3. c) $d_1 = \dfrac{0.1503 + (0.025 + \frac{0.14^2}{2}) \times 0.25}{0.14\sqrt{0.25}}$

$= 0.1637$

$d_2 = d_1 - 0.14\sqrt{0.25}$

$= 0.068625$

d) $N(d_1) = 0.434984$

$N(d_2) = 0.472614$

f). For given Period to option expiry a binomial Model will converge to Black-Scholes Model as the number of branches increases.

4, a) $X_t = LN(S_t/S_{t-1})$

$X_1 = LN(35.85/40.25)$

$= -0.115766$