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**TECHNICAL UNIVERSITY OF MOMBASA**

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE

**UNIVERSITY EXAMINATION FOR:**

BACHELOR OF COMMERCE &

BACHELOR OF IN BUSINESS ADMINISTRATION

**BAC 4201: COST ACCOUNTING**

SPECIAL/SUPPLEMENTARY EXAMINATION

**SERIES: JULY, 2025**

**TIME: 2HOURS**

**DATE: DECEMBER, 2024**

**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) Discuss the procedure of charging of overheads of service departments to production departments. **(5Marks)**
- b) A Company has three production departments and two service departments. Overheads of these departments for a specific period are as follows:

Production Departments	Sh
P	25,000
Q	20,000
R	15,000
Service Departments	
A	10,000
B	7,800
	77,800

The overheads of service centers are charged out as under:-

	<u>Departments</u>				
	P	Q	R	A	B
Service Dep : A	30%	30%	20%	-	20%
Service Dep: B	40%	30%	20%	10%	-

### Required

Show the total overhead chargeable to three production department by using simulation equation method. **(10Marks)**

(c) Baraka Company manufactures and sells a single product. The following budgeted/ actual information is provided in relation to the production of this product:

	<b>Sh</b>
Selling price per unit	50.00
Direct materials per unit	8.00
Direct Labour	5.00
Variable production overheads per unit	3.00

Details for the months of May and June 2010 are as follows:

	<u>May</u>	<u>June</u>
Production of Product A	500	380
Sales of Product A (units)	300	500

Fixed production overheads are budgeted at Sh. 4,000 per month and are absorbed on a unit basis. The normal level of production is budgeted at 400 units per month.

### Other costs

Fixed selling Sh. 4,000 per month

Fixed Administration Sh. 2,000 per month

Variable sales commission 5% of sales revenue

There was no opening inventory of Product A at the start of May

### Required

Prepare a profit statement using absorption costing principles for the months of May and June. **(10Marks)**

d) Ali Musa produced 600 units in a week but 40 units were rejected. Time allowed per unit is 6 minutes. No payment is made beyond the time allowed but the bonus paid on accepted units only. No penalty is imposed on the rejected units. Ali Musa produced 600 units in 48 hours. His wages rate per unit is Sh 15. Calculate his total wage on the basis of Halsey Bonus scheme. **(5Marks)**

### Question Two

(a) The finishing shop of company employs 60 direct workers. Each worker is paid sh. 400 as wages per week of 40 hours. When necessary, overtime is worked up to a maximum of 15 hours per week per worker at time rate plus one-half premium. The current output on an average is 6 units per man hour which may be regarded as standard output. If bonus scheme is introduced, it is expected that the output will increase to 8 units per man hour. The workers will, if necessary, continue to work Overtime up to the specified limit although no premium on incentives will be paid. The company is considering introduction of either Halsey Scheme or Rowan Scheme of wage Incentive system. The budgeted weekly output is 19,200 units. The selling price is sh. 11 per unit and the direct material Cost is sh. 8 per unit. The variable overheads amount to sh. 0.50 per direct labour hour and the fixed overhead is sh. 9,000 per week.

#### Required:

Prepare a Statement to show the effect on the company's weekly profit of the proposal to introduce (a) Halsey Scheme, and (b) Rowan scheme (12 marks)

(b) Briefly explain any Four reasons for Cost Accounting (8 marks)

### Question Three

- a) What is the concept of "equivalent units of production" in process costing, and how is it calculated? **(10 Marks)**
- b) Mabokoni Company Ltd, manufactures a chemical that passes through three production process 1-3. During the month of December 20x3, 6,000 litres of raw material at a price of Khs 240, 000 was introduced into process 1. The following are the additional costs that were incurred during the production process:

<u>Elements of cost</u>	<u>Total (Khs)</u>	<u>Process</u>		
		1-(Khs)	2-(Khs)	3(-Khs)
Direct material (added)	87,500	30,000	40,000	17,500
Direct Labour	110,000	40,000	30,000	20,000
Direct expenses	16,900	6,000	1,600	9,300

Normal loss per process is estimated to be 10%, 5% and 8% for process 1, 2 and 3 respectively. The loss in each process represented scrap which could be sold at for the following values:

Process1	-	Khs 20 per unit
Process 2		Khs 44 per unit
Process 3		Khs 55 per unit

There were no stocks of materials or work-in - progress at the beginning or end-of the month. The output of each process passes directly to the next process and finally to finished stock. Production overhead is absorbed by each process on a basis of 50% of the cost of direct labour.

### Required

b) Prepare the process accounts 1-3 of Mabokoni Company Ltd. **(10 Marks)**

### Question Four

From the following particulars given below: -

- prepare cost statement showing the component of total cost and, **(10Marks)**
- the profit for the year ended 31st December, 2015. **(10Marks)**

<b>1-1-2023</b>	<b>Sh</b>	<b>31-12-2023</b>	<b>Sh</b>
Stock of finished goods	6,000	Stock of finished goods	15,000
Stock of raw materials	40,000	Stock of raw material	50,000
Work-in-progress	15,000	Work-in-progress	10,000
Purchase of raw materials	4,750,000	General expenses	32,500

Carriage inward	12,500	sales for the year	8,600,000
Wages	1,750,000	Income tax	500
Manager's salary	30,000	Dividend	1000
Factory employees' salaries	60,000	Debenture interest	5,000
Factory rent, taxes and Insurance	7,250		
transfer to sinking fund for replacement of machinery	100,000		
Power expenses	95,500		
goodwill written off	100,000		
Other production expenses	430,000	Good will written off	
		Selling expenses	9,250

### Question Five

You have been asked to provide budgetary information to the board of Directors for a meeting where they will decide the pricing of an important product for the next period.

The following information is available from the records:

	Last Year		This year
	Sh.000		Sh.000
Sales (100,000@ sh13)	1,300	Sales (106,000@sh13	1,378
Costs	<u>1,000</u>	Costs	<u>1,077.4</u>
Profit	<u>300</u>	Profit	<u>300.6</u>

You find that between the previous and current periods there was a 4% general inflation rate and it is forecast that costs will further increase by 6% in the next period.

The firm did not increase the selling price in the current period although competitors raised their prices by 4% to allow for the increased costs.

A survey by economic consultants was commissioned and has found that the demand for the product is elastic with an estimated price elasticity of demand of 1.5. This means that volume will fall by one and a half times the rate of real price increase.

**Required:**

(a) Show the budgeted position if the firm maintains a sh.13 selling price for the next period (when it is expected that competitors will increase their prices by 6%)

**(10 marks)**

(b) Show the budgeted position if the firm increases its prices by 6% **(6 marks)**

(c) Write a short report to the Board, with appropriate figures, recommending whether the firm should maintain the\$13 selling price or raise it by 6% **(4 marks)**



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