一、

(A) $LTC = 10L + 10K$

(B) $MRTS = \dfrac{5L^{-0.5}K^{0.5}}{5K^{-0.5}L^{0.5}} = \dfrac{K}{L}$

(C)

L↑, K↓ 時, $MRTS_{LK}$下降, 故凸向原點

(D) $\begin{cases} MRTS = \dfrac{10}{10^{0.5}} = 1 \\ q = 10L^{0.5}K^{0.5} \end{cases} \rightarrow L^* = K^* = 0.1q$

(E) $TC = 10 \times 0.1q + 10 \times 0.1q = 2q$

$AC = MC = 2$

(F) $TC(10) = 2 \times 10 = 20$