BA1 Formula Sheet

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Business Economics (BA1) . CIMA Certificate syllabus . For revision use only

Simple & Compound Interest

Simple interest: I = P x r x n

Compound interest: FV = P x (1 + r)^n

P = principal, r = interest rate per period, n = number of periods

Annuities & Perpetuities

PV of annuity = A x [1 - (1 + r)^-n] / r

PV of perpetuity = A / r

A = periodic cash flow, r = interest rate per period

Growing Perpetuity

PV = A / (r - g)

g = constant growth rate per period (only valid where r > g)

Effective & Nominal Interest Rates

Effective annual rate = (1 + r/m)^m - 1

r = nominal annual rate, m = compounding periods per year

Index Numbers

Price relative = (Current price / Base price) x 100

Laspeyres price index = S(P1 x Q0) / S(P0 x Q0) x 100

Laspeyres weights by BASE year quantities (Q0)

Price Elasticity of Demand (PED)

PED = %change in quantity demanded / %change in price

|PED| > 1 = elastic; |PED| < 1 = inelastic; = 1 unit elastic

Income Elasticity of Demand (YED)

YED = %change in quantity demanded / %change in income

YED > 0 = normal good; YED < 0 = inferior good

Cross Elasticity of Demand (XED)

XED = %change in Qd of good A / %change in price of good B

XED > 0 = substitutes; XED < 0 = complements

Linear Regression (Forecasting)

Line of best fit: y = a + bx

a and b values are provided or derived from data given in the question

Correlation & Determination

Correlation coefficient r: -1 <= r <= 1

Coefficient of determination = r^2

r^2 shows the proportion of variation in y explained by x