



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTING

DEPARTMENT OF ACCOUNTING AND FINANCE

EXAMINATION PAPER

COURSE CODE	:	CAC205
COURSE TITLE	:	COST AND MANAGEMENT ACCOUNTING
SPECIAL REQUIREMENTS	:	
DURATION	:	3 Hours
LEVEL	:	2.1
DATE	:	

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 []

Question One

SECTION A

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

1. Marginal costing may be preferred to absorption costing because it
 - A. Complies with the accruals or matching concept
 - B. Complies with International Accounting Standard (IAS) 2
 - C. Enables use of the of the opportunity cost approach
 - D. Ensures the recovery of total costs in sales pricing

2. If an initial investment is \$765,000, payback period is 4.5 years, then increase in future cash flow will be
 - A. \$5,645,000
 - B. \$6,442,500
 - C. \$3,442,500
 - D. \$5,442,500

3. Which of the following statements are true?
 - (i) A flexible budget can be used to control operational efficiency.
 - (ii) Incremental budgeting can be defined as a system of budgetary planning and control that measures the additional costs that are incurred when there are unplanned extra units of activity.
 - (iii) Rolling budgets review and, if necessary, revise the budget for the next quarter to ensure that budgets remain relevant for the remainder of the accounting period.
 - A. (i) and (ii) only
 - B. (ii) and (iii) only
 - C. (iii) only
 - D. (i) only

The following data is given for questions 4 and 5 below.

Trafalgar Limited budgets to produce 10,000 units of product D12, each requiring 45 minutes of labour. Labour is charged at \$20 per hour, and variable overheads at \$15 per labour hour. During September 2019, 11,000 units were produced. 8,000 hours of labour were paid at a total cost of \$168,000. Variable overheads in September amounted to \$132,000.

4. What is the correct labour efficiency variance for September 2019?
 - A. \$5,000 Adverse
 - B. \$5,000 Favourable
 - C. \$5,250 Favourable
 - D. \$10,000 Adverse

5. What is the correct variable overhead expenditure variance for September 2019?
 - A. \$3,750 Favourable

- B. \$4,125 Favourable
- C. \$12,000 Adverse
- D. \$12,000 Favourable

6. Process of making long-term decisions for capital investment in projects is called

- A. Lead budgeting
- B. Lean budgeting
- C. Capital budgeting
- D. Relevant budgeting

7. In 'make or buy' decision, it is profitable to buy from outside only when the supplier's price is below the firm's own_____.

- A. Fixed cost
- B. Variable cost
- C. Total cost
- D. Prime cost

8. If contribution margin percentage is 30%, selling price is \$5,000, then contribution margin per unit will be

- A. \$900
- B. \$1,200
- C. \$1,500
- D. \$1,600

9. If pay back period is 4 years and uniform increases in cash flows per year is \$2,750,000 then net initial investment can be

- A. \$10,511,000
- B. \$12,105,000
- C. \$1,100,000
- D. \$11,000,000

10. If actual price input is \$700, budgeted price input is \$400 and actual quantity of input are 50 units, then price variance will be

- A. \$15,000
- B. \$13,000
- C. \$11,000
- D. \$9,000

11. The difference between budgeted amounts and actual results is classified as

- A. Standard deviation
- B. Variances
- C. Mean average
- D. Weighted average

12. The following are capital investment decision methods that take into consideration the time value of money

- A. Net present value, Accounting rate of return, Payback period
- B. Net present value, Internal rate of return, Payback period**
- C. Internal rate of return, Accounting rate of return, Payback period
- D. Net present value, Internal rate of return, Profitability index

13. Which of the following is the **BEST** description of zero-based budgeting?

- A. Zero-based budgeting is a technique applied in government budgeting in order to have neutral effect on policy issues
- B. Zero-based budgeting requires a completely clean sheet of paper every year, on which each part of the organization must justify the budget it requires**
- C. Zero-based budgeting starts with the figures of the previous period and assumes a zero rate of change
- D. Zero-based budgeting is an alternative name of flexible budget

14. How is target cost calculated?

- A. Desired selling price – actual profit margin
- B. Market price – desired profit margin**
- C. Desired selling price – desired profit margin
- D. Market price – standard profit margin

15. A new product is being developed. The development will take one year and the product is expected to have a life cycle of two years before it is replaced.

Which of the following statements are true of life cycle costing?

Statement 1 It is useful for assessing whether new products have been successful.

Statement 2 The individual profitability for products is less accurate.

