4.4 Electromagnetic Effects

Question Paper

Course	CIE IGCSE Physics
Section	4. Electricity & Magnetism
Topic	4.4 Electromagnetic Effects
Difficulty	Medium

Time allowed: 10

Score: /5

Percentage: /100

Question 1

Which of the following methods could be used to demagnetise a permanent magnet?

A. Cool it to a very low temperature.

B. Put it in a coil of wire and pass direct current through the wire.

C. Stroke it in a single direction with a permanent magnet.

D. Heat it to a high temperature

[1 mark]

Question 2

After being produced at a power station, electrical voltage is increased significantly for transportation across the country via the national grid.

What is the advantage of transmitting electricity at very high voltages?

A. It makes the electricity flow more quickly.

B. It increases the efficiency of the electricity transfer.

C. It produces more power.

D. It is safer to transmit electricity at high voltage.

[1 mark]

Question 3

When a wire is moved through a magnetic field, an e.m.f. is induced in that wire.

This rather remarkable effect allows which device to operate?

A. An electric motor

B. An electrical generator

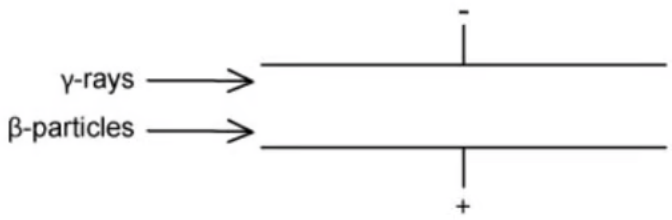
C. A photon accelerator

D. A transformer.

[1 mark]

Question 4

Beta and gamma radiation are passed through two metal plates, with equal and opposite charges, as shown in the diagram below.



Which direction, if any, would the **β-**particles and **γ-**rays be deflected?

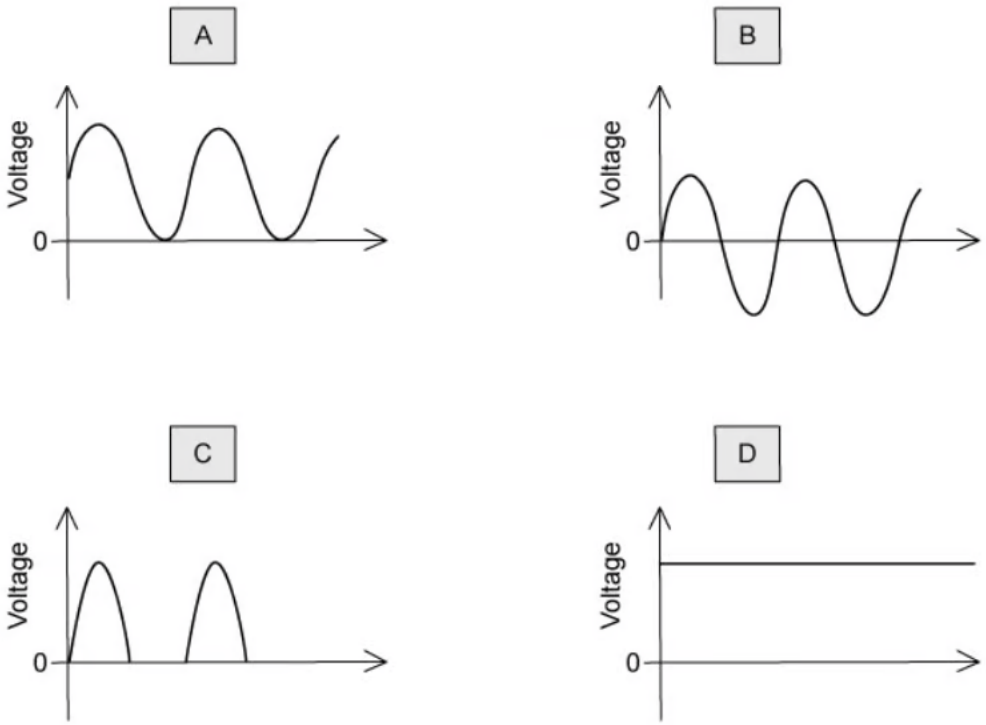
	β-particles	**γ-rays**
A	into the page	continue straight
B	towards the negative plate	out of the page
C	continue straight	towards the negative plate
D	towards the positive plate	continue straight

[1 mark]

Question 5

One of the diagrams below represents the output of a simple A.C. generator.

Which one is correct?



[1 mark]