



AQA	Paper 1	Paper 2	Paper 3	
Marks	91	91	78	260
Weighting	35%	35%	30%	100%
Duration	120 min / 2 hrs Approx. 1 min 20 sec per mark	120 min / 2 hrs Approx. 1 min 20 sec per mark	120 min / 2 hrs Approx. 1 min 30 sec per mark	6 hours
Question Types	Extended Response AO1 (15 marks = 6%)	Text Analysis (15 marks = 6%)	Data Analysis (15 marks = 6%) Essay Question (25 marks = 10%)	
Topics	AS Content Only 1. Biological Molecules 2. Cells 3. Organisms exchange substances with their environment 4. Genetic information, variation and relationships between organisms	A Level Content Only 5. Energy transfers in and between organisms 6. Organisms respond to changes in their internal and external environments 7. Genetics, populations, evolution and ecosystems 8. The control of gene expression	AS & A Level Content Topics 1-8	
Knowledge AO1	46%	24%	30%	30%
Application AO2	32%	54%	37%	40%
Skills AO3	22%	22%	33%	30%
Maths Skills	10% (minimum)	10% (minimum)	10% (minimum)	10%
Practical Skills	Practicals 1-6 15% (minimum)	Practicals 7-12 15% (minimum)	Practicals 1-12 15% (minimum) More Q's on practicals in P3	15%



Topic	Paper
Ratios	ANY
Appropriate Units	ANY
Calculating Rates	ANY
Standard Form	ANY
Percentages	ANY
Significant Figures	ANY
Uncertainties In Measurement	ANY
Algebraic Equations	ANY
The Potometer	ANY
Light Microscopes	ANY
Biological Drawings	ANY
Qualitative Tests for Molecules	ANY
Electrophoresis	ANY
Averages	ANY
Probability	ANY
Drawing Graphs	ANY
Prisms	ANY
Logarithmic Scale	ANY
Dilutions	ANY
Aseptic Technique	ANY

Topic	Paper
#1 Enzyme-Substrate Reactions	Paper 1 & 3
#4 Membrane Permeability	Paper 1 & 3
#5 Dissection	Paper 1 & 3
Triglycerides	Paper 1 & 3
Phospholipids & Cholesterol	Paper 1 & 3
Enzymes	Paper 1 & 3
Protein Specificity	Paper 1 & 3
Enzyme Reactions - Temperature	Paper 1 & 3
Enzyme Reactions - pH	Paper 1 & 3
Enzyme & Substrate Concentration	Paper 1 & 3
Semi-conservative DNA Replication	Paper 1 & 3
Proving DNA Replication Is Semi-conservative	Paper 1 & 3
Cell Organisation	Paper 1 & 3
The Absorption Of Glucose	Paper 1 & 3
Primary & Secondary Response	Paper 1 & 3
Vaccines	Paper 1 & 3
Comparing Haemoglobin in Different Organisms	Paper 1 & 3
Structure Of The Human Heart	Paper 1 & 3
Gas Exchange In Humans	Paper 1 & 3
Ventilation in Humans	Paper 1 & 3
Mechanics of Breathing	Paper 1 & 3
Protein Synthesis - Transcription	Paper 1 & 3
Protein Synthesis - Translation	Paper 1 & 3
Meiosis	Paper 1 & 3
Meiosis & Genetic Variation	Paper 1 & 3
Sampling	Paper 1 & 3

Topic	Paper
#2 Root Tip Squash	Paper 1 & 3
#6 Antimicrobial Substances	Paper 1 & 3
Monosaccharides & Disaccharides	Paper 1 & 3
Polymers of Carbohydrates	Paper 1 & 3
Introduction To Proteins	Paper 1 & 3
Protein Structure	Paper 1 & 3
Viruses	Paper 1 & 3
Cell Fractionation	Paper 1 & 3
Mitosis	Paper 1 & 3
Mitosis & Cancer	Paper 1 & 3
Binary Fission	Paper 1 & 3
Osmosis	Paper 1 & 3
The ELISA Test	Paper 1 & 3
HIV & Virus Replication	Paper 1 & 3
Digestion & Absorption of Carbohydrates & Lipids	Paper 1 & 3
Digestion & Absorption of Proteins	Paper 1 & 3
Haemoglobin & Bohr Effect	Paper 1 & 3
The Xylem	Paper 1 & 3
The Phloem	Paper 1 & 3
Translocation	Paper 1 & 3
Biodiversity	Paper 1 & 3
Farming, Biodiversity & Conservation	Paper 1 & 3



Topic	Paper
#12 Distribution of a Species	Paper 2 & 3
#8 Rate of the Light Dependent Reaction	Paper 2 & 3
#10 Animal Movements	Paper 2 & 3
Plant Growth Factors	Paper 2 & 3
Taxes & Kineses	Paper 2 & 3
Control of Blood Glucose	Paper 2 & 3
Autosomal Linkage	Paper 2 & 3
Abundance & Distribution of Organisms	Paper 2 & 3
Transects & Quadrats	Paper 2 & 3
Succession	Paper 2 & 3
Stem Cells	Paper 2 & 3
Transcription Factors	Paper 2 & 3
RNA Interference (RNAi)	Paper 2 & 3
Genome Projects	Paper 2 & 3
Polymerase Chain Reaction (PCR)	Paper 2 & 3

Topic	Paper
#7 Chromatography	Paper 2 & 3
The Light Independent Reaction (The Calvin Cycle)	Paper 2 & 3
The Link Reaction	Paper 2 & 3
Energy Transfer Through Ecosystems	Paper 2 & 3
Increasing Energy Transfer Efficiency	Paper 2 & 3
Microorganisms & Nutrient Cycles	Paper 2 & 3
The Human Eye	Paper 2 & 3
Changing Heart Rate	Paper 2 & 3
All or Nothing Law	Paper 2 & 3
The Role of Synapses	Paper 2 & 3
ATP & Muscle Contraction	Paper 2 & 3
Fast & Slow Twitch Muscle Fibres	Paper 2 & 3
Diabetes	Paper 2 & 3

Topic	Paper
Sex Linkage	Paper 2 & 3
The Hardy-Weinberg Principle	Paper 2 & 3
Mark - Release - Recapture	Paper 2 & 3
Epigenetics	Paper 2 & 3
Tumour Suppressor Genes & Proto-oncogenes	Paper 2 & 3
Cancer & Tumours	Paper 2 & 3
Genetic Fingerprinting	Paper 2 & 3
#9 Rate of Respiration	Paper 2 & 3
Pacinian Corpuscle	Paper 2 & 3
Synapses	Paper 2 & 3
Osmoregulation & Antidiuretic Hormone (ADH)	Paper 2 & 3
Speciation	Paper 2 & 3

Key:

More likely than normal to come up

Less likely than normal to come up