

**Multiple Choice Questions (MCQs)****CLASS: VIII****SUBJECT: CHEMISTRY****Chapter - 1**

- Question 1) Which is the formula given by Albert Einstein?  
 (a)  $E = mc^2$  (b)  $E = m^2c$  (c)  $M = Ec^2$  (d)  $F = ma$
- Question 2) On heating, the kinetic energy of the particles –  
 (a) increases (b) decreases  
 (c) remain same (d) neither increases nor decreases
- Question 3) All matter composed of many submicroscopic particles are called –  
 (a) atom (b) ions (c) molecules (d) all of these
- Question 4) According to Einstein, matter can be converted into –  
 (a) mass (b) energy (c) (a) and (b) (d) none of these
- Question 5) In which state of matter molecules have no definite arrangement and are spread very far apart ?  
 (a) solid (b) liquid (c) gas (d) (b) and (c)
- Question 6) The magnitude of the force between the molecules is depend –  
 (a) direction (b) distance (c) space (d) density
- Question 7) In which state of matter the force of attraction between molecules is negligible –  
 (a) solid (b) liquid (c) gas (d) (b) and (c)
- Question 8) The phenomenon of change of one state of matter into another and back to its original state is –  
 (a) condensation (b) inter conversion (c) sublimation (d) interaction
- Question 9) The process of changing solid into liquid on heating –  
 (a) Freezing (b) melting (c) vaporization (d) condensation
- Question 10) The process of changing liquid into solid on cooling –  
 (a) Melting (b) sublimation (c) freezing (d) vaporization
- Question 11) The phenomenon of changing gas into liquid –  
 (a) Freezing (b) melting (c) vaporization (d) condensation
- Question 12) The process of changing of the solid directly into gaseous state without undergoing the liquid state  
 (a) Melting (b) Sublimation (c) Freezing (d) Condensation
- Question 13) Law of conservation of mass is given by –  
 (a) Lavoisier (b) Maxwell (c) John Dalton (d) Albert Einstein
- Question 14) Which of the following occupy the shape and volume of the container ?  
 (a) Solids (b) Liquids (c) Gases (d) all of these
- Question 15) The gases can be compressed easily because of –  
 (a) enough space between the molecules (b) less space between molecules  
 (c) more force between molecules (d) all of these
- Question 16) In which year Albert Einstein got the Nobel Prize ?  
 (a) 1980 (b) 1672 (c) 1943 (d) 1921
- Question 17) In which state of matter the force of attraction is maximum –  
 (a) Solid (b) liquid (c) gas (d) all of these
- Question 18) The force of attraction is minimum in –  
 (a) Solid (b) liquid (c) gases (d) none of these
- Question 19) Which of the following state of matter consists super energetic and super excited particles?  
 (a) Solid (b) liquid (c) gas (d) plasma
- Question 20) The plasma is created in stars because of -  
 (a) Very low temperature (b) very high temperature (c) at room temperature (d) b and c
- Question 21) Which of the following is the fifth state of matter ?  
 (a) liquid (b) gas (c) plasma (d) BEC
- Question 22) The temperature at which liquid state changes into solid state is called \_\_\_\_\_  
 (a) melting point (b) boiling point (c) freezing point (d) none of these
- Question 23) The phenomenon of vaporization is responsible for conversion of \_\_\_\_\_  
 (a) solid into liquid (b) liquid into solid (c) liquid into gas (d) gas into solid
- Question 24) Mass remains conserved during chemical reaction is a statement of \_\_\_\_\_.  
 (a) Law of constant composition (b) law of multiple proportion  
 (c) law of conservation of mass (d) Dalton's law
- Question 25) The BEC is prepared by cooling a gas of –  
 (a) extremely high temperature (b) extremely low density  
 (c) extremely high density (d) low temperature

**Chapter – 2**

- Question 1) In which kind of change substance undergoes change in its physical properties ?  
 (a) Physical (b) Chemical (c) both (a) and (b) (d) None of these
- Question 2) When the water is heated, it changes into –  
 (a) ice (b) steam (c) gas (d) none of these
- Question 3) The chemical composition of water is –  
 (a) 2 atoms of hydrogen and 2 atoms of oxygen (b) 2 atoms of hydrogen and 1 atom of oxygen  
 (c) 3 atoms of hydrogen (d) 3 atoms of oxygen

