

## Metals and Non Metals

1. Which of the following metals catch fire on reaction with air?

- A. Magnesium
- B. Manganese
- C. Potassium
- D. Calcium

2. Which of the following metals does not react even with steam.?

- A. Silver
- B. Iron
- C. Calcium
- D. Sodium

3. Identify the non-metal which exists in a liquid state in room temperature 25°C.

- A. Aluminium
- B. Mercury
- C. Iodine
- D. Bromine

4. Which of the following pairs of compounds undergo displacement reaction when they react with each other?

- A. Cu and AgNO<sub>3</sub> solution
- B. Ag and FeSO<sub>4</sub> solution
- C. Cu and NaCl solution
- D. Mg and NaCl solution

5. A reaction in which a more reactive metal replaces a less reactive metal from its salt solution is called a/an \_\_\_\_\_ reaction.

- A. combination
- B. displacement
- C. double displacement
- D. addition

6. Food cans are coated with tin and not with zinc because:

- A. Zinc is less reactive than tin.
- B. Zinc is more reactive than tin.
- C. Zinc has a higher melting point than tin.
- D. Zinc is costlier than tin.

7. Metals, except Al and Zn, react with oxygen to form \_\_\_\_\_ oxides.

- A. acidic
- B. neutral
- C. amphoteric
- D. basic

8. Metals like zinc and aluminium react with sodium hydroxide to produce \_\_\_\_\_ gas.

- A. hydrogen
- B. hydrogen sulphide
- C. oxygen
- D. sulphur dioxide

9. The property by which metals can be beaten into sheets is known as \_\_\_\_\_

- A. ductility
- B. sonority
- C. lusture
- D. malleability

10. Pick the odd one from the following elements.

- A. Gold
- B. Potassium
- C. Carbon
- D. Platinum

11. Bauxite is an ore of

- a) Iron
- b) Aluminium
- c) Mercury
- d) Copper

12. In the given reaction,  $\text{Al}_2\text{O}_3 + \text{NaOH} \rightarrow \text{.....X.....} + \text{H}_2\text{O}$

What is element X?

- a)  $\text{NaAlO}_2$
- b)  $\text{Na}_3\text{Al}$
- c)  $\text{Na}_2\text{O}_3$
- d)  $\text{NaAl}_2\text{O}_3$

13. Which of the following represent the correct order of decreasing reactivity?

- a)  $\text{Mg} > \text{Al} > \text{Zn} > \text{Fe}$
- b)  $\text{Mg} > \text{Zn} > \text{Al} > \text{Fe}$
- c)  $\text{Al} > \text{Zn} > \text{Fe} > \text{Mg}$

d)  $\text{Mg} > \text{Fe} > \text{Zn} > \text{Al}$

14. An element reacts with oxygen to give a compound with a high melting point. This compound is also soluble in water. The element is likely to be

- (a) Ca
- (b) C
- (c) Si
- (d) Fe

15. Which of the following pairs of reactants will go undergo a displacement reaction?

- (a)  $\text{CuSO}_4 + \text{Fe}$
- (b)  $\text{ZnSO}_4 + \text{Fe}$
- (c)  $\text{MgSO}_4 + \text{Fe}$
- (d)  $\text{Ca}(\text{SO}_4)_2 + \text{Fe}$

16. Which of the following alloys contains a non-metal as one of its constituents?

- (a) Steel
- (b) Brass
- (c) Amalgam
- (d) Bronze

17. Which of the given oxide(s) of iron would be obtained on prolonged reaction of iron with steam?

- A. FeO
- B.  $\text{Fe}_2\text{O}_3$
- C.  $\text{Fe}_3\text{O}_4$
- D.  $\text{Fe}_2\text{O}_3$  and  $\text{Fe}_3\text{O}_4$

18. 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

19. 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

20. An alloy is

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

21. Which among the given statements is incorrect for magnesium metal?

- A. It burns in oxygen with a dazzling white flame
- B. It reacts with cold water to form magnesium oxide and evolves hydrogen gas
- C. It reacts with hot water to form magnesium hydroxide and evolves hydrogen gas
- D. It reacts with steam to form magnesium hydroxide and evolves hydrogen gas

22. An element reacts with oxygen to give a compound with a high melting point. The compound is soluble in water. The element is likely to be

- A. Calcium
- B. Carbon
- C. Iron
- D. Silicon

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

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

24. Which among the given alloys contain non-metal as one of its constituents?

- A. Brass
- B. Amalgam
- C. Gunmetal
- D. None of these

25. Aluminum is used for making cooking utensils. Which of the following properties of aluminum 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)

### **Answers key**

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|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. C  | 2. A  | 3. B  | 4. A  | 5. B  | 6. B  | 7. D  | 8. A  |
| 9. D  | 10. C | 11. B | 12. A | 13. A | 14. A | 15. A | 16. A |
| 17. C | 18. B | 19. A | 20. C | 21. B | 22. C | 23. A | 24. B |
| 25. D |       |       |       |       |       |       |       |