

CLASS : XI<sup>th</sup>  
DATE :

SUBJECT : CHEMISTRY  
DPP No. : 2

## Topic :- THE D-AND F-BLOCK ELEMENTS

- Which statement about Hg is correct?
  - Hg is the only liquid metal
  - Hg<sup>2+</sup> salts are more stable than Hg<sub>2</sub><sup>2+</sup> salts
  - Hg forms no amalgam with iron and platinum
  - All of the above
- Most abundant transition element is:
  - Fe
  - Sc
  - Os
  - None of these
- Which one of the following acts as an oxidizing agent?
  - Np<sup>4+</sup>
  - Sm<sup>2+</sup>
  - Eu<sup>2+</sup>
  - Yb<sup>2+</sup>
- Which of the oxide of manganese is amphoteric?
  - MnO<sub>2</sub>
  - Mn<sub>2</sub>O<sub>3</sub>
  - Mn<sub>2</sub>O<sub>7</sub>
  - MnO
- Which one of the following reactions will occur on heating AgNO<sub>3</sub> above its melting point?
  - $2\text{AgNO}_3 \rightarrow 2\text{Ag} + 2\text{NO}_2 + \text{O}_2$
  - $2\text{AgNO}_3 \rightarrow 2\text{Ag} + \text{N}_2 + 3\text{O}_2$
  - $2\text{AgNO}_3 \rightarrow 2\text{AgNO}_2 + \text{O}_2$
  - $2\text{AgNO}_3 \rightarrow 2\text{Ag} + 2\text{NO} + 2\text{O}_2$
- Which of the following is paramagnetic?
  - CuCl<sub>2</sub>
  - CaCl<sub>2</sub>
  - CdCl<sub>2</sub>
  - None of these
- Which does not give a precipitate with excess of NaOH?
  - HgCl<sub>2</sub>
  - HgNO<sub>3</sub>
  - FeSO<sub>4</sub>
  - ZnSO<sub>4</sub>
- Thermite is a mixture of iron oxide and:
  - Zn powder
  - K metal
  - Na-Hg
  - Al powder
- Ruby copper is:
  - Cu<sub>2</sub>O
  - Cu(OH)<sub>2</sub>
  - CuCl<sub>2</sub>
  - Cu<sub>2</sub>Cl<sub>2</sub>

10. The actinoids showing +7 oxidation state are  
 a) U, Np                      b) Pu, Am                      c) Np, Pu                      d) Am, Cm
11. Which match is incorrect?  
 a) Ammonia soda process – manufacture of potassium carbonate  
 b) Bessemer's process – manufacture of steel  
 c) Mac Arthur and Forest process – extraction of silver  
 d) Dow's process – manufacture of phenol
12. Carbon content of  
 a) Steel is in between those of cast iron and wrought iron.  
 b) Cast iron is in between those of steel and wrought iron.  
 c) Wrought iron is in between those of steel and cast iron.  
 d) Steel is higher than that of pig iron.
13. Which of the following pair is coloured in aqueous solution?  
 a)  $\text{Sc}^{3+}, \text{Co}^{2+}$                       b)  $\text{Ni}^{2+}, \text{Cu}^+$                       c)  $\text{Ni}^{2+}, \text{Ti}^{3+}$                       d)  $\text{Sc}^{3+}, \text{Ti}^{3+}$
14.  $\text{ZnSO}_4$  on heating to  $800^\circ\text{C}$  gives:  
 a)  $\text{ZnO} + \text{SO}_2 + \text{O}_2$                       b)  $\text{Zn} + \text{SO}_2$                       c)  $\text{ZnS} + \text{O}_2$                       d)  $\text{Zn} + \text{SO}_2 + \text{O}_2$
15. The ionization potential of transition metals is .... than *p*-block elements.  
 a) Less                      b) More                      c) Equal                      d) None of these
16. Spiegeleisen is an alloy of  
 a) Fe, Co and Cr                      b) Fe, Co and Mg                      c) Fe, Mg and C                      d) Fe, C and Mn
17. Which of the following group of transition metals is called coinage metals?  
 a) Cu, Ag, Au                      b) Ru, Rh, Pd                      c) Fe, CO, Ni                      d) Os, Ir, Pt
18. Cadmipone is a mixture of:  
 a) CdS and  $\text{BaSO}_4$                       b)  $\text{CaSO}_4$  and BaS                      c) CaS and  $\text{ZnSO}_4$                       d)  $\text{CaSO}_4$  and ZnS
19. Which one of the following does not correctly represent the correct order of the property indicated against it?  
 a)  $\text{Ti} < \text{V} < \text{Cr} < \text{Mn}$  : increasing number of oxidation states  
 b)  $\text{Ti}^{3+} < \text{V}^{3+} < \text{Cr}^{3+} < \text{Mn}^{3+}$  : increasing magnetic moment  
 c)  $\text{Ti} < \text{V} < \text{Cr} < \text{Mn}$  : increasing melting points  
 d)  $\text{Ti} < \text{V} < \text{Mn} < \text{Cr}$  : increasing 2<sup>nd</sup> ionization enthalpy
20. In chromite ore, the oxidation number of iron and chromium are respectively.  
 a) +3,+2                      b) +3,+6                      c) +2,+6                      d) +2,+3