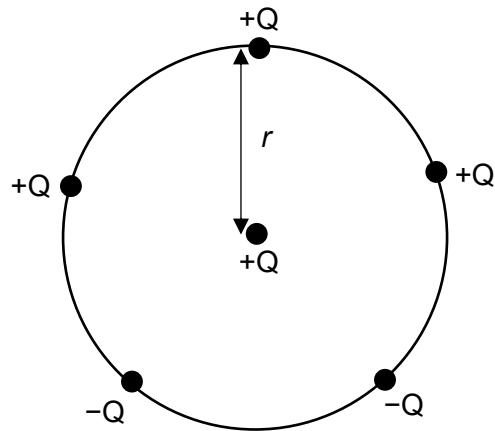


- 19 A point charge is surrounded by five charges of equal magnitude at distance r as shown in the diagram.



What is the work done to remove the charge at the centre to infinity without a change in kinetic energy?

A $-\frac{Q^2}{4\pi\varepsilon_0 r}$

B $\frac{Q^2}{4\pi\varepsilon_0 r}$

C $-\frac{5Q^2}{4\pi\varepsilon_0 r}$

D $\frac{5Q^2}{4\pi\varepsilon_0 r}$