



# JABchem



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## Question Bank

# Adv Higher

# Chemistry

**Self Evaluation**  
**Question Bank**

# Past Paper Question Bank

## Section 1a: Electromagnetic Radiation & Atomic Spectra

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
1 2 4											L2a				
3	mc1 mc22		mc1				mc3 mc5					mc1	mc2 mc3 mc4		mc1
5															
6 7 9															
8 13 14															
10 11 12		L1d		L5e	L13e	L4a		L3c	L1b	mc5 L1a	L2b	L1a(i)	L4d	mc1 mc2	L1b
15 16															
17 18					mc6										
19 20					mc4 mc5	mc1		L3a L3b	mc1			mc5			mc3
21												mc4	mc7	mc4	

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
22															
23															
24															
25															
26						L3c	mc10								
27															
28a															
28b						L3d									
28c															
28d															
29a	mc11	g32b		mc1	mc3	mc7	mc4			mc1 mc3				mc3	
29b															L1a(ii)
29c			mc6				mc9						mc5		
30						L3b									L1a(i)
31															
32		g32a g32c				L3a			L1a						
33					mc1			mc1		mc2					
34				L1a	mc2		L7b			mc4	mc1		mc1		
35				L1b									mc6		
36															
37						mc5	mc7			L1b(i) L5b	mc3		mc10		
38															
39	L9a			mc6 mc7				L1a	mc4			L4a			
40															
41	g32a	mc21	L1c	mc2	mc9	mc2	mc6		L12b	mc6 L1b(ii)	mc4 mc9	mc6	mc11	mc6 mc7 L1d	mc2 mc6
42	g32b	L2a	L3c												
43	L9b	L2b						L1b							

[illegible]

# Past Paper Question Bank

## Section 2a: Chemical Equilibrium

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
71 72	mc8	mc1 L4d	mc13	mc12 mc13	mc13	mc11		mc13		mc11 L7a	mc12		mc18 mc22	mc11	
73							L2a								
74 76		L4c	mc14				L2b		mc10	L7b	mc13	mc10		mc12 mc13	L5a(i)
75					mc21	mc21									
77															
78								mc12							
79					mc14		mc14	mc14	mc12			mc8			L5a(ii)
80															
81				mc2				mc3							
82			L3b(i)												
83														L1c	
84 85	L4a+b+c				mc15										
86												mc12			
87															
88			mc17					mc15							
89 90 91	L6a	L5b			L8a	L5c	L3a+b	mc16	L6a(i)	mc13	mc16	L7c			
92															
93 94															
95										L8a					
96															
97			mc16										mc21		mc14
98	mc24				L8b L8c	mc14 L5a		L9a L9b	L6a(ii)						
99		L10c	L11a			L5b	L3c		mc16 L6b	L8b		L7a	L6a		
100					mc16										
101															
102															
103				L8a							L9a				
104					mc17			L9c	mc15		L9b	mc11			mc13
105	L6b(iii)	L10d	L11b											L12b	
106	L6b(i) L6b(ii)			L8b		mc13					L9c		L6b	L12a	
107															
108			L12a												
109 110 111 112 113			L12b		mc18	mc15									
114	mc13	mc11	mc15					L9d		mc14		mc13	mc23		

## Past Paper Question Bank

### Section 2b: Reaction Feasibility

[illegible]

# Past Paper Question Bank

## Section 2c: Kinetics

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
137															
138 139	L8c	L5a(i)	mc21		L7b(i)	L7b	mc24 L4a				L7b	L10a L10b	L8a	L10a L11d	mc26 L5b(i)
140 141 142		mc14 L5a(ii)	L9a		mc25 L7b(ii)	mc25	L4b		mc21				L8b	L10b(i)	
143				L7c(i)		L7c		L10d(i)	mc20	L9c	L7a				
144						L7a								mc24	mc25
145			L9b	L7c(ii)	L7b(iii)	L7d	L4c	L10d(ii)		L9d	L7c	L10c	L8c	L10b(ii)	L5b(ii)
146 147	mc7	L5a(iii)		mc27		mc24			L7a	L9a L9b				mc23	mc24
148	L8b							L10d(iii)						L10c	

[illegible]



[illegible]

