



**ZIMBABWE EZEKIEL GUTI UNIVERSITY**

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**FACULTY OF LAW, BUSINESS INTELLIGENCE AND ECONOMICS**

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**DEPARTMENT OF ACCOUNTING, FINANCE AND HUMAN CAPITAL  
MANAGEMENT**

**EXAMINATION PAPER**

**MODULE CODE** : CAC214  
**MODULE TITLE** : CORPORATE FINANCE  
**DURATION** : 3 Hours  
**LEVEL** : 2.1  
**DATE** :

28 JUL 2025

**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.
4. Begin each question on a new page.
5. The number of marks for each question or part question is shown in brackets [ ]
6. Show all workings, where applicable.

## SECTION A: ANSWER ALL QUESTIONS

READ THE FOLLOWING CASE STUDY AND ANSWER THE QUESTIONS THAT FOLLOW

In an interview with ZEGU TV, Simba, the financial analyst at Hobart Investment stated that, "In present and future value problems, cash flow timing is critically important. In almost all such calculations, it is implicitly assumed that the cash flows occur at the end of each period". Hobart Investment has a PV of a 6-year annuity that will make a series of \$100 202 payments at the beginning of year for next six years. The discount rate is 10%. To finance this investment, Hobart Investment was offered five borrowing options from five banks. Zambezi Bank offered 15% compounded daily, Sable Bank 2 offered 16% compounded monthly, Christian Bank offered 16.5% compounded quarterly, ATR Bank offered 17.5% compounded semi-annually, and Shine Bank 5 offers 18% compounded annually.

### QUESTION 1

- a) Evaluate the differences between an annuity and annuity due. **(10 marks)**
- b) Calculate the present value of the 6-year annuity held by Hobart Investment. **(5 marks)**
- c) Compute the effective annual rate for each bank and determine the bank that has the best offer for Hobart Investment. **(10 marks)**

**Total marks [25 marks]**

## SECTION B: ANSWER ALL QUESTIONS

### QUESTION 2

- a) The risk-free is 6.6%, the market return is 12.9%, and the risk of the market is measured by the standard deviation of 9.1%. Tinashe wants to invest 77% of his proceeds in the market portfolio and the remainder in risk-free assets. Compute the required rate of return on the portfolio. **(5 marks)**

b) King Fisher has invested \$7 200 for 3 years in a deposit account that pays annual interest of 11.2%, compounded semi-annually. Compute the value of King Fisher's investment at the end of 3 years. **(5 marks)**

c) A project has the following cash-flows:

Year 1		Year 2		Year 3	
Cash flows (\$)	Probability	Cash flows (\$)	Probability	Cash flows (\$)	Probability
4 000	0.1	6 000	0.2	3 080	0.3
6 000	0.2	6 000	0.3	4 100	0.4
2 300	0.3	2 000	0.4	7 600	0.2
8 770	0.4	8 000	0.1	5 650	0.1

The initial investment of the project is \$12 000 and the interest rate is 8.8%.

- i. Calculate the expected net cash-flow for each year. **(9 marks)**
- ii. Compute the expected net present value of the project and appraise whether it is worth undertaking. **(6 marks)**

**Total marks [25 marks]**

### QUESTION 3

a) Evaluate the questions that finance managers should ask in order to have comprehensive analysis of financial statements. **(13 marks)**

b) Assess the mechanisms that can be put in place to resolve stakeholder conflict in any organization of your choice **(12 marks)**

**Total marks [25 marks]**

### QUESTION 4

a) Sky United pays \$24 187 per month in fixed costs and also pay \$33.65 per unit to produce football boots which are sold at \$41.35.

- i. Compute the total cost of producing 1 244 football boots. **(3 marks)**
- ii. Compute the break-even point in units for Sky United. **(3 marks)**

iii. -Compute the break-even point in sales value for Sky United. -

(3 marks)

b) Evaluate the link between taxation and the concept of ESG reporting in Zimbabwe.

(13 marks)

**Total marks**

**[25 marks]**

**END OF EXAMINATION PAPER**

## FORMULAS

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

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

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

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

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

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

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

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

$$PI = \frac{PV \text{ of CFs}}{IO}$$

$$ENCF = \sum CF_i * P_i$$

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

$$\text{Coef of var} = \frac{\text{Standard deviation}}{\text{Expected return/Expected cashflow}}$$

$$NPV = \sum \left(\frac{\alpha_n * CF_n}{(1+r_f)^n}\right) - IO$$

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

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

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

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

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

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$RADR = R_f + R_p$$

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

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

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

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

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

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

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

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

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

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

$$\delta_p = \delta_m * W_m$$

$$RP = (R_m - R_f)$$

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

Total CF = CF from operating activities + CF from investing activities + CF from financing activities

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

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

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

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

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

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

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

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

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

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

Value of target firm = Market share price \* number of outstanding shares

Value of target firm = Total assets - total liabilities

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

$$TA = TL + E$$

$$NWC = CA - CL$$

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

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

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

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

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

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

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

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

$$Cont = SP - VC$$

1/Jan