

1 viii Chemistry
Multiple Choice Questions (MCQs)
(for 2nd Term)
CLASS: VIII
SUBJECT: CHEMISTRY

=====

Chapter – 5

- Question 1) Who has suggested the modern system of symbolization of elements?
(a) J.J. Berzelius (b) Rutherford (c) Neil Bohr (d) none of these
- Question 2) Which of the following is the symbol of silver element?
(a) Au (b) Ag (c) Hg (d) Al
- Question 3) One atom of chlorine combines with one atom of hydrogen to form –
(a) one molecule of hydrogen chloride (b) two atoms of hydrogen chloride
(c) two molecules of hydrogen chloride (d) three molecules of hydrogen sulphide
- Question 4) The valency of nitrogen is –
(a) 2 (b) 3 (c) 4 (d) 1
- Question 5) Cluster or group of atoms are called –
(a) elements (b) compound (c) radicals (d) none of these
- Question 6) Valency is the number of electrons of an atom which an atom can –
(a) donate (b) accept (c) donate or accept (d) none of these
- Question 7) The symbol of ammonium ion is –
(a) CO_3^{2-} (b) SO_4^{2-} (c) NH_4^+ (d) none of these
- Question 8) Which of the following is electronegative monovalent radical?
(a) SO_4^{2-} (b) CO_3^{2-} (c) Ag^+ (d) Be^-
- Question 9) Which of the following is electronegative bivalent radical?
(a) Chloride (b) Sulphate (c) Sodium (d) nitrate
- Question 10) Which of the following is electropositive monovalent radical?
(a) Chloride (b) Sulphate (c) carbonate (d) silver
- Question 11) Which of the following is electropositive divalent radical?
(a) Magnesium (b) Chloride (c) bromide (d) iodide
- Question 12) Which of the following is electropositive trivalent radical?
(a) Magnesium (b) carbonate (c) hydroxide (d) chromium
- Question 13) Nitrogen (N_2) is an example of –
(a) monoatomic molecules (b) diatomic molecules (c) triatomic molecules (d) polyatomic molecules
- Question 14) The symbolic representation of the number of atoms present in that element or the number of atoms of different elements present in a compound is called –
(a) chemical reaction (b) chemical formula (c) chemical symbol (d) none of these
- Question 15) What is formula of ammonium chloride?
(a) NaCl (b) BaCl_2 (c) NH_4Cl (d) HCl
- Question 16) The representation of a chemical reaction, using symbols and formulae of the substances involved in a reaction is called –
(a) Chemical formulae (b) chemical equation (c) chemical symbol (d) none of these
- Question 17) Essential characteristics of chemical equation are –
(a) It should present an actual chemical change (b) It should be balanced
(c) It should be molecular (d) all of these
- Question 18) Which of the following is a balanced chemical equation –
(a) $2\text{Hg} + \text{O}_2 \rightarrow \text{HgO}$ (b) $\text{Fe} + \text{Cl}_2 \rightarrow 2\text{FeCl}_3$ (c) $\text{Hg} + \text{O}_2 \rightarrow 2\text{HgO}$ (d) $2\text{Hg} + \text{O}_2 \rightarrow 2\text{HgO}$
- Question 19) The correct chemical name of $\text{Na}_2\text{O} \rightarrow$
(a) Sodium hydrogen carbonate (b) sodium oxide (c) sodium sulphide (d) Sodium chloride
- Question 20) Chemical reaction always involves the –
(a) release of energy (b) absorption of energy (c) both a and b (d) none of these
- Question 21) A correct symbol of copper element –
(a) C (b) Cl (c) Cr (d) Cu
- Question 22) Which of the element has variable valency –
(a) Helium (b) Hydrogen (c) Sulphur (d) Sodium
- Question 23) How many steps involve in writing chemical formulae –
(a) 1 (b) 2 (c) 3 (d) 4
- Question 24) What is the product of zinc and sulphuric acid reaction?
(a) Zinc Sulphate (b) hydrogen (c) both a and b (d) none of these
- Question 25) What are the constituent elements of ammonium chloride?
(a) Nitrogen (b) hydrogen (c) chlorine (d) a, b and c

