SSLC EXAMINATION MARCH – 2018

CHEMISTRY (English)

Q No	Answer Key	Score	*Total Score*
1	4	**1**	***1***
2	**B:** $NH_4Cl(s) \leftrightarrow NH_3(g) + HCl(g)$	**1**	***1***
3	-COOH	**1**	***1***
4	Blue	**1**	***1***
5	Anlagesics	**1**	***1***
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6	(a) 1:3:2	**1**	***2***
	(b) 4	**1**	
7	(a)At equilibrium, both the reactants and products coexist	**1**	***2***
	(b) Add $Fe(NO_3)_3$ or KCNS into the system	**1**	
8	(a) The solution turns blue	**1**	***2***
	(b) $Cu_{(s)} + 2\ AgNO_{3(aq)} \rightarrow Cu(NO_3)_{2\ (aq)} + 2\ Ag_{(s)}$	**1**	
9	(a)Tin / Lead (Any one)	**1**	***2***
	(b) Calcination is the process of heating the concentrated ore at a temperature below its melting point ton remove the volatile impurities	**1**	
10	(a) $CH_3\text{-}COO\text{-}CH_2\text{-}CH_3$	**1**	***2***
	(b) $CH_3\text{-}COOH + CH_3\text{-}CH_2\text{-}OH \rightarrow CH_3\text{-}COO\text{-}CH_2\text{-}CH_3 + H_2O$	**1**	
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11	(a) Mass of an element equal to its atomic mass	**1**	***3***
	(b) (i) 5	**1**	
	(ii) 5x 40g = 200 g	**1**	
12	(a) 3	**1**	***3***
	(b) 16	**1**	
	(c) p	**1**	
13	(a) Rate of forward reaction **decreases**	**1**	***3***
	(b) Rate of forward reaction **increases**	**1**	
	(c) Rate of forward reaction **decreases**	**1**	
14	(a)Compounds having same molecular formula but different chemical and physical properties are called Isomers.	**1**	***3***
	(b)$CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}OH$ / $CH_3\text{-}CH_2\text{-}CH_2\text{-}CH(OH)\text{-}CH_3$ / $CH_3\text{-}CH_2\text{-}CH(OH)\text{-}CH_2\text{-}CH_3$ ***(Or Any other position isomer)***	**2**	

15	(a) Fractional distillation	**1**	***3***
	(b) Butane	**1**	
	(c) CO - Poisoning CO_2 - Global warming	½ ½	
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16	(a) 10	**1**	***4***
	(b) 3s < 3p < 3d	**1**	
	(c) B: $3d^{10}\ 4s^1$ To attain extra stability	**1** **1**	
17	(a) In molten state or in aqueous solution, ions of the electrolytes can move freely. These ions are responsible for the conduction of electricity by the electrolytes.Sodium chloride in solid state is not an electrical conductor because its ions have no freedom of movement.	**2**	***4***
	(b) **Sodium** at Cathode , Chlorine from the Anode	**1**	
	(c) **Hydrogen** at Cathode , Chlorine from the Anode	**1**	
18	(a) Bauxite ($Al_2O_3.2H_2O$)	**1**	***4***
	(b) Look at the figure given	**3**	
19	(a)Reactions in which an atom or a group in a compound is replaced by another atom or a group are called substitution reactions. Reactions in which unsaturated organic compounds with double bond or triple bond react with other molecules to form saturated compounds are called addition reactions.	**2**	***4***
	(b) (i) $CH_3\text{-}CH_2\text{-}Cl$	**1**	
	(ii) $CH_3\text{-}CH_2\text{-}\underset{\displaystyle I}{\underset{\vert}{C}}H\text{-}CH_3$	**1**	
20	(a) (iv) $CH_3\text{-}CH_2\text{-}CH_2\text{-}CH_3$	**1**	***4***
	(b) $CH_3\text{-}\underset{\displaystyle OH}{\underset{\vert}{C}}H\text{-}CH_3$		
	(c) (i) and (ii) **OR** $CH_3\text{-}CH_2\text{-}CO\text{-}CH_3$ / $CH_3\text{-}CH_2\text{-}CH_2\text{-}CHO$		
	(d) $CH_3\text{-}\underset{\displaystyle CH_3}{\underset{\vert}{C}}H\text{-}CH_3$