International Indian School Buraidah
Worksheet of the Year-2026-27
Class-10 Subject-Chemistry

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.The most abundant metal in the earth's crust is
(a) Iron
(b) Aluminium
(c) Calcium
(d) Sodium

3. The poorest conductor of heat among metals is
(a) Lead
(b) Mercury
(c) Calcium
(d) Sodium

4. Which property of metals is used for making bells and strings of musical instruments like Sitar and Violin?
(a) Sonorousness
(b) Malleability
(c) Ductility
(d) Conductivity

5. $Al_2O_3 + 2NaOH \rightarrow \ldots\ldots + H_2O$
(a) $Al(OH)_3$
(b) Na_2O
(c) $NaAlO_2$
(d) $AlNaO_2$

6. Which of the following is the correct arrange-ment of the given metals in ascending order of their reactivity?
Zinc, Iron, Magnesium, Sodium
(a) Zinc > Iron > Magnesium > Sodium
(b) Sodium > Magnesium > Iron > Zinc
(c) Sodium > Zinc > Magnesium > Iron
(d) Sodium > Magnesium > Zinc > Iron

7. Which of the following pairs will give dis-placement reactions?
(a) $FeSO_4$ solution and Copper metal
(b) $AgNO_3$ solution and Copper metal
(c) $CuSO_4$ solution and Silver metal
(d) NaCl solution and Copper metal

8. Non-metals form covalent chlorides because
(a) they can give electrons to chlorine

(b) they can share electrons with chlorine
(c) they can give electrons to chlorine atoms to form chloride ions
(d) they cannot share electrons with chlorine atoms
9. Which of the following oxide(s) of iron would be obtained on prolonged reaction of iron with steam?
(a) FeO
(b) Fe_2O_3
(c) Fe_3O_4
(d) Fe_2O_3 and Fe_2O_4
10. Which of tire following are not ionic compounds?
(i) KCl
(ii) HCl
(iii) CCl_4
(iv) NaCl
(a) (i) and (ii)
(b) (ii) and (iii)
(c) (iii) and (iv)
(d) (i) and (iii)
11. The electronic configuration of three elements X, Y and Z are as follows:
X = 2, 4, Y = 2, 7, Z = 2,1 Which two elements will combine to form an ionic compound and write the correct formula,
(a) X_2Y
(b) YZ
(c) $XZ_{3</sub}$
(d) Y_2Z
12. 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
13. Which of the following non-metal is lustrous?
(a) Sulphur
(b) Oxygen
(c) Nitrogen
(d) Iodine
14. Example of an amphoteric oxide is:
(a) Na_2O
(b) K_2O
(C) Al_2O_3
(d) MgO
15. Which one among the following is an acidic oxide?
(a) Na_2O
(b) CO
(c) CO_2
(d) Al_2O_3
16. The atomic number of an element ‘X’ is 12. Which inert gas is nearest to X?
(a) He
(b) Ar
(c) Ne
(d) Kr

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. In thermite welding a mixture of …… and …… is ignited with a burning magnesium ribbon which produces molten iron metal as large amount of heat is evolved.
(a) iron (III) oxide and aluminium powder
(b) iron (II) oxide and aluminium powder
(c) iron (III) chloride and aluminium powder
(d) iron (III) sulphate and aluminium powder
20. Galvanisation is a method of protecting iron from rudftng by coating with a thin layer of
(a) Galium
(b) Aluminium
(c) Zinc
(d) Silver
21. An element X 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 from the following
(a) Mg
(b) Na
(c) P
(d) Ca
22. 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
23. The electronic configurations of three ele¬ments 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
24. Amalgam is an alloy of
(a) Copper and Tin
(b) Mercury
(c) Lead and Tin
(d) Copper and Zinc
25. Copper objects lose their shine and form green coating of
(a) Copper oxide
(b) Copper hydroxide and Copper oxide
(c) Basic Copper carbonate
(d) Copper carbonate

Q-2 Direction: Following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.

(d) A is false but R is true.

Q.1. Assertion (A) : Hydrogen gas is not evolved when a metal reacts with nitric acid.
Reason (R) : Nitric acid is a strong oxidising agent.

Answer(a)

Q.2. Assertion (A) : Highly reactive metals are obtained by electrolytic reduction.
Reason (R) : In the electrolytic reduction, metal is deposited at the cathode.

Answer(b)
Q.3. Assertion (A): Bronze is an alloy of copper and tin.
Reason (R) : Alloys are heterogeneous mixture of metals with other metals and non-metals.

Answer(c)
Q.4. Assertion (A) : Zinc oxide is amphoteric in nature.
Reason (R): Zinc oxide reacts with both acids and bases.

Answer(a)
Q.5. Assertion (A) : Magnesium chloride is an ionic compound.
Reason (R) : Metals and non-metals react by mutual transfer of electrons.

Answer(a)
Q.6. Assertion (A): Zinc can easily displace copper on reacting with a solution of copper sulphate.
Reason (R): Copper is more reactive metal as compared to Zinc.

Answer(c)
Q.7. Assertion (A) : Zinc carbonate is heated strongly in presence of air to form zinc oxide and carbon dioxide.
Reason (R): Calcination is the process in which a carbonate ore is heated strongly in the absence of air to convert into metal oxide.
Answer(d)
Q.8. Assertion (A): Zinc becomes dull in moist air.
Reason (R) : Zinc is coated by a thin film of its basic carbonate in moist air.

Answer(a)
Q.9. Assertion (A) : MgCl, is a covalent compound.
Reason (R) : MgCl, is a good conductor of electricity in molten state.

Answer(d)

Q.10. Assertion (A) : Anodising is a method to prevent metal from corrosion.
Reason (R) : Anodising is a process of coating iron with a layer of zinc.

Answer(c)