

**O1. HEAT**

1. Convert  $47^{\circ}\text{C}$  into Kelvin scale.
2. Which factors that effect the rate of evaporation?
3. Sheela has confused about Latent heat and specific heat. Can you clarify? How?
4. Which of the following substances take more time to raise its temperature for a certain degree celcius. Give reason.

	Kerosene	Water	Sea water
Specific Heat (In cal/gm. $^{\circ}\text{C}$ )	0.50	1.00	0.95

5. Why do pigs toil in mud?
6. When ice melts, what happened to its temperature?
7. The rate of raise in temperature depends upon the nature of the substance. How can you prove it experimentally?
8. How much energy is released in which 20 gm of water at  $0^{\circ}\text{C}$  freezes to ice at  $0^{\circ}\text{C}$ ?
9. If we provide heat to ice at  $0^{\circ}\text{C}$ , why the temperature does no changes until the ice changes to water?
10. What are the conditions for thermal equilibrium of two bodies?
11. Write the differences between fog and dew.
12. If we mix 100ml of water at  $90^{\circ}\text{C}$  to 200ml of water at  $60^{\circ}\text{C}$ . Then find the temperature of the system at thermal equilibrium?
13. Your teacher made an experiment that shows the formation of dew and frost. Explain how you show the formation of dew and frost?
14. Lalitha wants to determine the specific heat of Aluminium shots. What apparatus or material is required to do this experiment ?
15. How can you prove that the kinetic energy of molecules of a hotter body is greater than that of a colder body?
16. Evaporation and condensations are opposite processes. – Explain.
17. We should not keep a bottle in the deep freezer, which is filled with water up to its brim. Why ?
18. Water was taken in two glasses. The temperature of water in both glasses is  $60^{\circ}\text{C}$ . Reshma said that they are in thermal equilibrium. Do you agree with Reshma ?
19. What is the principle of method of mixtures, according to heat?
20. What is the effect of temperature on the kinetic energy of the molecules in a substance?
21. Give examples for the following processes.  
(i) Condensation    (ii) Evaporation    (iii) Transfer of heat    (iv) Sublimation
22. How do you understand about Warming process? Give two examples.