



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF LAW, BUSINESS INTELLIGENCE AND ECONOMICS

DEPARTMENT OF ACCOUNTING AND HUMAN CAPITAL DEVELOPMENT

EXAMINATION PAPER

COURSE CODE : CAC223
COURSE TITLE : COST AND MANAGEMENT ACCOUNTING
DURATION : 3 Hours
LEVEL : 2.2
DATE : 12 JUN 2025

INSTRUCTIONS TO CANDIDATES:

1. No cell phones are allowed in the examination venue.
2. Answer **all** questions in **Section A and Section B**.
3. Begin each question on a new page for Section B only.
4. The number of marks for each question or part question is shown in brackets []
5. Use of silent non-programmable calculators is allowed

SECTION A [20 Marks]

ANSWER ALL QUESTIONS. Each question carries two marks.

SELECT THE MOST APPROPRIATE ANSWER

1. The audit fee paid by a manufacturing company would be classified by that company as:
 - A. A production overhead cost;
 - B. A selling and distribution cost;
 - C. A research and development cost;
 - D. An administration cost.
2. A manufacturing company has four types of cost (identified as T1, T2, T3 and T4). The total cost for each type at two different production levels is:

Cost type	Total cost for 125 units (\$)	Total cost for 180 units (\$)
T1	1,000	1,440
T2	1,750	2,520
T3	2,475	2,826
T4	3,225	4,644

Which cost types would be classified as being semi-variable?

- A. T1
 - B. T2
 - C. T3
 - D. T4
3. A company uses a predetermined overhead recovery rate based on machine hours. Budgeted factory overhead for a year amounted to \$720,000, but actual factory overhead incurred was \$738,000. During the year, the company absorbed \$714,000 of factory overhead on 119,000 actual machine hours.

What was the company's budgeted level of machine hours for the year?

- A. 116,098 hrs
- B. 119,000 hrs
- C. 120,000 hrs

D. 123,000 hrs

4. R makes one product, which passes through a single process. Details of the process account for period 1 were as follows:

	\$
Material cost – 20 000kg	26,000
Labour cost	12,000
Production overhead cost	5,700
Output	18,800kg
Normal losses	5% of input

There was no work in progress at the beginning or end of the period. Process losses have no value.

The cost of the abnormal loss (to the nearest \$) is:

- A. \$437
B. \$441
C. \$460
D. \$465
5. Two products G and H are created from a joint process. G can be sold immediately after split-off. H requires further processing into product HH before it is in a saleable condition. There are no opening inventories and no work in progress of products G, H or HH. The following data are available for last period:

		\$
Total joint production costs		350,000
Further processing costs of product H		66,000
Product	Production units	Closing Inventory
G	420,000	20,000
HH	330,000	30,000

Using the physical unit method for apportioning joint production costs, what was the cost value of the closing inventory of product HH for last period?

- A. \$16,640
B. \$18,625

- C. \$20,000
- D. \$21,600

6. A company has the following budgeted costs and revenues:

	\$ per unit
Sales price	50
Variable production cost	18
Fixed production cost	10

In the most recent period, 2000 units were produced and 1000 units were sold. Actual sales price, variable production cost per unit and total fixed production costs were all as budgeted. Fixed production costs were over-absorbed by \$4,000. There was no opening inventory for the period.

What would be the reduction in profit for the period if the company had used marginal costing rather than absorption costing?

- A. \$4 000
 - B. \$6 000
 - C. \$10 000
 - D. \$14 000
7. RT plc sells three products.
- Product R has a contribution to sales ratio of 30%.
 - Product S has a contribution to sales ratio of 20%.
 - Product T has a contribution to sales ratio of 25%.
- Monthly fixed costs are £100 000. If the products are sold in the ratio:
R: 2 S: 5 T: 3
- the monthly break-even sales revenue, to the nearest \$1, is:
- A. \$400,000
 - B. \$411,107
 - C. \$425,532
 - D. impossible to calculate without further information.
8. All of a company's skilled labour, which is paid \$8 per hour, is fully employed manufacturing a product to which the following data refer:

	\$ per unit	\$ per unit
Selling price		60
Less Variable costs:		
Skilled labour	20	
Others	15	(35)
Contribution		25

The company is evaluating a contract which requires 90 skilled labour hours to complete. No other supplies of skilled labour are available.

What is the total relevant skilled labour cost of the contract?

- A. \$720
 - B. \$900
 - C. \$1,620
 - D. \$2,160
9. PQ is purchasing the lease on a property which has an annual lease payment of \$300 in perpetuity. The lease payments will be paid annually in advance. PQ has a cost of capital of 12 per cent per annum.

The present value of the lease payments is:

- A. \$2,500
 - B. \$2,800
 - C. \$3,600
 - D. \$3,900
10. A company is considering investing in a project with an expected life of four years. The project has a positive net present value of \$280,000 when cash flows are discounted at 12 per cent per annum. The project's estimated cash flows include net cash inflows of \$320,000 for each of the four years. No tax is payable on projects of this type.

