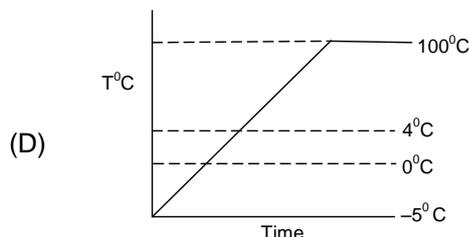
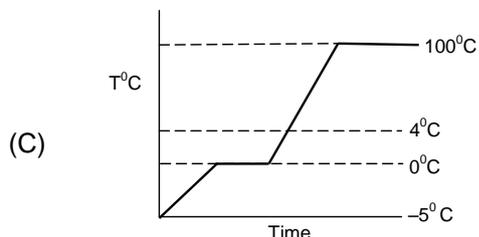
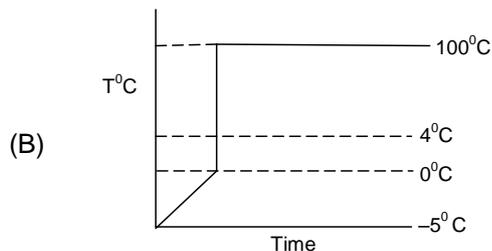
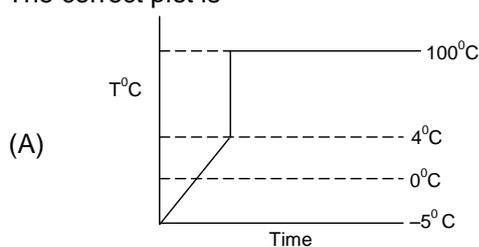


1. Some ice kept at -5°C is heated gradually to 100°C in a beaker. The temperature is plotted against time. The correct plot is



2. The process of diffusion shows presence of _____ in matter
 (A) Interparticle Forces (B) Interparticle spaces
 (C) Kinetic energy of particle (D) Both B and C
3. What happens when a fixed amount of O_2 gas is taken in a cylinder and compressed at constant temperature?
 (i) No. of collisions of O_2 at per unit area of the walls of container increases
 (ii) O_2 gas is converted to O_3
 (iii) Kinetic energy of O_2 molecule increases
 (A) i and iii (B) ii and iii (C) Only iii (D) Only i
4. Which of the following are the correct examples of matter?
 (A) Glass bottle, Water and Noise (B) Air, Wood and Vacuum
 (C) Silver foil, Hot air, Chalk (D) Sand, Oxygen, Light flash
5. Two identical beakers labelled as X and Y contain 100 ml of water each at 20°C . To water in beaker X 100 gm of water at 0°C was added and stirred to mix thoroughly. To beaker Y 100 gm of ice at 0°C was added and stirred till it melts in to water. Then the water in beaker Y will be
 (A) Hotter than in X (B) Lighter than X
 (C) Colder than in X (D) Heavier than X
6. A drop of each of two non corrosive and non-irritating liquids A and B at a temperature of 22°C are placed on the skin. Liquid A gives more cooling sensation than liquid B. Which of the following can be said about the liquids A and B.
 (A) Liquid A has higher Boiling point than B
 (B) Liquid A has higher Latent heat of vaporisation than B
 (C) Liquid A has lower Latent heat of vaporisation than B
 (D) Boiling points of A and B are equal
7. Boiling point of a sample of water was found to be 110.5°C at atm pressure. The boiling point may be measured at
 (A) Simla (B) Chennai
 (C) Mumbai (D) All any place in side a pressure cooker
8. When salt is added to ice at 0°C
 (A) It starts melting (B) It freezes more
 (C) Its temperature increases (D) No changes occurs

9. Gas $\xrightarrow[\text{Low temperature}]{\text{High pressure}}$ Liquid
The above process is termed as
(A) Liquification (B) Condensation
(C) Sublimation (D) Evaporation
10. Below critical temperature
(A) A gas can be converted to liquid state at normal pressure
(B) A gas can be converted to liquid state by applying pressure
(C) A gas can not be converted to liquid by applying high pressure
(D) A gas can not be converted to liquid at all
11. 5 gm of water when converted to ice
(A) Mass of ice is more than water (B) Density of ice is more than water
(C) Volume of ice is more than water (D) None of the physical property changes
12. To convert 30 gm of a pure solid to liquid 90 J heat is require at its melting point at atm pressure Latent heat of fusion of the solid is (in kJ/kg)
(A) 100 (B) 300 (C) 1000 (D) 3000
13. When iodine is heated it turns to
(A) Colourless liquid (B) Violet colour liquid
(C) Colourless vapour (D) Violet colour vapour
14. Rate of diffusion depends on
(A) Temperature (B) State of Matter
(C) Molecular mass of the substance (D) All the above factors
15. X has high compressibility high diffusion and high K.E. of particle. X has no free surface. Physical state of X is
(A) Solid (B) Liquid (C) Gas (D) Cannot be predicted
16. A student dissolved common salt in water and determined its boiling point to be 102°C at 1 atm pressure. Then cooled the solution to find its freezing point. What may be the freezing point of sample of water.
(A) 0°C (B) -1.8°C (C) 1.8°C (D) 2°C
17. Boiling point of diethyl ether, ethyl alcohol and water are 34°C , 75°C and 100°C at one atmospheric pressure respectively correct order of their evaporation rate is
(A) ether < alcohol < water (B) water < alcohol < ether
(C) ether < water < alcohol (D) alcohol < water < ether
18. Consider a long transparent tube of 100 cm (AB)
 $\text{HCl} \rightarrow \text{A} \boxed{\hspace{10cm}} \text{B} \leftarrow \text{NH}_3$
 Dry HCl gas is introduced from side A at the same time Dry ammonia gas is introduced from side B. HCl and NH_3 mix together to form Dense white fumes of NH_4Cl . The white fumes will be observed
(A) At the middle of tube (B) Close to end 'A'
(C) Close to end 'B' (D) Any where in the tube
19. When we break a stream of water without hand it rejoin to from single stream again. If we break a chalk it can not rejoin to from a single shalk. This property of water is termed as
(A) Rigidity (B) Fluidity (C) coalescence (D) Anisotropy
20. Anisotropy is a property related to
(A) Crystalline solids (B) Amaphous solids (C) Liquids (D) Gases