Key terms to choose from for Questions 1 and 2:

A. current    B. voltage    C. resistance
D. series circuit   E. transformer   F. proton
G. electric charge   H. electrons    I. ampere
J. ohm

1. (2 points)
   a. A quantity usually expressed in units of volts _____________________
   b. A positive particle located in the nucleus of an atom ___________________.

2. (2 points) Write the letter corresponding to a key term from above that best matches each description below.
   a. _____ Steps voltages up and down.
   b. _____ Time rate of flow of electric charge

3. (2 points) Circle the best answer for each of the following multiple choice questions.
   a. What is the unit of electric charge?
      i) volt
      ii) amperc
      iii) coulomb
      iv) Newton

   b. Two equal positive charges are placed equidistant on either side of another positive charge. What would the middle positive charge experience?
      i) a net force to the left
      ii) a zero net force
      iii) a net force to the right

Ô O V E R Ô
4. (2 points) Fill in the blanks below.
   a. The unit of electric current is the _________________.
   b. The unit of resistance is called the _________________.

5. (2 points) A 5 ohm S and a 15 S resistor are connected in parallel and are connected to a 10.0 V battery.
   a. What is the equivalent resistance of this system?
   b. What is the current in the system?

\[ R_p = R_1 + R_2 + R_3 + \ldots \]
\[ \frac{1}{R_p} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} + \ldots \]
\[ V = IR \quad P = IV \]