



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Sub: Physical Science

Class: 8

Date: 16.01.21

Duration: 40 min

Worksheet Solution 01

Full Marks: 15

MATTER

Choose the Correct options:

- 1) Water can be added dropwise to the upper surface of a coin, long after the surface of the coin is covered with water. This phenomenon is due to _____
(a) Adhesive force (b) **Cohesive force** (c) Diffusion (d) none of these
- 2) PVA glue is used to stick two pieces of paper together. This is due to _____
(a) **Adhesive force** (b) Cohesive force (c) Diffusion (d) none of these
- 3) Mercury poured onto a glass surface takes spherical shapes because of its excessive _____
(a) Adhesive force (b) **Cohesive force** (c) Diffusion (d) none of these
- 4) Water rising up a very thin glass pipe without the application of any suction is called capillary action. It is responsible for the rise of water in the xylem fibres of plants and is a mode of passive transport. The phenomenon is due to _____
(a) Adhesive force (b) Cohesive force (c) **Both (a) and (b)** (d) none of these
- 5) A container contains nitrogen gas. The force of attraction between the molecules of nitrogen is called _____
(a) Adhesive force (b) **Cohesive force** (c) Diffusion (d) none of these
- 6) A container contains nitrogen gas. The force of attraction between the container and the gas molecules is called _____
(a) **Adhesive force** (b) Cohesive force (c) Diffusion (d) none of these
- 7) The intermolecular forces of attraction between molecules is least in _____
(a) Solid (b) Liquid (c) **Gas** (d) Bose-Einstein Condensate
- 8) Plasma is said to be the fourth state of matter. It consists of _____
(a) Molecules (b) Ions (c) Electrons (d) **All of these**
- 9) The Cold Atom Laboratory aboard the ISS produced the fifth state of matter in 2018 by cooling atoms of rubidium and potassium in a vacuum chamber using laser light to slow their movement and then cooled to near absolute zero. This state of matter is called _____
(a) CAL (b) Cloud (c) Plasma (d) **Bose-Einstein Condensate**
- 10) A star is said to be an ionized ball of _____
(a) Gas (b) Cloud (c) **Plasma** (d) Bose-Einstein Condensate
- 11) Liquids and gases are called fluids. It is because of their low _____
(a) **Intermolecular forces** (b) Intermolecular spaces (c) Ionization energies (d) Boiling point
- 12) The Bose Einstein Condensate is named after Albert Einstein and which other scientist?
(a) **Satyendra Nath Bose** (b) Jagadish Chandra Bose (c) Both (a) and (b) (d) Neither
- 13) The most compressible among the three states of matter is ____
(a) Solid (b) Liquid (c) **Gas** (d) Does not depend on state of matter.
- 14) Brownian motion is not observed in which of the following?
(a) **Solid** (b) Liquid (c) Gas (d) Plasma
- 15) The force of cohesion is maximum in which of the three states of matter?
(a) **Solid** (b) Liquid (c) Gas (d) Does not depend on state of matter.