

Advance Information for Summer 2022

A Level Chemistry A H432

Advice

- For each paper the list shows the major focus of the content of the exam.
- Students are advised that content not listed may appear on the question paper.
- The information lists topic areas in rank order, with the areas carrying the highest mark allocations at the top of each list.
- Students' responses to individual questions may draw upon other areas of specification content where relevant, and credit will be given for this where appropriate.

H432/01 Periodic table, elements and physical chemistry:

2 hours 15 minutes 100 marks

(Multiple choice questions)

Module 1 Practical skills (Yr12&13)

Module 2 Foundations in chemistry (Yr12)

Module 3 Periodic table and energy (Yr12)

Module 5 Physical chemistry and transition elements (Yr13)

- 2.1.3 Amount of substance (includes practical skills) **Page 20-39**
- 5.3.1 Transition elements **Page 400-423**
- 5.1.3 Acids, bases and buffers (includes practical skills) **Page 310-345**
- 3.1.1 Periodicity **Page 90-107**
- 3.2.1 Enthalpy changes (includes practical skills) **Page 124-143**
- 5.1.1 How fast? (*Rates of reactions*) **Page 272-293**
- 5.2.2 Enthalpy and entropy **Page 346-371**
- 2.1.4 Acids (includes practical skills) **Page 40-53**

H432/02 Synthesis and analytical techniques:

2 hours 15 minutes 100 marks

(Multiple choice questions)

Module 1 Practical skills (Yr12&13)

Module 2 Foundations in chemistry (Yr12)

Module 4 Core organic chemistry and analysis (Yr12)

Module 6 Organic chemistry and analysis (Yr13)

- 2.1.3 Amount of substance (includes practical skills) **Page 20-39**
- 4.1.3 Alkenes **Page 200-221**
- 6.3.2 Spectroscopy **Page 506-535**
- 6.1.1 Aromatic compounds **Page 432-451**
- 6.2.5 Organic synthesis (includes practical skills) **Page 490-505 (includes reactions and mechanisms from chapter 11,12,13,14,15,27,26)**
- 6.1.2 Carbonyl compounds (includes practical skills) **Page 454-473**
- 4.1.1 Basic concepts of organic chemistry **Page 172--189**
- 4.2.4 Analytical techniques **Page 252-263**
- 6.2.3 Polyesters and polyamides **Page 483-489**

H432/03 Unified chemistry:

1 hours 30 minutes 70 marks

Module 1 Practical skills

Module 2 Foundations in chemistry

Module 3 Periodic table and energy Module 4 Core organic chemistry and analysis

Module 4 Core organic chemistry and analysis

Module 5 Physical chemistry and transition elements

Module 6 Organic chemistry and analysis

- 2.1.3 Amount of substance (includes practical skills) **Page 20-39**
- 5.2.3 Redox and electrode potentials (includes practical skills) **Page 372-398**
- 3.2.3 Chemical equilibrium (includes practical skills) **Page 154-163**
- 4.1.1 Basic concepts of organic chemistry **Page 172--189**
- 4.2.3 Organic synthesis (includes practical skills) **Page 240-251**
- 5.1.3 Acids, bases and buffers **Page 310-345**
- 5.2.1 Lattice enthalpy (includes practical skills) **Page 346-371**
- 6.2.2 Amino acids, amides and chirality **Page 474-482**
- 6.3.2 Spectroscopy **Page 506-535**