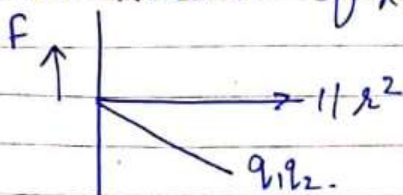
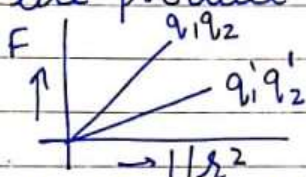


Topic: Electrostatics

(Electrostatics).

Q1. What is nature of force b/w q_1 and q_2 if graph b/w $F \propto \frac{1}{r^2}$ is shown.Q2. Two forces q_1 and q_2 kept at a distance d experiences a force F . How force is affected if distance b/w them is doubled.Q3. Two forces q_1 and q_2 kept at a distance d experiences a force F . At what distance should they be kept so that force becomes $5F$.Q4. Which of the product q_1q_2 or $q_1'q_2'$ is larger.Q5. Two pith balls A and B having charges $10\mu\text{C}$ and $20\mu\text{C}$ rep. A neutral ball C is kept first in contact with A then with B and later removed from system. Find force b/w A and B if kept at 1m .Q6. Two unequal charges exert an attractive force F . Now these charges are kept in contact and later kept at same distance. Now they exert force F' . What is nature of force F' and whether it is greater, smaller or equal to F .Q7. When 10^{14} electrons are removed from a neutral metal, the charge on sphere becomes _____.Q8. Find force b/w $10\mu\text{C}$ and $20\mu\text{C}$ kept at 20cm .Q9. Two charges of equal magnitudes kept at a distance r exert a force F on each other. If charges are halved and distance is doubled. Find new force.