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(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

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

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

THIRD YEAR SEMESTER TWO EXAMINATIONS

FOR THE DEGREE
OF
BACHELOR OF COMMERCE

COURSE CODE: **BCA 365**

COURSE TITLE: **MANAGEMENT ACCOUNTING**

DATE: Thursday 21ST APRIL 2022 **TIME:** 12-2PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO (2) QUESTIONS

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

QUESTION ONE (30 MARKS)

a) Explain three reasons why most firms find it advantageous to introduce a management accounting system in addition to financial accounting system (6 Marks)

b) The following data relates to Optimal Company, a manufacturer of a toothpaste product.

Financial extracts for the month of May 2020:

Fixed costs	Sh 200 000
Variable cost	Sh 12 per unit
Selling price	Sh 28 per unit

The current production is at 75% capacity and the number of units produced and sold is 37 500 units

Required:

i. The percentage capacity at break-even point (2 Marks)

ii. The profit or loss at current production capacity (2 Marks)

c) Consider the following payoff table

Payoffs in Sh'000

	S1	S2	S3
Probability	0.4	0.5	0.1
a1	200	700	800
a2	500	300	900
a3	800	600	7000

Required: The value of perfect information (4 marks)

d) Highlight the eight steps in the budgeting process (4 Marks)

e) Explain how "Strategic transfer pricing" can be used to shift profits from high tax countries (6 Marks)

f) Explain meaning of the following terms as used in management accounting(6 Marks)

i. Reverse engineering
ii. Zero based budgeting
iii. Kaizen costing

QUESTION TWO (20 MARKS)

a) Jambo Limited manufactures one product. The following information was extracted for the month of October, 2017

Production in units 5000 units

	Sh
Actual cost of direct materials purchased	5 712 000
Actual direct wages paid	4 080 000
Variable overheads incurred	630 000
Fixed overheads incurred	4 800 000

The variables from standard costs were:

	Sh

Direct materials usage variance	144 000 F
Direct material price variance	272 000 A
Direct wages efficiency variance	112 000 A
Direct wages rate variance	120 000 F
Variable overhead expenditure variance	46 000 A
Fixed overhead volume variance	232 000 F
Fixed overhead expenditure variance	360 000 A

F indicates a favourable variance while A indicates an adverse variance

Other information:

1. The company uses only one grade of direct material. Direct materials are purchased in kilograms. Throughout the month, the actual price paid was Sh 8.00 above the standard price per kilogram. The standard material cost of the product is Sh 720 per unit.

2. The company employs only one grade of direct labour. During the month, the actual wage rate paid was Sh 6.80 per hour. The standard hours are required to produce one unit

3. Fixed and variable overhead absorption rates are based upon standard hours produced

4. There were no stocks of materials, W.I.P or finished goods held at either the beginning or end of the month. There was no process losses.

Required: Calculate for the month of October 2017:

i. The actual quantity of direct materials consumed, in kilogrammes (3 marks)

ii. The actual price, per lilogramme paid for the material (3 marks)

iii. The actual direct labour hours worked (3 marks)

iv. The direct labour hours worked in excess of standard (3 marks)

b) The following table shows payoffs associated with three investment alternatives under different states of nature.

		Acts (millions)		
probability		a1	a2	a3
0.7	S1	4.0	1.0	2.0
0.2	S2	0.4	3.5	1.5
0.1	S3	3.0	2.6	1.8

Select the best alternative using the Expected Opportunity Loss approach (8 Marks)

QUESTION THREE (20 MARKS)

a) Using the following information, prepare budgets for the month of January for

i. Sales in quantity and value, including total value (3 Marks)

ii. Production quantities (3 Marks)

iii. Material usage in quantities (5 Marks)

iv. Material purchase in quantity and value, including total value (5 Marks)

	Product	Quantity (units)	Price each (Sh)
Sales:	A	1 000	10 000
	B	2 000	12 000
	C	1 500	14 000

Materials used in the company's products:			
Material	M1	M2	M3
Unit cost	Sh 400	600	900
Quantities used in:	MI(units)	M2(units)	M3(units)
Product A	4	2	-
Product B	3	3	2
Product C	2	1	1
Finished stocks:	Product A(units)	Product B (units)	Product C (units)
Quantities			
1st January	1 000	1 500	500
31st January	1 100	1 650	550
Material stocks:	M1(units)	M2(Units)	M3(units)
1st January	26 000	20 000	12 000

b) Explain four benefits which may accrue to an organization which operates a budgetary control system (4 Marks)

QUESTION FOUR (20 MARKS)

a) ABC limited operates in an industry where it operates to order and carries no inventory. Its demand function is estimated to be $P = 80 - 30Q$ where P is the unit selling price and Q is the quantity in thousands of units. Its total cost functions is estimated to be $TC = Q^2 + 20Q + 100$ where TC is total cost in sh.000 . determine

i. The output in units, total revenue and profit if the objective of ABC is to maximize profit. (5 marks)

ii. The output in units, total revenue and profit if the objective of ABC is to maximize revenue. (5 marks)

b) Cellular Ltd uses a certain machine that costs Sh. 60,000 when new. The following information has been provided by management with regard to the age of the said machine.

Age (years)	1	2	3	4	5
Expected annual operating costs(Kshs)	6,000	7,000	9,500	12, 000	13,500
Expected production per year (cases)	12,000	11,600	10,900	10,500	10,000
Salvage value (Kshs)	42,000	39,000	35,000	3,100	29,000

The price for one case less cost of sales and materials is Sh 13

Required:

Determine the optimal replacement policy (10 Marks)

QUESTION FIVE (20 MARKS)

a) Discuss four limitations of the CVP analysis. (6 marks)

b) Baboo runs a catering business providing lunch packs to students of KEP (Kakamega-one Education Prioritaire) schools. These lunch packs are purchased by the county government and distributed free of charge to students. The following information is available:

	Shs.
Selling price (unit)	60
Direct Material (unit)	16
Direct Labor (unit)	14
Variable Production overhead	8
Variable Selling costs	2
Fixed Production costs (annual)	350,000
Other Fixed costs (annual)	150,000

Baboo catering has the capacity to prepare 50,000 meals but is currently producing and selling 40,000.

REQUIRED:

i. Calculate the Break Even output and Break Even sales revenue? (6 M

ii. Calculate the margin of safety (MoS), expressed as a %. Interpret your answer briefly. (6 Marks)

iii. How many lunch packs should Babool sell to its customers to obtain a profit of Shs.300, 000? (2 Marks)