- Question 4) Which of the following is not a chemical change ?  
 (a) digestion (b) melting (c) rusting of iron (d) rotting of eggs
- Question 5) Which of the following is a chemical change ?  
 (a) melting (b) freezing (c) evaporation (d) cooking of food
- Question 6) Which of the following is a physical change ?  
 (a) condensation (b) digestion (c) burning of paper (d) ripening of fruits
- Question 7) Which of the following is the characteristic of physical change ?  
 (a) no change in chemical composition (b) formation of new substance  
 (c) irreversible (d) permanent
- Question 8) In which of the following change composition of the substance remains same ?  
 (a) Physical change (b) chemical change  
 (c) irreversible change (d) reversible change
- Question 9) Substances that react to form new substances during a chemical change are known as –  
 (a) reactants (b) products (c) chemicals (d) none of these
- Question 10) Substances that are formed during a chemical change are known as –  
 (a) reactants (b) products (c) chemicals (d) none of these
- Question 11) A permanent change which involves the formation of one or more new substances –  
 (a) Physical change (b) chemical change (c) reversible change (d) a and c
- Question 12) Which of the following is a physical change ?  
 (a) rusting of iron (b) formation of curd (c) sublimation of camphor (d) rooting of eggs
- Question 13) In nature, liquid water slowly converts into vapour by the process of –  
 (a) evaporation (b) melting (c) sublimation (d) condensation
- Question 14) In which change, the original substance loses its own composition and properties to give rise to new Substances ?  
 (a) physical change (b) reversible change (c) chemical change (d) periodic change
- Question 15) When a chemical reaction takes place with the release of heat energy, it is called –  
 (a) exothermic (b) endothermic change (c) reversible change (d) irreversible change
- Question 16) The reaction that involves the absorption of heat energy is called –  
 (a) exothermic reaction (b) endothermic reaction (c) physical reaction (d) chemical reaction
- Question 17) When wax of the burning candle burns, a chemical change takes place which gives rise to –  
 (a) water vapours (b) carbon dioxide (c) heat (d) all of these
- Question 18) The chemical name of rust is \_\_\_\_\_  
 (a) hydrated iron oxide (b) iron oxide (c) iron sulphide (d) none of these
- Question 19) A chemical change is a permanent and \_\_\_\_\_  
 (a) reversible change (b) temporary change (c) irreversible (d) all of these
- Question 20) In which change energy is either absorbed or evolved ?  
 (a) chemical change (b) physical change (c) exothermic change (d) endothermic change
- Question 21) The total mass of the substances involved in the chemical reaction remains –  
 (a) changed (b) unchanged (c) increases (d) decreases
- Question 22) Rusting of iron is a –  
 (a) slow change (b) fast change (c) reversible change (d) physical change
- Question 23) Physical changes are permanent and –  
 (a) can be reversed (b) cannot be reversed (c) a and b (d) none of these
- Question 24) Which of the following process is a slow process ?  
 (a) evaporation (b) vaporization (c) a and b (d) Melting
- Question 25) When two or more substances are mixed, an odour indicates a –  
 (a) physical reaction (b) chemical reaction (c) exothermic reaction (d) endothermic reaction

### **Chapter – 3**

- Question 1) A substance composed of two or more elements, chemically combined in a definite proportion is –  
 (a) mixture (b) compound (c) a and b both (d) none of these
- Question 2) Homogeneous solid made up of an element or compound –  
 (a) sediment (b) solution (c) crystal (d) none of these
- Question 3) A substance made up of identical atoms –  
 (a) compound (b) element (c) mixture (d) crystal
- Question 4) The process used to separate an insoluble solid from a liquid –  
 (a) filtration (b) decantation (c) crystallization (d) distillation
- Question 5) Method separating the pure liquid without disturbing the sediment.  
 (a) Distillation (b) decantation (c) filtration (d) crystallization
- Question 6) Components of more than one substance combine in any proportion, original properties of the components are retained in –  
 (a) mixture (b) compound (c) element (d) all of these
- Question 7) Method used to separate a mixture of a liquid and a soluble solid where the liquid is required –  
 (a) Decantation (b) Filtration (c) distillation (d) crystallization
- Question 8) Method of separating a pure solid in the form of its crystals from its solution –  
 (a) crystallization (b) filtration (c) distillation (d) separation
- Question 9) The technique is used to separate magnetic and non- magnetic nature of particles of the mixture –  
 (a) Magnetic separation (b) filtration (c) distillation (d) sieving

- Question 10) Which of the following method used, to separate wheat flour from bran –  
 (a) sieving (b) winnowing (c) decantation (d) none of these
- Question 11) The method used to separate grain particles such as rice and wheat from small stones.  
 (a) sieving (b) filtration (c) hand picking (d) winnowing
- Question 12) This method is based on the different in size, shape or colour of solid particles in the mixture –  
 (a) hand picking (b) sieving (b) filtration (d) winnowing
- Question 13) This method is based on the different in size of the solid particles in the mixture –  
 (a) handpicking (b) sieving (c) winnowing (d) filtration
- Question 14) This method is based on the difference in weight of the solid particles of the mixture –  
 (a) handpicking (b) sieving (c) filtration (d) winnowing
- Question 15) Which method is based on the difference in sublimable and non- sublimable substances in the mixture.  
 (a) Evaporation (b) Distillation (c) sublimation (d) all of these
- Question 16) Which of the following method is used to separate ammoniums chloride from mixture of ammonium Chloride and sodium chloride ?  
 (a) Evaporation (b) sublimation (c) distillation (d) decantation
- Question 17) It is based on evaporation of liquid component from solid – liquid mixture –  
 (a) filtration (b) sublimation (c) evaporation (d) distillation
- Question 18) Which method is used to separate salt from salt solution ?  
 (a) evaporation (b) filtration (c) distillation (d) sublimation
- Question 19) The process of separating fine suspended solid particles from a solid – liquid mixture by rotating mixture in a centrifuge is –  
 (a) centrifugation (b) distillation (c) distillation (d) none of these
- Question 20) Two miscible liquids with different boiling points can be separated by –  
 (a) fractional distillation (b) centrifugation (c) filtration (d) sublimation
- Question 21) Two immiscible liquids with difference in densities are separated by –  
 (a) separating funnel (b) centrifugation (c) filtration (d) fractional distillation
- Question 22) used to separate kerosene oil from mixture of kerosene oil and water.  
 (a) sieve (b) separating funnel (c) centrifuge (d) filter paper
- Question 23) It is based on the difference in solubility of solids in a liquid –  
 (a) filtration (b) crystallization (c) centrifugation (d) fractional distillation
- Question 24) Method used to separate cream from milk –  
 (a) centrifugation (b) filtration (c) distillation (d) sieving
- Question 25) Method used to separate clay particles from water –  
 (a) sieving (b) winnowing (c) filtration (d) distillation