- A. Both statements are true
- B. Both statements are false**
- C. Statement 1 is true and statement 2 is false
- D. Statement 2 is true and statement 1 is false

[Total: 30 marks]

SECTION B

Answer all questions in this section

Question One

- (a) Mupfuti Ltd manufactures a single product. Its costs and sales for the year ended 30 November 2018 were as follows

Units sold	21 000
Selling price	\$40 per unit
Variable costs per unit	
Wages	\$8
Materials	\$18
Overheads	\$4
Fixed costs	\$187 000

To improve profit for the year commencing 1 December 2018 the following changes are expected to take place:

Units to be sold are 22,500

Selling price is to be maintained at \$40 per unit

Wages are to be increased by 5% per unit

Material costs are to be reduced by 10% per unit, this being achieved by committing to a long-term contract with a single supplier only

Variable overheads are to be reduced by \$0.10 per unit

Fixed costs are to increase by \$20,000

REQUIRED

Calculate

- (a) The break-even in units and sales value [4 marks]
(b) The profit for the year [2 marks]
(c) The margin of safety in units and as a percentage [4 marks]
(d) The sales in units required to maintain the profit level of the year ended 30 November 2019 [4 marks]

[15 marks]

b. The accountant's approach to cost-volume-profit analysis has been criticized in that, among other matters, it does not deal with the following:

- (i) situations where sales volume differs radically from production volume;
(ii) situations where the sales revenue and the total cost functions are markedly non-linear;
(iii) changes in product mix;
(iv) risk and uncertainty.

Explain these objections to the accountant's conventional cost-volume-profit model and suggest how they can be overcome. [10 marks]

[Total: 25 marks]

Question Two

Mhofu Investments (Pvt) Ltd is to carry out a major modernization of its factory commencing in two weeks time. During the modernization, which is expected to take four weeks to complete, no production of the company's single product will be possible. The following additional information is available:

- (i) **Sales/Debtors:** Demand for the product at \$100 per unit is expected to continue at 800 units per week, the level of sales achieved for the last four weeks, for one further week. It is then expected to reduce to 700 units per week for three weeks, before rising to a level of 900 units per week where it is expected to remain for several weeks. All sales are on credit, 50 per cent being received in cash in the week following the week of sale and 50 per cent in the week after that.
- (ii) **Production/Finished goods stock:** Production will be at a level of 1,200 units per week for the next two weeks. Finished goods stock is 2,800 units at the beginning of week 1.
- (iii) **Raw material stock:** Raw material stock is \$36,000 at the beginning of week 1. This will be increased by the end of week 1 to \$40,000 and reduced to \$10,000 by the end of week 2.
- (iv) **Costs**

(\$ per unit)

Variable:	
Raw material	35
Direct labour	20
Overhead	10
Fixed:	
Overhead	25

Fixed overheads have been apportioned to units on the basis of the normal output level of 800 units per week and include depreciation of \$4,000 per week.

In addition to the above unit costs, overtime premiums of \$5,000 per week will be incurred in weeks 1 and 2. During the modernization variable costs will be avoided, apart from direct labour which will be incurred at the level equivalent to 800 units production per week. Outlays on fixed overheads will be reduced by \$4,000 per week.

- (v) **Payments:** Creditors for raw materials, which stand at \$27,000 at the beginning of week 1, are paid in the week following purchase. All other payments are made in the week in which the liability is incurred.
- (vi) **Liquidity:** The company has a bank overdraft balance of \$39,000 at the beginning of week 1 and an overdraft limit of \$50,000.

The company is anxious to establish the liquidity situation over the modernization period, excluding the requirements for finance for the modernization itself.

REQUIRED:

- (a) Prepare the weekly functional, income statement and cash budgets covering the six-week period up to the planned completion of the modernization. [20 marks]
- b) Comment upon any matters concerning the liquidity situation of Mhofu Investments Ltd which should be drawn to the attention of management. [5 marks]

[Total: 25 marks]

Question Three

(a) Mopani Co makes four components, W, X, Y and Z, for which costs in the forthcoming year are expected to be as follows.

	W	X	Y	Z
Production (units)	1,000	2,000	4,000	3,000
Unit marginal costs	\$	\$	\$	\$
Direct materials	4	5	2	4
Direct labour	8	9	4	6
Variable production overheads	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>
	<u>14</u>	<u>17</u>	<u>7</u>	<u>12</u>

Directly attributable fixed costs per annum and committed fixed costs:

	\$
Incurred as a direct consequence of making W	1,000
Incurred as a direct consequence of making X	5,000
Incurred as a direct consequence of making Y	6,000
Incurred as a direct consequence of making Z	8,000
Other fixed costs (committed)	<u>30,000</u>
	<u>50,000</u>

Directly attributable fixed costs are all items of cash expenditure that are incurred as a direct consequence of making the product in-house.

A subcontractor has offered to supply units of W, X, Y and Z for \$12, \$21, \$10 and \$14 respectively.

REQUIRED

- (i) Provide advise as to whether Mopani should make or buy the components? Support your answer with relevant calculations. **[10 marks]**
- (ii) State and advise other considerations management of Mopani should take into account in coming up with appropriate decisions beneficial to the organization. **[5 marks]**

(b) TN (Pvt) Ltd produces and sells two products, M and N. Product M sells for \$7 per unit and has a total variable cost of \$2.94 per unit, while Product N sells for \$15 per unit and has a total variable cost of \$4.40 per unit. The marketing department has estimated that, for every five units of M sold, one unit of N will be sold. The organisation's fixed costs per period total \$123,600.

REQUIRED

Calculate the breakeven point for the two products in units and value. Advise management on the implications of the breakeven point calculated.

[5 marks]

[Total: 20 marks]

END OF EXAMINATION