

Instructions

• Please ensure that you have read this notice before the examination.

Information

- This notice covers all examined components.
- The format/structure of the assessments remains unchanged.
- This advance information notice details the focus of the content of the exams in the May–June 2022 assessments.
- There are no restrictions on who can use this notice.
- This notice is meant to help students to focus their revision time.
- Students and teachers can discuss the advance information.
- This document has 7 pages.



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General advice

- In addition to covering the content outline in the Advance Information, students and teachers should consider how to:
 - manage their revision of content which may be assessed in areas not covered by the Advance Information
 - manage their revision of other parts of the specification which may provide knowledge that helps with understanding the areas being tested in 2022.
- For specifications with synoptic questions, topics not explicitly given in the Advance Information may appear, e.g. where students are asked to bring together knowledge, skills and understanding from across the specification.
- For specifications with optional papers/topics/content, students should only refer to the advance information for their intended option.
- For specifications with NEA, advance information does not cover any NEA components.

A link to the Joint Council for Qualifications guidance document on advance information can be found on the Joint Council for Qualifications website or here.

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Advance Information

Subject specific section

- For each paper the list shows the major focus of the content of the exam.
- Topics **not** assessed either directly or synoptically have also been listed.
- The information is presented in specification order and not in question order.
- Numbers in brackets refer to the points as listed in the specification.
- Assessment of practical skills, maths skills, and Working Scientifically skills will occur throughout all the papers.
- Core practicals that will be assessed have also been listed.
- Topics not explicitly given in either list may appear in low tariff questions or via synoptic or 'linked' questions. Synoptic or 'linked' questions are those that bring together knowledge, skills and understanding from across the specification.
- Students will still be expected to apply their knowledge to unfamiliar contexts.
- Each exam paper may include some, or all, of the content in the listed topic.

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Paper 1BI0/1F

Content will be assessed from the following topics:

- Topic 2 Cells and control brain and eye (2.10B–2.17B)
- Topic 3 Genetics reproduction and DNA (3.1B–3.6)
- Topic 4 Natural selection and genetic modification evolution and selective breeding (4.1B–4.8)
- Topic 5 Health, disease, and the development of medicines disease (5.1–5.8)
- Topic 5 Health, disease, and the development of medicines immune system (5.13–5.16)

Core practical activities that will be assessed:

- Core Practical 1.10: Investigate the effect of pH on enzyme activity
- Core Practical 1.13B: Investigate the use of chemical reagents to identify starch, reducing sugars, proteins and fats

Topics **not assessed** in this paper:

- Topic 1 Key concepts in biology microscopy (1.4–1.6)
- Topic 1 Key concepts in biology osmosis (1.16–1.17)
- Topic 3 Genetics proteins (3.7B–3.11B)
- Topic 3 Genetics inheritance (3.17B–3.23)
- Topic 4 Natural selection and genetic modification genetic engineering (4.9B–4.14)
- Topic 5 Health, disease, and the development of medicines plant defences (5.9B–5.10B)
- Topic 5 Health, disease, and the development of medicines microbial cultures (5.17B–5.20)

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Paper 1BI0/1H

Content will be assessed from the following topics:

- Topic 2 Cells and control cell cycle (2.1–2.6)
- Topic 2 Cells and control brain and eye (2.10B–2.17B)
- Topic 3 Genetics reproduction and DNA (3.1B–3.6)
- Topic 4 Natural selection and genetic modification inheritance (4.1B–4.6B)
- Topic 4 Natural selection and genetic modification selective breeding and genetic modification (4.8–4.11)
- Topic 5 Health, disease, and the development of medicines disease (5.2–5.8)
- Topic 5 Health, disease, and the development of medicines antibiotics (5.16–5.20)

Core practical activities that **will be assessed**:

- Core Practical 1.6: Investigate biological specimens using microscopes,
 - including magnification calculations and labelled scientific
 - drawings from observations
- Core Practical 1.10: Investigate the effect of pH on enzyme activity
- Core Practical 5.18B: Investigate the effects of antiseptics, antibiotics or plant

extracts on microbial cultures

Topics **not assessed** in this paper:

- Topic 1 Key concepts in biology transport into and out of cells (1.13B–1.17)
- Topic 3 Genetics proteins (3.7B–3.10B)
- Topic 3 Genetics genetic disorders and mutations (3.17B–3.23)
- Topic 4 Natural selection and genetic modification genetic engineering of plants (4.12B–4.14)
- Topic 5 Health, disease, and the development of medicines defence against disease (5.9B–5.15B)
- Topic 5 Health, disease, and the development of medicines monoclonal antibodies (5.21B–5.23)

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Paper 1BI0/2F

Content will be assessed from the following topics:

- Topic 1 Key concepts in biology cells and microscopes (1.1–1.6)
- Topic 6 Plant structures and their functions movement of substances through plants (6.7–6.12)
- Topic 7 Animal coordination, control, and homeostasis homeostasis (7.9–7.12B)
- Topic 7 Animal coordination, control, and homeostasis urinary system (7.18B–7.22B)
- Topic 8 Exchange and transport in animals the heart and blood (8.6–8.9)
- Topic 9 Ecosystems and material cycles energy transfer (9.7B–9.9)

Core practical activities that **will be assessed**:

- Core Practical 1.6: Investigate biological specimens using microscopes, including magnification calculations and labelled scientific drawings from observations
- Core Practical 6.5: Investigate the effect of light intensity on the rate of photosynthesis

Topics **not assessed** in this paper:

- Topic 1 Key concepts in biology enzymes (1.7–1.12)
- Topic 6 Plant structures and their functions plant hormones (6.14B–6.15B)
- Topic 7 Animal coordination, control, and homeostasis hormones (7.1–7.7)
- Topic 7 Animal coordination, control, and homeostasis diabetes (7.13–7.17)
- Topic 8 Exchange and transport in animals diffusion (8.3–8.5B)
- Topic 8 Exchange and transport in animals respiration (8.10–8.12)
- Topic 9 Ecosystems and material cycles communities (9.1–9.6)

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Paper 1BI0/2H

Content will be assessed from the following topics:

- Topic 6 Plant structures and their functions transport of substances in plants (6.8–6.12)
- Topic 6 Plant structures and their functions plant hormones (6.15B–6.16B)
- Topic 7 Animal co-ordination, control, and homeostasis human hormones (7.1–7.8)
- Topic 7 Animal co-ordination, control, and homeostasis thermoregulation and diabetes (7.11B–7.16)
- Topic 8 Exchange and transport in animals gas exchange (8.2–8.5B)
- Topic 8 Exchange and transport in animals respiration (8.9–8.12)
- Topic 9 Ecosystems and material cycles energy transfers (9.7B–9.9)
- Topic 9 Ecosystems and material cycles conservation and material cycles (9.10–9.15)
- Topic 9 Ecosystems and material cycles decomposition (9.16B–9.19B)

Core practical activities that will be assessed:

- Core Practical 8.11: Investigate the rate of respiration in living organisms
- Core Practical 9.5: Investigate the relationship between organisms and their

environment using fieldwork techniques, including quadrats

and belt transects

Topics **not assessed** in this paper:

- Topic 1 Key concepts in biology enzymes (1.7–1.12)
- Topic 1 Key concepts in biology transport into and out of cells (1.14B–1.17)
- Topic 6 Plant structures and their functions limiting factors on photosynthesis (6.3–6.6)
- Topic 9 Ecosystems and material cycles communities (9.1–9.3)

END OF ADVANCE INFORMATION