1. Which of the following pairs will give dis-placement reactions?

(a) FeSO4 solution and Copper metal (b) AgNO3 solution and Copper metal

(c) CuSO4 solution and Silver metal (d) NaCl solution and Copper metal

2. Which of the following methods is suitable for preventing an iron frying pan from rusting?

(a) Applying grease b) Applying paint

c) Applying a coating of zinc d) All of the above.

3. Food cans are coated with tin and not with zinc because

(a) zinc is costlier than tin (b) zinc has a higher melting point than tin.

(c) zinc is more reactive than tin. (d) zinc is less reactive than tin.

4. Which of the following oxides is amphoteric?

(a) MgO (b) Al2O3 (c) K2O (d) Na2O

5. Aluminum 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)

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)

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. H_2SO_4 B. HCl C. HNO_3 D. All the these

8. 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

9. 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

10. 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. $Cu(NO_3)_2$ D. CuO

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

A. Sulphur B. Oxygen C. Nitrogen D. Iodine

12. 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

13. 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

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

A. $CuCO_3$ B. $Cu(OH)_2$ C. $Cu(OH)_2.CuCO_3$ D. CuO

15. 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

16 Amalgam is an alloy of

(a) Copper and Tin (b) Mercury

(c) Lead and Tin (d) Copper and Zinc

17. The process in which a carbonate ore is heated strongly in the absence of air to convert it into metal oxide is called

(a) Roasting (b) Reduction

(c) Calcination (d) Smelting

18. Oxides of moderately reactive metals like Zinc, Iron, Nickel, Tin, Copper etc. are reduced by using

(a) Aluminium as reducing agent (b) Sodium as reducing agent

(c) Carbon as reducing agent (d) Calcium as reducing agent

19. The highly reactive metals like Sodium, Potas-sium, Magnesium, etc. are extracted by the

(a) Electrolysis of their molten chloride (b) Electrolysis of their molten oxides

(c) Reduction by Aluminium (d) Reduction by carbon

20. $Al2O3 + 2NaOH \rightarrow ..... + H2O$

(a) Al(OH)3 (b) Na2O (c) NaAlO2 (d) AlNaO2