Solution to (1) Answer: (A)

The put-call parity formula (for a European call and a European put on a stock with the same strike price and maturity date) is

$$
\begin{aligned}
C - P &= F_{0,T}^{P}(S) - F_{0,T}^{P}(K) \\
&= F_{0,T}^{P}(S) - \mathrm{PV}_{0,T}(K) \\
&= F_{0,T}^{P}(S) - Ke^{-rT} \\
&= S_0 - Ke^{-rT},
\end{aligned}
$$

because the stock pays no dividends

We are given that $C - P = 0.15$, $S_0 = 60$, $K = 70$ and $T = 4$. Then, $r = 0.039$.

Remark 1: If the stock pays n dividends of fixed amounts $D_1, D_2, \ldots, D_n$ at fixed times $t_1, t_2, \ldots, t_n$ prior to the option maturity date, T, then the put-call parity formula for European put and call options is

$$
\begin{aligned}
C - P &= F_{0,T}^{P}(S) - Ke^{-rT} \\
&= S_0 - \mathrm{PV}_{0,T}(\mathrm{Div}) - Ke^{-rT},
\end{aligned}
$$

where $\mathrm{PV}_{0,T}(\mathrm{Div}) = \sum_{i=1}^{n} D_i e^{-rt_i}$ is the present value of all dividends up to time T. The difference, $S_0 - \mathrm{PV}_{0,T}(\mathrm{Div})$, is the *prepaid forward price* $F_{0,T}^{P}(S)$.

Remark 2: The put-call parity formula above does not hold for American put and call options. For the American case, the parity relationship becomes

$$S_0 - \mathrm{PV}_{0,T}(\mathrm{Div}) - K \le C - P \le S_0 - Ke^{-rT}.$$

This result is given in Appendix 9A of McDonald (2006) but is not required for Exam MFE/3F. Nevertheless, you may want to try proving the inequalities as follows:
For the first inequality, consider a portfolio consisting of a European call plus an amount of cash equal to $\mathrm{PV}_{0,T}(\mathrm{Div}) + K$.
For the second inequality, consider a portfolio of an American put option plus one share of the stock.