



# MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

## **UNIVERSITY EXAMINATIONS**

#### **2022/2023 ACADEMIC YEAR**

## MAIN EXAMINATION

# FOR THE DEGREE OF MASTERS IN BUSINESS ADMINSTRATION

COURSE CODE: MBA 807

**COURSE TITLE: MANAGEMENT ACCOUNTING** 

DATE: Monday 17<sup>th</sup> April 2023 TIME: 2.00-5.00pm

**INSTRUCTIONS TO CANDIDATES** 

ATTEMPT ANY FOUR QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 4 Printed Pages. Please Turn Over.

# **OUESTION ONE (25 MARKS)**

- a) Distinguish management accounting from financial accounting (6 Marks)
- b) How should a company determine its optimal product mix when a limiting factor exists? (4 marks)
- c) The manager of MMUST Steel WORKS, learned about linear regression analysis at an MBA course. She decided to apply regression in her study of repair costs at her plant. She plotted 14 points for the past 24 months and fitted the following line:

Total repair cost= Sh 80,000-2.5X per month, where X is the number of machine hours worked. She was baffled because the result was spurious. Apparently, the more the machines were run, the less the repair costs. She decided that regression was a useless creature.

Why was the puzzling regression coefficient negative? Do you agree with the manager's conclusion regarding regression? Explain. (6 marks)

d) Differentiate between basic, ideal and currently attainable standards. From where you sit propose the best standard and explain. (9 marks)

#### **OUESTION TWO (25 MARKS)**

JC Ltd produces and sells one product only, product J, the standard cost for which is as follows for one unit.

	SH
Direct material X-10kg. @Sh. 20	200
Direct material Y-5 liters @ sh. 6	30
Direct wages - 5hrs @ sh. 6	30
Fixed production overhead	_50
Total standard cost	310
Total standard cost	<u>90</u>
Standard selling price	400

The fixed production overhead is based on an expected annual output of 10800 units produced at an even flow throughout the year, assuming each calendar month is equal. Fixed production overhead is absorbed on direct labor hours.

During April 2023, the first month of the financial year, the following actual results are available:

		SHs.
Sales on credit (800 units @ s	sh.400)	320000
Direct materials:		
X, 7800 Kg.	159900	
Y, 4300 liters	23650	
Direct wages: 4200hrs	24150	
Fixed production overhead,	<u>47000</u>	(254700)
Gross profit		65300

The material price variance is extracted at the time of receipt and the raw materials stores control is maintained at standard price.

The fixed production overhead of sh. 47000 was made up of expense creditors of sh. 36000, none of which was paid in April and depreciation of sh. 14000. The company operates an integrated accounting system.

## **REQUIRED:**

- i) Calculate price and usage variance for each material. (7 marks)
- ii) Calculate labor rate and efficiency variances. (7marks)iii) Comment on the above variances by highlighting the causes of each. (11 marks)

### **QUESTION THREE (25 MARKS)**

Shamba Company manufactures a line of electric garden tools that are sold in general hardware stores in Wangige. The company's Financial Director has just received the sales forecast for the coming year for Shamba's three products: Weeders, Hedge Clippers and Leaf blowers. The preliminary budget information is presented below:

Unit sales Unit selling price	Weeders 5000 sh. 280	Hedge clippers 5000 sh. 360	Leaf blowers 10000 sh. 480
Variable cost per unit Manufacturing Selling	sh. 130 sh. 50	sh. 120 sh. 40	sh. 250 sh. 60

The fixed factory overhead is budgeted at sh. 20 million and the company's selling and administrative expenses are forecast to be sh. 6 million. Shamba has an effective tax rate of 40%.

## Required:

- i) Determine Shamba Company's budgeted income. (6 marks)
- ii) Assuming the sales mix remain as budgeted, compute the break-even point both in total and for each product. (8 marks)
- iii) Determine the total sales Shamba Company must have in order to earn a net income of sh. 4.5 million. (6 marks)
- iv) Explain the limitations of cost volume profit analysis that the financial director will use to evaluate Shamba Company's budget. (5 marks)

### **OUESTION FOUR (25 MARKS)**

- a) Describe three roles that are played by a management accountant in environmental management accounting (EMA). (6 Marks)
- b) ABC Ltd. is a firm that is engaged in the repair and maintenance of property, plant and equipment. The firm has received an order form XYZ Ltd. to repair its property, plant and equipment.

The management accountant of ABC Ltd. has provided the following information:

	Note	Sh. "000"
Direct materials:		
100,000 welding rods @ Sh. 10 per rod	1.	1,000

300,000 welding rods @ Sh. 12 per rod		3,600
Other materials	2.	2,000
Labor cost:		
Skilled: 30,000 hours @ Sh. 30 per hour	3.	900
Unskilled: 20,000 hours @ Sh. 15 per hour	4.	300
Depreciation: General purpose machines	5.	100
Specific purpose machines	6.	200
Total cost		8,100
Profit		<u>810</u>
Suggested price		<u>8,910</u>

#### Additional information:

- 1. The repair contract requires 400,000 welding rods of which 100,000 rods are already in inventory. These types of rods are about to be phased out of the market and hence if they are not used, they will have to be discarded.
  - If ABC Ltd. is awarded the contract, it will have to purchase an extra 300,000 welding rods of the new model at a cost of Sh. 12 per rod.
- 2. Other materials will have to be bought at the above price if the contract is to be undertaken.
- 3. Skilled workers will have to be hired at the cost provided.
- 4. ABC Ltd. has five unskilled workers who are currently idle. The cost shown above is the guaranteed salary payable to the five workers.
- 5. The depreciation given is for the general purpose machines which are normally used to do other jobs including the special one if allocated.
- 6. The depreciation given is for machines which will be bought specifically for this contract. After the contract is complete, the machines will be scrapped without any alternative use.
- 7. ABC Ltd. aims to earn a profit mark up of 10% on cost on all work undertaken.

#### Required:

- i) Advice the management of ABC Ltd. on the minimum price to quote on this contract. (NB: Explain the rationale behind inclusion/exclusion of some costs). (14 marks)
- ii) Describe why in practice the minimum price is never actually used. (5 marks) OUESTION FIVE (25 MARKS)
  - a) Discuss ways in which the degree of participation in budget setting process as opposed to non-participation may affect the efficiency and effectiveness of the process and the attitudes of those involved. (15 marks)
  - b) Explain the advantages and disadvantages of imposed budgeting style. (7 marks)
  - c) Under what circumstances would imposed budgeting style advocated (3 marks)