# Past Paper Question Bank

## Section 3b: Synthesis Page 2

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
218 219 220	mc6 L12c(i)		mc31			mc31		mc26 mc27 mc29	mc29					mc28	
221			L5b(i)												
222															
223a															
223b 225			mc39 L5a(ii)		mc35						mc31		L10e		
223c 226a 227a	L10c(i)	mc30	L5c			mc27	L12b(ii)	mc24	mc27	L11b		mc28	mc31	L7b(i)	mc30
224a	L10c(ii)	L12c													
208b 223d 226b 227b								L10c							
224b															
228															
229															
230				mc36			L10a L10b	mc32	mc30 mc32	L11e		L13b			
231															
232															
233															
234		mc5		L11c	L5b								L11b		
235			mc27					mc33	mc34	mc34			mc37		mc36
236 237	mc25		mc28				mc26 mc30	mc34			mc33				
238				mc37							mc34	mc34		mc34	
239 240 241															
242	L5a L5c			mc38		L11b	mc38	mc35	mc33	mc37		mc31			L8a
243															
244		L6a	mc33				mc27	L13a	mc35	mc36				L8c	L8b(ii)
245	mc15	L6b				L11a(i)		L13b			mc35				
246			mc38	L4c	L10a		L8c			L11d		mc35	L10a	L6a L6b	L8b(i)
247			mc37	mc30	mc40	L11a(ii)		L13c	L10a		mc36	L14a(i)	mc38		L8c(ii)
248						L11a(iii)		L13d				L14b(i)			

# Past Paper Question Bank

## Section 3c: Stereochemistry

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
249 250															
251 252															
253a 254a 255a	L10a	L4a	L5e(i)	mc40	L11b	mc36		L4b	L9b	L11a	mc37		L13a	mc35	L9b
253b 254b 255b												mc36			
256															
257 259	L10b		L5e(ii) L11c(i)	L10d	L10c		L11a	mc36			L14b	L12b(i) L12b(ii)		L8a	mc37
258						L9b L9c			mc38	L12d(ii) L12d(iii)					
260 261 262															
263			L11c(ii)											mc36 L10d	L10f

# Past Paper Question Bank

## Section 3d: Experimental Determination of Structure

Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
264 265			L11a L11b	L12b(i)			L13a(i)								L11a
266 267		mc4		L12b(ii)	L13b	mc37	L13a(ii) L13b	mc38	L13b(i)		L11a	mc37	L14a		L11a
268															
269 270		g31b								mc39					
281 282	L11b(i) L11b(ii)		L7b	L12c(i) L12c(ii)	L13c(i) L13c(ii)	mc38	mc40	L12c(iii)	L11a L11c		mc38		L14b L14c	mc37 mc38	L11b
283 284				mc39		mc39						mc39		mc39	
285 286 287												mc38			
288	mc27		L7a	L12a(i) L12a(ii)	L13a			mc39	L11b(i) L11b(ii)	mc40	L11b(ii)		L12c	mc33 L8b(i)	
289											mc39				
291 292 293 294			L7c			L13a	L13c(i)			L13b(i) L13b(ii)	mc40				L10e L11c
295						L13b	L13c(ii)								
296 297															
298 299													L14d		
300	L11c							L12c(ii)				L15c			
			L7d	L12d	L13d		L13c(i)		L11d						

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# Past Paper Question Bank

## Section 3e: Pharmaceutical Chemistry



Outcome	Old AH <a href="#">2001</a>	Old AH <a href="#">2002</a>	Old AH <a href="#">2003</a>	Old AH <a href="#">2004</a>	Old AH <a href="#">2005</a>	Old AH <a href="#">2006</a>	Old AH <a href="#">2007</a>	Old AH <a href="#">2008</a>	Old AH <a href="#">2009</a>	Old AH <a href="#">2010</a>	Old AH <a href="#">2011</a>	Old AH <a href="#">2012</a>	Old AH <a href="#">2013</a>	Old AH <a href="#">2014</a>	Old AH <a href="#">2015</a>
301 302 303															
304													mc40		
305 306 307	mc30	L13b	L8a	L11a	L12a	mc40	L11c		mc40			mc40			mc39
308		L13a													
309 310			L8b					mc40							mc40
311			L8b	L11b	L12b		L11b				L10a L10b		L11c	mc40	

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## Past Paper Question Bank

### Section 4a: Common Chemical Apparatus

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[illegible]

## Past Paper Question Bank

### Section 4b: Skills Involved in Practical Work

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chem

[illegible]

**Past Paper Question Bank**  
Section 4c: Stoichiometric Calculations

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JAE  
chem

[illegible]

## Past Paper Question Bank

### Section 4d: Gravimetric Analysis

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chem

[illegible]



[illegible]

[illegible]

