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

A. Electrical conduction

B. Sonorous in nature

C. Dullness

D. Ductility

C

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

A. Ductility

B. Malleability

C. Sonorousity

D. Conductivity

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)

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

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

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)

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

A

**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

A

**9. Which of the following are not ionic compounds?**

**(a) KCl**

**(b) HCl**

**(c) CCl₄**

**(d) NaCl**

A. (A) & (B)

B. (B) & (C)

C. (C) & (D)

D. (A) & (C)

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

B

**11. Which of the following metals exists in its native state in nature?**

**(a) Cu**

**(b) Au**

**(c) Zn**

**(d) Ag**

A. (A) & (B)

B. (B) & (C)

C. (B) & (D)

D. (C) & (D)

C

**12. Metals are refined by using different methods. Which of the following metals are refined by electrolytic refining?**

**(a) Au**

**(b) Cu**

**(c) Na**

**(d) K**

A. (A) & (B)

B. (A) & (C)

C. (B) & (C)

D. (C) & (D)

D

**13. 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

C

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

A. Gallium

B. Aluminium

C. Zinc

D. Silver

C

**15. 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

A

**16. 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. CuSO₄

B. CuCO₃

C. Cu(NO₃)₂

D. CuO

B

**17. 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

D

**18. 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)

D

**19. Generally, non-metals are not lustrous. Which of the given nonmetals is lustrous?**

A. Sulphur

B. Oxygen

C. Nitrogen

D. Iodine

D

**20. Which one of the given four metals would be displaced from the solution of its salts by other three metals?**

A. Mg

B. Ag

C. Zn

D. Cu

B

**21. 2 ml each of concentrated HCl, HNO₃ and a mixture of concentrated HCl and concentrated HNO₃ 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

B

**22. An alloy is**

A. An element

B. A compound

C. A homogeneous mixture

D. A heterogeneous mixture

C

**23. An electrolytic cell consists of**

**(a) Positively charged cathode**

**(b) Negatively charged anode**

**(c) Positively charged anode**

**(d) Negatively charged cathode**

A. (A) & (B)

B. (C) & (D)

C. (A) & (C)

D. (B) & (D)

B

**24. 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

A

**25. An element A is soft and can be cut with a knife. This is very reactive to air and cannot be kept open in air. It reacts vigorously with water. Identify the element**

A. Mg

B. Na

C. P

D. Ca

B

**26. 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

D

**27. 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

B

**28. Which among the given alloys contains mercury as one of its constituents?**

A. Stainless steel

B. Alnico

C. Solder

D. Zinc amalgam

D

**29. Reaction between X and Y, forms compound Z. X loses electron and Y gains electron. Which of the given 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

B

**30. 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 given is correct?**

A. X is a metal

B. Y is a metal

C. Z is a non-metal

D. Y is a non-metal & Z is a metal

D

**31. Although metals form basic oxides, which of the given metals form an amphoteric oxide?**

A. Na

B. Ca

C. Al

D. Cu

C

**32. Generally, non-metals are not conductors of electricity. Which of the given is a good conductor of electricity?**

A. Diamond

B. Graphite

C. Sulphur

D. Fullerene

B

**33. Electrical wires have a coating of an insulating material. The material generally used is**

A. Sulphur

B. Graphite

C. PVC

D. All can be used

C

**34. Which of the given non-metals is a liquid?**

A. Carbon

B. Bromine

C. Phosphors

D. Sulphur

B

**35. Which of the given can undergo a chemical reaction?**

A. MgSO₄ + Fe

B. ZnSO₄ + Fe

C. MgSO₄ + Pb

D. CuSO₄ + Fe

D

**36. Which of the given metals is present in the anode mud during the electrolytic refining of copper?**

A. Sodium

B. Aluminium

C. Gold

D. Iron

D

**37. 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

C

**38. The second most abundant metal in the earth’s crust is**

A. Oxygen

B. Silicon

C. Aluminium

D. Iron

D

**39. An alloy of Zn and Cu is dissolved in dil. HCl. Hydrogen gas is evolved. In this evolution of gas**

A. Only zinc reacts with dil. HCl

B. Only copper reacts with dil. HCl

C. Both zinc and copper react with dil. HCl

D. Only copper reacts with water

A

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

A. CuCO₃

B. Cu(OH)₂

C. Cu(OH)₂.CuCO₃

D. CuO

A

**41. Rusting of iron takes place in**

A. Ordinary water

B. Distilled water

C. Both ordinary & Distilled water

D. None of these

C

**42. The bronze medals are made up of**

A. Cu and Zn

B. Zn and Ni

C. Cu and Sn

D. Cu, Zn, Tn

C

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

A. Ag₂O

B. Ag₂S

C. AgCN

D. Ag₂O and Ag₂S

B

**44. During smelting, an additional substance is added which combines with impurities to form a fusible product known as**

A. Slag

B. Mud

C. Gangue

D. Flux

A

**45. A student placed an iron nail in copper sulphate solution. He observed the reddish brown coating on the iron nail which is**

A. Soft and dull

B. Hard and flading

C. Smooth and shining

D. Rough and granular

D

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

A. Brass

B. Amalgam

C. Gunmetal

D. None of these

B

**47. An aluminium strip is kept immersed in freshly prepared ferrous sulphate solution taken in a test tube, the change observed is that**

A. Green solution slowly turns brown

B. Lower end of test tube become slightly warm

C. A colourless gas with the smell of burning sulphur is observed

D. Light green solution changes to blue

A

**48. Which of the given metals cannot be extracted using smelting?**

A. Fe

B. Al

C. Zn

D. Pb

B

**49. In general, the number of electrons in the outermost shell of a metal atom is**

A. 1

B. 1 to 3

C. 5 to 8

D. 8

B

**50. 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)

D