**Question 11** **(9 marks)**

Shari requires a loan of $325 000 for the purchase of a new house. She wishes to make two equally-spaced repayments of $700 each month.

Shari is offered a choice of two loan options for the first three years, both of which have interest calculated daily.

- Option 1 An introductory compound interest rate of 2.55% per annum for the first year which changes to 2.99% per annum for the next two years.
- Option 2 A compound interest rate of 2.85% per annum fixed for the first three years.

(a) Describe briefly the benefit of making two repayments of $700 each month instead of one repayment of $1400 at the end of each month. (1 mark)

(b) For Option 1, calculate

(i) the loan balance at the end of the first year. (3 marks)

(ii) the loan balance at the end of the third year. (2 marks)

(c) Determine which option gives the best result for Shari after three years and by how much. (3 marks)