

**Chemistry Term 1**  
**ANSWER KEY**  
**SET – A**

1. 6
2. 28 gm
3. H<sub>2</sub>
4. a) 10  
b) 1s<sup>2</sup> 2s<sup>2</sup> 2p<sup>6</sup>
5. a) X = 2 ; Y = 600 ml  
b) Charle's Law
6. a) Na    b) H<sub>2</sub>
7. a) 1s<sup>2</sup> 2s<sup>2</sup> 2p<sup>6</sup> 3s<sup>2</sup> 3p<sup>6</sup> 3d<sup>6</sup> 4s<sup>2</sup>  
b) Group = 8<sup>th</sup> group; Period = 4<sup>th</sup> period  
c) 1s<sup>2</sup> 2s<sup>2</sup> 2p<sup>6</sup> 3s<sup>2</sup> 3p<sup>6</sup> 3d<sup>6</sup>
8. a) 44 x 5 = 220 gm  
b) 5 x 6.022 x 10<sup>23</sup>
9. a) Impure Copper  
b) At Cathode: Cu<sup>2+</sup> + 2e<sup>-</sup> → Cu  
At Anode: Cu → Cu<sup>2+</sup> + 2e<sup>-</sup>
10. a) i . Cu<sup>1+</sup> , ii Cu<sup>2+</sup>  
b) Show variable oxidation state,  
Form coloured compounds,  
All are metals,  
The last electron filled in the penultimate shell. (Any two)  
c) Violet/ Purple
11. a) i. Avogadro's Law , ii Boyle's Law  
b) 2 L
12. a) Anode / Zn rode  
b) Cu<sup>2+</sup> + 2e<sup>-</sup> → Cu  
c) Anode / Negative electrode / Zn rode  
d) Mg