



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

END OF SEMESTER EXAMINATION

SERIES: DECEMBER, 2024

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.

Question One.

(a) In a unit, 10 men work as a group. When the production for the group exceeds the standard output of 200 pieces per hour, each man is paid an incentive for the excess production in addition to his wages at hourly rates. The incentive is at half the percentage, the excess production over the standard bears to the standard production, Each man is paid an incentive at the rate of this percentage of a wage rate of sh. 200 per hour. There is no relation between the individual workman's hourly rate and the bonus rate. In a week, the hours worked are 500 hours and the total production is 140,000 pieces.

(i) Compute the total amount of the bonus for the week. **(4 marks)**

(ii) Calculate the total earnings of each worker if A worked 44 hours and his basic rate per hour was sh.220 while B worked 48 hours and his basic rate per hour was sh.190.

(8 marks)

b) The store-keeper of 2007chicken feed ltd. Made the following transactions during the month of October.

Date.

02.10. Purchase 400 bags at sh. 150 @.

08-10 Sold 300 bags at sh.180 @

10-10 Purchased 600 bags at sh.165 @

15-10 Sold 500 bags at sh.200 @
 24-10 Purchased 700 bags at sh.170 @
 26-10 Purchased 500 bags at sh. 180 @
 27-10 Sold 600 bags at sh.200 @
 30-10 Sold 700 bags at sh.235 @.

There was an opening stock of 200 bags valued at sh.140@

Required: Trading Account base on;

- i) FIFO (5 marks)
 ii) LIFO (5 marks)

(c) The overheads applicable to each department following allocation and primary apportionment are;

Department	Overheads
M	6,800
S	2,700
P1	12,000
P2	19,500
P3	26,000
Total.	67,000

Data for the apportionment of service department overheads.

	M	S	PI	P2	P3
M	-	5%	25%	38%	32%
S	15%	-	40%	27%	18%

Required:

Using simultaneous equations method apportion the service department overheads to production departments. (8 marks)

Question Two

Mr Green, a sole trader, has been asked by his bank to provide detailed budget projections for the year ahead and he has provided you with the following information:-

	Product Alpha	Product Beta
Sales Forecast		
Quarter 1	10,000 units	2,000 units

Quarter 2	10,000 units	5,000 units
Quarter 3	10,000 units	5,000 units
Quarter 4	10,000 units	8,000 units
Sales price per unit	sh. 35.00	sh. 50.00
Production Costs		
Material A (sh.3.00/kg)	0.75kg per unit	4kg per unit
Material B (sh.2.00/kg)	1kg per unit	2kg per unit
Direct Labour		
Department 1 sh.12.00/hr)	15 mins per unit	30 mins per unit
Department 2 (sh.10.00/hr)	1 hour per unit	1 hour per unit
Stock Holding – Finished Goods		
Opening Stock (Quarter 1)	5,000 units	2,000 units
Required Closing Stock (Quarter 4)	2,500 units	1,000 units

Other information

- There are no opening or closing stocks of materials held.
- Production is assumed to be even across the year.
- Other Production costs per annum
 - Supervisory wages sh.42,000
 - Heat, light and power sh. 90,000
 - Maintenance of equipment sh.25,000
 - Depreciation of equipment sh.84,000
- General business overheads of sh.350,000 are also anticipated.

Requirement:

(a) Prepare the following budgets, set out on a quarterly basis for the year:

- Sales Budget. (2 marks)
- Production Budget. (3 marks)
- Purchasing Budget. (3 marks)
- Direct Labour Cost Budget. (2 Marks)

(b) You are a student who has been deployed in the stores department to review efficiency and stock controls. You have ascertained the following information about the organisation's main raw material:-

Minimum usage..... 100 units per day.
Maximum usage..... 800 units per day.
Average usage..... 400 units per day.
Total projected usage... 20,000 units per quarter.
Lead time..... 4 - 8 days.
Cost per order..... sh.20.
Unit Cost..... sh. 25.
Carrying cost..... 6% of total materials cost per annum.

Requirement:

a) To assist with an efficiency review, calculate the following stock control ratios:

- Stock re-order level. (2 marks)
- Minimum stockholding level. (3 marks)
- Economic order quantity. (3 marks)
- Maximum stockholding level. (2 marks)

Question Three

'The budgeting process is an important feature of effective management performance'.

Required:

(a) Outline and briefly explain five benefits of budgeting. (5 Marks)

(b) Provide a brief overview of the budgeting process. (6 Marks)

(c) Explain each of the following approaches to budgeting:

i. Activity based budgeting; (3 marks)

ii. Zero based budgeting; (3 marks)

iii. Rolling budgets. (3 marks)

Question Four

a) briefly explain the following terms as applied in process costing;

- Normal loss (2 marks)

- Abnormal loss (2 marks)

- Abnormal gain (2 marks)

b).A product is manufactured by passing through three processes, A,B, and C. The following details relate to the company's operations for the month of October 2008.

	Process A	process B	process C
Normal loss of input (%)	5	10	5
Scrap value (sh. Per unit)	1.50	2.00	4.00
<u>Output (units)</u>	<u>5760</u>	<u>5,100</u>	<u>4370</u>
Direct materials (6,000 units) 12,000		--	--
Direct materials added in process 5,000		9,000	4,000
Direct wages	4,000	6,000	2,000
Direct expenses	800	1,660	2,260

Budgeted production overheads were sh. 30,500 which were to be absorbed on the basis of Labour costs.

Required:

- process accounts for A, B and C. (10 marks)
- Abnormal loss and abnormal gains accounts. (4 marks)

Question Five

a). The following information relates to cost estimates for the production of item Zed.
ksh.

Direct materials	100,000
Direct wages	80,000
Direct expenses	35,000
Indirect factory costs	55,000
Administration costs	30,000
Distribution costs	30,000
Selling expenses	25,000

Additional information;

During the year ended 30th November 2007, prime cost will rise by 15%, indirect factory costs will increase by 10% administration costs, distribution costs and selling expenses will each increase by 5% the company expects to make 20% profit on the selling price of product Zed.

Required:

Prepare a statement to show the selling price of product zed for the year ended 30th November 2007. (10 marks)

b) What is the economic order quantity when demand is 25 units per working day. Ordering costs are Sh. 150 per order, the items cost sh.3 each and carrying costs are 12% per year. There are 250 working days per year. (4 marks)

(d) Explain any four reasons for costing. (6 marks)