# Unit 6: Salts

24 MCQs. Correct option in bold. 1 mark each.

**1.** Salts are ionic compounds formed due to the electrostatic attraction between
A. electrons only **B. oppositely charged ions**
C. neutral atoms D. like charges

**2.** In the formation of a salt, the positive ions come from the
A. indicator B. water C. acid **D. base**

**3.** The primary reason salts have high melting points is
**A. strong electrostatic forces between ions** B. hydrogen bonding
C. weak van der Waals forces D. covalent bonding

**4.** Solid salts do not conduct electricity because their ions are
A. neutral B. absent
**C. held in fixed positions in the lattice** D. free to move

**5.** Molten salts conduct electricity because they have
A. free protons only **B. free-moving ions**
C. free atoms D. free molecules

**6.** When a salt dissolves in water, its ions
A. form a solid B. form a gas
**C. become mobile** D. become fixed in place

**7.** All sodium, potassium and ammonium salts are
**A. soluble in water** B. coloured
C. gases D. insoluble in water

**8.** All nitrate salts are
A. insoluble in water B. volatile
C. insoluble except sodium nitrate **D. soluble in water**

**9.** Most chlorides are soluble except
A. sodium chloride and potassium chloride **B. lead(II) chloride and silver chloride**
C. ammonium chloride only D. calcium chloride and magnesium chloride

**10.** Most carbonates are insoluble except those of
**A. sodium, potassium and ammonium** B. barium and iron
C. calcium and magnesium D. lead and silver

**11.** Which carbonate is insoluble in water?
A. Sodium carbonate B. Potassium carbonate
C. Ammonium carbonate **D. Calcium carbonate**

**12.** Most common sulphates are soluble except those of
A. magnesium and zinc B. sodium, potassium and ammonium
**C. lead, barium and calcium** D. copper and iron

**13.** Which of the following salts is soluble in water?
**A. Sodium nitrate** B. Silver chloride
C. Lead carbonate D. Lead chloride

**14.** Which of the following salts is insoluble in water?
A. Potassium carbonate B. Calcium chloride
C. Ammonium nitrate **D. Lead chloride**

**15.** A soluble salt can be prepared from an acid and an alkali by
A. decantation B. distillation
**C. titration** D. filtration

**16.** In titration of HCl with NaOH using phenolphthalein, the end point is when the colour changes from colourless to
A. red **B. light pink**
C. blue D. yellow

**17.** Which method is the most suitable to prepare a soluble salt from an acid and an alkali?
A. Distillation B. Filtration
C. Crystallisation of a metal **D. Titration**

**18.** To prepare zinc sulphate from zinc and dilute sulphuric acid, zinc is added in
**A. excess** B. equal amount only
C. no amount D. small amount

**19.** When preparing a salt using an excess metal, the excess metal is removed by
A. distillation B. evaporation
**C. filtration** D. decantation

**20.** When preparing copper(II) sulphate from sulphuric acid, an excess of _____ is added.
A. sodium **B. copper(II) oxide**
C. water D. copper metal

**21.** An acid reacting with an excess of an insoluble base gives
A. a salt and carbon dioxide B. a salt and oxygen
**C. a salt and water** D. a salt and hydrogen

**22.** When preparing calcium chloride from HCl and excess $CaCO_3$, the gas evolved is
A. hydrogen **B. carbon dioxide**
C. oxygen D. chlorine

**23.** When an insoluble carbonate reacts with an acid, the gas produced is
**A. carbon dioxide** B. hydrogen
C. nitrogen D. oxygen

**24.** The steps in preparing a soluble salt using an excess insoluble solid are reaction, filtration and
A. sublimation B. condensation
C. distillation **D. crystallisation**