



Class X Science MCQ Revision

Metals and Non Metals

1. Aluminium is used for making cooking utensils. Which of the following properties of aluminium are responsible for the same?
- i) Good thermal conductivity
 - ii) Good electrical conductivity
 - iii) Ductility
 - iv) High melting point
- a) (i) and (ii) b) (i) and (iii)
c) (ii) and (iii) d) (i) and (iv)
2. Which one of the following metals do not react with cold as well as hot water?
- a) Na b) Ca c) Mg d) Fe
3. Which of the following oxide(s) of iron would be obtained on prolonged reaction of iron with steam?
- a) FeO b) Fe₂O₃ c) Fe₃O₄
d) Fe₂O₃ and Fe₃O₄
4. What happens when calcium is treated with water?
- i) It does not react with water
 - ii) It reacts violently with water
 - iii) It reacts less violently with water
 - iv) Bubbles of hydrogen gas formed stick to the surface of calcium
- a) (i) and (iv) b) (ii) and (iii)
c) (i) and (ii) d) (iii) and (iv)
5. Generally metals react with acids to give salt and hydrogen gas. Which of the following acids does not give hydrogen gas on reacting with metals (except Mn and Mg)?
- a) H₂SO₄ b) HCl
c) HNO₃ d) All of these
6. 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
7. Which of the following are not ionic compounds?
- i) KCl ii) HCl
 - iii) CCl₄ iv) NaCl
- a) (i) and (ii) b) (ii) and (iii)
c) (iii) and (iv) d) (i) and (iii)
8. Which one of the following 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
9. Which of the following metals exist in their native state in nature?
- i) Cu ii) Au iii) Zn iv) Ag
- a) (i) and (ii) b) (ii) and (iii)
c) (ii) and (iv) d) (iii) and (iv)
10. Which of the following metals are refined by electrolytic refining?
- i) Au ii) Cu iii) Na iv) K
- a) (i) and (ii) b) (i) and (iii)
c) (ii) and (iii) d) (iii) and (iv)
11. Silver articles become black on prolonged exposure to air. This is due to the formation of
- a) Ag₃N b) Ag₂O
c) Ag₂S d) Ag₂S and Ag₃N
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
13. In stainless steel, iron is mixed with
- a) Ni and Cr b) Cu and Cr
c) Ni and Cu d) Cu and Au



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

15. Which of the following metals are obtained by electrolysis of their chlorides in molten state ?

- i) Na ii) Ca iii) Fe iv) Cu
a) (i) and (iv) b) (iii) and (iv)
c) (i) and (iii) d) (i) and (ii)

16. Which one of the following four metals would be displaced from the solution of its salts by other three metals?

- a) Mg b) Ag c) Zn d) Cu

17. 2 mL each of concentrated HCl, HNO_3 and a mixture of concentrated HCl and concentrated HNO_3 in the ratio of 3 : 1 were taken in test tubes labelled as A, B and C. A small piece of metal was put in each test tube. No change occurred in test tubes A and B but the metal got dissolved in test tube C respectively. The metal could be

- a) Al b) Au c) Cu d) Pt

18. An electrolytic cell consists of

- i) Positively charged cathode
ii) Negatively charged anode
iii) Positively charged anode
iv) Negatively charged cathode
a) (i) and (ii) b) (iii) and (iv)
c) (i) and (iii) d) (ii) and (iv)

19. During electrolytic refining of zinc, it gets

- a) Deposited on cathode
b) Deposited on anode
c) Deposited on cathode as well as anode
d) Remains in the solution

20. Which among the following alloys contain non-metal as one of its constituents?

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

21. Which among the following 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. Which among the following alloys contain mercury as one of its constituents?

- a) Stainless steel b) Alnico
c) Solder d) Zinc amalgam

23. Reaction between X and Y, forms compound Z. X loses electron and Y gains electron. Which of the following properties is not shown by Z?

- a) Has high melting point
b) Has low melting point
c) Conducts electricity in molten state
d) Occurs as solid

24. The electronic configurations of three elements X, Y and Z are X — 2, 8; Y — 2, 8, 7 and Z — 2, 8, 2. Which of the following is correct?

- a) X is a metal b) Y is a metal
c) Z is a non-metal
d) Y is a non-metal and Z is a metal

25. Which of the following non-metals is a liquid?

- a) Carbon b) Bromine
c) Phosphorus d) Sulphur