

Chapter 3 “Metals and Non-Metals” Multiple Choice Questions

1. Which of the given properties is generally not shown by metals?

- A. Electrical conduction
- B. Sonorous in nature
- C. Dullness
- D. Ductility

Answer: (C)

2. The ability of metals to be drawn into thin wire is known as

- A. Ductility
- B. Malleability
- C. Sonorousity
- D. Conductivity

Answer: (A)

3. Aluminium is used for making cooking utensils. Which of the following properties of aluminium are responsible for the same?

- (a) Good thermal conductivity
 - (b) Good electrical conductivity
 - (c) Ductility
 - (d) High melting point
- A. (A) & (B)
 - B. (A) & (C)
 - C. (B) & (C)
 - D. (A) & (D)

Answer: (D)

4. Which one of the given metals does not react with cold as well as hot water?

- A. Na
- B. Ca
- C. Mg
- D. Fe

Answer: (D)

5. Which of the given oxide(s) of iron would be obtained on prolonged reaction of iron with steam?
- A. FeO
 - B. Fe₂O₃
 - C. Fe₃O₄
 - D. Fe₂O₃ and Fe₃O₄

Answer: (C)

6. What happens when calcium is treated with water?
- (a) It does not react with water
 - (b) It reacts violently with water
 - (c) It reacts less violently with water
 - (d) Bubbles of hydrogen gas formed stick to the surface of calcium
- A. (A) & (D)
 - B. (B) & (C)
 - C. (A) & (B)
 - D. (C) & (D)

Answer: (D)

7. Generally metals react with acids to give salt and hydrogen gas. Which of the given acids does not give hydrogen gas on reacting with metals (except Mn and Mg)?
- A. H₂SO₄
 - B. HCl
 - C. HNO₃
 - D. All the these

Answer: (C)

8. The composition of aqua-regia is
- A. Dil.HCl : Conc. HNO₃ = 3 : 1
 - B. Conc.HCl : Dil. HNO₃ = 3 : 1
 - C. Conc.HCl : Conc. HNO₃ = 3 : 1
 - D. Dil.HCl : Dil. HNO₃ = 3 : 1

Answer: (A)

9. Which of the following are not ionic compounds?

- (a) KCl
 - (b) HCl
 - (c) CCl_4
 - (d) NaCl
- A. (A) & (B)
B. (B) & (C)
C. (C) & (D)
D. (A) & (C)

Answer: (B)

10. Which one of the given properties is not generally exhibited by ionic compounds?

- A. Solubility in water
- B. Electrical conductivity in solid state
- C. High melting and boiling points
- D. Electrical conductivity in molten state

Answer: (B)

11. Silver articles become black on prolonged exposure to air. This is due to the formation of

- A. Ag_3N
- B. Ag_2O
- C. Ag_2S
- D. Ag_2S and Ag_3N

Answer: (C)

12. Galvanisation is a method of protecting iron from rusting by coating with a thin layer of

- A. Gallium
- B. Aluminium
- C. Zinc
- D. Silver

Answer: (C)

13. Stainless steel is very useful material for our life. In stainless steel, iron is mixed with

- A. Ni and Cr
- B. Cu and Cr

- C. Ni and Cu
- D. Cu and Au

Answer: (C)

- 14. If copper is kept open in air, it slowly loses its shining brown surface and gains a green coating. It is due to the formation of**
- A. CuSO_4
 - B. CuCO_3
 - C. $\text{Cu}(\text{NO}_3)_2$
 - D. CuO

Answer: (B)

- 15. Generally, metals are solid in nature. Which one of the given metals is found in liquid state at room temperature?**
- A. Na
 - B. Fe
 - C. Cr
 - D. Hg

Answer: (D)

- 16. Which of the given metals are obtained by electrolysis of their chlorides in molten state ?**
- (a) Na
 - (b) Ca
 - (c) Fe
 - (d) Cu
- A. (A) & (D)
 - B. (C) & (D)
 - C. (A) & (C)
 - D. (A) & (B)

Answer: (D)

- 17. Generally, non-metals are not lustrous. Which of the given nonmetals is lustrous?**
- A. Sulphur
 - B. Oxygen
 - C. Nitrogen
 - D. Iodine

Answer: (D)

18. A greenish coating develops on copper utensils due to formation of

- A. CuCO_3
- B. Cu(OH)_2
- C. $\text{Cu(OH)}_2 \cdot \text{CuCO}_3$
- D. CuO

Answer: (A)

19. An alloy is

- A. An element
- B. A compound
- C. A homogeneous mixture
- D. A heterogeneous mixture

Answer: (C)

20. Alloys are homogeneous mixtures of a metal with a metal or nonmetal. Which among the given alloys contain non-metal as one of its constituents?

- A. Brass
- B. Bronze
- C. Amalgam
- D. Steel

Answer: (D)

Thanks