



ZIMBABWE EZEKIEL GUTI UNIVERSITY

**FACULTY OF BUSINESS INTELLIGENCE, ENTREPRENEURSHIP, ARTEFACTUAL
DESIGNS, AND FUTURES**

DEPARTMENT OF ECONOMICS, MARKETING AND ENTREPRENEURSHIP

EXAMINATION PAPER

MODULE CODE	:	CBM223
MODULE TITLE	:	Business Finance
SPECIAL REQUIREMENTS	:	Formulae Sheets
DURATION	:	3 Hours
LEVEL	:	2.2
DATE	:	10 JUN 2026

INSTRUCTIONS TO CANDIDATES:

1. No cell phones are allowed in the examination venue.
2. Answer **ALL FOUR (4)** questions.
3. The number of marks for each question or part question is shown in brackets []
4. Use of non-programmable calculators is allowed.
5. Show all your workings in order to gain full marks.
6. Begin each answer on a new page.
7. **DO NOT OPEN THIS PAPER UNTIL THE INVIGILATOR INSTRUCTS YOU.**

SECTION A: ANSWER ALL QUESTIONS

Read the case study below and answer the questions that follow.

Nzara Foods Holdings Limited is one of Zimbabwe's largest food manufacturers, producing maize meal, flour, stock feeds, and other food products. The company is considering a major investment to expand its processing capacity in Bulawayo to serve the Matabeleland region more effectively. The proposed project involves constructing a new maize and wheat milling plant at an initial cost of US\$8 million. The plant will have a useful life of 10 years. The finance department has prepared the following projected cash flows:

Year	1	2	3	4	5	6	7	8	9	10
Projected Cash Flow	1.2 million	1.5 million	1.8 million	2 million	2.2 million	2.4 million	2.2 million	2 million	1.8 million	1.5 million

The company's cost of capital is 12%. The board of directors has asked for a thorough evaluation of this investment proposal using multiple appraisal techniques.

QUESTION ONE

- Calculate the payback period for this project and based on the company's policy of accepting projects with payback periods of less than 6 years, evaluate whether the project should be accepted or rejected. **(5 marks)**
- Calculate the Net Present Value (NPV) of the project at the 12% cost of capital and appraise whether the project should be accepted based on the NPV rule. **(5 marks)**
- Calculate the Profitability Index (PI) for the project and interpret its meaning for the board of directors. **(5 marks)**
- Assess the weakness of each appraisal method and recommend the method which should be given the greatest weight by the board in the evaluation of the project **(10 marks)**

Total marks

[25 marks]

SECTION B: ANSWER ALL QUESTIONS

QUESTION TWO

- a) Evaluate the **FOUR** major financial management decisions that every finance manager must address using examples from a Zimbabwean company of your choice. **(10 marks)**
- b) Calculate the future value of a US\$15 200 investment for 3 years at an interest rate of 6% per annum. Show both the compound interest and simple interest earned over the investment period. **(5 marks)**
- c) Given a discount rate of 10%, find the present value of a 3-year annuity that will make payments of \$200 at the beginning of each year for the next three years. **(6 marks)**
- d) Assess the reasons why rental payments for an apartment and life insurance premiums are typically structured as annuities due rather than ordinary annuities. **(4 marks)**

Total marks

[25 marks]

QUESTION THREE

- a) Possible net cash flows for Projects A and B and their probabilities are given below.

Event	Project A		Project B	
	Cash Flow (\$)	Probability	Cash Flow (\$)	Probability
A	8,700	0.1	26,000	0.5
B	10,020	0.2	20,000	0.15
C	12,000	0.2	16,020	0.1
D	14,100	0.4	12,000	0.15
E	16,600	0.1	8,100	0.1

The discount rate is 10%, and the initial investment for both projects is \$10,000.

- i) Calculate the expected net cash flow for each project. **(4 marks)**
- ii) Calculate the expected net present value (ENPV) for each project and state which project is preferable. **(10 marks)**

b) A company pays a dividend of \$0.38 per share, and the growth rate in dividend is expected to be 2.76%. Calculate the cost of equity share if the current market price is \$5.15. (4 marks)

(d) Assess the advantages and disadvantages of using retained earnings as a source of finance. (7 marks)

Total marks [25 marks]

QUESTION FOUR

a) Using examples, critically evaluate the following motives for holding cash:

i) Transactions motive. (3 marks)

ii) Precautionary motive. (3 marks)

iii) Speculative motive. (3 marks)

iv) Compensation motive. (3 marks)

b) Consider the following two investments:

- Investment A: Expected return = \$20,000, Standard deviation = \$3,000
- Investment B: Expected return = \$51,000, Standard deviation = \$21,500

Calculate the coefficient of variation for each investment and determine which investment a risk-taking manager should choose. (3 marks)

c) Assess the link between ESG and taxation in Zimbabwe using clear examples.

