

Class: IX	Topic: Assignment on Matter in our surrounding
Subject: Chemistry	

- Note-
1. Questions 1 to 9 ,each one is of 1 mark
 2. Questions 10 to 11,each one is of 3 marks
 3. Question 12 is of 5 marks

M.M- 20

1. Explain how gases can be liquefied? 1
 2. A drop of dettol got evenly distributed in water. Which phenomenon is involved here? 1
 3. Liquid nitrogen is used as a commercial refrigerant to flash freeze foods. Nitrogen boils at -196°C . What is this temperature on the Kelvin temperature scale? 1.
 4. Which of the following has the highest kinetic energy? 1
 - (a) Particle of ice at 0°C
 - (b) Particle of water at 0°C
 - (c) Particle of ice at 100°C
 - (d) Particle of steam at 100°C
 5. Which of the following does not affect rate of evaporation? 1
 - (a) Wind speed
 - (b) Surface area
 - (c) Temperature
 - (d) Insoluble heavy impurities
 6. Bose-Einstein Condensate have 1
 - (a) Very low kinetic energy
 - (b) Low kinetic energy
 - (c) High kinetic energy
 - (d) Highest kinetic energy.
 7. In which of the following conditions, the distance between the molecules of hydrogen gas would increase? 1.
 - (i) Increasing pressure on hydrogen contained in a closed container
 - (ii) Some hydrogen gas leaking out of the container
 - (iii) Increasing the volume of the container of hydrogen gas
 - (iv) Adding more hydrogen gas to the container without increasing the volume of the container
 - (a) (i) and (iii)
 - (b) (i) and (iv)
 - (c) (ii) and (iii)
 - (d) (ii) and (iv)
- 8 to 9:**
- (a) Both assertion and reasons are correct statements, and reason is the correct explanation of the assertion.

(b) Both assertion and reasons are correct statements, and reason is not the correct explanation of the assertion.

© Assertion is correct, but reason is wrong statement.

(d) Assertion is wrong, but reason is correct statement.

8. (A) Solids can hardly be compressed by applying pressure. 1

(R) Solids are extremely hard in nature.

9. (A) Evaporation of a liquid can take place even in closed container 1

(R) Change of liquid state into gaseous or vapour state is known as evaporation.

10. In a hot summer day, Priyanshu and Soham are wearing cotton and nylon clothes respectively. Whom do you think would be more comfortable and why?

b. Name the physical state of matter which can flow but can not fill the vessels completely.

OR

Which phenomenon occurs during the following changes? 3

i. Wax melts in the sun.

ii. Drying of wet clothes

iii. Formation of clouds

11. Differentiate the three states of matter on the basis of 3

a. Density b. Volume c. Compressibility

12. What is evaporation? In what way it is different from boiling? What is the effect of humidity on the rate of evaporation?

Define Latent heat of fusion? Why does steam cause more severe burning as compared to boiling water at 100°C ?

OR 5

Explain why?

i. A gas fills a vessel completely.

ii. Camphor disappears without leaving any residue.

iii. The temperature does not rise during the process of melting and boiling, though heat energy is constantly supplied.

iv. Water stored in an earthen vessel becomes cool.

v. An iron almirah is a solid at room temperature.

Note- The above content has been absolutely prepared from home