

# Advance information June 2022

## A-level Biology (7402)

### Version 1.0

Because of the ongoing impacts of the Coronavirus (COVID-19) pandemic, we are providing advance information on the focus of June 2022 exams to help students revise.

This is the advance information for A-level Biology (7402)].

### Information

- This advance information covers all examined components.
- For each paper the list shows the major focus of the content of the examination; 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 appear in multiple-choice items, low tariff questions, or via synopticity.
- Assessment of practical skills (section 8.3 of the specification) and maths skills (section 6 of the specification) occurs throughout the three papers.
- It is not permitted to take this advance information into the examination.

### Advice

- 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.
- Students will still be expected to apply their knowledge to unfamiliar contexts.
- Students will be expected to draw on knowledge, skills and understanding from across the specification when responding to synoptic questions.

### Focus of the June 2022 exam

The inclusion of Required Practicals in the lists below should not be taken to imply direct references to those procedures quoted in the Practical Handbook. They are there to give a general idea of the context in which practical work is being assessed.

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**Paper 1 7402/1**

- 3.2.3 Transport across cell membranes (including Required Practical 3)
- 3.2.1 Cell structure
- 3.4.4 Genetic diversity and adaptation (including Required Practical 6)
- 3.3.2 Gas exchange
- 3.1.4 Proteins (including Required Practical 1)
- 3.1.2 Carbohydrates
- 3.3.4 Mass transport
- 3.4.6 Biodiversity within a community

**Paper 2 7402/2**

- 3.6.4 Homeostasis is the maintenance of a stable internal environment
- 3.5.2 Respiration (including Required Practical 9)
- 3.6.2 Nervous coordination
- 3.5.3 Energy and ecosystems
- 3.5.4 Nutrient cycles
- 3.7.1 Inheritance
- 3.8.2 Gene expression is controlled by a number of features
- 3.5.1 Photosynthesis

**Paper 3 7402/3**

- 3.5.1 Photosynthesis
- 3.2.2 All cells arise from other cells (including Required Practical 2)
- 3.8.4 Gene technologies allow the study and alteration of gene function allowing a better understanding of organism function and the design of new industrial and medical processes
- 3.6.2 Nervous coordination
- 3.3.4 Mass transport
- 3.4.2 DNA and protein synthesis
- 3.1.4 Proteins
- 3.6.1 Stimuli, both internal and external, are detected and lead to a response

The final question, as always, on 7402/3 will be a choice of two synoptic essays.

- The level of response mark scheme makes references to ‘several topics’ being covered in order to qualify for the top two levels.
- The ‘commentary’ on the scheme defines ‘several’ as at least four topic areas.

END OF ADVANCE INFORMATION