GCE A LEVEL

PHYSICS

A420QS

Summer 2022 examinations

Component 1	Newtonian Physics	Thursday, 26 May 2022
Component 2	Electricity and the Universe	Friday, 10 June 2022
Component 3	Light, Nuclei and Options	Thursday, 16 June 2022

Advance Information

General information for students and teachers

This advance information provides the focus of the content of the summer 2022 examination papers.

It does not apply to any other examination series.

It is intended to support revision.

It may be used at any time from the date of release.

It must not be taken into the examination.

Subject information for students and teachers

A guidance document on advance information has been produced by The Joint Council for Qualifications (JCQ) on behalf of all awarding organisations. It can be found here.

This advance information covers Component 1, Component 2 and Component 3. There is no advance information for the Practical Endorsement (NEA).

The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to the Summer 2022 examinations.

It is advised that teaching and learning should still cover the entire subject content in the specification.

The format/structure of the papers remains unchanged.

Students and teachers should consider how to revise other parts of the specification, for example to review whether other topics may provide knowledge which helps understanding in relation to the areas being tested in 2022.

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 at the top of each list.

Topics **not** explicitly given in the list may still appear in the paper (e.g. in synoptic questions where students are asked to bring together knowledge, skills and understanding from across the specification) but will not be allocated as many marks overall as those listed.

Assessment of core concepts, practical skills (Appendix A of the specification) and mathematical skills (Appendix C of the specification) will occur throughout the three papers.

Component 1

- 1.3 Dynamics (including specified practical work)
- 1.6 Vibrations (including specified practical work)
- 1.7 Kinetic theory
- 1.1 Basic physics
- 1.4 Energy concepts

Component 2

- 2.5 Solids under stress (including specified practical work)
- 2.6 Electrostatic and gravitational fields of force
- 2.4 Capacitance
- 2.3 D.C. circuits (including specified practical work)
- 2.7 Using radiation to investigate stars
- 2.8 Orbits and the wider universe

Component 3

- Option Choice of one from Options A-D
- 3.1 The nature of waves
- 3.2 Wave properties (including specified practical work)
- 3.9 Magnetic fields (including specified practical work)
- 3.4 Photons
- 3.6 Nuclear decay

End of advance information