Chapter – 6

- Question 1) Which of the following components are formed by the combination of hydrogen and oxygen?
(a) Carbon monoxide (b) carbon (c) water (d) all of these
- Question 2) Magnesium reacts with oxygen to form –
(a) magnesium oxide (b) carbon dioxide (c) water (d) none of these
- Question 3) The reaction in which all the reactants and products take part in the same physical state is called –
(a) homogeneous reaction (b) heterogeneous (c) both of them (d) none of these
- Question 4) The reaction in which reactants and products taking part are not in the same physical state is –
(a) homogeneous reaction (b) heterogeneous reaction (c) both a and b (d) none of these
- Question 5) Any ion or a molecule that can receive a hydrogen ion is called –
(a) Alkali (b) Base (c) Catalyst (d) none of these
- Question 6) Catalyst is a substance which is responsible for –
(a) analysis (b) catalysis (c) diffusion (d) none of these

2 viii Chemistry

- Question 7) A phenomenon which alters the rate of chemical reaction is called –
 (a) electrode (b) Alkali (c) catalyst (d) Base
- Question 8) A liquid or solution which is capable of conduction electricity –
 (a) Electrode (b) electrolyte (c) both a and b (d) none of these
- Question 9) A system consisting of electrode immersed in a solution of electrolytes is called –
 (a) electrolytic cell (b) Electron volt (c) catalysis (d) all of these
- Question 10) A unit of energy widely used in nuclear physics and nuclear chemistry –
 (a) electron volt (b) jule (c) kilogram (d) none of these
- Question 11) Electroplating is the decomposition of a layer of a metal by –
 (a) catalysis (b) oxidation (c) electroplating (d) electrolysis
- Question 12) Combination with oxygen or removal of hydrogen or loss of electron by an atom, ion or a molecule is called –
 (a) reduction (b) oxidation (c) both (a) and (b) (d) none of these
- Question 13) In exothermic reaction heat is _____
 (a) absorbed (b) released (c) both a and b (d) none of these
- Question 14) In endothermic reaction heat is –
 (a) absorbed (b) released (c) both a and b (d) none of these
- Question 15) In metal reactivity series, metals are arranged in order of their –
 (a) atomic number (b) mass number (c) reactivity (d) none of these
- Question 16) Which of the following metal comes after potassium in the activity series of metals –
 (a) Sodium (b) Calcium (c) Magnesium (d) Zinc
- Question 17) Which one of the following is the last metal of the activity series of metals?
 (a) Potassium (b) Magnesium (c) Nickel (d) Platinum
- Question 18) An oxide, which neither forms salt with a base nor with an acid is called –
 (a) Amphoteric oxide (b) Basic oxides (c) acidic oxides (d) neutral oxides
- Question 19) An oxide which can react with an acid as well as a base is called _____
 (a) Amphoteric (b) Neutrol (c) Basic (d) ocidic
- Question 20) Which of the following is the acidic oxide?
 (a) Carbonic acid (b) sulphuric acid (c) sodium oxide (d) carbon dioxide
- Question 21) Which of the following is the metallic oxide?
 (a) Sulphur dioxide (b) carbon dioxide (c) phosphorus pentaoxide (d) sodium oxide
- Question 22) Which of the following is the amphoteric oxide?
 (a) Sulphur dioxide (b) calcium oxide (c) Potassium oxide (d) Zinc oxide
- Question 23) A substance which brings about the oxidation of various substances is called –
 (a) oxidizing agent (b) catalyst (c) a and b both (d) none of these
- Question 24) A chemical reaction in which a larger molecule breaks into two or more smaller molecules as called –
 (a) combination reaction (b) decomposition reaction (c) displacement reaction (d) all of these
- Question 25) Which one of the following gas is prepared by Haber's synthetic process –
 (a) oxygen (b) Hydrogen (c) Ammonia (d) none of these

