

**Class 09 Chemistry : Chapter 01: Matter In Our Surroundings MCQ : Hot's 2021 #JsunilSir**

1. Q. Put some glass balls into a glass tumbler up to its 5-6 cm height. Add some salt to it. You will observe that there is no increase in the volume due to the addition of salt up to the level of glass balls.

Considering the glass balls into a glass tumbler as particles of matter, which of the following statements is correct?

- A. There is repulsion between the particles of two matters.
- B. There is an attraction between the particles of matter.
- C. There is neither attraction nor repulsion between the particles of matter.
- D. There is space between the particles of matter. ?

2. When an agarbati is lighted in one corner of a room, its fragrant smell takes just a few minutes to reach the other corner of the room. It is due to

- A. The repulsion between particles of air and fragrant vapours of lighted agarbati.
- B. The random collision between the particles of fragrant vapours of agarbati..
- C. The collision between the particles of air and fragrant vapours of agarbati.?
- D. The attraction between particles of air and fragrant vapours of agarbati.

Chart	
Set	Properties
(a)	Generally fixed shape and volume. On heating, it changes its state.
(b)	Fixed shape, size and volume. Change in volume on heating
(c)	No shape, fixed volume, on heating it changes its state.
(d)	No shape, no fixed volume, on heating, does not change shape.

Given in the chart are four sets of properties of different states of matter.

Which set represents the properties of gas?

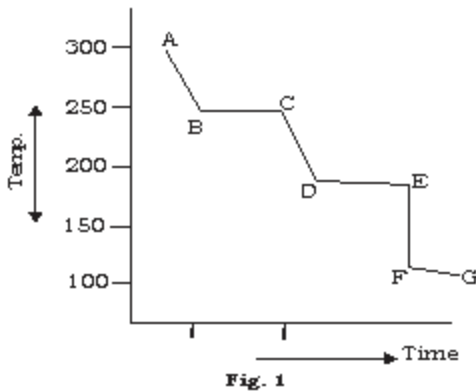
- A. (c).
- B. (b).
- C. (d)?
- D. (a)

4. Which state of matter can undergo compression when pressure is applied over it?

- A. Both liquid & Gas.?
- B. Gas .
- C. Solid.
- D. Liquid

5. The graph in Fig.-1 shows the temperature changes during cooling of a gas at atmospheric pressure. Which of the following statements concerning this is/are correct?

- 1) Conversion of matter from liquid state to solid state is an endothermic process
- 2) The curve CD represents the solid state of a gas.
- 3) The curve BC represents latent heat of vaporisation.



- A. 1 & 2 only.
- B. 1 Only.
- C. 3 only. ?
- D. 2 only

Note. Correct. At point B, the gas starts losing energy i.e. latent heat of vapourisation, up to point C where all the gas gets converted into liquid.

6. Read the following statements and try to fill up the blanks given subsequently:

- Solids have a definite shape because their particles cannot move away from each other.
- Liquids are not-easily compressible because there is little free space between their particles.
- Gases are highly compressible because there is large free space between their particles.
- Liquids acquire the shape of their container because their particles can move around easily.
- Solids are not easily compressible because there is little free space between their particles.
- Liquids can flow easily because their particles can move away from each other.
- Solids do not acquire the shape of their container because the particles are not free to move about.
- Gases have indefinite volume therefore occupy all the space of a closed container because their particles are moving about randomly.

**Fill in the blanks:**

1. A substance has neither a fixed shape nor a fixed volume therefore, it is a .....
2. A substance has a definite volume but no definite shape therefore, it is a .....
3. The melting point of a substance is below the room temperature, therefore, at room temperature it will be a .....
4. The most easily compressible state of matter is .....
5. The state of matter which does not take the shape of the container is .....
6. Indefinite shape and high compressibility are the properties of .....
7. The state of matter which cannot diffuse is .....
8. The state of matter which can diffuse most rapidly is .....
9. Definite shape and non-compressibility are the properties of .....
10. Which of the following substances has maximum force of attraction between their particles (water,Nacl,air)
11. The state of matter which can diffuse slowly .....
12. Which of the following can be compressed easily .....(water,Nacl,air)
13. Which of the following cannot be compressed .....(water,Nacl,air)
14. Which of the following will acquire the shape of the container .....(water,Nacl,air)
15. The melting point of a substance is more than room temperature. At room temperature the substance will have a state as .....
16. The particles of ..... have minimum force of attraction.
17. The particles of ..... have maximum force of attraction.
18. The particles of ..... have minimum empty space between them.
19. The particles of ..... have maximum empty space between them.
20. The particles in ..... have minimum distance them Air,water,stone
21. Boiling point of water is 373K and freezing point is 273K. The state of water at 253K will be .....
22. Boiling point of water is 373K and freezing point of water is 273K. The state of water at 383K will be .....(Solid,liquid,gaseous)

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|--------|-----------|-----------|-----------|-----------|--------------------|-------------------|
| 1.Gas, | 2.liquid, | 3.liquid, | 4. gas,   | 5. solid, | 6. gas,            | 7.solid           |
| 8.gas  | 9.solid   | 10.Nacl   | 11.liquid | 12.Air    | 13.Sodium chloride |                   |
| 14.Air | 15.solid  | 16.gas    | 17.solid  | 18.solid  | 19.gas             | 20.stone 21.solid |
23. Gaseous