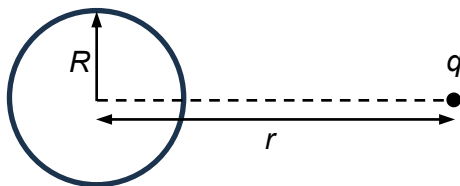


- 21 A charged conducting sphere of radius  $R$  has an electric potential  $V$ . A particle of charge  $q$  is at a distance  $r$  away from the centre of the charged sphere.



What is the magnitude of the electric force acting on the particle due to the charged sphere?

**A**  $\frac{qV}{R}$

**B**  $\frac{qV}{r}$

**C**  $\frac{qVr}{R^2}$

**D**  $\frac{qVR}{r^2}$