The percentage decrease in the estimated annual net cash inflows that would cause the company's management to reject the project from a financial perspective is, to the nearest 0.1 per cent:

- A. 87.5%

B. 21.9%

C. 3.5%

D. 28.8%

[Total 20 marks]

SECTION B [80 Marks]

ANSWER ALL QUESTIONS. Begin each question on a new page.

Question 1

Runzika Ltd manufactures and sells a single product at a unit selling price of \$25. In constant price level terms its cost structure is as follows:

Variable costs:

Production materials \$10 per unit produced
Distribution \$1 per unit sold

Semi-variable costs:

Labour \$5,000 per annum, plus \$2 per unit produced

Fixed costs:

Overheads \$5,000 per annum

For several years Runzika has operated a system of variable costing for management accounting purposes. It has been decided to review the system and to compare it for management accounting purposes with an absorption costing system.

As part of the review, you have been asked to prepare estimates of Runzika's profits in constant price level terms over a three year period in three hypothetical situations and to compare the two types of systems generally for management accounting purposes.

- a) In each of the following three sets of hypothetical circumstances, calculate Runzika's profits in each of years 2020, 2021, and 2022 and also in total over the same three periods 2020, 2021, and 2023 using first a variable costing system and then a full cost absorption costing system with fixed costs recovery based on a normal production level of 1,000 units per annum.

- (i) Stable unit levels of production, sales and inventory.

	2020	2021	2022
Opening inventory	100	100	100
Production	1,000	1,000	1,000
Sales	1,000	1,000	1,000
Closing inventory	100	100	100

[5]

- (ii) Stable unit level of sales, but fluctuating unit levels of production and inventory.

	2020	2021	2022
Opening inventory	100	600	400
Production	1,500	800	700
Sales	1,000	1,000	1,000
Closing inventory	600	400	100

[5]

(iii) Stable unit level of production, but fluctuating unit levels of sales and inventory.

	2020	2021	2022
Opening inventory	100	600	400
Production	1,000	1,000	1,000
Sales	500	1,200	1,300
Closing inventory	600	400	100

[5]

b) Write a short comparative evaluation of variable and absorption costing systems for management accounting purposes, paying particular attention to profit measurement and using your answer in (a) to illustrate your arguments. [10]

[Total 25marks]

Question 2

Purutanai Ltd manufactures and sells a single product. The budgeted profit statement for this month, which has been prepared using marginal costing principles, is as follows:

	\$	\$
Sales		864,000
Less Variable production cost of sales:		
Opening inventory (3,000 units)	69,000	
Production (22,000 units)	506,000	
Closing inventory (1,000 units)	(23,000)	(552,000)
		312,000
Less Variable selling costs		(60,000)
Contribution		252,000
Less Fixed overhead costs:		
Production	125,000	
Selling and administration	40,000	(165,000)
Net Profit		87,000

The normal monthly level of production is 25,000 units and inventory is valued at standard cost.

Required:

- Prepare in full a budgeted profit statement for this month using absorption costing principles. Assume that fixed production overhead costs are absorbed using the normal level of activity. [10]
- Prepare a statement that reconciles the net profit calculated in (a) with the net profit using marginal costing. [5]
- Distinguish between variable costing and absorption costing [10]

[Total 25marks]

Question 3

Buruthu Ltd makes three products and is reviewing the profitability of its product line. You are given the following budgeted data about the firm for the coming year.

	A	B	C
Product sales (in units)	100,000	120,000	80,000
	\$	\$	\$
Revenue	1,500,000	1,440,000	880,000
Costs:			
Material	(500,000)	(480,000)	(240,000)
Labour	(400,000)	(320,000)	(160,000)
Overheads	(650,000)	(600,000)	(360,000)
Profit/loss	(50,000)	40,000	120,000

The company is concerned about the loss on product A. It is considering ceasing production of it and switching the spare capacity of 100,000 units to Product C. You are told:

- (i) All production is sold.
- (ii) 25 percent of the labour cost for each product is fixed in nature.
- (iii) Fixed administration overheads of \$900,000 in total have been apportioned to each product on the basis of units sold and are included in the overheads costs above. All other overheads costs are variable in nature.
- (iv) Ceasing production of a product A would eliminate the fixed labour charge associated with it and one-sixth of the fixed administration overhead apportioned to product A.
- (v) Increasing the production of product C by 100,000 units would mean that less fixed labour cost associated with product C would double, the variable labour cost would rise by 20% and its selling price would have to be decreased by \$1,50 in order to achieve the increased sales.

Required:

- a) Prepare a marginal cost statement for a unit of each product on the basis of:
 - (i) The original budget
 - (ii) If product A is deleted

[15]
- b) Prepare statement showing the total contribution and profit for each product group on the basis of:
 - (i) The original budget
 - (ii) If product A is deleted

[10]
- c) Using results from (a) and (b) advise whether product A should be deleted from the product range, giving reasons for your decision. **[5]**

[Total 30 marks]

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