

Question 1. The quantity of matter present in an object is called its:

- (a) Weight
- (b) Gram
- (c) Mass
- (d) Density

Question 2. At higher altitudes:

- (a) Boiling point of a liquid decreases
- (b) Boiling point of a liquid increases
- (c) No change in boiling point
- (d) Melting point of solid increases

Question 3. The boiling point of alcohol is 78°C . What is this temperature in Kelvin scale:

- (a) 373 K
- (b) 351 K
- (c) 375 K
- (d) 78 K

Question 4. In which phenomena water changes into water vapour below its B.P.?

- (a) Evaporation
- (b) Condensation
- (c) Boiling
- (d) No such phenomena exist

Question 5. The boiling point of water on Celsius and Kelvin scale respectively is:

(a) 373, 273

(b) 0, 273

(c) 273, 373

(d) 100, 373

Question 6. The liquid which has the highest rate of evaporation is:

(a) Petrol

(b) Nail-polish remover

(c) Water

(d) Alcohol

Question 7. When we put some crystals of potassium permanganate in a beaker containing water, we observe that after some time whole water has turned pink. This is due to:

(a) Boiling

(b) Melting of potassium permanganate crystals

(c) Sublimation of crystals

(d) Diffusion

Question 8. The state of matter which consists of super energetic particles in the form of ionized gases is called:

(a) Gaseous state

(b) Liquid state

(c) Bose-Einstein condensate

(d) Plasma state

Question 9. The force that binds the particles of matter together is known as:

- (a)Intermolecular space
- (b)Bond
- (c)Intermolecular force
- (d)Nuclear force

Question 10.The change of a liquid into vapour is called:

- (a)Vaporization
- (b)Solidification
- (c)Sublimation
- (d)None of these

Question 11.Which of the following describes the liquid phase?

- (a)It has a definite shape and a definite volume
- (b)It has a definite shape but not a definite volume
- (c)It has a definite volume but not a definite shape
- (d)It has neither a definite shape nor a definite volume

Question 12.When a teaspoon of solid sugar is dissolved in a glass of liquid water, what phase or phases are present after mixing:

- (a)Liquid only
- (b)Still solid and liquid
- (c)Solid only
- (d)None of these

Question 13.Volume of a gas at a particular temperature and on atmospheric pressure is 200 ml. Keeping the temperature constant if pressure is increased to 5 atmosphere, then volume of the gas will be:

- (a) 100 ml
- (b) 40 ml
- (c) 200 ml
- (d) 205 ml

Question 14. Which of the following statements best explains why a closed balloon filled with helium gas rises in air?

- (a) Helium is a mono-atomic gas, whereas nearly all the molecules that make up air, such as nitrogen and oxygen, are diatomic.
- (b) The average speed of helium atoms is higher than the average speeds of air molecules, and the higher speed of collisions with the balloon walls propels the balloon upward.
- (c) Because the helium atoms are of lower mass than the average air molecules, the helium gas is less dense than air. The balloon thus weighs less than the air displaced by its volume.
- (d) Because helium has a lower molar mass than the average air molecules, the helium atoms are in faster motion. This means that the temperature. Hot gases tend to rise.

Question 15. Equal volumes of all gases under similar conditions of temperature and pressure contain equal numbers of molecules. This statement was made by:

- (a) Gay-Lussac
- (b) Avogadro
- (c) Berzelius
- (d) John Dalton

Question 16. Boyle's law states that the:

- (a) Pressure of a gas is directly proportional to the temperature at constant volume
- (b) Pressure of a gas is inversely proportional to the volume at constant temperature

- (c) Volume is directly proportional to the temperature at constant pressure
- (d) None of the above

Question 17. All gases will occupy zero volume when the temperature is reduced to:

- (a) 273°C
- (b) 273°C
- (c) -273°C
- (d) 0°C

Question 18. Non-reacting gases have a tendency to mix with each other. This phenomenon is known as:

- (a) Chemical reaction
- (b) Diffusion
- (c) Effusion
- (d) Explosion

Question 19. A gas which obeys the gas laws is known as:

- (a) An ideal gas
- (b) A heavier gas
- (c) A lighter gas
- (d) A real gas

Question 20. A gas can be compressed to a fraction of its volume. The same volume of a gas can be spread all over a room. The reason for this is that:

- (a) The volume occupied by molecules of a gas is negligible as compared to the total volume of the gas.
- (b) Gases consist of molecules which are in a state of random motion

(c)Gases consists of molecules having very large inter- molecular space which can be reduced or increased under ordinary conditions

(d)None of these

Answer

- 1.(c)
- 2.(a)
- 3.(b)
- 4.(a)
- 5.(d)
- 6.(a)
- 7.(d)
- 8.(d)
- 9.(c)
- 10.(a)
- 11.(c)
- 12.(a)
- 13.(b)
- 14.(c)
- 15.(b)
- 16.(b)
- 17.(d)
- 18.(c)
- 19.(a)
- 20.(c)