



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF LAW, BUSINESS INTELLIGENCE AND ECONOMICS

DEPARTMENT OF ECONOMICS, MARKETING AND ENTREPRENEURSHIP

FORMULA BOOKLET

COURSE CODE : CAC 214
COURSE TITLE : Formula Booklet

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

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

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

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

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

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

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

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

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

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

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

$$PBP = \frac{IO}{CF}$$

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

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

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

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

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

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

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

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

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

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

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

$$K_e = R_f + \beta_1 * RP_1 + \dots + \beta_n * RP_n + \mu \quad K_d = \frac{I}{NP} * (1 - t)$$

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

$$K_o = \sum W_i K_i$$

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

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

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

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

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

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

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

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

$$\delta_p = \delta_m * W_m$$

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

$$RP = (R_m - R_f)$$