

ICSE Board
Class VIII
Chemistry
Sample Paper – 2

Time: 2hrs

Total Marks: 75

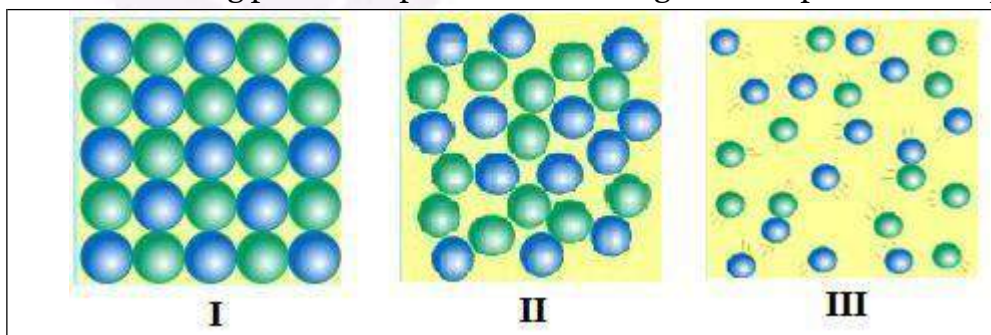
General Instructions:

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

Question 1

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

1. The valency of carbon is 4 and that of oxygen is 2. What is the molecular formula of carbon dioxide?
(a) C_2O
(b) C_2O_2
(c) CO
(d) CO_2
2. Which of the following pictures represents the arrangement of particles in liquids?



- (a) Picture II
- (b) Picture I and II
- (c) Picture I
- (d) Picture II and III

3. Which of the following are combination reactions?

- i. $4\text{K} + \text{O}_2 \rightarrow 2\text{K}_2\text{O}$
 - ii. $\text{CuSO}_4 + 2\text{NH}_4\text{OH} \rightarrow (\text{NH}_4)_2\text{SO}_4 + \text{Cu}(\text{OH})_2$
 - iii. $2\text{ZnS} + 3\text{O}_2 \rightarrow 2\text{ZnO} + 2\text{SO}_2$
 - iv. $\text{Na}_2\text{O} + \text{H}_2\text{O} \rightarrow 2\text{NaOH}$
- (a) Reactions (i) and (ii)
 - (b) Reactions (ii) and (iii)
 - (c) Reactions (ii) and (iv)
 - (d) Reactions (i) and (iv)

4. Which of the following is incorrect about a heterogeneous mixture?

- (a) Constituents can be distinctly seen
- (b) Constituents are uniformly mixed
- (c) Different composition throughout its mass
- (d) Different composition in different parts of its mass

5. If atomic number of an atom is 17 and mass number is 35 then number of neutrons will be

- (a) 35
- (b) 17
- (c) 18
- (d) 52

6. The Element _____ has symbol derived from its Latin name 'plumbum'.

- (a) Calcium
- (b) Lead
- (c) Carbon
- (d) Hydrogen

7. Valency of iron in FeO is ___ of chlorine in CaCl_2 is _____ .

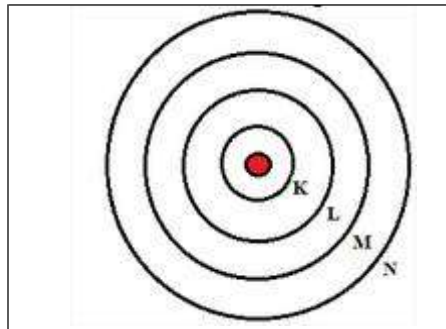
- (a) 1+, 2-
- (b) 2+, 1-
- (c) 2+, 2-
- (d) 1+, 1-

8. Which inert gas is used in the advertisement hoarding shown in the given picture?



- (a) Radon
 - (b) Argon
 - (c) Krypton
 - (d) Neon
9. In metal reactivity series the most reactive metal are at
- (a) Top
 - (b) Bottom
 - (c) Middle
 - (d) None
10. When the temperature of water increases above 0°C up to 4°C , its density_____.
- (a) decreases
 - (b) increases
 - (c) becomes zero
 - (d) remains unchanged
11. When an electric current is passed through acidulated water,_____volume of hydrogen is formed at the cathode and_____volume of oxygen is formed at the anode.
- (a) one, two
 - (b) three, one
 - (c) one, three
 - (d) two, one
12. A soluble solid is separated from insoluble solid by _____
- (a) Fractional crystallisation
 - (b) Solvent extraction
 - (c) Sublimation
 - (d) Magnetic separation.
13. The process of removing oxygen from their compounds is called_____.
- (a) Reduction
 - (b) Combination
 - (c) Synthesis
 - (d) Oxidation

14. Which of the following shells represent the orbit number $(n) = 2$?



- (a) K shell
- (b) L shell
- (c) M shell
- (d) N shell

15. The _____ of water enables aquatic animals to survive in a reservoir where the surface layer of water has frozen.

- (a) anomalous expansion
- (b) anomalous contraction
- (c) volume
- (d) Temperature

Question 2

(A) Define Matter. State the main postulates of kinetic theory of matter. [5]

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

1. Water reacts with metals to liberate _____ gas.
2. The process of change from the _____ state to the _____ state at a particular temperature is called liquefaction.
3. Atoms of the same elements differing in the number of _____ in their nuclei are known as isotopes.
4. The gas which has now replaced hydrogen in air balloons is _____
5. The crystal of _____ is opaque to light and is good conductor of heat

Question 3

(A) State whether the following statements are true or false.

Rewrite the false statement.

[5]

1. Distilled water is used as an electrolyte in the electrolysis of water.
2. Graphite is the purest form of carbon.

3. Charcoal is good adsorbent.
4. Carbon monoxide is a poisonous gas.
5. The rays emitted from the cathode towards the anode in the discharge tube are called cathode rays.

(B) Explain efflorescence and deliquescence with the help of an example. [5]

Question 4

(A) Describe the formation of coal. What are its four types? [5]

(B) State physical properties of water. How does anomalous expansion of water helps aquatic organism in cold climates? [5]

Question 5

(A) What is atom? State the main postulates of Dalton's atomic theory. [5]

(B) Draw a neat labelled diagram for the laboratory preparation of hydrogen. Give balanced equations for reaction and how is hydrogen gas is collected? Why? [5]

Question 6

(A) Explain with example:

1. Combination reaction
2. Decomposition reaction
3. Displacement reaction
4. Double displacement reaction
5. Neutralisation reaction.

[5]

(B) State the atomic number, mass number and electronic configuration for each of the following elements: [5]

1. Carbon [p = 6, n = 6]
2. Helium [p = 2, n = 2]
3. Magnesium [p = 12, n = 12]
4. Boron [p = 5, n = 6]
5. Sodium [p = 11, n = 12]

Question 7

(A)

1. Differentiate between physical change and chemical change [3]
2. State the formula of the following compounds: [2]
 - a. Ammonium bicarbonate
 - b. Aluminium oxide

(B)

1. Explain the term compound with suitable examples. [2]
2. What is destructive distillation? What are the products formed due to the destructive distillation of coal? [3]

