Problem 4) A charged particle q1 is at position (2, –1, 3). The electrostatic force on another charged particle q2 at (0, 0, 0) is :

1) $\frac{q_1 q_2}{56\pi\,\varepsilon_o}$(2i-j+3k)

2) $\frac{q_1 q_2}{56\sqrt{14}\pi\,\varepsilon_o}$(2i-j+3k)

3) $\frac{q_1 q_2}{56\pi\,\varepsilon_o}$(j-2i-3k)

4) $\frac{q_1 q_2}{56\sqrt{14}\pi\,\varepsilon_o}$(j-2i-3k)

Ans) - 4