



TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL OF BUSINESS  
DEPARTMENT OF ACCOUNTING & FINANCE  
**UNIVERSITY EXAMINATION FOR:**  
DACC,DBA,DPMM,  
BAC 2210: MANAGEMENT ACCOUNTING  
END OF SEMESTER EXAMINATION  
**SERIES APRIL 2022**  
**TIME:2HOURS**  
**DATE:Pick DateApr2022**

**Instructions to Candidates**

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of five questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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**Question ONE**

a). In the context of budgetary control explain the main functions and importance of a cash budget. (10 marks)

b) You are in charge of making forecasts and preparing budgets. You have been supplied with cost and revenue forecasts and details of payment as follows:

1. Forecast of revenue and costs for the quarter ending 31 March 2021.

	January Shs.	February Shs.	March Shs.
<b>Direct</b>			
Materials (purchases)	112,000	100,000	135,000
Wages	90,000	80,000	100,000
Overhead Production	34,000	32,000	40,000
Administration	22,000	20,000	27,000
Selling and distribution	13,000	11,000	18,000
Sales	360,000	350,000	440,000

2. Forecast of revenue and costs for the quarter ending 30 June 2021

	April Sh.	May Sh.	June Sh.
<b>Direct</b>			
Materials (purchases)	90,000	67,000	79,000
Wages	72,000	54,000	63,000
Overhead Production	45,000	36,000	40,000
Administration	22,000	25,000	27,000
Selling and distribution	13,000	11,000	16,000
Sales	350,000	360,000	360,000
Cash balance on 1 April 2001			Sh. 90,000

3. Other Details

- Period of credit allowed by suppliers averages two months.
- Debenture to the value of Shs. 125,000 are being issued in May 2001 and the amount is expected to be received during the month.
- A new machine is being installed at the end of March 2001 at a cost of Sh 150,000 and payment is promised in early May 2001.
- Sales commission of 3% is payable within one month of sales.
- A dividend of Sh 100000 is to be paid in June 2001.
- There is a delay of one month in the payment of overheads. There is also a delay in payment of wages averaging a quarter of a month.
- Twenty per cent of the debtors pay cash, receiving a cash discount of 4% and 70% of debtors pay within one month and receive a cash discount of 2 ½%. The other debtors pay within two months.

Required:

A cash budget on a monthly basis from the second quarter of the year 2021. (20 marks)

(Total 30 marks)

**Question TWO**

A company has budgeted to produce 2,750 articles in 22,000 hours, with fixed overheads of Sh 88,000 and variable overheads of Sh 55,000. The company's production during the period of the budget was 2,700 articles in 21,500 working hours with fixed overheads costing Sh 90,000 and variable overheads Sh 58,000.

Required: Calculate the following variances:

- a) Overhead variance (3 marks)
- b) Fixed production overhead variance. (3 marks)
- c) Variable production overhead variance (3 marks)

- d) Fixed production overhead expenditure variance. (3 marks)
- e) Fixed production overhead volume variance. (3 marks)
- f) Fixed cost productivity variance. (3 marks)
- g) Capacity variance (2 marks)

**(Total 20 marks)**

### QUESTION THREE

Nyali Mbali Ltd. are retailers who sell ceramic tiles. During the months of July to September 2021, there were price fluctuations. Due to the above problem the company had to adjust its selling prices

The following transactions took place during the period.

**3 July** Opening stock was 5,000 tiles valued at Sh 825,000.

**10 July** Orders placed with the company increased, so extra tiles had to be obtained from Mombasa. Therefore 22,000 tiles were purchased at a cost Sh 140 each but in addition, there was a freight and insurance charge of Sh 5 per tile.

**31 July** During the month 20,000 tiles were sold at a price of Sh 220 each.

**4 August** A new batch of 14,000 tiles was purchased at a cost of Sh 175 per tile.

**30 August** The sales for the month of August were 14,000 tiles at a selling price of Sh 230 each.

**1 September** A further 24,000 tiles were purchased at a cost of Sh 195 each.

**30 September** 270,000 tiles were sold during September at price of Sh 240 each. The cost accountant of Nyali Mbali Ltd decided he would apply first-in-first-out basis and weighted average methods of material pricing for purposes of comparison.

Required:

- (i) A stores ledger account using the two methods and showing stock values at 30 September 2021. (14 marks)
- (ii) The trading accounts using each of the above methods. (6 marks)

**(TOTAL 20 MARKS)**

## QUESTION FOUR

a) Briefly explain the following cost estimation methods;

i) High-low method (3 marks)

ii) Simple regression method. (3 marks)

(b) The management of Limuru Processing Company Limited wishes to obtain better cost estimates to evaluate the company's operations more effectively.

The following information is provided to you for analysis:

<b>Year 2004</b>	<b>Equivalent Overheads</b>	<b>production</b>
<b>Month</b>	<b>Units (000)</b>	<b>Sh 000</b>
January	1,425	12,185
February	950	9,875
March	1,130	10,450
April	1,690	15,280
May	1,006	9,915
June	834	9,150
July	982	10,133
August	1,259	11,981
September	1,385	12,045
October	1,420	13,180
November	1,125	13,180
December	980	10,430

Additional information:

1. In November, the opening work in progress inventory contained 1,000,000 units that were 30% complete with respect to conversion costs.
2. During the same month of November, the manufacturing department transferred 1,500,000 units.
3. The closing inventory for the month of November was 1,200,000 units and the units were 30% incomplete with respect to conversion costs
4. Using the above information, you have obtained the following variables by applying simple regression analysis.

	<b>Sh. „000</b>
Constant	3,709
Slope	6,487

Required:

- i) Use the high-low method to estimate the overhead cost function. (6 marks)
- ii) Use the regression method to determine the overhead cost function. (2 marks)
- iii) Use the regression function formulated in (ii) above to estimate the overhead cost for the month of November. (6 marks)

**(Total 20 marks)**

### QUESTION FIVE

- a) State and briefly explain three assumptions underlying the break-even theory. (6 marks)
- b) Jamii Company Ltd manufactures and sells a single product. The following information regarding the company's operations for the year ended 30 September 2020 was presented to you.

Profit and loss account for the year ended 30 September 2021

	Sh'000	Sh'000
Sales		30,000
Less:		
<b>Production costs</b>		
Direct material	6,500	
Direct labour	5,400	
Production overhead variable	<u>7,000</u>	
Prime costs		<u>18,900</u>
		11,100
<b>Other expenses:</b>		
Selling - Variable	2,600	
- Cost	1,997	
Administration	<u>2,100</u>	<u>6,697</u>
Net profit		<u>4,403</u>

The following changes are expected to occur during the year ending 30 September 2021: "

1. Selling price will be adjusted downward by 3% in order to attract more customers.
2. Material prices will rise by 2% due to inflation.
3. There will be a reduction in labour cost of 4%.
4. Production overheads will increase by 3%.
5. Increase in the efficiency of sales persons will reduce direct selling costs by 5%. All other factors are expected to remain constant.

**Required:**

- i. Break-even point in sales value (4 marks)
- ii. The margin of safety in sales value (2 marks)
- iii. The sales value at which profit of Sh 4.5 million will be achieved (2 marks)
- iv. A summary operating statement that shows the net profit of Sh 4.5 million in (c) above. (6 marks)