

Date Planned : __ / __ / __	Daily Tutorial Sheet-6	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration : _____

76. All Zn(+II) compounds are white because :
- (A) Zn^{2+} has a d^{10} configuration and the d-subshell is full
 (B) Zn^{2+} shows d-d transition
 (C) Zn^{2+} has no electron in the 4s-subshell
 (D) Zn is not a transition element
77. Which of the following statements are correct about Zn, Cd and Hg ? 
- I. they exhibit high enthalpies of atomisation as the d-subshell is full
 II. Zn and Cd do not show variable oxidation states while Hg shows +I and +II
 III. Compound of Zn, Cd and Hg are paramagnetic in nature
 IV. Zn, Cd and Hg are called soft metals
- (A) I, II and III (B) I and III (C) II and IV (D) Only IV
78. The correct statement about iron includes :
- I. the highest oxidation state of iron is +6 in K_2FeO_4
 II. that the iron shows +2 oxidation state with six electrons in the 3d orbitals
 III. the common oxidation state of iron is +3 with five unpaired electrons in the 3d orbital
- (A) I, II and III (B) I and II (C) II and III (D) Only I
79. The maximum and minimum m.p. of 1st transition and 2nd transition series respectively are obtained with:
- (A) Cr and Zn (B) Cr and Cd (C) Cr and Hg (D) Mo and Cd
80. Which of the following acids attack(s) on copper and silver ?
- (A) dilute HNO_3 (B) dilute HCl (C) dil. H_2SO_4 (D) aqua regia
- *81. Identify the correct statements :
- (A) Iron belongs to first transition series of the periodic table
 (B) The purest form of commercial iron is wrought iron
 (C) Anhydrous ferrous sulphate is called as yellow vitriol
 (D) Iron is the most abundant transition metal
82. Mercury is a liquid at 0°C because of :
- (A) very high ionisation energy (B) weak metallic bonds
 (C) high heat of hydration (D) high heat of sublimation
- *83. Which of the following statements are true for Mohr's salt ? 
- (A) it decolourizes KMnO_4 solution (B) it is a double salt
 (C) it is colourless salt (D) it is a primary standard substance
- *84. Which statements are correct regarding copper sulphate ? 
- (A) It reacts with NaOH and glucose to give Cu_2O
 (B) It reacts with KCl to give Cu_2O
 (C) It gives CuO on heating in air
 (D) It reacts with KI to give brown colouration

85. Statement-I : CO_3^{2-} and HCO_3^- ions are distinguished by using AgNO_3 .

Statement-II : CO_3^{2-} give white (yellowish) ppt. with AgNO_3 and no ppt. with HCO_3^- .

- (A) If both Statement-I and Statement-II are true and Statement-II is the correct explanation of Statement-I
- (B) If both Statement-I and Statement-II are true and Statement-II is not the correct explanation of Statement-I
- (C) If Statement-I is true and Statement-II is false
- (D) If Statement-I is false and Statement-II is true