

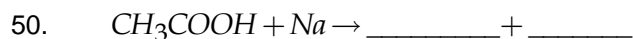
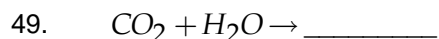
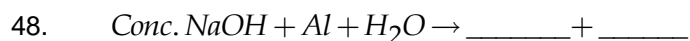
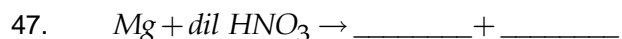
- Which of the following pairs will give displacement reaction?
  - $NaCl$  solution and  $Cu$  metal
  - $MgCl_2$  solution and  $Al$  metal
  - $FeSO_4$  solution and  $Ag$  metal
  - $AgNO_3$  solution and  $Cu$  metal
- An element reacts with Oxygen to give a compound which is basic in nature. This compound is Soluble in water. The element is
  - Calcium
  - Carbon
  - Nitrogen
  - Sulphur
- Food cans are coated with tin and not zinc because
  - zinc is costlier than tin
  - Zinc has a higher melting point than tin
  - Zinc is more reactive than tin
  - Zinc is less reactive than tin
- Stainless steel in addition to iron and carbon contains \_\_\_\_\_
  - Nickel and Chromium
  - Copper and tin
  - Aluminium and magnesium
  - Magnesium and Manganese
- Which one of the following metals does not react with cold as well as hot water ?
  - $Na$
  - $Ca$
  - $Mg$
  - $Fe$
- Which of the following oxide of iron would be obtained on reaction with steam ?
  - $FeO$
  - $Fe_2O_3$
  - $Fe_3O_4$
  - $Fe_2O_3 \cdot xH_2O$
- The composition of aqua regia is
  - $dil. HCl + conc. HNO_3$  (3 : 1)
  - $conc. HCl + dil. HNO_3$  (3 : 1)
  - $conc. HCl + conc. HNO_3$  (3 : 1)
  - $dil. HCl + dil. HNO_3$  (3 : 1)
- For electroplating of Iron with Nickel, Cathode, Anode and Electrolyte used will be
 

	Cathode	Anode	Electrolyte
a)	Fe	Ni	$FeSO_{4(aq)}$
b)	Ni	Fe	$NiSO_{4(aq)}$
c)	Fe	Ni	$NiSO_{4(aq)}$
d)	Ni	Fe	$FeSO_{4(aq)}$
- Four metals A,B,C,D kept in to the salt solution of  $A(NO_3)_2$ ,  $B(NO_3)_2$ ,  $C(NO_3)_2$ ,  $D(NO_3)_2$  separately. It is found that Metal B shows displacement in all the other three solution. Metal A can show displacement only in salt solution of C. The correct decreasing order of reactivity is
  - $B > C > A > D$
  - $D > B > A > C$
  - $B > D > A > C$
  - $B > D > C > A$
- The electronic configuration of three elements X,Y,Z are  $X - 2, 8$  ;  $Y - 2, 8, 7$  ;  $Z - 2, 8, 2$  . Which of the following is correct.
  - X - metal, Y - Non metal, Z - noble gas
  - Y - metal, X - noble gas, Z - non metal
  - Z - non metal, Y - noble gas, X - metal
  - Y - non metal, Z - metal, X - noble gas
- Which among the following alloys contain mercury as one of its constituents?
  - Steel
  - Alnico
  - Solder
  - Amalgam
- An element A is soft and can be cut with knife. This is very reactive to air and kept stored in kerosene. It reacts vigorously with water. A produces golden yellow flame when burns in Oxygen. Identify A
  - Mg
  - P
  - Ca
  - Na

