



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

**MAIN / BUNGOMA / WEBUYE / MUMIAS / KAPSABET / NAIROBI
CAMPUS**

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

SECOND YEAR SEMESTER TWO EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF COMMERCE / BACHELOR OF EDUCATION**

COURSE CODE: BCA 208

COURSE TITLE: COST ACCOUNTING

DATE: Monday 17th April 2023

TIME: 3.00-6.00 pm

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO (2) QUESTIONS

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 5 Printed Pages. Please Turn Over.

QUESTION ONE(30 MARKS)

- a. Prepare a store ledger Account showing the receipts and the issues of Material X for March 2019 pricing the material issued on the basis of i) FIFO method and ii) LIFO method(6 Marks)

Receipts:

| <u>Date</u> | <u>Quantity</u> | <u>Rate per unit Sh.</u> |
|-------------|-----------------|--------------------------|
| 1-3-2019 | 2000 units | 20 |
| 18-3-2019 | 3000 units | 18 |
| 30-3-2019 | 1000 units | 16 |

Issues:

| <u>Date</u> | <u>Quantity</u> |
|-------------|-----------------|
| 4-3-2019 | 1000 units |
| 10-3-2019 | 500 units |
| 22-3-2019 | 2500 units |
| 31-3-2019 | 1000 units |

- b. Jambo ltd has four production departments P, Q, R and S and two service departments A and B whose budgeted overheads are as follows

| Dept. | P | Q | R | S | A | B |
|----------------|--------|--------|--------|-------|-------|-------|
| Overheads (Sh) | 24 000 | 18 000 | 12 000 | 6 000 | 3 600 | 1 800 |

It has been estimated that the cost of running the service departments can be charged to various departments as follows:

| Service dept. | P | Q | R | S | A | B |
|---------------|-----|-----|-----|-----|-----|-----|
| A | 40% | 10% | 20% | 20% | - | 10% |
| B | 20% | 30% | 10% | 20% | 20% | - |

Required: Apportion the service departments' overheads using

- Repeated distribution method (3 Marks)
- Simultaneous equation method (3 Marks)

- c) During the month of July ABC Ltd processes a basic raw material through a manufacturing process that yields three products – product X, Y and Z. There were no opening inventories and the products are sold at the split-off point without further processing. Details of the production process and the sales revenues are given below

| | | |
|-------------------------|-----------|--|
| Joint costs Ksh 600 000 | Product X | 40 000 units with a sales value of Ksh 15 per unit |
| | Product Y | 20 000 units with a sales value of Ksh 25 per unit |
| | Product Z | 60 000 units with a sales value of Ksh 30 per unit |

Required: Allocate the joint costs to each individual product using the physical measures method (6 Marks)

- c. The following data relates to a half- year report for period ending 30th June 2022. The monthly average figures for the year ending 30th June 2022 were as follows:

| Month | Machine hours(000) | Fuel oil expense (Sh 000) |
|-------|--------------------|---------------------------|
|-------|--------------------|---------------------------|

| | | |
|----------|----|-----|
| January | 26 | 500 |
| February | 28 | 510 |
| March | 31 | 530 |
| April | 35 | 550 |
| May | 43 | 580 |
| June | 48 | 680 |

Required: Estimate fixed and variable elements of fuel oil expense from the above data by both the following methods

- i. High-low method (2 Marks)
- ii. Least-squares regression analysis (4 Marks)

d. Explain three cost standards that an organization can set (6 Marks)

QUESTION TWO (20 MARKS)

- a) You have been appointed as the new Accountant of xyz limited, Explain problems which you may encounter when implementing a budgetary control system for the firm (5 Marks)
- b) Stock control is key to Cost accountants. Explain 3 methods of stock control and outline the importance of stock control to a company (5 Marks)
- c) A firm uses materials s which is acquired from a local supplier

| | Min mum | Normal | Maximum |
|-------------------------|---------|--------|---------|
| Lead time in days | 5 | 7 | 10 |
| Demand in units per day | 60 | 80 | 105 |

