

Electromagnetic Effects

Question Paper

Course	CIE IGCSE Physics
Section	4. Electricity & Magnetism
Topic	Electromagnetic Effects
Difficulty	Easy

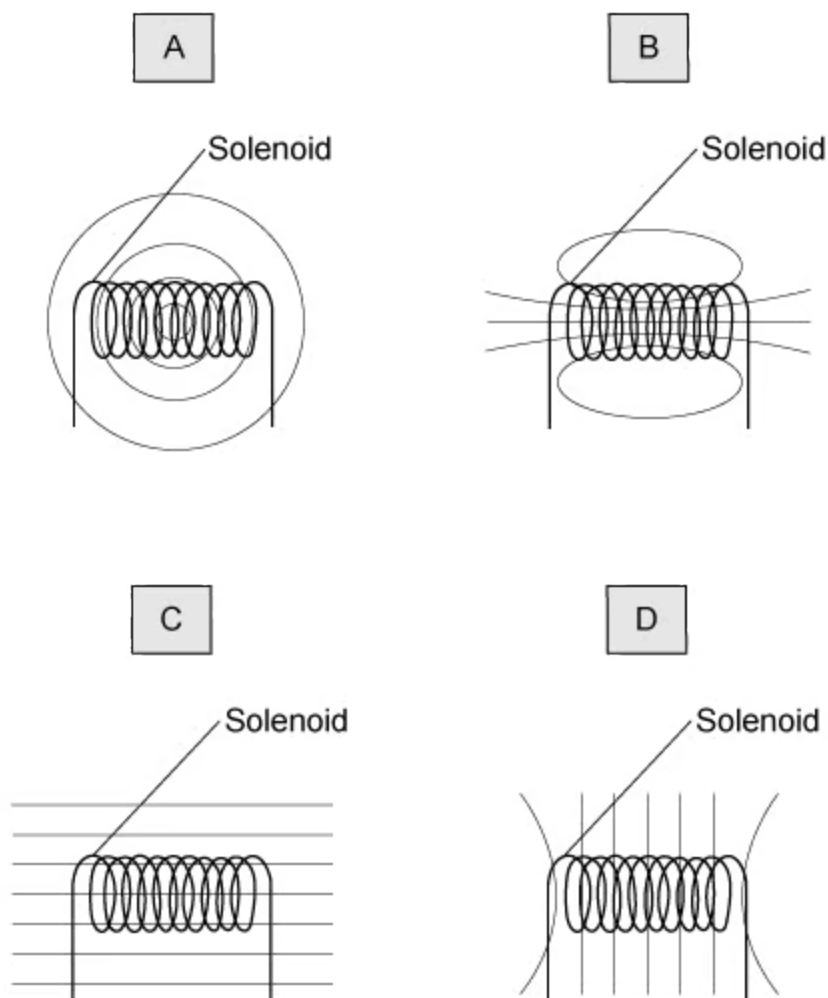
Time Allowed 10

Score /5

Percentage /100

Question 1

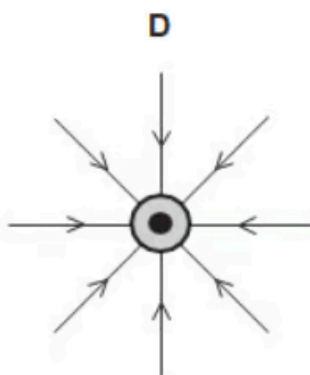
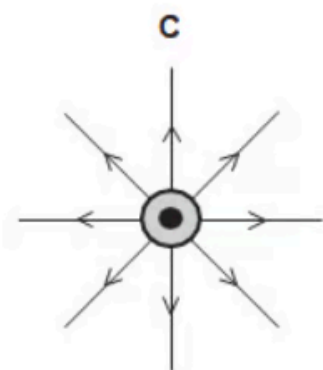
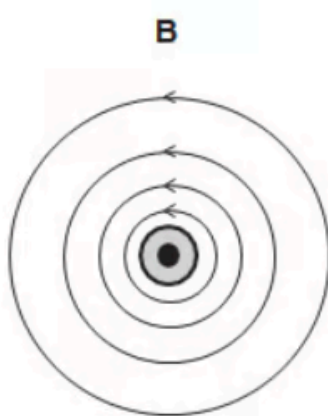
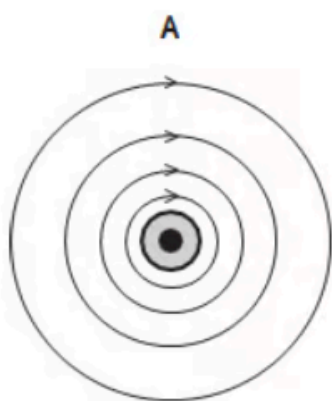
Which diagram shows the correct magnetic field pattern around a current-carrying solenoid?



[1 mark]

Question 2

Which diagram correctly shows the magnetic field lines around a current-carrying wire if the current is directed out of the page?



[1 mark]

Question 3

Extended tier only

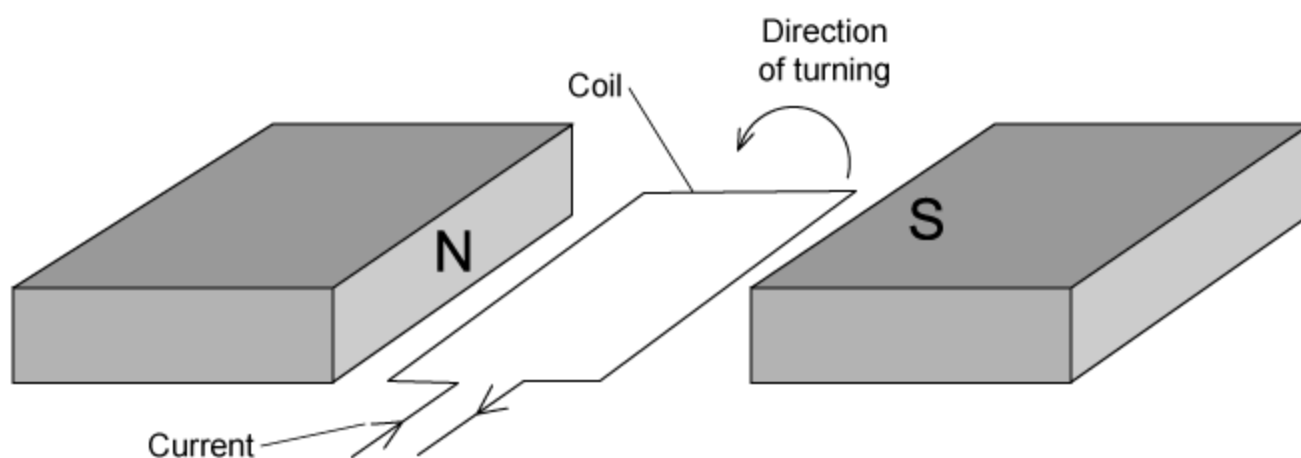
Which device uses a split ring commutator?

- A. d.c. motor
- B. transformer
- C. relay
- D. a.c. generator

[1 mark]

Question 4

A simple d.c. electric motor is shown in the diagram.



Which of the following changes would make the coil turn more quickly?

- A.** Reducing the strength of the magnetic field.
- B.** Reversing the direction of the current and swapping the magnetic poles.
- C.** Swapping the magnetic poles.
- D.** Increasing the current in the coil

[1 mark]

Question 5

The number of turns in the primary coil and secondary coil of a transformer is N_p and N_s respectively.

Which of the following statements represents a step-up transformer?

A. $N_s = N_p$

B. $N_s > N_p$

C. $N_s < N_p$

D. $N_p > N_s$

[1 mark]