

ICSE Board
Class VII Chemistry
Sample Paper 3

Time: 2 hrs

Total Marks: 75

General Instructions:

1. *All questions are **compulsory**.*
2. *Questions 1 to 15 carry one mark each.*
3. *Questions in 2 A and B carry one mark each.*
4. *Questions in 3 A and B carry one mark each.*
5. *Questions in 4 A and B carry one mark each.*
6. *Question 5 A and B carry five marks each.*
7. *Questions in 6 A carry one mark each and 6B carry five marks.*
8. *Question 7 carries ten marks in total.*

Question 1

Choose the correct answer out of the four available choices given under each question. [15]

1. The _____ substances do not have their own definite shape and volume.
(a) crystal
(b) Solid
(c) Liquid
(d) Gaseous
2. Metals react with dilute acids to liberate _____ gas.
(a) Sulphur
(b) Oxygen
(c) Hydrogen
(d) Chlorine
3. A solution which cannot dissolve more of solute at a given temperature is called _____.
(a) Unsaturated solution
(b) Saturated solution
(c) True solution
(d) Colloid solution
4. Which of the following is a property of carbon dioxide
(a) Combustible, non-supporter of combustion
(b) Combustible, supporter of combustion
(c) Non-combustible, supporter of combustion
(d) Non-combustible, non-supporter of combustion

5. Phosphorus burns in oxygen to form
- (a) Phosphorus oxide
 - (b) Phosphorus dioxide
 - (c) Phosphorus tetroxide
 - (d) Phosphorus pentoxide
6. In a _____ reaction, two substances exchange their radicals and form a new substance.
- (a) Direct combination
 - (b) Decomposition
 - (c) Simple displacement
 - (d) Double displacement
7. Which method is based on the difference in weights of solid particles?
- (a) Filtration
 - (b) Sieving
 - (c) Handpicking
 - (d) Winnowing
8. Electrolysis of water is an example of _____ reaction.
- (a) Combination
 - (b) Decomposition
 - (c) Double decomposition
 - (d) Displacement
9. Burning of magnesium is a
- (a) Permanent
 - (b) Irreversible
 - (c) Chemical
 - (d) All of the above
10. In a chemical equation, the total mass of the reactants is equal to
- (a) Total quantity of the reactants
 - (b) Physical state of the reactants
 - (c) Total mass of the products
 - (d) Total mass of the solution
11. Sodium chloride is a
- (a) Acid
 - (b) Base
 - (c) Salt
 - (d) Alkali

12. The molecular formula of water is
- (a) OH
 - (b) H_2O
 - (c) H_2O_2
 - (d) HO_2
13. The main chemicals that cause acid rain are _____
- (a) CO_2 and SO_2
 - (b) SO_2 and NO_2
 - (c) CO_2 and NO_2
 - (d) O_2 and CO_2
14. The symbol for copper is
- (a) Co
 - (b) Cp
 - (c) Cu
 - (d) Cr
15. Rusting of iron is a _____ change.
- (a) Chemical
 - (b) Physical
 - (c) Periodic
 - (d) Fast

Question 2

(A) Give the chemical formula for the following: [5]

1. Caustic soda
2. Nitric acid
3. Lead nitrate
4. Blue vitriol
5. Vinegar

(B) Fill in the blanks and rewrite the sentences: [5]

1. Manganese dioxide acts as a _____ during the formation of oxygen.
2. On burning a candle, _____ and _____ are formed.
3. When ammonium chloride is dissolved in water, heat is _____.
4. A sublimable solid on heating turns into _____.
5. Adding salt to water increases the _____ point of water.

Question 3

(A) State whether True or False. [5]

1. Marble is a hydrated calcium sulphate.
2. Oxygen burns in an atmosphere of acetylene producing very high temperatures which is used for welding and cutting metals.
3. Metals occur in nature in both free and combined states.
4. Rusting is a slow oxidation process in which iron slowly reacts with oxygen of the air in the presence of moisture.
5. Water freezing into ice is an example of chemical change.

(B) Match the following: [5]

Solid 'X' to Liquid 'Y'	Liquefaction
Liquid 'X' to its vapours 'Z'	Solidification
'Z' to 'X'	Melting
'Y' to 'X'	Boiling point
The temperature at which 'Y' changes to 'Z'	Vaporisation

Question 4

(A) Write the valency and the symbols for the following elements: [5]

- a. Oxygen
- b. Sulphur
- c. Bromine
- d. Chlorine
- e. Carbon

(B) Give the chemical name for the following: [5]

1. NaOH
2. KOH
3. NaHCO₃
4. CaO
5. H₃PO₄

Question 5

(A) Give reasons: [5]

1. Addition of curd to milk is a chemical change.
2. Burning of sulphur powder is a chemical change.

(B) Explain the term catalyst and its types.

[5]

Question 6

(A) Define: [5]

1. Chemical equation
2. Reactants
3. Products
4. Balanced equation
5. Catalyst

(B) Compare in tabular form properties of Solids, Liquids and Gases with respect to : [5]

- (i) Shape
- (ii) Volume
- (iii) Compressibility
- (iv) Diffusion
- (v) Fluidity or Rigidity

Question 7

1. Define mixture. What are its types? [4]
2. Explain the term atomicity in detail. [3]
3. Give the differences between elements and compounds. [3]