### **Chapter – 4**

- Question 1) Anu made up of sub particles are known as –  
 (a) atoms (b) elements (c) paramanu (d) molecules
- Question 2) Who has believed that the anu made up to parmanu ?  
 (a) Dalton (b) J.J. Thomson (c) Maharishi Kanada (d) Einstein
- Question 3) Atoms are divisible into further smaller particles are –  
 (a) electrons and protons (b) protons and neutrons (c) electrons, protons and neutrons (d) none of these
- Question 4) Electrons, protons and neutrons are known as –  
 (a) subatomic particles (b) electrodes (c) a and b (d) none of these
- Question 5) The positive terminal of the electrode is called –  
 (a) cathode (b) anode (c) a and b both (d) none of these
- Question 6) The negative terminal of the electrode is called –  
 (a) cathode (b) anode (c) a and b both (d) none of these
- Question 7) Which of the following is positively charged particle ?  
 (a) electron (b) proton (c) neutron (d) none of these
- Question 8) Which of the following is negatively charged particle ?  
 (a) electron (b) proton (c) neutron (d) none of these
- Question 9) The mass of an electron is \_\_\_\_\_  
 (a)  $9.11 \times 10^{-31}$  kg (b)  $9.12 \times 10^{-31}$  kg (c)  $9.40 \times 10^{-31}$  kg (d)  $9.11 \times 10^{-38}$  kg
- Question 10) The mass of proton is equal to the mass of –  
 (a) oxygen (b) hydrogen (c) nitrogen (d) none of these
- Question 11) The mass of proton is –  
 (a)  $1.672 \times 10^{-27}$  (b)  $1.672 \times 10^{-30}$  (c)  $1.68 \times 10^{-37}$  (d)  $1.82 \times 10^{-30}$
- Question 12) A chemical reaction involves –  
 (a) combination (b) separation (c) rearrangement of atoms (d) all of these
- Question 13) The mass of neutron is –  
 (a)  $1.675 \times 10^{-27}$  kg (b)  $8 \times 10^{-8}$  kg (c)  $1.670 \times 10^{-27}$  kg (d)  $8.5 \times 10^{-30}$  kg
- Question 14) Neutrons and protons are present in the \_\_\_\_\_  
 (a) orbits (b) nucleus (c) both a and b (d) none of these
- Question 15) Who has suggested that electrons revolve around the nucleus in particular orbits ?  
 (a) Thomson (b) William Crooke (c) Maharishi Kanada (d) Neil Bohr
- Question 16) Atomic number of the atom is equal to the number of –  
 (a) electrons (b) neutrons (c) protons (d) a and b

- Question 17) Protons and neutrons, together, are called –  
(a) nucleus (b) nucleons (c) atomic number (d) atomic mass
- Question 18) Mass number of an atom is defined as the sum of –  
(a) Protons and electrons (b) electrons and neutrons (c) protons and neutrons (d) none of these
- Question 19) The distribution of electrons revolving in the different orbits of an atom is called –  
(a) electronic configuration (b) arrangement (c) a and b both (d) none of these
- Question 20) Atomic number of oxygen element –  
(a) 9 (b) 6 (c) 3 (d) 8
- Question 21) The outermost shell of an atom is known as the –  
(a) closest shell (b) valence shell (c) orbit (d) none of these
- Question 22) In the formation of a compound, attractive forces are called -  
(a) intermolecular force (b) electrostatic force (c) chemical bonds (d) none of these
- Question 23) The atom that gains electrons becomes negatively charged ions –  
(a) cation (b) anion (c) compounds (d) valence electrons
- Question 24) Valency of calcium atom is –  
(a) 3 (b) 4 (c) 2 (d) 1
- Question 25) Metals react with non- metals to form stable compounds are called –  
(a) ionic compounds (b) ions (c) a and b both (d) none of these

