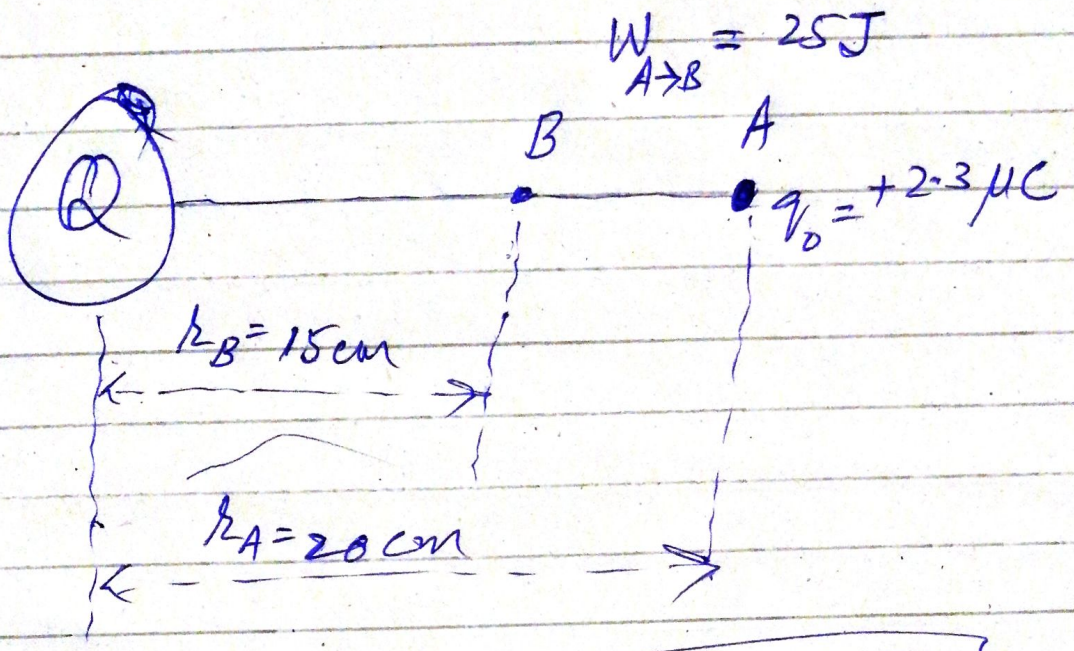
(c) $E = \frac{kQ}{r^2} = \frac{(9\times10^9\ Nm^2/C^2)(7.27\times10^{-4}\ C)}{(0.1m)^2}$

$= \boxed{6.54\times10^8\ N/C}$



(a) $\Delta V_{BA} = \frac{W_{A\to B}}{q_0} = \boxed{1.087\times10^7\ V}$

(b) $\because \Delta V_{BA} = V_B - V_A = kQ\left[\frac{1}{r_B} - \frac{1}{r_A}\right]$

$= kQ\left(\frac{r_A - r_B}{r_A r_B}\right)$

$\Rightarrow Q = \frac{\Delta V_{BA}\, r_A\, r_B}{k(r_A - r_B)}$

$= \frac{(1.09\times10^7 V)(0.2m)(0.15m)}{(9\times10^9\ Nm^2/C^2)(0.2m - 0.15m)}$ $\quad \because V = J/C$ & $Nm = J$

$= 7.27\times10^{-4}\left(\frac{V\cdot m^2\cdot C^2}{Nm^3}\right) = 7.27\times10^{-4}\cdot\frac{(J/C)\cdot C^2}{J}$

$= \boxed{7.27\times10^{-4}\ C}$