

# Exam Practice Guide

## Unit 3

## Physics

## Examination Questions

### Key Features:

- ✓ 66 original examination style questions on all examinable topics.
- ✓ Full solutions and a marking guide to all questions.
- ✓ Separated into key topic areas within each Area of Study, enabling students to master one topic at a time.
- ✓ Written by VCE assessors who mark the real examinations.
- ✓ Excellent resource for examination practice.

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***Helping VCE students be the best they can be.***

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SAMPLE

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**AREA OF STUDY ONE: How do things move without contact?****Topic 1 – Magnetic Fields****Question 1 (6 marks)**

A field is a region of space where forces are exerted on objects. For the following fields, identify what the force will be acting on and the possible effect of this force.

a. Gravitational field:

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(2 marks)

b. Electric field

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(2 marks)

c. Magnetic field

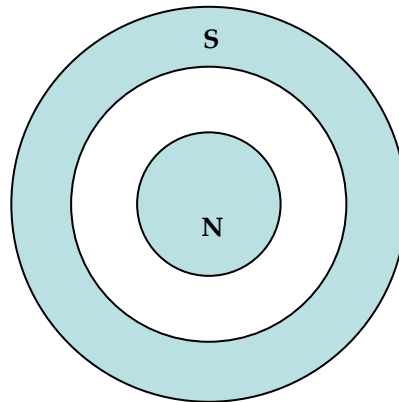
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(2 marks)

**Question 2 (2 marks)**

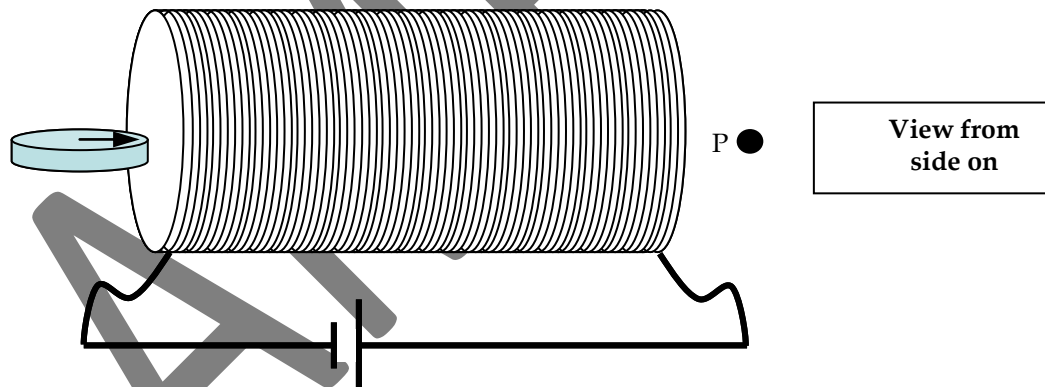
Indicate on the diagram the *direction of the magnetic field* due to the arrangement in **Figure 1**.



**Figure 1**

**Question 3 (2 marks)**

Ben and Akshay are experimenting with a solenoid. Ben connects a battery to either end of the solenoid and Akshay places a small compass near one end of the solenoid as shown in **Figure 2**.



**Figure 2**

Based on the direction of the small compass in **Figure 2**, which of the following best describes the direction of the magnetic field at Point P **when viewed from above**?

A	B	C	D	E
→	↑	←	↓	↔