



**ZIMBABWE EZEKIEL GUTI UNIVERSITY**

---

**FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTING**

---

**DEPARTMENT OF ACCOUNTING AND FINANCE**

**EXAMINATION PAPER**

**COURSE CODE** : CAC 205  
**COURSE TITLE** : COST AND MANAGEMENT ACCOUNTING  
**DURATION** : 3 Hours  
**DATE** : 27 May 2019

**INSTRUCTIONS TO CANDIDATES:**

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

## SECTION A

Answer all questions in this section. Each question carries 2 marks.

1. Break-even is a point at which:
  - A. Contribution margin = Fixed costs or expenses
  - B. Sales revenue > Net income
  - C. Net income < Contribution margin
  - D. Fixed costs = Variable costs
  
2. In comparatively big organizations, the primarily responsible of approval of budgets and administration of budgeting process is normally entrusted to:
  - A. Board of directors
  - B. Top management
  - C. Budget committee
  - D. Budgeting process manager
  
3. Contribution margin contributes to meet which one of the following options? Select correct option:
  - A. Variable cost
  - B. Fixed cost
  - C. Operating cost
  - D. Net Profit
  
4. What is the output level at the variable cost's point of inception on a break-even chart?
  - A. Output > Zero
  - B. Output < Zero
  - C. Output = Zero
  - D. None of the above
  
5. \_\_\_\_\_ is a summary of all functional budgets in a capsule form.
  - A. Functional Budget
  - B. Master Budget
  - C. Long Period Budget
  - D. Flexible Budget
  
6. CVP assumes the following excluding:
  - A. Constant variable cost per unit
  - B. Constant total fixed cost
  - C. Units sold = Units produced
  - D. Constant time value of money
  
7. Limiting factor, in budgeting, is a:
  - A. Least desirable factor
  - B. Principal budget factor
  - C. Revenue generating budget factor
  - D. Contributing factor

8. A company's sources of finance are as follows:

	RTGSS\$
Ordinary share capital	1,800,000
9% Preference shares	900,000
10% Debentures	300,000

The ordinary shareholders expect dividend payments of 6% p.a. Calculate the weighted cost of capital.

- A. 9%
  - B. 7%
  - C. 5%
  - D. 11%
9. Which of the following budgets will typically be prepared first in the budget preparation cycle of a manufacturing company?
- A. Production budget
  - B. Sales budget
  - C. Cost of goods sold budget
  - D. Factory or manufacturing overhead
10. Which of the following is the correct formula for the calculation of margin of safety?
- A. Margin of safety = Budgeted sales – Actual sales
  - B. Margin of safety = Budgeted sales – Operating profit
  - C. Margin of safety = Contribution margin – Actual sales
  - D. Margin of safety = Actual sales – Break even sales
11. In One-off Contracts, a contract will, most probably, be accepted if it increases:
- A. Sales revenue & decreases contribution margin
  - B. Contribution margin & net profit
  - C. Variable cost & decreases fixed cost
  - D. None of the above

Using the below information, answer question 18-21.

	Standard	Actual
Price of material (RTGSS\$ tonne)	6.40	6.30
Usage of material (tonnes)	570	610
Wage rate (RTGSS\$ per hour)	3.42	3.22
Direct labour hours	120	140

12. Calculate the material price variance
- A. RTGSS\$ 61 (A)
  - B. RTGSS\$ 61 (F)
  - C. RTGSS\$ 81 (F)
  - D. RTGSS\$ 81 (A)
13. Calculate the material usage variance
- A. RTGSS\$ 256 (A)
  - B. RTGSS\$ 256 (F)

- C. RTGS\$ 266 (F)
- D. RTGS\$ 266 (A)

14. Wage rate variance

- A. RTGS\$ 68 (A)
- B. RTGS\$ 68 (F)
- C. RTGS\$ 28 (F)
- D. RTGS\$ 28 (A)

15. Direct labour efficiency variance

- A. RTGS\$ 68.40 (A)
- B. RTGS\$ 68.40 (F)
- C. RTGS\$ 88.40 (F)
- D. RTGS\$ 88.40 (A)

[Total: 30 Marks]

**SECTION B**

**Answer all questions in this section.**

**Question One**

The following information relates to three possible capital expenditure projects. Because of capital rationing only one project can be accepted:

	Project		
	A	B	C
Initial Cost	\$200 000	\$230 000	\$180 000
Expected Life	5 years	5 years	4 years
Scrap value expected	\$10 000	\$15 000	\$8 000
<b>Expected profits</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
End of year: 1	42,000	57,000	12,000
2	32,000	27,000	22,000
3	27,000	23,000	42,000

4	28,000	7,000	57,000
5	17,000	7,000	-

The company estimates its cost of capital at 12% p.a.

**Required**

a. Calculate and indicate which decision you would make based on:

- (i) Payback method
- (ii) Accounting rate of return
- (iii) Net present value

Which project must be accepted and why

**(10 marks)**

b. Outline the advantages and disadvantages of each of the above-mentioned capital appraisal methods stated in (a.) above.

**(15 marks)**

**[ Total: 25 Marks]**

**Question Two**

The following particulars are extracted from the records of a company:

	Per Unit	
	Product A	Product B
Sales	\$100	\$120
Consumption of materials	2kgs	3kgs
Material cost	\$10	\$15
Direct wages cost	\$15	\$10
Direct expenses	\$5	\$6
Machine hours used (hours)	3	2
Overhead expenses:		

Fixed	\$5	\$10
Variable	\$15	\$20

Direct wages per hour is \$5.

**Required:**

a. Assuming raw material as the key factor, availability of which is 10 000 kg and maximum sales potential of each product being 3 500 units, find the product mix which yield maximum profit and indicate the profit to be made. **(15 marks)**

b. Define the term relevant costing and outline the principles that apply to this concept. **(10 marks)**

**[Total: 25 marks]**

**Question Three**

In 2013 Chrysler Corporation found itself in a very unhappy financial situation. Profits were down, cash flow was tight, and the stock was trading at a low price of RTGS\$ 10 per share. The Japanese auto industry posed a serious threat. Despite a strong Yen, they had captured and continued to preserve a healthy share of the U.S. auto market. Chrysler management decided it was time to change their approach to new car design. They adopted a competitive weapon that the Japanese auto industry had used for many years called target costing. Target costing was applied to all product development efforts in the Company including the NEON, a new small car developed for the lower price range. A price and profit target was set for the car and it was then designed to meet that profit without sacrificing major customer requirements. The results of using target costing on the NEON were impressive. The NEON:

- Provided dual airbags and a powerful engine for a small car.
- Was named "Auto of the Year" in 2017.
- Had a relatively short development time going from product concept to market in 31 months.
- Came in below its project development and investment budget.
- Is one of a handful of small cars made in the USA that makes a positive return.

- Is environmentally friendly built using a recyclable facia and non-toxic materials.

Since the introduction of target costing, Chrysler's profits have increased significantly. Its share price went up from RTGS\$ 10 per share in 2013 to RTGS \$54 per share in 2018.

**Required:**

- a. Identify the seven steps in the establishment phase of target costing. Provide specific examples of activities undertaken for each of the seven steps. **(14 marks)**
- b. Discuss how each of the three steps in attaining target costs might have applied to the Neon project. Also discuss how Chrysler could design costs out or reduce costs through design improvements. **(6 marks)**

**[Total 20 marks]**

**End of Paper**