# Past Paper Question Bank

## Section 1a: Electromagnetic Radiation & Atomic Spectra

Outcome	<a href="#">Exemplar Paper</a>	Speciman <a href="#">2015</a>	AH <a href="#">2016</a>	AH <a href="#">2017</a>	AH <a href="#">2018</a>	AH <a href="#">2019</a>	AH 2020	AH 2021	AH 2022	AH 2023	AH 2024		revisedAH <a href="#">2013</a>	revisedAH <a href="#">2014</a>	revisedAH <a href="#">2015</a>
1 2 4															
3		mc3	mc1		mc1								(mc2) (mc3) (mc4)		(mc1) L1b(ii)
5															
6 7 9															
8 13 14						L5a									
10 11 12	L1a	L1c	L1b L6a	L1b	L1a L5c(i)	L5c(i) L7d(ii)C							(L4d)	(mc6) L1a(ii)	L1b(i)
15 16														L1d	
17 18	mc2	mc27	L3b(ii)												
19 20	L1c	L1a L1b		L1a(i) L1a(ii)	L5a	mc1								L1a(i)	(mc2)
21		L4c(i)			L10c(i)A L10c(i)B	L3b(ii) L3b(ii) L3b(iii)							(mc7)	(mc7)	

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## Past Paper Question Bank

Section 1b: Atomic Orbitals and Electronic Configurations

[illegible]

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## Past Paper Question Bank

### Section 1c: Transition Metals

[illegible]

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## Past Paper Question Bank

### Section 2a: Chemical Equilibrium

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Outcome	Exemplar Paper	Speciman 2015	AH 2016	AH 2017	AH 2018	AH 2019	AH 2020	AH 2021	AH 2022	AH 2023	AH 2024		revisedAH 2013	revisedAH 2014	revisedAH 2015
71 72					mc7 mc10	L1c							mc13 (mc18)		
73					L2a(i)										
74 76		mc5		L2a(i)											(L6a(i))
75			L7a												
77															
78	mc8			L2a(ii)		mc9									
79															(L6a(ii))
80															
81															mc4
82															
83															
84 85															
86															
87															
88					mc9								L3		
89 90 91		L2a	mc6		mc8	L4a(i) L4a(ii) L4b									
92															
93 94															
95	mc10			L6b(ii)	L2a(ii)								mc17		
96															
97		mc6													
98		mc9 L2b	L5a			L4c(i)									
99	L4a		L5b	mc7	L2b(i)	L4c(ii)B							(L6a)		
100	mc9	L2c	L9b(iii)		mc11										mc20
101				L6b(i)											
102															
103															
104			mc8		mc12										(mc21)
105	L4b(ii) (3marks)					L4d (3marks)								(L13b)	
106	L4b(i)	mc7											(L6b)	(L13a)	
107															
108															
109 110 111 112 113			mc7			L4d (3marks)									
114	mc7	mc8		mc6									(mc18)		

## Past Paper Question Bank

### Section 2b: Reaction Feasibility

[illegible]

[illegible]



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## Past Paper Question Bank

### Section 3a: Molecular Orbitals

[illegible]



[illegible]