13. Metals are good  
 a) oxidising agent  
 b) Reducing agent  
 c) Both oxidising and reducing agent  
 d) Neither oxidising nor reducing agent
14. Aluminium powder when put in to copper sulphate solution the colour of solution changes from \_\_\_\_\_ to \_\_\_\_\_ and \_\_\_\_\_ colour deposit is formed  
 a) Blue, Colourless, brown  
 b) Colourless, Blue , Brown  
 c) Blue , light green, grey  
 d) Light green , Blue, Grey
15. Zinc react with hot conc.  $NaOH$  solution produce  
 a)  $O_2$   
 b)  $H_2$   
 c)  $NH_3$   
 d)  $NO_2$
16. When dilute hydrochloric acid is added to granulated zinc placed in a test tube the observation made is  
 a) The surface of metal turns shining  
 b) The reaction mixture turns milky  
 c) Odour of chlorine is observed  
 d) a Colourless, odourless gas evolves
17. Iron container can be used to store  
 a)  $Al_2(SO_4)_3$   
 b)  $ZnSO_4$   
 c)  $CuSO_4$   
 d) Both a and b
18. Which of the following solution cannot oxidise  $Zn$  to  $Zn^{2+}$  ions?  
 a)  $FeSO_4$  solution  
 b)  $CuSO_4$  solution  
 c)  $Al_2(SO_4)_3$  solution  
 d) All
19. On passing electricity through molten  $Al_2O_3$  \_\_\_\_\_ is formed at cathode and \_\_\_\_\_ is formed at anode.  
 a)  $Al$ ,  $O_2$   
 b)  $Al^{3+}$ ,  $O^{2-}$   
 c)  $O^{2-}$ ,  $Al^{3+}$   
 d)  $O_2$ ,  $Al$
20. Pyrolusite is \_\_\_\_\_ Ore  
 a) Oxide  
 b) Carbonate  
 c) Sulphate  
 d) Chloride
21. Identify the correct statement  
 a) All minerals are ores  
 b) Some ores are minerals  
 c) All ores are minerals  
 d) Ores cannot be minerals
22. Magnetite is  
 a) oxide ore of Magnesium  
 b) Oxide ore of Iron  
 c) Carbonate ore of magnesium  
 d) Carbonate ore of Iron
23. The non metal used for disinfection of water is  
 a) Fluorine  
 b) Chlorine  
 c) Bromine  
 d) Iodine
24. Which ore is concentrated by froth floatation method?  
 a) sulphate  
 b) sulphide  
 c) carbonate  
 d) oxide
25. Which of the following is incorrect?  
 a) malachite-copper  
 b) cinnabar-mercury  
 c) calamine-aluminium  
 d) galena-lead
26. The unwanted material in an ore is known as  
 a) flux  
 b) gangue  
 c) slag  
 d) mineral
27. 1.  $Metal\ sulphide + O_2 \rightarrow Metal\ Oxide$   
 2.  $Metal\ Oxide \xrightarrow{\Delta} Metal + O_2$   
 a) 1 – Roasting  
 2 – Carbon reduction  
 b) 1 – Calcination  
 2 – Auto reduction  
 c) 1 – Roasting  
 2 – Auto reduction  
 d) 1 – Calcination  
 2 – Carbon reduction

