

B.C.M SCHOOL BASANT AVENUE DUGRI ROAD LUDHIANA
ASSIGNMENT OF SCIENCE
CHAPTER - 1(MATTER IN OUR SURROUNDINGS)
CLASS – IX

MCQ(Q.1-2)

ASSERTION REASON (Q.3-4)

SUBJECTIVE (Q.5-9)

Case study (Q.10)

1.Name the phenomenon which causes one crystal of potassium permanganate to turn a beaker of water purple.



a.centrifugation. b.filtration. c.diffusion. d. sedimentation

2.Seema visited a Natural Gas Compressing Unit. She found that a gas can be liquefied under specific conditions of temperature and pressure. While sharing her experience with her friends, she got confused. Can you help her to identify the correct set of conditions?

- (a) Low temperature and low pressure
- (b) High temperature and low pressure
- (c) Low temperature and high pressure
- (d) High temperature and high pressure

3. Assertion : Gases exert pressure on the walls of the container.

Reason : The intermolecular force of attraction is very strong in gases.

4.Assertion : When a solid melts, its temperature remains the same.

Reason : The heat gets used up in changing the state by overcoming the forces of attraction between the particles.

- (a) Both, A and R, are true and R is the correct explanation of A

(b) Both, A and R, are true but R is not the correct explanation of A

(c) If A is true but R is false

(d) If A is false but R is true

5. Define matter and list its characteristics.

6. Differentiate between solids, liquids, and gases based on their shape, volume.

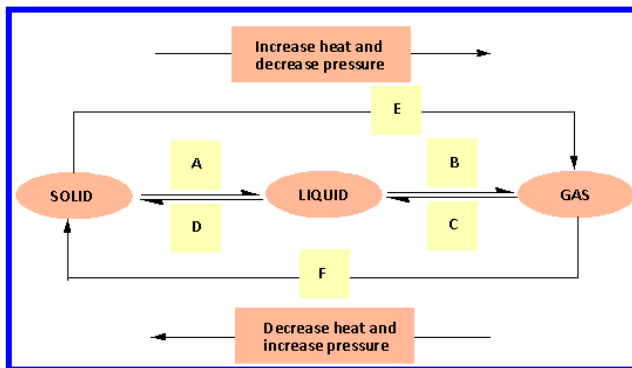
7. Describe the process of evaporation. How does it differ from boiling?

8. Give reasons for the following:

a) Clothes dry faster on a windy day.

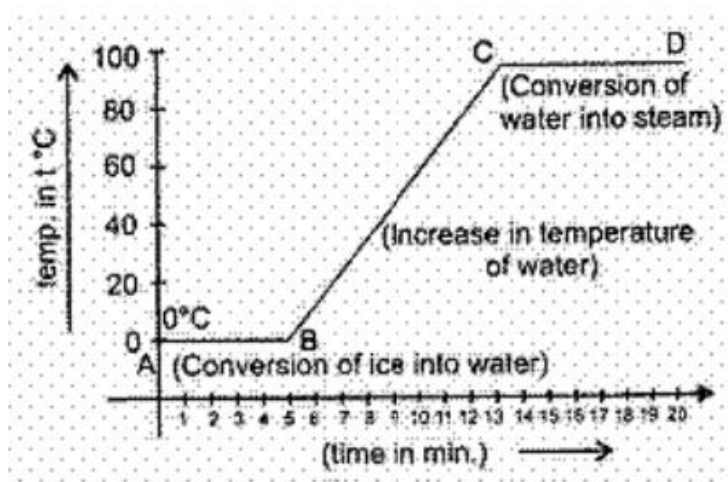
b) Ice melts faster on a hot day than on a cold day.

8.a. Name A, B, C, D, E and F in the given flow chart.



b. Define latent heat of vaporisation.

10. The heating curve of certain pure substances made of hydrogen and oxygen elements at one atm is shown in given figure.



A. During the melting, temperature of substance does not change.

B. Temperature rises after all amount of ice melts.

C. At a specific temperature water starts boiling and temperature remains the same during the conversion of water into steam.

Answer the following questions

i. Which statement is correct regarding graph?

- a. Only (C) is correct.
- b. All (A), (B) and (C) are correct
- c. Only (B) is correct.
- d. Only (A) is correct

ii. When water boils, its temperature:

- a. remains the same.
- b. first increases and then decreases
- c. decreases.
- d. increases

iii. In the determination of boiling point of water correct reading in the thermometer is noted when

- a. water starts boiling.
- b. temperature starts rising
- c. temperature becomes constant.
- d. whole of the water evaporates

iv. Identify the substance & Convert its melting point and boiling point in Kelvin scale?