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(1) Using the concept of Newton's second law of motion, describe the magnitude and direction of the acceleration of an electron being shot horizontally into a closed space with a uniform field being directed upward

ANSWER
Newton's second law states that the vector sum of the forces F acting on an object is equal to the mass M of that object multiplied by the acceleration A of that object: F=ma. When an electron enters the field, there is a vertical downward force acting on it. This is because electric force acts in the opposite direction to an electric field and the electric field always points upwards.
The magnitude of the force is given by F=Gq.
Where:
G= electric field strength.
q= charge of the electron.
Since no acts horizontally, the magnitude of the acceleration is gotten by using Newton's second law F=ma
Where:
m= mass
f= force
a= acceleration
$$a=F/m = G(q/m) = Gq/m$$
The 'a' is downwards just like the way force F is directed. This obeys Newton's second law, force is directly proportional to acceleration.

(2) Describe electric field, magnetic field and electric current with respect to charges

ANSWER

Electric field
An electric field is a region in which electric force can be felt. The direction of the field is taken to be the direction of the force it would exert on a positive test charge. The direction of the electric field is radially outward from a positive point and radially in toward a negative point. Electric field is not a single vector quantity but an infinite set of vector quantities, associated with each point in space, hence, it is a vector field.
Electric field is represented mathematically as: $E=F/q$
Where:
E= Electric field
F= force
q= charge

Magnetic field
A magnetic field is a region in space, in which magnetic forces or influence can be felt.

The magnetic of this force is proportional to the amount of charge q, the speed of the charged particle v, and the magnitude of the applied magnetic field. The direction of this force is perpendicular to both the direction of the moving charged particle and the direction of the applied magnetic field. Based on these observations, we define the magnetic field strength B based on the magnetic force F= on a charge q moving at velocity v= as the cross product of the velocity and magnetic field, that is   F=qvBsinϴ

Where:

F= magnetic force

q= charge of the particle

B= Magnetic field strength

v= Velocity at which the charge is moving with

Electric current

Electric current is a stream of charged particles such as electrons or ions moving through an electrical conductor or space. It is measured as the net rate flow of electric charge past a region. The moving particles are called charge carriers.