

# SSLC-2023, CHEMISTRY - Answer Key

From the desk of [Name] [Name]

1. Vinyl chloride    2.  $3p^4$   
3. alkyne    4. basic    5.  $CuSO_4$

- 6 a. froth floatation  
b. distillation

7. a. 56MM    b. 5NA molecules

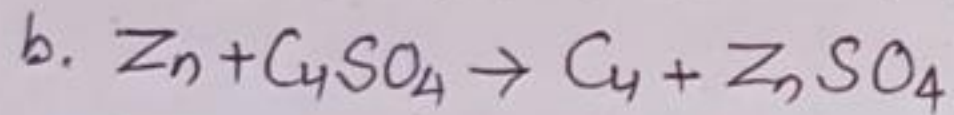
8. a. 95.6% ethanol  
b. absolute alcohol is 99-100% ethanol

9. a. roasting    b. calcination

10. a. NaCl    b.  $2NaCl + H_2SO_4 \rightarrow 2HCl + Na_2SO_4$

11. a. P    b. S    c. R

12. a. beaker A.  
Zinc is more reactive than Cu



13. a. CO    b. acts as flux  
c.  $CaSiO_3$  - calcium silicate

14. a. but-1-ene, b.  $C_4H_8$     c.  $C_5H_{10}$

15. a. addition reaction  
b. substitution reaction  
c. combustion reaction

16. a.  $1s^2 2s^2 2p^6$   
b. group-16    period-2  
c.  $Al_2X_3$

17. a.  $x=2$      $y=400$   
b. Charles's law  
c. According to Charles's law, when temperature increases, volume of gas also increases. Balloon enlarges and bursts.

18. a. chemical energy to electrical energy  
b. Mg electrode (left)  
c. Cu electrode (right)  
d.  $Cu^{2+} + 2e^- \rightarrow Cu$

19. a. less product is formed  
b. increase the pressure  
c. forward reaction increases  
d. It increases the rates of both forward and backward reactions.

20. a. i, v  
ii, iv  
iii, vi  
b. ii, iv