



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING BANKING AND FINANCE

THIRD YEAR SPECIAL/ SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF COMMERCE

BAC 300: MANAGEMENT ACCOUNTING1

DATE: 24/3/2021

TIME:2.00-4.00 PM

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## INSTRUCTIONS:

*Answer question one and any other two questions.*

### QUESTION ONE (30 MARKS)

- a) Explain the difference between management accounting and Financial accounting.(4 marks)
- b) Distinguish between budgeting and budgetary control. (4 marks)
- c) i A company uses 50,000 units of widgets per annum which are sh.10 each to purchase. The ordering and handling costs are sh.150 per order and carrying costs are 15% of purchase price per annum, i.e it costs sh.1.50 p.a to carry a widget in stock. Calculate the EOQ. (3 marks)
- ii Assume that the firm in c)i) has decided to make the widgets in its own factory. The necessary machinery has been purchased which has a capacity of 250,000 widgets per annum. All other data are assumed to be the same. Calculate EOQ with gradual replenishment. (3 marks)
- d) ZARIA Ltd makes a single product, which it sells at ksh.16 per unit. Fixed costs are Ksh.76,800 per month and the product has a contribution to sales of 40%.
- i. Calculate the Break Even Point. (5 marks)
- ii. In a period when sales were ksh.224,000, what was the margin of safety in units? (3 marks)
- e) Explain the limitations of CVP analysis. (8 marks)

**QUESTION TWO (20 MARKS)**

- a) Honi limited is a manufacturer of children garments. The sales vary seasonally and are higher in the month of May. The management wishes to prepare a cash budget from the period January through June 2017. The sales estimates are as follows:-

Month	Sale estimates (shs.)	Credit purchases (shs)
January	84,000	110,000
February	156,000	170,000
March	132,000	160,000
April	228,000	240,000
May	288,000	250,000
June	108,000	260,000

**You are given the following additional information: -**

1. Sales for December were shs.60,000 and purchases shs.120,000.
2. Credit sales are 70% and cash sales 30% of total sales
3. There is a time lag of one month between credit sales and its collection. No bad debts are expected.
4. Payments for purchases is 60% in the month of purchase and balance in the following month.
5. Monthly administration expenses are: shs.720.
6. As at January 2017, there was a cash balance of shs.1,200, 000.

**Required:**

1. Determine the amount of credit and cash sales for each month. (4 marks)
2. Calculate payments relating to each month. (6 marks)
3. Prepare a cash budget from the months January to June 2017. (10 marks)

**QUESTION THREE (20 MARKS)**

- a) Explain the meaning and purpose of standard costing. (2 marks)
- b) The standard cost for a production system in a given model is as follows:

Inputs	Std.Qty	Std price	std cost limit
Materials	3kg	Sh.4.00	Sh.2.00
Direct labour	2.5 Hours	Sh.14.00	Sh.35.00
Variable Overheads	2.5 Hours	Sh.3.00	Sh.7.50

During the month 6,500 kg of raw materials were purchased at Sh.3.80 per kg and all the material was used to produce 2000 units of finished products. 4,500 hours of direct labour time were used at a total cost of Sh.64,350. The actual variable overhead cost was Sh.13,950.

**Required:**

Compute the following variances:

- a) Materials price variance. (2 marks)
- b) Materials efficiency (usage) variance. (2 marks)
- c) Total materials variance. (2 marks)
- d) Labour rate variance. (2 marks)
- e) Labour efficiency variance. (2 marks)
- f) Total labour variance. (2 marks)
- g) Variable overhead rate variance. (2 marks)
- h) Variable overhead efficiency variance. (2 marks)
- i) Total overhead Variance. (2 marks)

**QUESTION FOUR (20 MARKS)**

- a) A hotel has 4 independent projects which have the following information: (10 marks)

Project	Cost	Present Value of Cash Inflows
A-accommodation	Shs.30m	Shs. 50m
B-beverages	Shs.35m	Shs. 53m
C-outside catering	Shs.50m	Shs. 93m
D-tents& chairs	Shs. 58m	Shs.90m

**Additional Information:**

1. The company has a capital limitation of Shs.100m. the cost of capital is 9.5% and any surplus funds can be invested at 12% p.a return on investment in perpetuity.
2. All the projects are indivisible.

**Required:**

- a) Determine the projects that should be undertaken. (10 marks)
- b) A hotel intends to invest in either machine KX40 or KY50 for cooking. Each of these machines costs shs.200,000 and have an estimated economic life of 10 years and no scrap

value. The cashflows for the two machines are as follows:

(10

marks)

Year	KX40	KY50
	Shs.	Shs.
1	40,000	60,000
2	50,000	40,000
3	30,000	50,000
4	10,000	30,000
5	20,000	20,000
6	30,000	18,000
7	15,000	14,000
8	10,000	8,000
9	5,000	3,000
10	30,000	30,000

Calculate the profitability index for each of the machines and advise the management on the machine to purchase.

(10

marks)

#### QUESTION FIVE (20 MARKS)

A restaurant makes two types of products namely X(coffee) and Y(tea). The company uses two materials A and B in the manufacture of these products. The following information is given for the year 2016:

##### 1. Budgeted sales

Product	Quantity	Price
X	10,000	Ksh.40
Y	8,000	Ksh.30

##### 2. Materials used:

##### Material

	A	B
Unit cost	Ksh.5	Ksh.8
Quantities used		
X	5	3
Y	4	4

There were no stocks at the beginning of the year. Stocks at the end of year are expected to be:

X 1000 units          Y 500units

Required: Prepare:

- a) Sales budget (3 marks)
- b) Production budget (7 marks)

- c) material usage in quantities budget (7 marks)
- d) Material purchase in quantity and value budget. (3 marks)