. Discuss the differences between management accounting and financial accounting. (6 marks)

QUESTION FIVE (20 MARKS)

- a) Decentralisation involves distributing decision making power to lower levels within an organisation. Discuss the reasons why companies decentralise. (8 marks)
- b) Variance analysis is a critical tool used to assess the differences between actual and budgeted standard amounts. Explain the importance of variance analysis. (6 marks)
- c) Explain the limitations of management accounting. (6 marks)