

Science Exams

Triple science exams are 1h45min each

Combined Science exams are 1h10min each

(The topics in bold are only on the Triple Science papers, not the Combined Science)

Paper	Content	Topics
1	B1	<ul style="list-style-type: none">1- Key concepts in biology<ul style="list-style-type: none">a. Microscopesb. Cells – animal, plant, specialised, prokaryoticc. Enzymes – action, factors affectingd. Food testse. Cell transport – diffusion, osmosis and active transport2- Cells and control<ul style="list-style-type: none">a. Mitosisb. Growth in animals and plantsc. Stem cellsd. The nervous systeme. The brain and spinal cordf. The eye3- Genetics<ul style="list-style-type: none">a. Meiosisb. DNA and extractionc. Alleles and inheritanced. Gene mutatione. Variationf. Sexual and asexual reproductiong. Genetic variants and phenotypesh. Mendeli. Multiple and missing alleles4- Natural selection and genetic modification<ul style="list-style-type: none">a. Evidence for human evolutionb. Darwin's theoryc. Classificationd. Selective breedinge. Genetic engineeringf. Tissue cultureg. Fertilisers and biological control5- Health, disease and the development of medicines<ul style="list-style-type: none">a. Communicable diseases and pathogensb. Spreading pathogensc. Non-communicable diseasesd. Cardiovascular disease, BMI and waist:hipe. Physical and chemical barriersf. The immune systemg. Antibiotics and drug testing

Paper 2	Content C1	Topics
<p>1- Key concepts in chemistry</p> <ol style="list-style-type: none"> a. Structure of an atom b. Atomic number and mass number c. Isotopes d. The Periodic table – elements, atomic number, electronic configuration e. Ionic bonding and covalent bonding f. Molecular compounds g. Allotropes of carbon h. Properties of metals i. Models of bonding j. Masses and empirical formulae k. Conservation of mass l. Moles <p>2- States of matter and mixtures</p> <ol style="list-style-type: none"> a. States of matter b. Mixtures and pure substances c. Separation (filtration, crystallisation, chromatography, distillation) d. Drinking water <p>3- Chemical changes</p> <ol style="list-style-type: none"> a. Acids, alkalis, bases and salts b. Solubility c. Electrolysis <p>4- Extracting metals and equilibria</p> <ol style="list-style-type: none"> a. Reactivity b. Ores c. Oxidation and reduction d. Recycling e. Dynamic equilibrium <p>5- Separate chemistry 1</p> <ol style="list-style-type: none"> a. Transition metals b. Corrosion c. Electroplating d. Alloys e. Yields, atom economy, concentrations f. Titrations g. Volumes of gases h. Fertilisers and the Haber process i. Factors affecting equilibrium j. Chemical cells and fuel cells 		

Paper 3	Content P1	Topics
<ul style="list-style-type: none"> 1- Key concepts in physics <ul style="list-style-type: none"> a. SI units b. Unit prefixes and conversions c. Significant figures and standard form 2- Motion and forces <ul style="list-style-type: none"> a. Vectors and scalars b. Distance/time graphs c. Acceleration d. Velocity/time graphs e. Resultant forces f. Newton's laws g. Mass and weight h. Momentum i. Stopping distances and crash hazards 3- Conservation of energy <ul style="list-style-type: none"> a. Energy stores and transfers b. Efficiency c. Ways of reducing energy transfer d. Renewable and non-renewable energy resources 4- Waves <ul style="list-style-type: none"> a. Longitudinal and transverse waves b. Wave speeds c. Reflection, refraction, transmission, absorption d. Ultrasound and infrasound e. The ear 5- Light and the electromagnetic spectrum <ul style="list-style-type: none"> a. Ray diagrams b. Colour c. Lenses d. The electromagnetic spectrum e. Uses and dangers of EM waves f. Radiation and temperature 6- Radioactivity <ul style="list-style-type: none"> a. Atomic models b. Background radiation c. Types of radiation d. Radioactive decay and half-life e. Dangers of radioactivity f. Using radioactivity g. Nuclear energy, fission and fusion 7- Astronomy <ul style="list-style-type: none"> a. Solar system, gravity and orbits b. Life cycle of stars c. Red shift d. Origin of the universe 		

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<https://www.bbc.com/bitesize/subjects/zrkw2hv> ▼

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