G:

20 chapter: Electromagnetic forces:

1. A current flows downwards in a wire that passes vertically through a small hole in a table top. Will the magnetic field lines around it go clockwise or anticlockwise?

7.

a. In a d.c. motor, why must the current to the rotor coil be reversed twice during each rotation?

b. What device reverses the current?

8. Describe how the turning effect of a d.c. motor will change if the current flowing through the motor coil is increased.

13.

a. What is meant by the term thermionic emission?

b. What particles are released by this process?

21 chapter: Electromagnetic induction:

1. Draw a diagram to show the energy transformations in:

a. an electric motor,

b. a generator.

Remember that neither is 100% efficient.

2. If you hold a coil of wire next to a magnet, no current will flow. What else is needed to induce a current?

A:

8 chapter: Electric fields:

1. Draw these diagrams:

a. two positive charges repealing each other,

b. two negative charges,

c. two opposite charges.