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② Answer Question 2 Answer

② Electric field is defined as the electric force per unit charge. The direction of the force it would exert on a positive test charge. For the positive charge, the electric field is radially outward, and radially inward for the negative charge.

- Magnetic field is defined as a field of force surrounding a permanent magnet or a moving charge particle, in which another permanent magnet or moving charge experiences a force compare electric field.

- Electric current is defined as the rate of at which charge flows through a surface. For example, a cross sectional wire.

Questions 1 Answer

① According to the Newton second law of motion which states that the rate of change of momentum of a body is directly proportional to the force applied and in a direction to the force.

Force, $F = ma$, the positive and negative charges act opposite directions inward and outward directions. Of the electric field the force acting on an electron being shot into a closed space is constant due to the field uniformity so the force acting on that same field is constant.

The force acting on the electron is also constant and as if F is constant, a , too is also constant, A , is the acceleration of the electron.