



(University of Choice)

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

MAIN EXAMINATIONS

2021/2022 ACADEMIC YEAR

SECOND YEAR SEMESTER TWO EXAMINATION

FOR THE DEGREE

OF

BACHELOR OF COMMERCE

COURSE CODE: BCA 208

COURSE TITLE: COST ACCOUNTING

DATE: Friday 22ND APRIL 2022

TIME: 12-2PM

INSTRUCTIONS TO CANDIDATES

Attempt QUESTION ONE and any other two questions

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

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

QUESTION ONE (30 MARKS)

- a) A factory requires 1,500 units of an item per month. The cost of each unit is Sh.27. The cost per order is Sh.150 and material carrying charge works out to 20% of the average material. Find out the economic order quantity (EOQ) and ascertain the number of orders to be placed per year (5 marks)
- b) A company manufactures 5,000 units of a product per month. The cost of placing an order is Sh.100. The purchase price of the raw material is Sh. 10 per kg. The re-order period is 4 to 8 weeks. The consumption of raw materials varies from 100 kg. to 450 kg. per week. The average weekly consumption being 275 kg. The carrying cost of inventory is 20% per annum. Assuming 52 weeks in a year, you are required to calculate

- (i) Re-order quantity; (ii) Maximum level; (iii) Minimum level; (6 marks)
- c) Mazuri Ltd A manufacturing company has three production departments and two service departments. Overheads for the departments for a specific period were as follows;

Production Department	Sh'000'		
X	2,500		
Y	2,000		
Z	1,500		
Service department	1,000		
A	1,000		
B	<u>780</u>		
	<u>7,780</u>		

Additional information;

1.A technical assessment for the apportionment of the service department costs were as follows;

Department	X	Y	Z	A	B
A	30%	30%	20%	-	20%
B	40%	30%	20%	10%	-

2.Output for the production department during the period were as follows;

Department	units of output
X	200,000
Y	100,000
Z	50,000

Required;The total overheads chargeable to the departments using;

- i. Continuous allotment method (7 Marks)
- ii. Simultaneous equation method (7 Marks)
- iii. overhead cost per unit for each department (3 Marks)
- (b) Explain the salient features of economic order quantity approach (2 Marks)

QUESTION TWO (20 MARKS)

- a) In a factory guaranteed wages at the rate of Sh.18.00 per hour are paid in a 48-hour week. By time and motion study it is estimated that to manufacture one unit of a particular product 20 minutes are taken. The time allowed is increased by 25%. During one week Abraham produced 180 units of the product. Calculate his wages under each of the following methods:
- i. Piece-rate with a guaranteed weekly wage,(3 marks)
- ii. Halsey premium bonus (3 marks)
- iii. Rowan premium bonus. (3 marks)

b) The stock of material in hand on 1st April, 2013 was 400 units at Sh.50 per unit. The following receipts and issues were recorded.

- i. 2 April Purchased 100 units @ Sh.55 each,
- ii. 6 April Issued 400 units
- iii. 10 April Purchased 600 units @ Sh.60 each
- iv. 13 April Issued 500 units
- v. 20 April Purchased 500 units @ Sh. 65 each
- vi. 25 April Issued 600 units
- vii. 10 May Purchased 800 units @ Sh.70 each
- viii. 12 May Issued 500 units 13 May Issued 200 units
- ix. 15 May Purchased 500 units @ Sh.75 each
- x. 12 June Issued 400 units
- xi. 15 June Purchased 300 units @ Sh.80 each.

Prepare a Stores Ledger Account under 'weighted average method, (11 marks)

QUESTION THREE (20 MARKS)

- a) State any four features of process costing. (4 marks)
- b) Explain any three application of process costing (3 marks)
- c) The product of a company passes through 3 distinct process. The following information is obtained from the accounts for the month ending January 31, 2021

Particulars	Process A	Process B	Process C
Direct Material	7800	5950	9000
Direct Wages	5 000	8000	13000
Production Overheads	7 000	10,000	11 000

3000 units @ Sh. 3 each were introduced to process A. There was no stock of materials or work in progress. The output of each process passes directly to the next process and finally to finished stock A/c. The following additional data is obtained:

Process	Output	Normal Loss in %	Realisable Value of Scrap
Process A	2,850	5 %	2
Process B	2,520	10 %	4
Process C	2,250	15 %	5

Required

- i. Process Cost Account, for A,B and C (10 marks)
- ii. Normal Loss Account (3 marks)

QUESTION FOUR (20 MARKS)

ABC Ltd is a manufacturing company that makes only three products P,Q and R. Data for the period ended last month are as follows

	P	Q	R
Units produced and sold	12 000	16 000	8 000
	Ksh	Ksh	Ksh
Sales price per unit	50	70	60
Direct material cost per unit	16	24	20
Direct labor cost per unit	8	12	8

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Production overheads costs	Total K.sh	Cost drivers
Machining costs	102 000	Machine hours
Production scheduling	84 000	No. of production runs
Set-up costs	54 000	No. of production runs
Quality control	49 200	No. of production runs
Receiving materials	64 800	No. of component receipts
Packing materials	36 000	No. of customer orders
	<u>390 000</u>	

Information on the cost drivers is given as follows:

	P	Q	R
Direct labor hours per unit	1	1.5	1
Machine hours per unit	0.5	1	1.5
No. of components per unit	3	5	8
No. of components per receipt	18	80	64
No. of customer orders	6	20	10
No. of production runs	6	16	8

Required: Using activity based costing (ABC) show the cost and gross profit per unit for each product during the period

- a. Explain the assumptions of cost-volume-profit analysis (12 Marks)
(8 Marks)

QUESTION FIVE (20 MARKS)

Capital Tours Limited sells weekend tours of Rusinga Island for Shs. 10,000 per person. Last month 1,000 tours were sold and costs were Shs. 9,000,000 (representing a total cost per tour of Shs. 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 Capital Tours Shs. 7,000 per tour.

REQUIRED:

- a) Explain with reasons whether Capital Tours should accept the offer. (5 marks)
b) Explain the danger, in the long run, of Capital Tours using prices based on variable (marginal costing). (5 marks)
c) Explain Four qualitative factors that Capital Tours should consider before accepting the offer. (10 marks)