



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF LAW, BUSINESS INTELLIGENCE AND ECONOMICS

DEPARTMENT OF ACCOUNTING, FINANCE AND HUMAN CAPITAL MANAGEMENT

EXAMINATION PAPER

COURSE CODE : CAC223
COURSE TITLE : COST AND MANAGEMENT ACCOUNTING
SPECIAL REQUIREMENTS : No
DURATION : 3 Hours
LEVEL : 2.2
DATE : 09 OCT 2023

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: [Total 30 marks]

ANSWER ALL QUESTIONS IN THIS SECTIONS (Each question carries 2 marks)

SELECT THE MOST APPROPRIATE ANSWER.

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 Favorable
 - C. \$5,250 Favorable
 - D. \$10,000 Adverse

5. What is the correct variable overhead expenditure variance for September 2019?
- A. \$3,750 Favorable
 - B. \$4,125 Favorable
 - C. \$12,000 Adverse
 - D. \$12,000 Favorable
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 payback 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 [Total 70 marks]

Answer all questions in this section

Question 1

Fambayi Ltd. is a small clothing company operating in Bindura. You have recently joined them as the trainee management accountant after successfully completing your BA (Hons) in Business from the University.

One particular garment has a standard material cost of \$13.50, comprising 3 metres of cloth at \$4.50 per metre. The standard labour time allowed for making up the garment is 15 minutes, and employees are paid at a rate of \$5 per hour. For the month of August, the company was able to produce 10,000 garments. The budgeted output level was 9,000 garments.

The purchasing manager was very pleased as he had managed to buy 45,000 metres of cloth for \$4.25 per metre. However, the production manager was not so pleased because he claims the cloth was of poor quality which resulted in operational inefficiency.

Actual data for August is as follows:-

Wages paid - £12,740

Hours worked - 2,600 hours

Cloth issued - 32,000 metres.

Required:

a) Calculate for August:

- | | |
|----------------------------------|-----------|
| (i) material usage variance; | [4 marks] |
| (ii) material price variance; | [4 marks] |
| (iii)labour efficiency variance; | [4 marks] |
| (iv)labour rate variance; | [4 marks] |

b) Comment on the points of view of both the purchasing manager and the production manager. Do you think the purchasing manager was correct to buy the cloth at \$4.25 per metre if it was responsible for operational problems? [6 marks]

c) What do you understand by the term "inter-relationship of variances"? [3 marks]

[Total 25 marks]

Question 2

Binga Limited is preparing its annual budgets for the year to 31 December 2021. It manufactures and sells one product, which has a selling price of \$150. The marketing director believes that the price can be increased to \$160 with effect from 1 July 2021. The sales volumes for each quarter of the year will be as follows:

Quarter	Sales Volume
1	40 000
2	50 000
3	30 000
4	45 000

Sales for each quarter of 2022 are expected to be 40 000 units. Each unit of finished product, which is manufactured, requires four units of component R and three units of component T, together with a body shell S. These items are purchased from an outside supplier. Currently prices are:

Component R	\$8.00 each
Component T	\$5.00 each
Shell S	\$30.00 each

The components are expected to increase in price by 10% with effect from 1 April 2021; no change is expected in the price of the shell. Assembly of the shell and components into the finished product requires 6 labour hours: labour is currently paid at \$5.00 per hour. A 4 per cent increase in wage costs is anticipated to take effect from 1 October 2021.

Variable overhead costs are expected to be \$10.00 per unit for the whole of 2021; fixed production overhead costs are expected to be \$240 000 for the year, and are absorbed on a per unit basis. Stocks on 31 December 2020 are expected to be as follows:

Finished units	9000 units
Component R	3000 units
Component T	5500 units
Shell S	500 units

Closing stocks at the end of each quarter are expected to be as follows:

Finished units	10% of next quarter's sales
Component R	20% of next quarter's production requirements
Component T	15% of next quarter's production requirements
Shell S	10% of next quarter's production

requirements

Required:

a) Prepare the following budgets for Baker Limited for the year ending 31 December 2021, showing values for each quarter and the year in total:

- (i) sales budget (in \$s and units) [4 marks]
- (ii) production budget (in units) [4 marks]
- (iii) material usage budget (in units) [5 marks]
- (iv) production cost budget (in \$s) [5 marks]

b) Sales are often considered to be the principle budget factor of an organisation. Explain the meaning of the principle budget factor and indicate how it may apply to sales. [2 marks]

[Total: 20 marks]

Question 3

a) Limiting or scarce factors are factors that restrict output (such as skilled labour, machine capacity, materials availability, cash or funding, sales floor space, or factory floor space). Below is information regarding Mthuli Enterprises business construct.

Components	X	Y	Z
Contribution per unit	\$12	\$10	\$6
Machine hours per unit	6	2	1
Estimated potential sales demand (units)	2 000	2 000	2 000
Required machine hours	12 000	4 000	2 000
Contribution per machine hour	\$2	\$5	\$6
Ranking per machine hr	3	2	1

Capacity for the period is restricted to 12 000 machine hours.

Required:

Evaluate the optimum production mix for Mthuli Enterprises showing clearly contribution per limiting factor, the quantity for each product and the total net profit that will result for the period. [10 marks]

b) Mazondo 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 is to calculate:

- (i) The break-even in units and sales value [4 marks]
- (ii) The profit for the year [2 marks]
- (iii) The margin of safety in units and as a percentage [4 marks]
- (iv) The sales in units required to maintain the profit level of the year ended 30 November 2019 [5 marks]

[Total: 20 marks]

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END OF EXAMINATION QUESTION PAPER