

Q1. Choose the correct option from A, B C and D :-

[5]

- (i) 1. The ice melted to water.  
2. Water turns to steam at its boiling point.  
3. Water vapour turns to water at 100°C when cooled.

Which statement is true regarding the interconversion of states of matter?

- (A) 1            (B) 2            (C) 3            (D) None of these.

- (ii) Evaporation, Vaporization, Liquefaction

The correct odd one with reason is/are:

P. Liquefaction is odd because it is a cooling process, the rest are heating processes.

Q. Evaporation is odd because it takes place below the boiling point, the rest takes place at their respective fixed temperature.

- (A) P            (B) Q            (C) Both P & Q            (D) Neither P or Q

- (iii) Which statement is / are correctly related to the postulates of the kinetic theory of matter?

P. Matter is composed of tiny particles. These particles may be atoms, molecules or ions.

Q. Particles of matter are arranged in a way such that there is a gap exists between them.

R. Particles of matter attract each other with a force called intermolecular force.

S. All particles of matter possess kinetic energy.

- (A) P & Q            (B) Q & R            (C) P, Q, R & S            (D) None of these.

- (iv) A solid is heated to get a liquid.

Find out the incorrect statement related to the change.

P. The particles of the solid gain heat energy and the temperature of the particles rises and is stored as the potential energy.

Q. This stored energy increases the inter-particle space.

R. As the space between the particles increases, the force of attraction increases accordingly.

S. So at its melting point, particles become free and turn to liquid.

- (A) P            (B) Q            (C) R            (D) S

- (v) When solid iodine is heated it turns to iodine vapour.

P. Iodine particles have a low force of attraction between their particles.

Q. On heating the force of attraction is overcome and the molecules become free and escape from the surface.

R. The violet vapours condensed at the cooler part immediately called sublimate.

Which statement are correct in this context?

- (A) P & Q            (B) Q & R            (C) P, Q & R            (D) None of these.

**Q2. Identify the state of matter.** [5]

- (a) The state of matter at which the kinetic energy is minimum for its particles.
- (b) The state of matter at which the inter-particle space is minimal.
- (c) The state of matter which may have uncountable surfaces.
- (d) The state of matter in which the particles are free to move anywhere.
- (e) The state of matter in which the particles flow downward.

**Q3. Identify the following process.** [5]

- (a) A brown flaky substance is formed over iron.
- (b) A solute dissolves in a solvent.
- (c) Glucose is converted into energy in human cells.
- (d) Carbon dioxide and water combine in the presence of sunlight.
- (e) A magnet loses its magnetism due to heating.

**Q4. Classify into physical or chemical change:** [4]

Melting of wax, Melting of butter, Burning of wax, Magnetization of iron, Cooking of food, Rusting of iron, Curdling of milk, Condensation of water vapour.

**Q5. State one main character of a chemical change.** [1]

\*\*\*\*\*ALL THE BEST\*\*\*\*\*