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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY

UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR
SECOND YEAR, SECOND SEMESTER EXAMINATION
FOR THE DEGREE OF BACHELOR OF SCIENCE
(BUSINESS ADMINISTRATION)

Date: 11th August, 2023
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

City Star Myraba Ltd. is a manufacturing firm with interest in pastries and Chocolates. The Company has seven branches in Nairobi and Western Kenya. The management of the Company is considering a better approach in managing its factory overhead costs and raw materials management (it seeks to adopt the Just-in-Time (JIT) philosophy in reducing materials inventory. For the last two months, the Company has been recording unfavourable/adverse labour and materials variances which are largely attributed to weak internal control systems and training needs. The Board of Directors have set aside some sh. 3,500,000 to address the challenges highlighted above. The production department is largely automated (with modern production technology): this was equally intended to reduce the cost of production labour. The cost of electricity has been rising due to high inflation and the fact that production capacity has been increasing due to a high demand of its new brand of chocolates in Western part of the country. The production process is largely machine intensive though management is considering a more efficient approach to managing production processes to better manage overhead costs. The firm may not consider expanding the accounting department since most of the accounting systems have been automated. However, the accounting variances continue to pose a problem. In addition, competition is making the situation worse since most potential investors and customers expect the firm to record high profitability. Operations remain the main cost management initiative by the Chief Executive Officer. The adoption of modern cost management practices remain a priority for the board of directors.

Required: in view of the Case study above, you are required to:

i) Describe how Information Communication Technology (ICT) could help the company improve on managing labour cost for its production labourers who are engaged on a week by week basis (6 marks)

ii) Explain three possible causes of unfavourable/adverse labour variance for the company (6 marks)

iii) Discuss how the concept of break-even analysis could help the management accountant to advise the firms board of directors and the management team. (6 marks)

iv) Describe how the management could utilize responsibility accounting to overcome challenges associated with cost management (6 marks)

v) Discuss how management of accounting systems could improve accounting for labour in the organization (6 marks)

QUESTION TWO (20 MARKS)

a) Cost accounting forms an integral part of management accounting in the determination of product costs. Describe how Economic-Order Quantity (EOQ) model could be adopted to improve stock management in a Supermarket (5 marks)

b) Consider the following information for the production department of the ABC Ltd.

Machine hours	Estimated cost ('000)
90hrs	Sh. 1,500
150	2,100
60	1,200
30	900
180	2,400
150	2,100
120	1,800
180	2,400
90	1,500
30	900
120	1,800
160	1,200

Required: Develop a Cost function (Y= a + bX) using and do an interpretation:

i) High-Low method (5 marks)

ii) Least-Square method (by Elimination or Substitution)

$$\sum y = na + b\sum x$$
$$\sum xy = \sum xa + b\sum x^2$$

(10 marks)

QUESTION THREE (20 MARKS)

City distributer Ltd. is considered the purchase of a Truck to boost its sales revenues following a massive expansion programme in Nairobi City County. The Truck is estimated to cost sh. 8,550,000 in purchase price and sh. 50, 000 for transportation from the port of Mombasa. It will cost the firm an additional sh.15, 000 to install an alarm on the Truck. It is estimated that the Truck will have a useful life of 5 years and a salvage value of sh.3, 500,000 with its depreciation being calculated on a straight line basis. A working capital injection of sh. 40,000 is expected once the Truck is bought.
A driver will be employed purposely for the Truck and his salary for the 1st year of service is estimated to be sh.200, 000. The Truck will require a major engine overhaul in the third year and this will cost sh.85, 000 after factoring in inflation. The firm has already negotiated a repairs and maintenance contract with

Stanteck Motors Limited for all its vehicles for sh.445, 000 per annum. Purchase of the Truck will generate additional annual sales revenues of sh. 2,000,000 by the end of the first year (the revenues are expected to increase each subsequent year only due to inflation). Variable selling costs are expected to remain at sh. 700,000 annually. The cash flows are expected to be affected by inflation at a rate of 1%. The firm is in the 30% tax brackets and its investors require a return of 10%.

Required:

a) Compute the relevant cash flows and advice the firm on the viability of purchasing the Truck using Net Present Value (NPV) (12 marks)

b) Discuss scope of management accounting activity. (4 marks)

c) Differentiate between semi fixed costs and fixed costs. (4 marks)

QUESTION FOUR (20 MARKS)

Mirosoa Limited is a Manufacturing firm in Industrial Area, Nairobi, Kenya.
The opening cash balance for the Company (on 1st January 2023) was expected to be sh. 30,000.

The sales budgets were as follows:

November 2022	80,000
December 2022	90,000
January 2023	75,000
February 2023	75,000
March 2023	80,000

Debtors pay up according to the following **pattern:** 60% within the month of sale; 25% the month following and 15% the 2nd month following the sales date

Extracts from the purchases budget were as follows:

December 2022	60,000
January 2023	55,000
February 2023	45,000
March 2023	55,000

All purchases are on credit and past experience indicates that 90% are settle in the month of purchase and the balance settle the month after.

Wages were 15,000 per month and factory overheads of 20,000 per month (including depreciation of 5,000) are settled/paid off monthly.

Taxation of 8,000 has to be paid in February and the company will receive settlement of an insurance claim of 25,000 in March.

Regarded:

i) Prepare a Schedule for Cash collections and Cash payments for January, February and March 2023 (8 marks)

ii) Prepare the Company's cash budget for January, February and March 2023. (12 marks)

QUESTION FIVE(20 MARKS)

a) Differentiate between Activity-Based Budgeting and Zero-Based Budgeting (4 marks)

b) Describe the scope of Responsibility Accounting (RA) as a more advanced managerial approach to managing operations in a busy production factory with huge numbers of casual labourers and huge consumption of materials and overhead costs. (10 marks)

c) Discuss three ethical aspects that guide a management accountant in the course of discharging their duties. (6 marks)s