DPP
DAILY PRACTICE PROBLEMS

CLASS : XIth **SUBJECT : CHEMISTRY**
DATE : **DPP No. : 2**

Topic :- THE P-BLOCK ELEMENTS-1

1. Lead may be replaced from its salt solution by:
   a) Cu b) Au c) Ag d) Mg

2. Unstable lead compounds are
   a) $PbCl_4, PbBr_4$ and PbI_4 b) $PbCl_2, PbBr_2$ and PbI_2
   c) PbO, PbO_2 and Pb_3O_4 d) $PbCl_4^{2-}, PbCl_6^{2-}$

3. Which acid is formed when SiF_4 reacts with water?
   a) H_2SO_4 b) H_2SiF_4 c) H_2SiF_6 d) None of these

4. Which of the following reactions occurs at the cathode during the charging of lead accumulator?
   a) $Pb^{2+} + 2e \longrightarrow Pb$
   b) $Pb^{2+} + SO_4^{2-} \longrightarrow PbSO_4$
   c) $Pb \rightarrow Pb^{2+} + 2e$
   d) $PbSO_4 + 2H_2O \longrightarrow PbO_2 + 4H^+ + SO_4^{2-} + 2e$

5. The two type of bonds present in B_2H_6 are covalent and.....
   a) Ionic b) Coordinate c) Hydrogen bridge d) None of these

6. Which one shows most pronounced inert pair effect?
   a) Si b) Sn c) Pb d) C

7. Which of the following is an ore of lead?
   a) Galena b) Calamine c) Malachite d) Dolomite

8. Soldiers of Napolean army while at Alps during freezing winter suffered a serious problem as regards to the tin buttons of their uniforms. While metallic tin buttons got converted to grey powder. This transformation is related to
   a) An interaction with nitrogen of the air at very low to temperatures
   b) A change in the partial pressure of oxygen in the air
   c) A change in the crystalline structure of tin
   d) An interaction with water vapour contained in the humid air

9. In SiF_6^{2-} and $SiCl_6^{2-}$ which one is known and why?
   a) SiF_6^{2-} because of small size of F b) SiF_6^{2-} because of large size of F
   c) $SiCl_6^{2-}$ because of small size of Cl d) $SiCl_6^{2-}$ because of large size of Cl

10. Which of the following has structure similar to graphite?
    a) BN b) B c) B_4C d) B_2H_6

11. Tin(II) chloride (anhydrous) can be obtained :
    a) By melting tin in an atmosphere of Cl_2

b) By treating tin with conc. HCl and heating the product to dryness
c) By treating tin with dil. HCl and heating the product to dryness
d) By treating tin with HCl(gas)

12. Which statement is not true about potash alum?
a) Its empirical formula is $KAl(SO_4)_2 \cdot 12H_2O$
b) Its aqueous solution is basic in nature
c) It is used in dyeing industries
d) On heating it melts and loses its water of crystallization

13. Solder is an alloy of :
a) Pb, Sb and Sn b) Pb and Sn c) Pb, Bi and Sn d) Sn, Sb and Cu

14. The thermal stability order for group 14 halides is:
a) $GeX_2 < SiX_2 < SnX_2 < PbX_2$
b) $SiX_2 < GeX_2 < PbX_2 < SnX_2$
c) $SiX_2 < GeX_2 < SnX_2 < PbX_2$
d) $PbX_2 < SnX_2 < GeX_2 < SiX_2$

15. Mica is chemically:
a) Potassium alumino silicate having sheet structure
b) Calcium alumino silicate having fibrous structure
c) Calcium magnesium silicate having three dimensional network
d) Hydrated sodium alumino silicate having three dimensional network

16. When tin is treated with concentrated nitric acid
a) It is converted into stannous nitrate b) It is converted into stannic nitrate
c) It is converted into metastannic acid d) It becomes passive

17. An element 'X' which occurs in the first short period has an outer electronic structure s^2p^1. What is the formula and acid-base character of its oxides?
a) XO_3, basic b) X_2O_3, basic c) X_2O_3, acidic d) XO_2, acidic

18. Pb and Sn are extracted from their Chief ores by:
a) Carbon reduction and self reduction
b) Self reduction and carbon reduction
c) Electrolysis and self reduction
d) Self reduction and electrolysis

19. Boron readily dissolves in:
a) Conc. HCl
b) Fused NaOH at 673 K
c) Fused Na_2CO_3 at 1173K
d) A mixture of conc. HNO_3 and conc. $H_2SO_4(1:2)$

20. The borax bead is chemically:
a) B_2O_3 b) $Na_2B_4O_7$ c) Na_3BO_3 d) $B_2O_3 + NaBO_2$