Study tips:

Formulae for students taking *Corporate Finance*, *Financial and Business Planning in a Global Context*, *Financial Management*, and *Management of Financial Resources and Performance*, by John Burnup, Programme Chief for the Financial Management Programme.

All students taking any of these examinations: Corporate Finance, Financial and Business Planning in a Global Context, Financial Management, and Management of Financial Resources and Performance, please note that the following formulae will be printed inside the question papers as of December 2009. These formulae can be used in answering certain questions but their use is not compulsory.

Cost of capital

Cost of irredeemable preference shares paying an annual dividend *d* in perpetuity, and having a current market price *p*

$$Kpref = \frac{d}{p}$$

Cost of irredeemable debt paying annual net interest *i(1-t)* and having a current market price *p*

$$Kdebt = \frac{i(1-t)}{p}$$

Cost of ordinary shares having a current ex-div. market price *p*, having paid a dividend *d*, with dividend growth *g*% per annum

$$Kequity = \frac{do(1+g)}{p} + g$$

Cost of ordinary shares, using CAPM where *Rf* is the risk free rate and *Rm* is the return on the market

$$Kequity = Rf + \beta(Rm - Rf)$$

Share valuation

Value of irredeemable preference shares paying an annual dividend *d* in perpetuity

$$Po = \frac{d}{Kpref}$$

Value of ordinary shares paying an annual dividend *d*, with dividend growth *g*

$$Po = \frac{do(1+g)}{Ke - g}$$

Value of irredeemable debt paying annual after tax interest *i(1-t)*

$$Po = \frac{i(1-t)}{Kdebt}$$

Money rates

Forward rates using interest rate parity

$$\text{Forward rate €/£} = \text{Spot €/£} \times \frac{1 + \text{nominal € interest rate}}{1 + \text{nominal UK interest rate}}$$

Forward rates using purchasing power parity

$$\text{Forward rate €/£} = \text{Spot €/£} \times \frac{1 + \text{€ zone inflation rate}}{1 + \text{UK inflation rate}}$$

Adjustment of money for inflation

(1+ money rate of return) = (1 + real interest rate) (1 + inflation rate)

N.B. Tables are provided for the present value of cash flows received in future years and the cumulative present value of a series of annual cash flows received in future years (annuities).