Total marks [25 marks]

END OF THE EXAMINATION PAPER

FORMULAS

$$FV_n = PV * (1 + r)^n$$

$$r = \left(\frac{FV}{PV}\right)^{1/n} - 1$$

$$PV_0 = \frac{FV}{(1+r)^n}$$

$$PV \text{ Perp} = \frac{C}{r}$$

$$PV \text{ annuity due} = (1 + r) * PV \text{ of annuity}$$

$$r = \frac{QR}{m}$$

$$PBP = \frac{\text{Original cost of the project (initial outlay) (IO)}}{\text{Annual cash inflow (CF)}}$$

$$AAR = \frac{Av \text{ Inc}}{Av \text{ Inv}} * 100$$

$$PI = \frac{PV \text{ of CFs}}{\text{Initial Investment}}$$

$$ENCF = \sum CF_i * P_i$$

$$\text{Variance } (\delta^2) = \sum (CF - ENCF)^2 * P_i$$

$$\text{Coef of var} = \frac{\text{Standard deviation}}{\text{Expected return/Expected cashflow}} \quad RADR = R_f + R_p$$

$$NPV = \sum \left(\frac{\alpha_n * CF_n}{(1+r)^n} \right) - \text{Initial Investment}$$

$$K_e = \frac{D}{MP}$$

$$K_p = \frac{D}{NP}$$

$$K_e = \frac{EPS}{MP_e}$$

$$K_e = R_f + \beta_1 * RP_1 + \dots + \beta_n * RP_n + \mu$$

$$NP = \text{Amnt of D} - \text{D Acq fees} + \text{Prem} - \text{Disc} \quad K_r = K_e * (1 - t) * (1 - b)$$

maximum level = reorder level - (minimum consumption) * (minimum lead times) + reordering quantity
minimum level = reorder level - (average usage * average lead time)

Reorder level = maximum usage * maximum lead time or minimum level + consumption during lead time.

$$E(R_i) = R_f + \beta_1 (R_{m1} - R_f) + \dots + \beta_n (R_{mn} - R_f)$$

$$E(r) = \sum (\text{Prob} * \text{Return})$$

$$\text{Standard deviation } \delta = \sqrt{\delta^2}$$

$$CV = \frac{\delta}{x}$$

$$FV_n - PV = (1 + r)^n$$

$$PV_0 = \frac{FV}{(1+r)^n}$$

$$PV \text{ ann} = \frac{C}{r} * (1 - (1 + r)^{-n})$$

$$FV \text{ ann} = \frac{C}{r} * ((1 + r)^n - 1)$$

$$FV \text{ ann due} = (1 + r) * FV \text{ of annuity}$$

$$EAR = (1 + \frac{QR}{m})^m - 1$$

$$\text{Payback period} = Y + \frac{B}{C}$$

$$NPV = \sum \frac{CF_n}{(1+r)^n} - \text{Initial Investment}$$

$$IRR = A + B * \frac{C}{D}$$

$$ENPV = \left(\sum \frac{ENCF}{(1+r)^n} \right) - \text{Initial Investment}$$

$$\text{Standard deviation } (\delta) = \sqrt{\delta^2}$$

$$WACC / K_o = \sum W_i K_i$$

$$K_e = \frac{D}{MP} + g$$

$$NP = \text{Issue Price} - \text{Flotation price}$$

$$K_e = R_f + (R_m - R_f) * \beta$$

$$K_d = \frac{\text{Interest}}{NP} * (1 - t)$$

$$\delta^2 = \sum \text{Prob} * (R - E(r))^2$$

$$Er(p) = \sum W_i * E(r)_i$$

$$CV = \frac{1}{n} * \sum (R_x - E(R_x) (R_y - E(R_y)))$$

$$CV = \sum P_i (R_x - E(R_x) (R_y - E(R_y))$$

$$r_{xy} = \frac{\text{Covariance}_{xy}}{\delta_x \delta_y}$$

$$\delta_{AB}^2 = W_A^2 \delta_A^2 + W_B^2 \delta_B^2 + 2W_A W_B \text{Cov}_{AB}$$

$$\text{CML}(R_p) = R_f + \frac{E(R_m - R_f)}{\delta_m} * \delta_p$$

$$\delta_p = \delta_m * W_m$$

$$E(R_i) = R_f + \beta (R_m - R_f)$$

$$RP = (R_m - R_f)$$

$$TA = TL + E$$

$$NCA + CA = NCL + CL + E$$

$$NWC = CA - CL$$

$$\text{Total CF} = \text{CF from operating activities} + \text{CF from investing activities} + \text{CF from financing activities}$$

$$\text{Current ratio} = \frac{CA}{CL}$$

$$\text{Acid/quick test ratio} = \frac{CA - \text{Inv}}{CL}$$

$$\text{Cash ratio} = \frac{CA + CE}{CL}$$

$$\text{Total debt ratio} = \frac{TA - TE}{TA}$$

$$\text{Debt-equity ratio} = \frac{TD}{TE}$$

$$\text{Equity multiplier} = \frac{TA}{TE}$$

$$\text{Interest cover ratio} = \frac{EBIT}{Int}$$

$$\text{Inventory turnover} = \frac{COGS}{Inv}$$

$$\text{Days' sales in inventory} = \frac{365 \text{ days}}{Inv T/O}$$

$$\text{Receivables turnover} = \frac{S}{TR}$$

$$\text{Receivables turnover} = \frac{S}{TA}$$

$$\text{Profit margin} = \frac{NI}{S}$$

$$ROA = \frac{NI}{TA}$$

$$ROE = \frac{NI}{TE}$$

$$EPS = \frac{E}{\text{Ordinary shares in issue}}$$

$$P/E \text{ ratio} = \frac{\text{price per share}}{EPS}$$

$$BEP = \frac{FC}{Cont}$$

$$Cont = SP - VC$$

$$\text{Dividends per share} = \frac{\text{Dividends announced during the period}}{\text{Number of shares in issue}}$$

$$\text{Value of target firm} = \text{Market share price} * \text{number of outstanding shares}$$

$$\text{Value of target firm} = \text{Total assets} - \text{total liabilities}$$

25/4 AM