

1. Select the correct statement

- A. Like sign electric charges attract each other
- B. Electric charges do not conserve
- C. Aluminum-oxide (Al_2O_3) is a good insulator
- D. The electric charge of a particle can go below 1×10^{-20} C.

2. Order of magnitude estimate, the Coulomb force between the electron and proton inside an hydrogen atom is

- A. 5×10^{-10} N
- B. 10^{-7} N
- C. 10 N
- D. 1.6×10^{-19} N

3. An electric field

- A. exerts force on charges inside it
- B. only attracts negative charges
- C. is only inside a conductor
- D. is only in outer space

4. Select the correct statement:

- A. Electric field lines are real lines that connect charges together
- B. Electric field lines start from positive charges and end at negative charges
- C. Electric field has no directions
- D. Electric field exists only when a test charge is used to measure it.