

SSLC Model Examination, February - 2026:

Chemistry Answer Key

1	Answer: (c)	1
2	Answer: (c)	1
3	Answer: (d) (r, s, q)	1
4	Answer: (c)	1
5	Option A:	
	(a) 7.	1
	(b) 3.	1
	Option B	
	(a) 4 carbon atoms.	1
	(b) But-1-yne: $\text{CH}\equiv\text{C}-\text{CH}_2-\text{CH}_3$ or But-2-yne: $\text{CH}_3-\text{C}\equiv\text{C}-\text{CH}_3$.	1
6	(a) Group 1	1
	(b) 11	1
7	(a) ZnCO_3	1
	(b) Calcination	1
8	(a) Ammonium Chloride (NH_4Cl) and Calcium Hydroxide ($\text{Ca}(\text{OH})_2$)	1
	(b) Liquor Ammonia	1
9	Option A	
	(a) Chlorine gas (Cl_2).	1
	(b) $\text{Na}^+ + 1\text{e}^- \rightarrow \text{Na}$.	1
	Option B	
	(a) Iron bangle	1
	(b) $\text{Cu} \rightarrow \text{Cu}^{2+} + 2\text{e}^-$	1
10	(a) 112 L.	1
	(b) Avogadro's Law (Equal volumes of all gases under the same conditions of temperature and pressure contain equal number of molecules).	1
11	(a) Pineapple	1
	(b) Butanoic acid ($\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{COOH}$).	1
12	(a) Rate of forward reaction equals rate of backward reaction. At Equilibrium both reactants and products co exist	1
	(b) (i) Adding O_2 : Increases forward rate.	1
	(ii) Increasing Pressure: Increases forward rate	1

- 13 Option A
- (a) Sodium Aluminate (NaAlO_2). 1
 - (b) By adding freshly prepared $\text{Al}(\text{OH})_3$ and diluting the solution. 1
 - (c) Calcination or Heating strongly 1
- Option B
- (a) Coke (C) and Limestone (CaCO_3). 1
 - (b) Carbon Monoxide (CO). 1
 - (c) $\text{Fe}_2\text{O}_3 + 3\text{CO} \rightarrow 2\text{Fe} + 3\text{CO}_2$. 1
- 14
- (a) Mg (Magnesium). 1
 - (b) From Magnesium to Zinc 1
 - (c) $\text{Mg} + \text{Zn}^{2+} \rightarrow \text{Mg}^{2+} + \text{Zn}$ 1
- 15
- (a) Vinyl Chloride $\text{CH}_2=\text{CHCl}$. 1
 - (b) Polyvinyl Chloride (PVC). 1
 - (c) $n\text{CH}_2=\text{CHCl} \rightarrow -[\text{CH}_2-\text{CHCl}]_n-$ 1
- 16 Option A
- (a) 2 moles. 1
 - (b) 10 mol O_2 1
 - (c) 224 L 1
- Option B
- (a) 400 g. 2
 - (b) 176 g. 1
- 17
- (a) MnO_2 . 1
 - (b) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^3$ (or $[\text{Ar}] 3d^3$). 1
 - (c) Small energy difference between penultimate d and outermost s subshells allowing electrons from both to participate in bonding. 1
- 18 Option A
- (a) $\text{CH}_3-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_3$ 1
 - (b) Alkoxy group (Ether). 1
 - (c) Methoxypropane ($\text{CH}_3-\text{O}-\text{CH}_2-\text{CH}_2-\text{CH}_3$). 1
 - (d) Butan-1-ol ($\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{OH}$) or any Butanol isomer. 1
- Option B
- (a) Pentanal: $\text{CH}_3-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CHO}$. 1
 - (b) Aldehydes. 1
 - (c) Pentan-2-one: $\text{CH}_3-\text{CO}-\text{CH}_2-\text{CH}_2-\text{CH}_3$ 1
 - (d) Pentan-3-one: $\text{CH}_3-\text{CH}_2-\text{CO}-\text{CH}_2-\text{CH}_3$ 1