

OXFORD

INTERNATIONAL  
AQA EXAMINATIONS

# AS AND A-LEVEL PHYSICS

9630

May/June 2022 Advance Information

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For use in May/June 2022 only

## INTRODUCTION

This advance information details the focus of the content of the May/June 2022 examinations for both the AS and A-level qualifications for Physics.

The purpose of this information is to support revision. It is provided in the context of the coronavirus (Covid-19) pandemic which has disrupted the education of students sitting exams in May/June 2022.

A guidance document on advance information notice has been produced and it can be found [here](#)

## INFORMATION

- This advance information covers all examined components.
- For each paper, the list shows the major focus of questions.
- The topic areas are listed in rank order, with the areas carrying the highest mark allocations across the whole paper at the top of each list.
- Assessment of practical skills (section 6.2 of the specification) will occur throughout the five papers but predominantly in PH01, PH02 and PH05.
- Assessment of maths skills (section 7 of the specification) will occur throughout the five papers.
- Topics not explicitly included in the list may appear in low tariff questions or via synoptic questions. Synoptic questions are those that bring together knowledge, skills and understanding from across the specification.
- It is **not** permitted to take this notice into the examination.

## ADVICE

- Students should only refer to the advance information notice for components for which they intend to sit examinations in May/June 2022.
- Students and teachers should consider how to focus their revision of other non-listed parts of the specification, which may be tested in lower mark questions.

## PH01 MECHANICS, MATERIALS AND ATOMS

- 3.3.3 Radioactivity
- 3.3.1 Constituents of the atom
- 3.2.4 Projectile motion
- 3.2.10 The Young modulus
- 3.2.9 Bulk properties of solids
- 3.2.7 Work, energy and power

## PH02 ELECTRICITY, WAVES AND PARTICLES

- 3.5.8 Refraction at a plane surface
- 3.5.6 Interference
- 3.4.3 Resistivity
- 3.4.5 Potential divider
- 3.5.9 Collisions of electrons with atom
- 3.5.11 Wave particle duality

## PH03 FIELDS AND THEIR CONSEQUENCES

- 3.8.4 Capacitors
- 3.10.2 Moving charges in a magnetic field
- 3.9.2 Exponential changes in radioactivity
- 3.10.4 Electromagnetic induction
- 3.6.1 Circular motion
- 3.7.4 Orbits of planets and satellites
- 3.10.5 Alternating currents

## PH04 ENERGY AND ENERGY RESOURCES

- 3.12.3 Induced fission
- 3.11.3 Ideal gases
- 3.11.1 Energy transfer by heating and doing work
- 3.13.1 Rotational motion
- 3.12.1 Radius of the nucleus
- 3.12.5 Nuclear fusion

## PH05 PHYSICS IN PRACTICE

- 3.1 Measurements and their errors
- 3.11.3 Ideal gases
- 3.13.1 Rotational motion
- 3.10.6 The operation of a transformer
- 3.2.9 Bulk properties of solids

PH05 is the synoptic paper; the topics in it are assessed in combination with each other. Section A of PH05 focuses on the practical and analytical skills outlined in section 6.2 of the specification. Questions relating to these skills are set in the context of experimental work that may not conform exactly to activities listed in the specification, whether in section 3 (Subject Content) or section 6 (Practical Assessment). In such cases, full details of the activity will be provided as appropriate. The specification areas noted above, as they apply to Section A, provide as close a match as possible to the question contexts.

**END OF ADVANCE INFORMATION**



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