

# LC Chemistry – Section A: Experiment Questions & MS Quicklinks 2020 – 2006

April 2021

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- Click on the “Year & question” symbol to access a pdf of the associated Exam Questions
- Click on the “MS” symbol to access a pdf of the matching Marking Schemes

EXPERIMENT/VIDEO LINK	LCH		LCO	
	QUESTION	MARKING SCHEME	QUESTION	MARKING SCHEME
1-1 <a href="#">Flame tests</a>			<a href="#">2015 Q3A</a> <a href="#">2010 Q3A</a> <a href="#">2008 Q3</a>	<a href="#">MS</a>
1-2 <a href="#">Oxidation-reduction reactions [reagents &amp; displacements]</a>				
2-1 <a href="#">Anion tests</a>	<a href="#">2009 Q3</a>	<a href="#">MS</a>	<a href="#">2015 Q3B</a> <a href="#">2013 Q3</a> <a href="#">2010 Q3B</a>	<a href="#">MS</a>
3-1 <a href="#">Relative molecular mass of a volatile liquid</a>	<a href="#">2019 Q3</a> <a href="#">2012 Q3</a>	<a href="#">MS</a>		
4-1 <a href="#">Making a primary standard – sodium carbonate [Na<sub>2</sub>CO<sub>3</sub>]</a>			<a href="#">2015 Q2 A – E</a> <a href="#">2013 Q2 A – E</a> <a href="#">2011 Q2 A – G</a> <a href="#">2008 Q2 A – E</a> <a href="#">2006 Q2 A – G</a>	<a href="#">MS</a>
4-2A <a href="#">Standardisation of a hydrochloric acid solution [HCl vs Na<sub>2</sub>CO<sub>3</sub>]</a>			<a href="#">2020 Q2</a> <a href="#">2019 Q2</a> <a href="#">2018 Q2</a> <a href="#">2015 Q2 F - H</a> <a href="#">2013 Q2 F</a> <a href="#">2011 Q2 H</a> <a href="#">2010 Q2</a> <a href="#">2008 Q2 F</a> <a href="#">2006 Q2 H</a>	<a href="#">MS</a>
4-2B <a href="#">Standardisation of a sodium hydroxide solution to produce NaCl salt [HCl vs NaOH]</a>			<a href="#">2017 Q2</a> <a href="#">2016 Q2</a> <a href="#">2014 Q2</a> <a href="#">2012 Q2</a> <a href="#">2009 Q2</a> <a href="#">2007 Q2</a>	<a href="#">MS</a>

EXPERIMENT/VIDEO LINK	LCH		LCO	
	QUESTION	MARKING SCHEME	QUESTION	MARKING SCHEME
4-3 <a href="#">Percentage ethanoic acid in vinegar [CH<sub>3</sub>COOH vs. NaOH]</a>	<a href="#">2016 Q1</a> <a href="#">2008 Q1</a>	<a href="#">MS</a>		
4-4 <a href="#">Percentage water of crystallisation in hydrated sodium carbonate [washing soda]</a>	<a href="#">2020 Q1</a> <a href="#">2017 Q1</a> <a href="#">2014 Q1</a> <a href="#">2007 Q1</a> <a href="#">2006 Q1</a>	<a href="#">MS</a>		
4-5 <a href="#">Standardisation of potassium permanganate solution [(NH<sub>4</sub>)<sub>2</sub>Fe(SO<sub>4</sub>)<sub>2</sub> vs. KMnO<sub>4</sub>]</a>	<a href="#">2017 Q1</a>	<a href="#">MS</a>		
4-6 <a href="#">Amount of iron in iron tablets</a>	<a href="#">2009 Q1</a>	<a href="#">MS</a>		
4-7 <a href="#">Standardisation of sodium thiosulfate [I<sub>2</sub> vs. Na<sub>2</sub>SO<sub>3</sub>]</a>	<a href="#">2015 Q1</a>	<a href="#">MS</a>		
4-8 <a href="#">Percentage of hypochlorite in bleach</a>	<a href="#">2011 Q1</a>	<a href="#">MS</a>		
5-1 <a href="#">Heat of reaction [HCl vs. NaOH]</a>	<a href="#">2018 Q3</a> <a href="#">2014 Q3</a> <a href="#">2013 Q3</a> <a href="#">2007 Q3</a>	<a href="#">MS</a>	<a href="#">2017 Q3</a> <a href="#">2012 Q3</a> <a href="#">2007 Q3</a>	<a href="#">MS</a>
5-2 <a href="#">Preparation of ethyne [C<sub>2</sub>H<sub>2</sub>]</a>	<a href="#">2017 Q2</a>	<a href="#">MS</a>	<a href="#">2020 Q1 B</a> <a href="#">2019 Q1</a> <a href="#">2017 Q1 B</a> <a href="#">2016 Q1 B</a> <a href="#">2014 Q1</a> <a href="#">2012 Q1D, E</a> <a href="#">2009 Q1</a> <a href="#">2006 Q1 B</a>	<a href="#">MS</a>
6-1 <a href="#">Rate of reaction – catalyst (oxygen production)</a>	<a href="#">2016 Q3</a> <a href="#">2008 Q3</a>	<a href="#">MS</a>	<a href="#">2020 Q3</a> <a href="#">2018 Q3</a> <a href="#">2014 Q3</a> <a href="#">2011 Q3</a> <a href="#">2009 Q3</a>	<a href="#">MS</a>
6-2A <a href="#">Rate of reaction – concentration [HCl vs. Na<sub>2</sub>SO<sub>3</sub>]</a>	<a href="#">2020 Q3</a> <a href="#">2017 Q3</a> <a href="#">2010 Q3</a>	<a href="#">MS</a>		
6-2B <a href="#">Rate of reaction – heat [HCl vs. Na<sub>2</sub>SO<sub>3</sub>]</a>	<a href="#">2014 Q3</a>	<a href="#">MS</a>		
7-1A <a href="#">Preparation of benzoic acid [C<sub>6</sub>H<sub>5</sub>COOH]</a>	<a href="#">2020 Q2</a> <a href="#">2015 Q2A, B</a>	<a href="#">MS</a>		
7-1B <a href="#">Recrystallisation of benzoic acid</a>	<a href="#">2018 Q2 C</a> <a href="#">2015 Q2C, D</a> <a href="#">2011 Q3A-E</a>	<a href="#">MS</a>		
7-1C <a href="#">Melting point of benzoic acid</a>	<a href="#">2011 Q3F, G</a>	<a href="#">MS</a>	<a href="#">2020 Q1 C</a>	<a href="#">MS</a>