From available information the firms economic order quantity is 400 units

Required:

- i) What is the Economic order Model (1Mark)
- ii) Compute re order level (3Marks)
- iii) Min mum stock level (3 Marks)
- iv) Maximum stock level(3Marks)

QUESTION THREE (20 MARKS)

- a) The extracts given below were obtained from the records of Monta Limited, for the month of September 2019:

Extracts of production and sales budget

| | |
|---|--------------|
| Budgeted production and sales | 2000 units |
| Selling price | Sh. Per unit |
| Variable cost: | 300 |
| Direct material (7kg @sh 20 per kg) | 140 |
| Direct labour (5 hours @ Sh 10 per hour) | 50 |
| Fixed overhead (5 direct labour hours @ Sh 12 per hour) | 60 |
| Budgeted profit | 50 |

Additional information is as follows:

| | |
|--|--------------|
| Actual production and sales | 2200 units |
| Actual selling price per unit | Sh. 290 |
| Actual cost: | Sh. per unit |
| Direct material (8kg @sh 18 per kg) | 144 |
| Direct labour (4 hours @ Sh 12 per hour) | 48 |

Total actual fixed overheads for the month

Sh. 130 000

Required:

- i. Direct materials price variance (2 Marks)
- ii. Direct materials usage variance (2 Marks)
- iii. Wage rate variance (2 Marks)
- iv. Labour efficiency variance (2 Marks)
- v. Fixed overheads variance (2 Marks)
- b) Explain five functions of budgeting (10 Marks)

QUESTION FOUR (20 MARKS)

a) Bibi Ltd produces food which passes through two processes; A and B then to finished products. Normal loss is estimated at 590 for each process and 10% scrap which realizes Sh.80

The following information is obtained;

| | A | B |
|---------------------------------|--------|--------|
| Materials (Units) | 1000 | 70 |
| Cost of materials per unit (Sh) | 125 | 200 |
| Wages (Sh) | 28,000 | 10,000 |
| Other direct expenses (Sh) | 8,000 | 5,250 |
| Output in units | 830 | 780 |

Required; Process Accounts for the two processes assuming there was no stock or work in progress in the two processes. (10Marks)

b) NN Tours Limited sells weekend tours of Port Victoria Island for Sh. 10,000 per person. Last month 1,000 tours were sold and costs were Sh. 9,000,000 (representing a total cost per tour of Sh. 9,000). These costs included Shs. 3,000,000 which were fixed costs. A local college wishing to send 200 students on an educational trip has offered NN Tours Sh. 7,000 per tour.

Required:

- a) Should NN accept the offer Explain. (6 marks)
- b) Explain Four qualitative factors that NN Tours should consider before accepting the offer. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Explain the following terms as used in cost accounting:
 - I. Allocation of overheads
 - II. Apportionment of overheads
 - III. Absorption of overheads (3 Marks)
- b) Explain FOUR reasons for overhead under absorbed and overhead over absorbed. (4 Marks)
- c) Specify and explain the factors to be considered in determining whether to utilize a single factory wide recovery rate for all production overheads or a separate rate for each cost center, production or service department. (3 Marks)
- d) A company makes a single product with a sales price of sh.10 and a marginal cost of sh.6. Fixed costs are sh.60, 000 per annum.

Calculate.

- i. Number of units to break even (2Marks)
- ii. Sales at break-even point (2Marks)
- iii. C/S ratio (2Marks)

- iv. What number of units will need to be sold to achieve a profit of sh.20, 000 per annum (2 Marks)
- v. Because of increasing costs the marginal cost is expected to rise to sh.6.50 per unit and fixed costs to sh. 70,000 p.a. If the selling price cannot be increased what will be the number of units required to maintain a profit of sh. 20,000 p.a. (2 Marks)

Total actual fixed overheads for the month Sh. 130 000

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