

Question 1 to 5 are of 1 marks each

1. A certain substance X cannot be compressed, but takes shape of the container in which is kept. What is its physical state?
2. Can Kelvin scale have negative temperature? Give reason.
3. What do you mean by fluidity? Do liquids possess fluidity?
4. Does the evaporation of a liquid occur only at a fixed temperature?
5. Name one property which is shown by naphthalene and not by sodium chloride.

Question 6 to 10 are of 2 marks each

6. The melting point of two solids (X) and (Y) are 300 K and 700 K, respectively. Which one has stronger interpartical forces?
7. Why is ice rubbed immediately on the burnt part of the skin?
8. Explain the factors responsible for bringing a change in the physical state of a substance.
9. Why is there no rise in temperature of a substance when it is undergoing a change of state on being heated?
10. Why is ice at 273 K more effective in cooling than water at the same temperature?

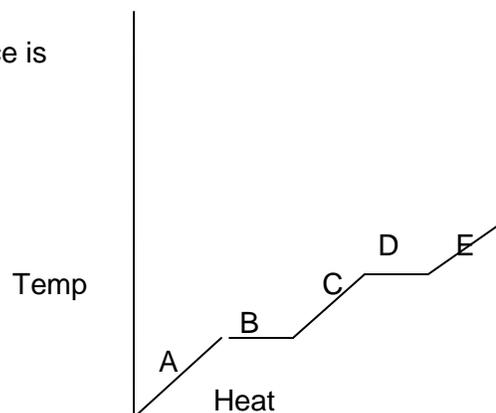
Question 11 to 15 are of 3 marks each

11. A bottle of ammonia got spilled in the corner of laboratory due to mishandling by a student. The whole laboratory was filled with a pungent and irritating smell. The teacher immediately got all the doors and laboratory opened and switched on the exhaust fan. After some time, the students got relief. What did actually happen?
12. With the help of an experiment show that diffusion becomes faster with increase in temperature.
13. With the help of an experiment show that particles of matter are extremely small.
14. What is evaporation? In what way it is different from boiling?
15. What is latent heat? What are its types? Describe by giving one example of each type.

Question 16 to 17 are of 5 marks each

16. The graph given below shows the heating curve for a pure substance. The temperature rises as the substance is heated.

- (i) What is the physical state of the substance at points A, B, C, D and E?
- (ii) What is the melting point of the substance?
- (iii) What is the boiling point of the substance?
- (iv) What happens to the temperature when the substance is
- (v) Can the given substance be ice at point A?



17. a) Small quantities of water and ether are placed on the palms of the right hand and left hand, respectively. Which will experience more cooling?

b) Give reasons for the following:

(i) A gas fills completely the vessel in which it is kept. changing its state?

(ii) A gas exerts pressure on the walls of the container.

(iii) A wooden table should be called a solid.

(iv) We can easily move our hand in air but to do the same through a solid block of wood we need a karate expert.

Sub Chemistry Chapter - 2 Is Matter Around Us Pure Std : X

Question 1 to 5 are of 1 marks each

1. Give one example of a suspension and a colloidal solution.

2. Name a typical solid solution.

3. How would you separate water from mustard oil?

4. Which process is used to purify an impure sample of copper sulphate?

5. What is the effect of temperature on the solubility of solids in liquids?

Question 6 to 10 are of 2 marks each

6. What do you mean by a physical change and a chemical change? Give two examples of each of these changes.

7. What is chromatography? State its two applications.

8. State two ways by which you can distinguish a true solution from a colloidal solution.

9. How would you confirm that a colourless liquid given to you is pure water without tasting it?

10. What is the difference between aqueous solution and non-aqueous solution? Give one example of each.

Question 11 to 15 are of 3 marks each

11. Which of the two will scatter light—soap solution or sugar solution? Why?

12. What is the concentration of a solution which contains 16 g of sugar in 120 g of solution?

13. Name the process involved in

(i) recovering the whole of dye from black ink.

(ii) separating various dyes present in black ink.

(iii) squeezing out water from wet clothes in washing machines.

14. Draw a well-labelled diagram of the fractional distillation apparatus used for separating components of a mixture of alcohol and water.

15. Describe the method of separating components of a mixture containing iodine, iron filings and salt.

Question 16 to 17 are of 5 marks each

16. Name the method(s) by which the components of the following mixtures can be separated:

(i) Water and ethyl alcohol.

(ii) Sand and iodine.

(iii) Oil and water.

(iv) Sawdust and common salt.

(v) Ink containing two or more dyes.

(vi) Sand and ammonium chloride

(vii) Sand and sugar.

(viii) Benzene and water.

(ix) Common salt and water.

(x) Iron and sulphur.

17.a) Compare the properties of a true solution, a suspension and a colloid.

b) What do you understand by the term 'Tyndall effect'? Describe an experiment in support of your answer.