CUET 2023 Chemistry Question Paper

May 21, 2023

Question 1. An alloy of copper, silver and gold is found to have copper constituting the ccp lattice. If silver atoms occupy the edge centres and gold is present at the body centre, the alloy has a formula
A. Cu4Ag2Au
B. Cu4Ag4Au
C. Cu4Ag3Au
D. CuAgAu
Answer: Option (3)

Question 2. Copper crystallizes in fcc with a unit cell length of 361 pm. what is the radius of copper atom?
A. 157 pm
B. 181 pm
C. 127 pm
D. 108 pm
Answer: Option (c)

Question 3. Alkali halides do not show Frenkel defect because
A. Cations and anions have almost equal size
B. There is large difference in size of cations and anions
C. Cations and anions have low coordination number
D. Anions cannot be accommodated in voids
Answer: Option (a)

Question 4. A solution of urea (mol. mass 56 g mol-1) boils at 100.18°C at atmospheric pressure. If Kf and Kb for water are 1.86 and 0.512 K kg mol-1, respectively, the above solution will freeze at
(a) -0.654°C
(b) 0.654°C
(c) -6.54°C
(d) 6.54°C
Answer: Option (a)

Question 5. The solubility of a gas in liquid decreases with an increase in temperature because:
A. Dissolution of a gas in liquid is an endothermic process
B. Dissolution of a gas in liquid is an exothermic process
C. Gases are highly compressible

D. All of the above
Answer: Option (b)

Question 6. Assertion: The solubility of any gas in any liquid is an exothermic process.
Reason: All the gas are highly soluble in any liquid.
A. Both Assertion and reason are correct and reason is the correct explanation of assertion
B. Both assertion and reason are correct but reason is not the correct explanation of assertion
C. Assertion is correct and reason is incorrect
D. Both assertion and reason are incorrect
Answer: Option (c)