# Class – IX WORKSHEET [L-1] MATTER IN OUR SURROUNDINGS

**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 78oC. 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 sometime 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.**What is the term used to describe the phase change of a liquid to a gas?

- (a)Boiling
- (b)Condensation
- (c)Melting
- (d)None of the above

**Question 14.**What term is used to describe the phase change of a solid to a liquid?

- (a)Freezing
- (b)Melting
- (c)Boiling
- (d)None of the above

**Question 15.**What s the term used to describe the phase change as a liquid becomes a solid?

- (a)Evaporation
- (b)Condensation

- (c)Freezing
- (d)None of the above

### Question 16. Which has the least energetic molecules?

- (a)Solids
- (b)Liquids
- (c)Gases
- (d)Plasmas

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**Question 17.**In which phase of matter would you expect compound (alcohol exists) at room temperature?

- (a)Solid
- (b)Liquid
- (c)Gas
- (d)Plasma

**Question 18.**.Which of these choices will not change the state of matter?

- (a)Temperature
- (b)Crushing a crystal
- (c)Pressure
- (d)Heat

**Question 19.**If you leave water in a glass and some molecules turn into a gas, it is called:

- (a)Condensation
- (b)Evaporation
- (c)Extinction

**Question 20.** As of the 1990s, scientists have proved the existence of how many states of matter?

- (a)Two
- (b)Three
- (c)Four
- (d)Five

**Question 21.**Out of the following which is the densest state of matter?

- (a)Solids
- (b)Liquids
- (c)Gases
- (d)Plasmas

# **Question 22.**Rate of diffusion of a gas is:

- (a)Directly proportional to its density
- (b)Directly proportional to its molecular mass
- (c)Inversely proportional to the square root of its density
- (d)Inversely proportional to the square root of its molecular mass

### **Question 23.** Select the one that is not a matter:

- (a)Feeling of hot
- (b)Smoke
- (c)Humidity
- (d)Water

### **Question 24.**Which is incorrect statement:

- (a)Matter is continuous in nature.
- (b)Of the three state of matter, the one that is most compact is solid state.
- (c)In solid state inter-particles space (i.e., empty space) is minimum.
- (d)The density of solid is generally more than that of a liquid.

**Question 25.** Select the one that when used would be considered as best condition for liquification of a gas:

- a)Increasing the temperature
- b)Decreasing the pressure
- c)Increasing the pressure and decreasing the temperature
- d)Decreasing the pressure and increasing the temperature.

**Question 26.** Select the correct order of evaporation for water, alcohol, petrol and kerosene oil:

- (a)Water > alcohol > kerosene oil > petrol
- (b)Alcohol > petrol > water > kerosene oil
- (c)Petrol > alcohol > water > kerosene oil
- (d)Petrol > alcohol > kerosene oil > water

# Question 27. Which one is a sublime substance?

- (a)Table salt
- (b)Sugar
- (c)lodine
- (d)Potassium iodide

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### Question 28. S. I. unit of temperature is:

- (a)Celsius
- (b)Fahrenheit
- (c)Kelvin
- (d)None of these

# **Question 29.**100 K is equal to:

- (a)183°C
- (b)-173°C
- (c)173°C
- (d)-273°C

**Question 30.** The process of change of liquid state into gaseous state at constant temperature is known as:

(a)Boiling

- (b)Melting
- (c)Fusion
- (d)Evaporation

### **Question 31.**What is Dry Ice?

- (a)Ice having no water of crystallisation
- (b)Ice that has been dried
- (c)Solid carbon dioxide
- (d)None of these

# Question 32. Which one is a surface phenomenon?

- (a)Evaporation
- (b)Boiling
- (c)Both (a) and (b)
- (d)None of these

# **Question 33.**Rate of diffusion depends upon:

- (a)Temperature
- (b)Surface area
- (c)Both temperature and surface area
- (d)None of these

# **Question 34.**Which of the following processes is known as fusion?

- (a)Change of liquid to solid
- (b)Change of solid to liquid
- (c)Change of liquid to vapour
- (d)Change of gaseous state to solid state

# **Question 35.** The evaporation of a liquid can best be carried out in a:

- (a)Flask
- (b)China dish
- (c)Test tube
- (d)Beaker

# Question 35. The one, in which inter-particle forces are strongest, is:

- (a)Sodium chloride
- (b)Hydrogen
- (c)Ether
- (d)Carbon dioxide

**Question 36.** The melting point temperature of the solid state of a substance is 40°C. The freezing point temperature of the liquid state of the same substance will be:

- (a)35°C
- (b)40°C
- (c)45°C
- (d)Can't predict

**Question 37.**Which one will help to accelerate the process of evaporation of a liquid kept in an open china dish?

- (a)Keeping dish in open
- (b)Blowing air into the liquid
- (c)Keeping the dish under a running fan
- (d)All the above

### **Question 38.**When a gas is compressed keeping temperature constant. It results in:

- (b)Increase in collision among gaseous molecules
- (c)Decrease in speed of gaseous molecules
- (d)Decrease in collision among gaseous molecules

### Question 39. Pressure of air at sea level is:

- (a)One atmosphere
- (b)760 cm of Hg
- (c)76 mm of Hg
- (d)All are correct

# Question 40. Zig-zag movement of the solute particle in a solution is known as

- (a) Linear motion
- (b) Circular motion
- (c) Brownian motion
- (d) Curved motion.

# Question 41. Gases can be liquefied by

- (a) increasing pressure
- (b) decreasing temperature
- (c) both (a) and (b)
- (d) decreasing pressure

# Question 42. Density of a substance is defined as

- (a) ratio of mass and volume
- (b) product of mass and volume
- (c) ratio of mass and temperature
- (d) product of mass and temperature

### Question 43. Which of the following is not matter

- (a) Blood
- (b) Moon rock
- (c) Electron
- (d) Humidity

# Question 44. Which is more effective in cooling?

- (a) Ice at 273K
- (b) Water at 273 K
- (c) Water at 373K
- (d) Ice at 373K

# Question 45. 0 ° C temperature is equal to

(a) 0 K

- (b) 273 K
- (c) -273 K
- (d) 300 K

Question 46. The process involving the change of state from solid to gas is called

- (a) melting
- (b) boiling
- (c) fusion
- (d) sublimation
- 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(a)
- 14.(b)
- 15.(c)
- 16.(a)
- 17.(b)
- 18.(b)
- 19.(b)
- 20.(d)
- 21.(a)
- 22.(d) 23.(a)
- 24.(a)
- 25.(c)
- 26.(d))
- 27.(c)
- 28.(c)
- 29.(b)
- 30.(a)
- 31.(c)
- 32.(a)
- 33.(c)
- 34.(b)
- 35.(b) 36.(a)
- 37.(b)
- 38.(d)

- 39.(d)
- 40.(c) 41.(c)
- 42.(A)
- 43.(D)
- 44.(A)
- 45.(B)
- 46.(D)