ECE 333 Quiz 4.

1.1) False; we use the combined interest rate

1.2) False; we annualize P to get A.

2.1) $A = 350 \times 2000 = 700000$ \$/yr

$\beta = (1.09)^{-1} \approx 0.91743$

$$P \approx 700{,}000 \times \frac{1-(0.91743)^{20}}{0.09}$$

$P \approx \$6{,}390{,}018$

2.2) $A = 150{,}000 \times \dfrac{0.5 \times 10^{-2}}{10^{-3}} = 750{,}000$ \$/yr

$$P \approx 750{,}000 \times \frac{1-(0.91743)^{20}}{0.09}$$

$P \approx \$6{,}846{,}447$

2.3) The one time option has no risk associated and has the highest present value. Therefore, the land owner should choose the one-time option