

- 7 (a) A direct current passes around a flat, circular coil as shown.

On the diagram, sketch the magnetic field caused by the current in the coil.

(3)



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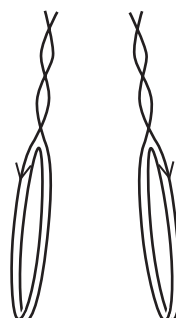


- (b) The coil is suspended vertically so that it is free to swing.
A second, identical coil is placed beside it.

When direct currents pass, as shown,
the two coils move together.



When the current in the
right-hand coil is reversed,
the two coils move apart.



Explain why the coils move in this way.

(3)

(Total for Question 7 = 6 marks)

