

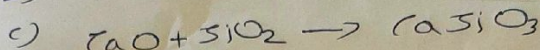


SECOND TERMIAL EXAM CHEMISTRY 2023-24

1. Liquid ammonia
2.  $C_2H_2$
3. 4f
4. Iron pyrites
5. Gold
6. a)  $X = 1s^2 2s^2 2p^6 3s^2 3p^6 3d^2 4s^2$   
b) 4<sup>th</sup> group  
c) ~~3d~~
7. a) 5  
b) 3-methyl pentane
8. a)  $Na^+, Cl^-$   
b)  $Na^+ + e^- \rightarrow Na$
9. a) Cu is deposited on zinc surface  
b) Zn displaces Cu from  $CuSO_4$  solution.
10. a) When sulphuric acid reacts with potassium chloride, gets hydrogen chloride and potassium bisulphate  
b)  $H_2SO_4 + KCl \rightarrow KHSO_4 + HCl$

11. a) Haematite,  $\text{CaCO}_3$ , coke

b)  $\text{CO}$



Flux  $\text{CaO} \rightarrow$  slag

12. a) Electrical energy  $\rightarrow$  chemi

b) i) Production of metals

ii) Refining of metals

13. a) Alkane

b) i) Members have same properties

ii) Differ by a  $\text{CH}_2$  group

14. a) Carbon

b) Dehydrating nature

c) sulphates or bisulphates

15. a) 22.4 L

b) Number of moles =  $\frac{\text{Given mass}}{\text{GAM}}$

$$= \frac{64}{16} = 4 \text{ mol}$$

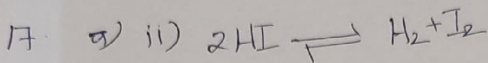
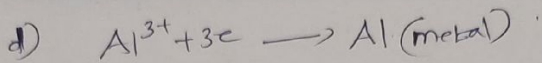
Volume =  $4 \times 22.4 \text{ L} = \underline{\underline{89.6 \text{ L}}}$

16. a) Bauxite

b) Hot  $\text{NaOH}$  solution

c) i) To reduce the melting point of alumina

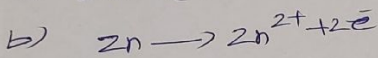
ii) To increase the electrical conductivity of alumina.



b) Here, the number of moles of reactants and products are equal.

- c) 1) Amount of product decreased.  
2) Amount of product increased.

18. a) Zinc (Zn)



c)  $Zn \rightarrow Cu$  (Anode to cathode)

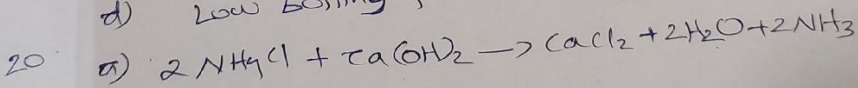
d) Galvanometer.

19. a) Zinc carbonate

b) calcination

c) Distillation

d) Low boiling point



b) Red litmus turns to blue

c)  $CaO$  (quick lime)