EXPERIMENT/VIDEO LINK	LCH		LCO	
	QUESTION	MARKING SCHEME	QUESTION	MARKING SCHEME
7-2 <a href="#">Preparation of soap</a>	<a href="#">2018 Q2 A</a> <a href="#">2014 Q2</a> <a href="#">2010 Q2</a>	<a href="#">MS</a>	<a href="#">2013 Q1</a> <a href="#">2011 Q1</a> <a href="#">2007 Q1</a>	<a href="#">MS</a>
7-3 <a href="#">Preparation of ethene [C<sub>2</sub>H<sub>4</sub>]</a>	<a href="#">2019 Q2 C</a> <a href="#">2012 Q2</a>	<a href="#">MS</a>	<a href="#">2020 Q1 A</a> <a href="#">2019 Q1</a> <a href="#">2017 Q1 A</a> <a href="#">2016 Q1 A</a> <a href="#">2012 Q1 A-C</a> <a href="#">2010 Q1</a> <a href="#">2006 Q1 A</a>	<a href="#">MS</a>
7-4 <a href="#">Preparation of ethanal [CH<sub>3</sub>CHO]</a>				
7-5 <a href="#">Preparation of ethanoic acid [CH<sub>3</sub>COOH]</a>				
7-6A <a href="#">Clove oil extraction</a>	<a href="#">2013 Q2 E</a> <a href="#">2011 Q2 B</a> <a href="#">2008 Q2C-G</a>	<a href="#">MS</a>	<a href="#">2015 Q1 A</a>	<a href="#">MS</a>
7-6B <a href="#">Clove oil separation</a>	<a href="#">2018 Q2 B</a>	<a href="#">MS</a>	<a href="#">2015 Q1 B</a>	<a href="#">MS</a>
7-7 <a href="#">Chromatography [paper/TLC/column]</a>			<a href="#">2017 Q1 C</a>	<a href="#">MS</a>
8-1 <a href="#">Le Chatelier's Principle – conc. &amp; temp. [FeCl<sub>3</sub> vs. KSCN]</a>				
9-1A <a href="#">Free chlorine in swimming pool water/bleach - COMPARATOR</a>	<a href="#">2015 Q3 D</a> <a href="#">2006 Q3A-D</a>	<a href="#">MS</a>		
9-1B <a href="#">Free chlorine in swimming pool water/bleach - COLORIMETER</a>	<a href="#">2015 Q3 D</a> <a href="#">2006 Q3A-D</a>	<a href="#">MS</a>		
9-2 <a href="#">Suspended/dissolved solids &amp; pH in water</a>	<a href="#">2015 Q3 A,B</a> <a href="#">2006 Q3 E</a>	<a href="#">MS</a>	<a href="#">2019 Q3</a> <a href="#">2015 Q3C-E</a> <a href="#">2006 Q3</a>	<a href="#">MS</a>
9-3 <a href="#">Total hardness in water [EDTA]</a>	<a href="#">2018 Q1</a> <a href="#">2015 Q3C</a> <a href="#">2010 Q1</a>	<a href="#">MS</a>		
9-4 <a href="#">Dissolved oxygen in water (Winkler Method)</a>	<a href="#">2019 Q1</a> <a href="#">2013 Q1</a>	<a href="#">MS</a>		