ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF LAW, BUSINESS INTELLIGENCE AND ECONOMICS

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 AN 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

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

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

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

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

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

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

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

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

PV annuity due $= (1 + r) *$ PV of annuity

FV ann due $= (1 + r) *$ FV of annuity

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

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

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

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

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

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

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

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

$ENCF = \sum CF_i * P_i$

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

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

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

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

$RADR = R_f + R_p$

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

WACC/ $K_o = \sum W_i K_i$

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

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

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

NP = Issue Price – Flotation price

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

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

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

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

NP = Amnt of D − D Acq fees + Prem − Disc

$K_r = K_e * (1 - t) * (1 - b)$

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.

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

E (r) $= \sum (Prob * Return)$

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

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

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

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

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

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

$r_{xy} = \frac{Covariance_{xy}}{\delta_x \delta_y}$

$\delta_{AB}^2 = W_A^2 \delta_A^2 + W_B^2 \delta_B^2 + 2 W_A W_B Cov_{AB}$

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

$\delta_p = \delta_m * W_m$

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

RP= (Rm – Rf)

$TA = TL + E$

$NCA + CA = NCL + CL + E$

$NWC = CA - CL$

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

Current ratio= $\frac{CA}{CR}$

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

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

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

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

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

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

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

Days` sales in inventory = $\frac{365\ days}{Inv\ T/O}$

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

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

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

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

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

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

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

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

Cont = SP – VC

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

Value of target firm = Market thare price * number of outstanding shares
Value of target firm = Total assets – total liabilities