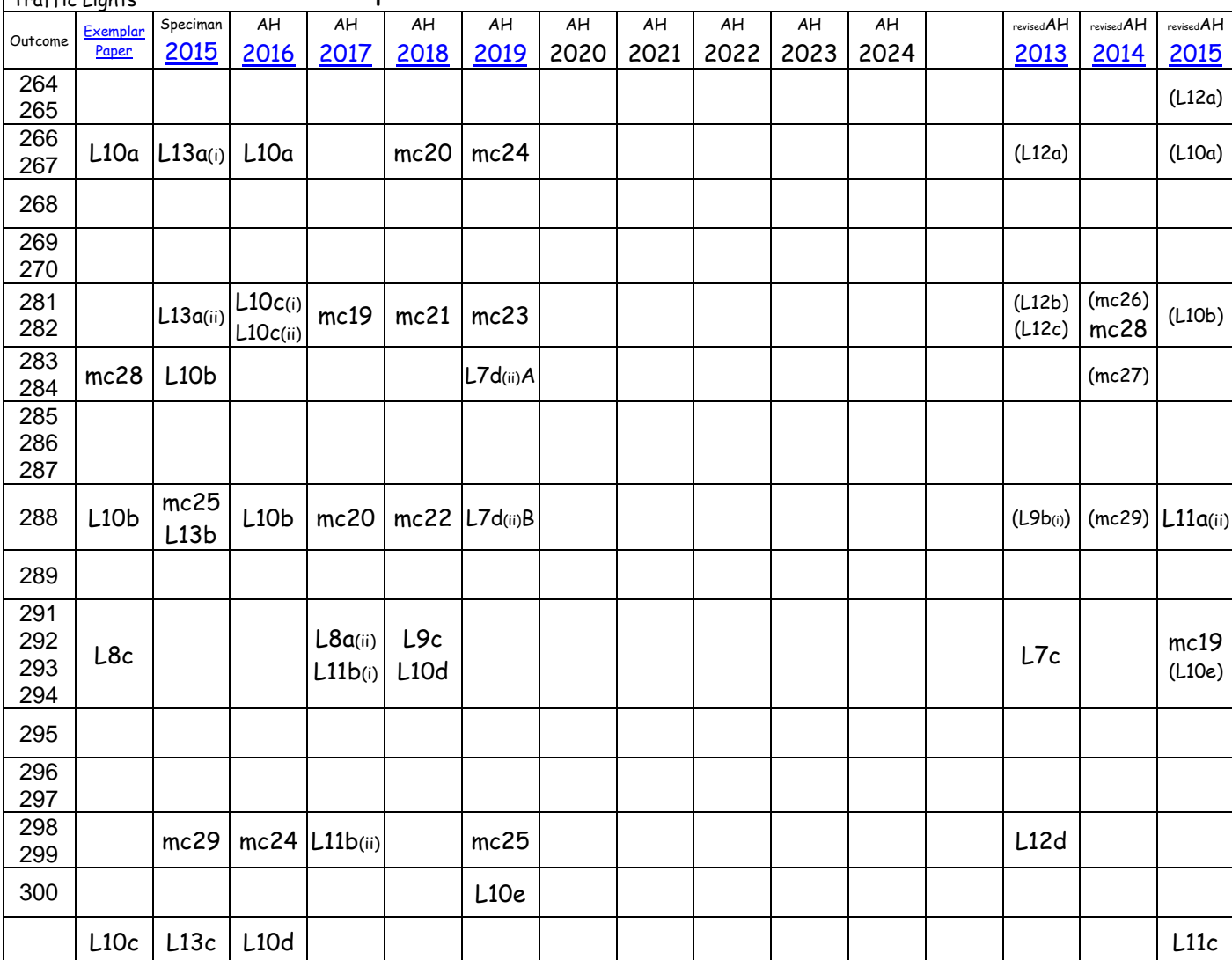
# Past Paper Question Bank

## Section 3c: Stereochemistry

Outcome	<a href="#">Exemplar Paper</a>	Speciman <a href="#">2015</a>	AH <a href="#">2016</a>	AH <a href="#">2017</a>	AH <a href="#">2018</a>	AH <a href="#">2019</a>	AH 2020	AH 2021	AH 2022	AH 2023	AH 2024		revisedAH <a href="#">2013</a>	revisedAH <a href="#">2014</a>	revisedAH <a href="#">2015</a>
249 250															
251 252															
253a 254a 255a	mc20	L11a(i)			L4b L4c	mc17 mc18								(mc16)	(L9c)
253b 254b 255b				L8b											
256															
257 259	mc18 L8b	L10a	L7b(i) L7b(ii)	L8c(i)	L7a(iv)	L9a(i) L9a(ii) L10d								(L9a)	(mc12)
258				L8c(ii)	mc17										
260 261 262															
263	mc19	L6b L6d(i)		mc13										(mc17) (L11d)	(L10f)

## Past Paper Question Bank

### Section 3d: Experimental Determination of Structure



## Past Paper Question Bank

### Section 3e: Pharmaceutical Chemistry

[illegible]



## Past Paper Question Bank

### Section 4b: Skills Involved in Practical Work

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chem

[illegible]



Outcome	<a href="#">Exemplar Paper</a>	Speciman <a href="#">2015</a>	AH <a href="#">2016</a>	AH <a href="#">2017</a>	AH <a href="#">2018</a>	AH <a href="#">2019</a>	AH 2020	AH 2021	AH 2022	AH 2023	AH 2024		revisedAH <a href="#">2013</a>	revisedAH <a href="#">2014</a>	revisedAH <a href="#">2015</a>
314 315				mc27 mc28											
316b 316c 316d 320d		mc15	mc28		mc24 L3b(i)								(mc12)		(L3b(i))
320a				mc29											
320b 320c															
316a						L4c(ii)A									
317															
318															
319	L6b		mc26	L4c	L7b	mc27								L1e	
320e															
320f															
320h															
320g 321		L11b	L9b(v)	L7b		L9b(ii)							L11b(i)	(L7b(ii))	L4c
322													L11b(ii)	(L9b(iii))	

[illegible]

## Past Paper Question Bank

### Section 4e: Volumetric Analysis

[illegible]

## Past Paper Question Bank

### Section 4f: Practical Skills & Techniques

[illegible]