

AQA GCSE Biology (Higher) - Specification Points to Learn for Summer 2022 Exams

Key

YES =	This will be a major focus of the paper.
Maybe =	This might be assessed in short answer questions or synoptic questions (questions which draw together multiple topics).
no =	This will not be assessed in the paper.

PPQs = Past paper questions

Paper 1H - Tuesday 17th May 2022

4.1 Cell Biology

4.1.1 - Cell structure

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.1.1.1	Eukaryotes and prokaryotes	YES			
4.1.1.2	Animal and plant cells	YES			
4.1.1.3	Cell specialisation	YES			
4.1.1.4	Cell differentiation	YES			
4.1.1.5	Microscopy	YES			
4.1.1.6	Culturing microorganisms	YES			

4.1.2 - Cell division

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.1.2.1	Chromosomes	Maybe			
4.1.2.2	Mitosis and the cell cycle	Maybe			

4.1.2.3	Stem cells	Maybe			
---------	------------	-------	--	--	--

4.1.3 - Transport in cells

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.1.3.1	Diffusion	YES			
4.1.3.2	Osmosis	YES			
4.1.3.3	Active transport	YES			

4.2 Organisation

4.2.1 - Principles of organisation

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.2.1.1	Principles of organisation	Maybe			

4.2.2 - Animal tissues, organs and organ systems

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.2.2.1	The human digestive system	YES			
4.2.2.2	The heart and blood vessels	YES			
4.2.2.3	Blood	no	- N/A -	- N/A -	- N/A -
4.2.2.4	Coronary heart disease: a non-communicable disease	YES			
4.2.2.5	Health issues	YES			
4.2.2.6	The effect of lifestyle on some non-communicable diseases	YES			
4.2.2.7	Cancer	no	- N/A -	- N/A -	- N/A -

4.2.3 - Plant tissues, organs and systems

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.2.3.1	Plant tissues	YES			
4.2.3.2	Plant organ system	YES			

4.3 Infection and response

4.3.1 - Communicable diseases

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.3.1.1	Communicable (infectious) diseases	YES			
4.3.1.2	Viral diseases	YES			
4.3.1.3	Bacterial diseases	YES			
4.3.1.4	Fungal diseases	YES			
4.3.1.5	Protist diseases	YES			
4.3.1.6	Human defence systems	YES			
4.3.1.7	Vaccination	YES			
4.3.1.8	Antibiotics and painkillers	no	- N/A -	- N/A -	- N/A -
4.3.1.9	Discovery and development of drugs	no	- N/A -	- N/A -	- N/A -

4.3.2 - Monoclonal antibodies

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.3.2.1	Producing monoclonal antibodies	YES			
4.3.2.2	Uses of monoclonal antibodies	YES			

4.3.3 - Plant disease

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.3.3.1	Detection and identification of plant diseases	Maybe			
4.3.3.2	Plant defence responses	Maybe			

4.4 Bioenergetics

4.4.1 - Photosynthesis

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.4.1.1	Photosynthetic reaction	Maybe			
4.4.1.2	Rate of photosynthesis	Maybe			
4.4.1.3	Uses of glucose from photosynthesis	Maybe			

4.4.2 - Respiration

Num.	Topic Name	In Paper 1?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.4.2.1	Aerobic and anaerobic respiration	Maybe			
4.4.2.2	Response to exercise	no	- N/A -	- N/A -	- N/A -
4.4.2.3	Metabolism	Maybe			

Paper 2H - Wednesday 15th June 2022

4.5 Homeostasis and response

4.5.1 - Homeostasis

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.5.1.1	Homeostasis	Maybe			

4.5.2 - The human nervous system

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.5.2.1	Structure and function	no	- N/A -	- N/A -	- N/A -
4.5.2.2	The brain	no	- N/A -	- N/A -	- N/A -
4.5.2.3	The eye	no	- N/A -	- N/A -	- N/A -
4.5.2.4	Control of body temperature	YES			

