

SECTION A – MULTIPLE-CHOICE QUESTIONS**Instructions for Section A**

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1; an incorrect answer scores 0.

Marks will **not** be deducted for incorrect answers.

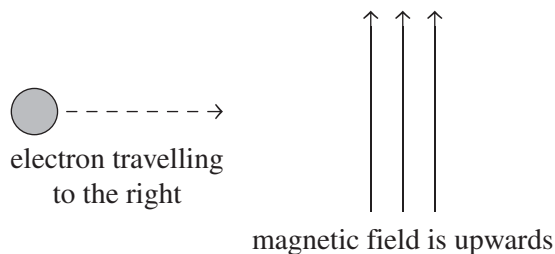
No marks will be given if more than one answer is completed for any question.

Unless otherwise indicated, the diagrams in this booklet are **not** drawn to scale.

Take the value of g to be 9.8 m s^{-2} .

Question 1

The diagram below shows an electron fired into a region of magnetic field.



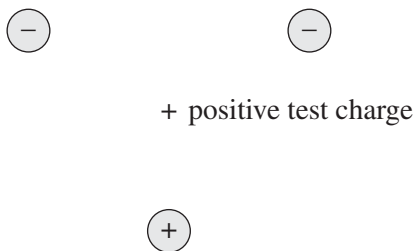
As the electron initially enters the magnetic field, the direction of motion is

- A. upwards.
- B. downwards.
- C. out of the page.
- D. into the page.

Question 2

Two negative charges and a positive charge are placed such that they are equidistant from each other.

A positive test charge is placed at a position that is equidistant from each of the charges mentioned. This is shown in the diagram below.



Which of the vector arrows, **A.–D.**, shows the direction of the initial motion of the positive test charge?

- A. \longrightarrow
- B. \longleftarrow
- C. \downarrow
- D. \uparrow