Notation and terminology used for Exam FM/2

The following notation and terminology will apply to the examination questions.

Unless otherwise stated in the examination question, the rate of interest and the rate of discount are annual rates.

The effective rate of interest is denoted by i. The nominal rate of interest payable m times per period is denoted by $i^{(m)}$.

When more than one interest rate is referenced in a question, additional letters such as j may be used to denote the additional interest rates.

The effective rate of discount is denoted by d and is equal to $\dfrac{i}{1+i}$. The nominal rate of discount payable m times per period is denoted by $d^{(m)}$.

The discount factor is denoted by v and is equal to $\dfrac{1}{1+i}$.

Force of interest:

A constant force of interest is denoted by δ

A force of interest varying by time is denoted by δ_t

An annuity-immediate is an annuity where the payments are made at the end of each period.

The present value of an annuity-immediate with n payments is denoted by

$$a_{\overline{n}|} \quad \text{or} \quad a_{\overline{n}|i}$$

The accumulated value of an annuity-immediate with n payments is denoted by

$$s_{\overline{n}|} \quad \text{or} \quad s_{\overline{n}|i}$$

An annuity-due is an annuity where the payments are made at the beginning of each period.

The present value of an annuity-due with n payments is denoted by

$$\ddot{a}_{\overline{n}|} \quad \text{or} \quad \ddot{a}_{\overline{n}|i}$$

The accumulated value of an annuity-due with n payments is denoted by

$$\ddot{s}_{\overline{n}|} \quad \text{or} \quad \ddot{s}_{\overline{n}|i}$$

"Dollar-weighted rate of return" means the simple interest approximation to the yield rate.

Unless otherwise stated in the examination question, the redemption value of a bond at the maturity date of the bond is equal to the face amount (par value) of the bond.