SYNOPSES

Part I of the note describes the statistical investigations that led to the development of the stochastic investment model described in the Faculty paper. This is based on a study of the Retail Prices Index, and its predecessors, over the period from 1661 to 1982; indices of share dividends and share yields from 1919 to 1982; and the yields on Consols from 1756 to 1982. The resulting model takes as input four independent 'white noise' series, and transforms them into suitably correlated series that adequately describe the movements of these investment variables, so that the resulting model can be used for simulations of 'possible futures'.

Part II of the note gives details of the results from the model with various parameters and various starting values, to show the sensitivity of the results to changes in these parameters.

Finally a table showing a particular simulation is given, along with graphs of it and of other simulations.

ON A CLASS OF RESTRICTED PERMUTATIONS

BY DR JACQUES DUTKA, PH.D.

(Paper No. 37 deposited in the Library in April 1985)

THE paper treats the problem of "Circular Sealing Arrangements" (see D. S. Jones and P. G. Moore, *J.I.A.*, **108**, 405) as a particular case of a diverse family of problems of the same genesis. An explicit solution of the general problem is developed, and an historical sketch is provided of several related problems including the 'Genoese lottery', 'Tait's knot problem', the 'problème des ménages' and other variations.