



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 :
DATE : 17^{2.1} FEB 2022

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. [30 marks]

Answer all questions in this section. Each question carries 2 marks.
Select the most appropriate answer

1. Which of the following definitions best describes "Zero-Based Budgeting"?
 - A. A method of budgeting where an attempt is made to make the expenditure under each cost heading as close to zero as possible.
 - B. A method of budgeting whereby all activities are re-evaluated each time a budget is formulated.
 - C. A method of budgeting that recognises the difference between the behaviour of fixed and variable costs with respect to changes in output and the budget is designed to change appropriately with such fluctuations.
 - D. A method of budgeting where the sum of revenues and expenditures in each budget centre must equal zero.

2. 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

3. Which of the following **BEST** describes target costing?
 - A. Setting a cost by subtracting a desired profit margin from a competitive market price
 - B. Setting a price by adding a desired profit margin to a production cost
 - C. Setting a cost for the use in the calculation of variances
 - D. Setting a selling price for the company to aim for in the long run

4. Which method of investment appraisal is based on profits?
 - A. Pay back period

- B. Accounting rate of return
- C. Net present value
- D. Internal rate of return

5. The budgeted sales of Benedict Trading are \$24,000, with a budgeted selling price of \$12 per unit. Actual sales are 2,600 units valued at \$30,400. What is the price variance?

- A. \$800 adverse
- B. \$800 favourable
- C. \$6,400 adverse
- D. \$6,400 favourable

6. Which of the following may **NOT** explain an unfavourable material usage variance?

- A. The use of low grade material
- B. The use of low caliber of employees
- C. Low staff morale in the factory
- D. An increase in the price of raw materials

7. A trader has given you the following information concerning his product:

Per Unit	\$
Selling Price	2,000
Variable labour cost	700
Raw material cost	500

If the break-even point is 5,000 units, what is the total fixed costs?

- A. \$4,000,000
- B. \$6,000,000
- C. \$6,500,000
- D. \$7,500,000

8. A hairdresser is facing some working capital problems and would want to take a short-term loan. The bank has asked to see budgets for the next six months.

Which budget should be prepared first?

- A. Cash
- B. Labour

C. Materials

D. Sales

9. 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
10. 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
11. 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
12. The difference between budgeted amounts and actual results is classified as
- A. Standard deviation
 - B. Variances
 - C. Mean average
 - D. Weighted average
13. 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
14. 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

15. 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

[Total: 30 marks]

SECTION B. [70marks]

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 [3 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]

(e) 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.
[5marks]

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: 30 marks]

Question Two

(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]

[Total: 15 marks]

Question Three

Lakeside plc is considering purchasing one of two businesses in order to expand its operations. The options are:

Turner Ltd

Estimated cost of the take-over bid: \$2.15 million
 Production: 100,000 units per annum.
 Sales: 80% of the output will be sold under an existing fixed price contract which has a further four years to run at \$15 per unit. The remainder of the production will be sold on the open market at the following selling prices:

Year	1	2	3	4
Selling price per unit	\$14	\$14	\$15	\$16

Operating costs (including depreciation): \$750,000 over each of years 1 and 2
 \$800,000 over each of years 3 and 4.
 Depreciation: \$60,000 per year.

Paxton Ltd

Estimated cost of take-over bid: \$3.5 million
 Production: 200,000 units per annum.

Sales: A contract already exists covering the next four years under which the entire product will be taken at a price of \$13 per unit for years 1 and 2, \$14 per unit in year 3 and \$15 per unit in year 4.

Operating costs (including depreciation): \$1.2 million in the first year, \$1.3 million in the second year, \$1.5 million in the third year and \$1.7 million in the fourth year.
Depreciation: \$90,000 per year.

The cost of capital for Lakeside plc is 12%. All receipts and payments take place at the end of each year.
Extract from present value tables of \$1 @ 12%:

Year 1	.893
Year 2	.797
Year 3	.712
Year 4	.636

REQUIRED

- (a) Calculate the net present value of each of the two businesses. Make a recommendation, with reasons, as to which business appears to be the better investment. [17 marks]
- (b) Evaluate the importance of two other methods of capital investment appraisal [8 marks]

[Total: 25 marks]

END OF EXAMINATION