Class-9th. Subject – Science. T M - 30

Q1. Which of the following cannot be considered a form of matter?
(A) Atom
(B) Water
(C) Humidity
(D) Electron

Q2. Which of the following causes the temperature of a substance to remain constant while it is undergoing a change in its state?
(A) Latent heat
(B) Lattice energy
(C) Loss of heat
(D) None of these

Q3. When water at 0°C freezes to form ice at the same temperature of 0°C, then it:
(A) Absorbs some heat
(B) Releases some heat
(C) Neither absorbs nor releases heat
(D) Absorbs 3.34 x 105J/kg of heat.

Q4. Which of the following statement is correct?
(A) Substances that exist as liquids at room temperature typically have melting and boiling points lower than that of room temperature.
(B) The process in which a substance transitions directly from a solid to a gas state without going through the liquid state is known as sublimation.
(C) To convert a temperature from the Celsius scale to the Kelvin scale, add 273 to the given temperature.
(D) The density of ice is lower than that of water.

Q5. Under which of the following circumstances would the distance between molecules of hydrogen gas increase?
(i) Applying greater pressure to hydrogen within a sealed container.
(ii) Leakage of a portion of the hydrogen gas from the container.
(iii) Expanding the volume of the container holding hydrogen gas.
(iv) Introducing additional hydrogen gas into the container without altering its volume.
(A) (i) and (iii)
(B) (i) and (iv)
(C) (ii) and (iii)
(D) (ii) and (iv)

Q6. What is the physical state of matter in which particles have the least kinetic energy?
A) Solid B) Liquid C) Gas D) Plasma

Q7. Which of the following is a characteristic property of solids?
A) Definite shape and volume
B) Indefinite shape and volume
C) Indefinite shape but definite volume
D) Definite shape but indefinite volume

Q8. What happens to the arrangement of particles when a substance changes from sol to liquid state?
A) Particles come closer together
B) Particles move further apart
C) Particles become arranged in a regular patt
D) None of the above

Q9. Which of the following statements abo gases is true?
A) Gases have definite shape and volume
B) Gases have definite shape but indefinite volume
C) Gases have indefinite shape and volume
D) Gases have indefinite shape but definite volume

Q10. The process of conversion of a solid a gas without passing through the liquid is called
A) Evaporation
B) Condensation
C) Sublimation
D) Fusion

Q11. Which of the following substanc not show the property of sublimation
A) Iodine
B) Camphor
C) Naphthalene
D) Copper.

Q12. Which of the following is a phy change?
A) Rusting of iron
B) Burning of paper
C) Melting of ice
D) Cooking of food

Q13. Which of the following has the intermolecular force?
A) Solid
B) Liquid
C) Gas
D) Plasma

Q14. The process of changing a liq gas is called
A) Condensation