2022 - Section 1

Question	Area of course	Question type	Grade A
1	Periodic Table and atoms	Selecting information	
2	Periodic Table and atoms	Knowledge and understanding - making statements	
3	Covalent bonding	Applying knowledge to new situations, interpreting, solving problems	1
4	Calculations involving the mole and balanced equations	Drawing conclusions and giving explanations	
5	Covalent bonding	Applying knowledge to new situations, interpreting, solving problems	
6	Ionic compounds	Drawing conclusions and giving explanations	
7	Ionic compounds	Applying knowledge to new situations, interpreting, solving problems	
8	Carboxylic acids	Applying knowledge to new situations, interpreting, solving problems	1
9	Commercial production of fertilisers	Applying knowledge to new situations, interpreting, solving problems	
10	Energy from fuels	Drawing conclusions and giving explanations	
11	Systematic carbon chemistry	Applying knowledge to new situations, interpreting, solving problems	
12	Carboxylic acids	Applying knowledge to new situations, interpreting, solving problems	
13	Systematic carbon chemistry	Drawing conclusions and giving explanations	
14	Cycloalkanes	Processing information (using calculations and units)	
15	Metallic bonding	Knowledge and understanding - making statements	
16	Non-specific	Drawing conclusions and giving explanations	
17	Extraction of metals	Applying knowledge to new situations, interpreting, solving problems	
18	Electrochemical cells	Applying knowledge to new situations, interpreting, solving problems	
19	Electrochemical cells	Applying knowledge to new situations, interpreting, solving problems	
20	Electrochemical cells	Applying knowledge to new situations, interpreting, solving problems	
21	Representation of the structure of monomers and polymers	Applying knowledge to new situations, interpreting, solving problems	
22	Haber and Ostwald processes	Knowledge and understanding - making statements	
23	Half-life	Applying knowledge to new situations, interpreting, solving problems	
24	Use of radioactive isotopes	Applying knowledge to new situations, interpreting, solving problems	
25	Analytical methods	Suggesting improvements to experimental procedures	

2022 – Section 2

Question	Area of course	Question type	Grade A
1(a)(i)	Nuclear equations	Knowledge and understanding - making statements	
1(a)(ii)	Nuclear equations	Applying knowledge to new situations, interpreting, solving problems	
1(b)(i)	Half-life	Applying knowledge to new situations, interpreting, solving problems	
1(b)(ii)	Half-life	Drawing conclusions and giving explanations	
2(a)	Reporting experimental work	Processing information (using calculations and units)	1
2(b)	Rates of reaction	Applying knowledge to new situations, interpreting, solving problems	
2(c)	Rates of reaction	Planning or designing experiments	1
2(d)	Rates of reaction	Making predictions and generalisations	
3(a)	Non-specific	Selecting information	
3(b)	Non-specific	Processing information (using calculations and units)	
3(c)	Neutralisation reactions	Applying knowledge to new situations, interpreting, solving problems	
3(d)	Non-specific	Selecting information	
3(e)(i)	Commercial production of fertilisers	Knowledge and understanding- descriptions and explanations	
3e(ii)	Percentage composition	Applying knowledge to new situations, interpreting, solving problems	1
4(a)(i)	Alkenes	Applying knowledge to new situations, interpreting, solving problems	
4(a)(ii)	Covalent bonding	Applying knowledge to new situations, interpreting, solving problems	
4(a)(iii)	Alkenes	Processing information (using calculations and units)	1
4(b)(i)	Non-specific	Processing information (using calculations and units)	
4(b)(ii)	Carboxylic acids	Knowledge and understanding - making statements	
5	Rates of reaction	Knowledge and understanding- descriptions and explanations	2
6(a)	Alkanes	Applying knowledge to new situations, interpreting, solving problems	1
6(b)(i)	Energy from fuels	Knowledge and understanding - making statements	1
6(b)(ii)	Calculations involving the mole and balanced equations	Applying knowledge to new situations, interpreting, solving problems	
6(b)(iii)	Energy from fuels	Applying knowledge to new situations, interpreting, solving problems	1
6(b)(iv)	General practical techniques	Planning or designing experiments	1
7(a)(i)	Calculations involving the mole and balanced equations	Applying knowledge to new situations, interpreting, solving problems	1
7(a)(ii)	General practical techniques	Knowledge and understanding - making statements	
7(b)(i)	Reporting experimental work	Processing information (using calculations and units)	
7(b)(ii)	Reporting experimental work	Presenting information appropriately in a variety of forms	

Question	Area of course	Question type	Grade A
7(c)	Reporting experimental work	Drawing conclusions and giving explanations	
7(d)	Reporting experimental work	Drawing conclusions and giving explanations	
8(a)	Neutralisation reactions	Applying knowledge to new situations, interpreting, solving problems	
8(b)	Reactions of metals	Applying knowledge to new situations, interpreting, solving problems	
8(c)	Neutralisation reactions used to prepare soluble salts	Applying knowledge to new situations, interpreting, solving problems	1
8(d)	Analytical methods	Applying knowledge to new situations, interpreting, solving problems	
8(e)	Neutralisation reactions	Knowledge and understanding - making statements	1
9(a)	Periodic Table and atoms	Knowledge and understanding - making statements	
9(b)	Periodic Table and atoms	Knowledge and understanding- descriptions and explanations	
9(c)(i)	Calculations involving the mole and balanced equations	Applying knowledge to new situations, interpreting, solving problems	1
9(c)(ii)	Covalent bonding	Applying knowledge to new situations, interpreting, solving problems	1
9(c)(iii)A	Rates of reaction	Applying knowledge to new situations, interpreting, solving problems	
9(c)(iii)B	Non-specific	Presenting information appropriately in a variety of forms	1
10(a)	Systematic carbon chemistry	Knowledge and understanding - making statements	
10(b)(i)	Alcohols	Knowledge and understanding - making statements	
10(b)(ii)	Alcohols	Drawing conclusions and giving explanations	
10(b)(iii)	Systematic carbon chemistry	Applying knowledge to new situations, interpreting, solving problems	
11(a)(i)	Analytical methods	Knowledge and understanding - making statements	
11(a)(ii)	Chemical formulae	Applying knowledge to new situations, interpreting, solving problems	1
11(b)(i)	Energy from fuels	Knowledge and understanding - making statements	
11(b)(ii)	Analytical methods	Knowledge and understanding- descriptions and explanations	
11(c)	Calculations involving the mole and balanced equations	Applying knowledge to new situations, interpreting, solving problems	1
12(a)(i)	Non-specific	Making predictions and generalisations	
12(a)(ii)	Non-specific	Making predictions and generalisations	
12(a)(iii)	Non-specific	Making predictions and generalisations	
12(b)	Non-specific	Processing information (using calculations and units)	
12(c)(i)	Periodic Table and atoms	Applying knowledge to new situations, interpreting, solving problems	
12(c)(ii)	Periodic Table and atoms	Drawing conclusions and giving explanations	1
13	Redox	Knowledge and understanding- descriptions and explanations	2