4.5.3 - Hormonal control in humans

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.5.3.1	Human endocrine system	YES			
4.5.3.2	Control of blood glucose concentration	YES			
4.5.3.3	Maintaining water and nitrogen balance in the body	YES			
4.5.3.4	Hormones in human reproduction	no	- N/A -	- N/A -	- N/A -
4.5.3.5	Contraception	no	- N/A -	- N/A -	- N/A -
4.5.3.6	The use of hormones to treat infertility	no	- N/A -	- N/A -	- N/A -
4.5.3.7	Negative feedback	no	- N/A -	- N/A -	- N/A -

4.5.4 - Plant hormones

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.5.4.1	Control and coordination	YES			
4.5.4.2	Use of plant hormones	no	- N/A -	- N/A -	- N/A -

4.6 Inheritance, variation and evolution

4.6.1 - Reproduction

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.6.1.1	Sexual and asexual reproduction	YES			
4.6.1.2	Meiosis	YES			
4.6.1.3	Advantages and disadvantages of sexual and asexual reproduction	no	- N/A -	- N/A -	- N/A -
4.6.1.4	DNA and the genome	YES			
4.6.1.5	DNA structure	YES			
4.6.1.6	Genetic inheritance	YES			
4.6.1.7	Inherited disorders	YES			
4.6.1.8	Sex determination	no	- N/A -	- N/A -	- N/A -

4.6.2 - Variation and evolution

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.6.2.1	Variation	no	- N/A -	- N/A -	- N/A -
4.6.2.2	Evolution	no	- N/A -	- N/A -	- N/A -
4.6.2.3	Selective breeding	no	- N/A -	- N/A -	- N/A -
4.6.2.4	Genetic engineering	no	- N/A -	- N/A -	- N/A -
4.6.2.5	Cloning	no	- N/A -	- N/A -	- N/A -

4.6.3 - The development of understanding of genetics and evolution

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.6.3.1	Theory of evolution	no	- N/A -	- N/A -	- N/A -
4.6.3.2	Speciation	no	- N/A -	- N/A -	- N/A -
4.6.3.3	The understanding of genetics	no	- N/A -	- N/A -	- N/A -
4.6.3.4	Evidence for evolution	no	- N/A -	- N/A -	- N/A -
4.6.3.5	Fossils	no	- N/A -	- N/A -	- N/A -
4.6.3.6	Extinction	no	- N/A -	- N/A -	- N/A -
4.6.3.7	Resistant bacteria	no	- N/A -	- N/A -	- N/A -

4.6.4 - Classification of living organisms

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.6.4.1	Classification of living organisms	no	- N/A -	- N/A -	- N/A -

4.7 Ecology

4.7.1 - Adaptations, interdependence and competition

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.1.1	Communities	Maybe			
4.7.1.2	Abiotic factors	Maybe			
4.7.1.3	Biotic factors	Maybe			
4.7.1.4	Adaptations	no	- N/A -	- N/A -	- N/A -

4.7.2 - Organisation of an ecosystem

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.2.1	Levels of organisation	YES			
4.7.2.2	How materials are cycled	YES			
4.7.2.3	Decomposition	YES			
4.7.2.4	Impact of environmental change	no	- N/A -	- N/A -	- N/A -

4.7.3 - Biodiversity and the effect of human interaction on ecosystems

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.3.1	Biodiversity	no	- N/A -	- N/A -	- N/A -
4.7.3.2	Waste management	Maybe			
4.7.3.3	Land use	Maybe			
4.7.3.4	Deforestation	no	- N/A -	- N/A -	- N/A -
4.7.3.5	Global warming	Maybe			
4.7.3.6	Maintaining biodiversity	no	- N/A -	- N/A -	- N/A -

4.7.4 - Trophic levels in an ecosystem

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.4.1	Trophic levels	no	- N/A -	- N/A -	- N/A -
4.7.4.2	Pyramids of biomass	no	- N/A -	- N/A -	- N/A -
4.7.4.3	Transfer of biomass	Maybe			

4.7.5 - Food production

Num.	Topic Name	In Paper 2?	Flashcards made?	Flashcards learnt?	PPQs Done?
4.7.5.1	Factors affecting food security	Maybe			

4.7.5.2	Farming techniques	Maybe			
4.7.5.3	Sustainable fisheries	no	- N/A -	- N/A -	- N/A -
4.7.5.4	Role of biotechnology	no	- N/A -	- N/A -	- N/A -