28. Metal which does not react even with steam is  
 a) potassium                      b) iron                                      c) magnesium                      d) silver
29. A- Diamond is a hard shining metal  
 R- metals are hard solid and have lustre  
 a) A is true R is true                                      b) A is true R is false  
 c) A is false R is true                                      d) A is false R is false
30. The non metal readily reacts with oxygen to form an oxide is  
 a) sulphur                      b) nitrogen                                      c) carbon                                      d) phosphorous
31. Thin sheets cannot be formed from  
 a) aluminium                      b) silver                                      c) sulphur                                      d) iron
32. The common metal present in both bronze and brass is  
 a) Cu                                      b) Zn                                      c) Sn                                      d) Pb
33. Solder is an alloy of Pb with  
 a) Cu                                      b) Zn                                      c) Al                                      d) Sn
34. Pick out the possible reaction  
 a)  $Cu + H_2SO_4 \rightarrow CuSO_4 + H_2$                                       b)  $2Ag + Cu(NO_3)_2 \rightarrow 2AgNO_3 + Cu$   
 c)  $4Al + 3MgCl_2 \rightarrow 2Al_2Cl_3 + 3Mg$                                       d)  $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$
35. Calcination and Roasting are done to  
 a) Convert ore to oxide form                                      b) Remove volatile impurities  
 c) To make ore easily reducible                                      d) All
36. Greenish layer formed on the copper articles is due to the  
 a)  $Cu_2S$                                       b)  $Cu(OH)_2$                                       c)  $CuCO_3$                                       d)  $CuCO_3 \cdot Cu(OH)_2$
37. Silver articles turn black due to reaction with  
 a)  $O_2$  and  $H_2O$                                       b)  $H_2O$  and  $CO_2$                                       c)  $H_2S$  and  $O_2$                                       d)  $CO_2$  and  $H_2O$
38. Al is resistant to corrosion because  
 a) less reactive                                      b) highly reactive  
 c) forms a protective layer of its Oxide                                      d) cannot be predicted
39. Which of the following is not a sulphide ore  
 a) cinnabar                                      b) galena                                      c) dolomite                                      d) zinc blend
40. Identify the element that cannot liberate  $H_2$  gas on reaction with dilute sulphuric acid solution  
 a) Fe                                      b) Cu                                      c) S                                      d) b and c
41. Platinum and gold are called  
 a) noble metals                                      b) noble gases                                      c) highly reactive elements                                      d) reactive metals
42. Amphoteric oxide among the following is  
 a) CO                                      b)  $Al_2O_3$                                       c)  $ZnO$                                       d) b and c
43. Magnetic method of concentration is done for  
 a) Magnetite                                      b) Galena                                      c) Bauxite                                      d) Limestone
44. Thermite process of reduction can be used for  
 a) Sodium                                      b) Aluminium                                      c) Magnesium                                      d) Manganese
45. Lime stone is an ore of  
 a) calcium                                      b) magnesium                                      c) iron                                      d) zinc

**Complete the following equation and balance them**



51. Match the following

	Column I		Column II
A)	Sodium	I)	Bauxite
B)	Zinc	II)	Rock salt
C)	Aluminium	III)	Cinnabar
D)	Iron	IV)	Calamine
E)	Mercury	V)	Hemalite

52. Match the following

	Column I		Column II
A)	Calcination	I)	Sulphite Ore
B)	Roasting	II)	Aluminium
C)	Thermite	III)	Moderately reactive metals
D)	Carbon reduction	IV)	Highly reactive method
E)	Electrolytic reduction	V)	Carbonate Ore

**KEY**

- |   |   |       |       |       |
|---|---|-------|-------|-------|
| 1. d                                      | 2. a                                      | 3. c  | 4. a  | 5. d  |
| 6. c                                      | 7. a                                      | 8. c  | 9. c  | 10. d |
| 11. d                                     | 12. d                                     | 13. b | 14. a | 15. b |
| 16. d                                     | 17. d                                     | 18. c | 19. a | 20. a |
| 21. c                                     | 22. b                                     | 23. b | 24. b | 25. c |
| 26. b                                     | 27. c                                     | 28. d | 29. c | 30. d |
| 31. c                                     | 32. a                                     | 33. d | 34. d | 35. d |
| 36. d                                     | 37. c                                     | 38. c | 39. c | 40. d |
| 41. a                                     | 42. d                                     | 43. c | 44. d | 45. a |
| 46. $NaAlO_2 + H_2O$                      | 47. $Mg(NO_3)_2 + H_2$                    |       |       |       |
| 48. $NaAlO_2 + H_2$                       | 49. $H_2CO_3$                             |       |       |       |
| 50. $CH_3COONa + H_2$                     |   |       |       |       |
| 51. A – II, B – IV, C – I, D – V, E – III | 52. A – V, B – I, C – II, D – III, E – IV |       |       |       |