Chapter – 7

- Question 1) Which gas is prepared by Henry Cavendish ?
 (a) Hydrogen (b) oxygen (c) nitrogen (d) sulphur
- Question 2) The process of addition of oxygen or removal in a chemical reaction is called –
 (a) oxidation (b) reduction (c) both a and b (d) none of these
- Question 3) Substance that causes oxidation of other substance is called –
 (a) reducing agent (b) catalyst (c) oxidizing agent (d) none of these
- Question 4) The process of addition of hydrogen or removal of oxygen in a chemical reaction is –
 (a) oxidation (b) reduction (c) both a and b (d) none of these
- Question 5) Substance that causes reduction of other substance is called –
 (a) oxidizing agent (b) catalyst (c) reducing agent (d) none of these
- Question 6) Which gas is used in the manufacture of ammonia –
 (a) Hydrogen (b) oxygen (c) sulphur (d) none of these
- Question 7) At which temperature hydrogenation of vegetable oils takes place?
 (a) 100°C (b) 50°C (c) 200°C (d) 1000°C
- Question 8) Which gas is combustible but does not support burning?
 (a) oxygen (b) hydrogen (c) both a and b (d) none of these
- Question 9) What is formed, when hydrogen reacts with sulphur?
 (a) water (b) Carbon dioxide (c) hydrogen sulphide (d) none of these
- Question 10) Which process is used in the manufacture of vanaspati ghee?
 (a) hydrogenation of oils (b) reduction reaction (c) oxidation reaction (d) none of these
- Question 11) Oxidation reaction involves –
 (a) removal of hydrogen (b) addition of oxygen (c) both a and b (d) none of these
- Question 12) Which of the following method is used to liberate water into hydrogen and oxygen?
 (a) bosch process (b) electrolysis (c) both a and b (d) none of these
- Question 13) Which gas is found in atmosphere of sun and other stars –
 (a) Nitrogen (b) hydrogen (c) sulphur (d) all of these
- Question 14) Which of the following gas is a good reducing agent?
 (a) Sulphur (b) nitrogen (c) hydrogen (d) none of these
- Question 15) Which of the following gas is used for the formation of ammonia?
 (a) Hydrogen (b) nitrogen (c) both a and b (d) none of these
- Question 16) Which of the following gas is produced when sodium reacts with dilute acid?
 (a) Nitrogen (b) oxygen (c) sulphur (d) hydrogen
- Question 17) The chemical reactions in which both oxidation and reduction take place simultaneously are called –
 (a) redox reactions (b) oxidizing reactions (c) both a and b (d) none of these

3 viii Chemistry

- Question 18) Lead oxide reacts with hydrogen to form –
(a) lead (b) water (c) both a and b (d) none of these
- Question 19) A mixture of oxygen and hydrogen used for –
(a) cutting (b) welding (c) both a and b (d) none of these
- Question 20) $\text{PbO} + \text{H}_2 \rightarrow \text{Pb} + \text{H}_2\text{O}$
Which kind of reaction it is ?
(a) reduction (b) oxidation (c) both a and b (d) none of these
- Question 21) The reaction which involve removal of oxygen is –
(a) $\text{H}_2\text{S} + \text{Cl}_2 \rightarrow 2\text{HCl} + \text{S}$ (b) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ (c) $\text{PbO} + \text{H}_2 \rightarrow \text{Pb} + \text{H}_2\text{O}$ (d) none of these
- Question 22) Reaction involves removal of hydrogen is –
(a) $\text{H}_2\text{S} + \text{Cl}_2 \rightarrow 2\text{HCl} + \text{S}$ (b) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ (c) $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$ (d) none of these
- Question 23) Reaction involving addition of oxygen is –
(a) $\text{H}_2\text{S} + \text{Cl}_2 \rightarrow 2\text{HCl} + \text{S}$ (b) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$ (c) both a and b (d) none of these
- Question 24) Reaction involving addition of hydrogen is –
(a) $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$ (b) $\text{PbO} + \text{H}_2 \rightarrow \text{Pb} + \text{H}_2\text{O}$ (c) both a and b (d) none of these
- Question 25) Which gas is produced, when active metals react with hydrochloric acid?
(a) oxygen (b) Hydrogen (c) Sulphur (d) all of these

