



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF LAW, BUSINESS INTELLIGENCE AND ECONOMICS

DEPARTMENT OF ACCOUNTING, FINANCE AND HUMAN CAPITAL
MANAGEMENT

EXAMINATION PAPER

COURSE CODE : CAC414
COURSE TITLE : MANAGEMENT AND COST ACCOUNTING 2
DURATION : 3 Hours
LEVEL : 4.1
DATE : 11 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. Non programmable calculators are allowed in the examination.
5. Graph paper
6. The number of marks for each question or part question is shown in brackets []

SECTION A [20Marks]

ANSWER ALL QUESTIONS (Each question carries 2marks)

SELECT THE MOST APPROPRIATE ANSWER

1. In which of the following ways might financial returns be improved over the life cycle of a product?
 - 1) Maximising the breakeven time
 - 2) Minimising the time to market
 - 3) Minimising the length of the life cycle

A. 1 and 2 only
B. 1 and 3 only
C. 2 only
D. 2 and 3 only

2. Which of the following is considered a relevant cost?

A. Sunk cost
B. Opportunity cost
C. Fixed overheads
D. Historical cost

3. A plant should be shut down if:

A. Fixed costs exceed variable costs
B. Total revenues exceed total costs
C. Total revenues are less than variable costs
D. Contribution margin is positive

4. What is the break-even point in units if the selling price per unit is \$50, variable cost per unit is \$30, and total fixed costs are \$40,000?

A. 1,000 units
B. 1,333 units
C. 2,000 units
D. 2,500 units

5. A company has a material price variance of \$5,000 favourable and a material usage variance of \$2,000 unfavourable.

What is the net material variance?

- A. \$3,000 favourable
- B. \$3,000 unfavourable
- C. \$7,000 favourable
- D. \$7,000 unfavourable

6. A performance budget system primarily focuses on:

- A. Input costs
- B. Output and outcomes
- C. Historical financial data
- D. Inflation adjustments

7. A decision tree shows two possible outcomes for a decision: Outcome 1 with a probability of 0.6 and a payoff of \$50,000, and Outcome 2 with a probability of 0.4 and a payoff of \$30,000.

What is the expected monetary value (EMV) of the decision?

- A. \$32,000
- B. \$38,000
- C. \$42,000
- D. \$46,000

8. If the expected times for activities on the critical path of a PERT project are 5, 7, and 9 weeks, respectively, what is the expected completion time for the project?

- A. 18 weeks
- B. 19 weeks
- C. 20 weeks
- D. 21 weeks

9. A company is evaluating two mutually exclusive projects. Project Khetai requires an investment of \$120,000 and has a profitability index (PI) of 1.2. Project Muthudza requires an investment of \$100,000 and has a PI of 1.4. Which project should the company choose based on the profitability index?

- A. Project Khetai, because it has a higher initial investment.
- B. Project Muthudza, because it has a higher profitability index.
- C. Project Khetai, because it has a PI greater than 1.
- D. Neither, because both have a PI greater than 1.

10. Calculate the net present value (NPV) of a project requiring an initial investment of \$200,000, with expected cash inflows of \$60,000 per year for 5 years,

assuming a discount rate of 10%. (Use the present value of annuity factor for 5 years at 10% = 3.7908).

- A. \$17,448
- B. \$18,548
- C. \$19,658
- D. \$20,768

[Total 20marks]

SECTION B [80 Marks]

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

Question 1

Atamost Manufacturing is considering expanding its production facility. The expansion requires an investment of \$1,000,000 and is expected to bring additional cash flows of \$250,000 per year for 6 years. The company uses a discount rate of 8%.

Required:

- Calculate the Payback Period for the expansion project. **(5marks)**
- Compute the Net Present Value (NPV) of the expansion. **(10marks)**
- Use the present value of annuity factor for 6 years at 8% = 4.6229.
- Assess whether the expansion project is financially viable based on the NPV and Payback Period. Support your assessment with calculations. **(5marks)**
- Critique the decision-making process of the company, considering both quantitative and qualitative factors. Suggest improvements. **(5marks)**

[Total 25marks]

Question 2

A company is evaluating a new product launch project using the Project Evaluation and Review Technique (PERT). The optimistic, most likely, and pessimistic time estimates for the project completion are 6 months, 8 months, and 10 months, respectively.

Required:

- Calculate the expected completion time and variance for the project. (15marks)
- Based on this analysis, discuss the level of uncertainty associated with the project timeline and potential risk management strategies that could be implemented. (10marks)

[Total 25marks]

Question 3

- A company's standard overhead cost for producing one unit of product C is \$30, consisting of \$15 variable overhead and \$15 fixed overhead. During the month, the company produced 2,000 units of product C. The actual variable overhead incurred was \$32,000, and the actual fixed overhead incurred was \$28,000.

Required:

- (i) Calculate the variable overhead spending variance, variable overhead efficiency variance, fixed overhead spending variance, and fixed overhead volume variance. **(8marks)**
- (ii) Based on the calculated variances, analyse the overall impact on the company's profitability and discuss potential strategic decisions the company could make to improve its overhead cost control and budgeting processes. **(7marks)**

b) A company's budgeted sales for the upcoming quarter are 10,000 units, with an expected selling price of \$50 per unit. The company's variable cost per unit is \$30, and fixed costs are budgeted at \$100,000 for the quarter.

Required:

- (i) Calculate the budgeted operating income for the quarter. **(5marks)**
- (ii) Assuming the actual sales volume for the quarter turned out to be 12,000 units, analyse the impact of the sales volume variance on the company's operating income. **(5marks)**
- (iii) Discuss potential reasons for the variance and recommend strategies to address it in future budgeting cycles **(5marks)**

[Total 30marks]

1/12 AM

END OF EXAMINATION QUESTION PAPER
