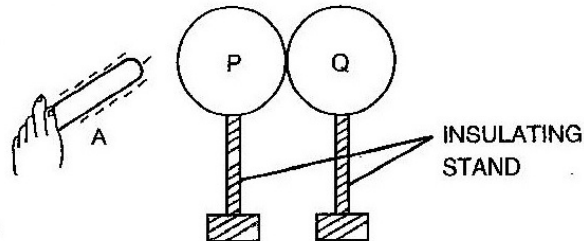


Question 10

- (a) The figure shows a negatively charged ebonite rod A which is brought near an uncharged metal sphere P touching the other uncharged metal sphere Q. Both the spheres stand on separate insulating stands. [3]



- i. If keeping the rod A in position, the sphere Q is removed by holding the insulating stand of it, state the kind of charge on them and give reason to support your answer.
 - ii. If the rod A is removed first and then the sphere Q is removed by holding the insulating stand of it, what kind of charges will be on the spheres P and Q? Explain. [3]
- (b) State three factors on which the resistance of a wire depends. Explain how the resistance depends on the factors stated by you. [4]
- (c)
- i. Why will heating the magnet strongly remove its magnetism?
 - ii. What are neutral points? [3]