



St. Lawrence High School  
A Jesuit Christian Minority Institution



Term : 2<sup>nd</sup>

Solution of Work Sheet – 34

Class – XI  
Chapter – Heat

Subject – Physics

Date – 28.11.20

Choose the correct option for the following questions.

1 × 15 = 15

- 0.540kg of ice at 0°C is mixed with 0.540kg of water at 80°C. The final temp of the mixture is  
a. 40°C                      b. 79.9°C                      c. 80°C                      d. 0°C
- 0.1kg of ice at -10°C is heated till it is converted to 30°C. the amount of heat required is  
a. 58800J                      b. 69300J                      c. 105000J                      d. 48300J
- 0.1kg of ice at 0°C is mixed with .1kg water at 100°C. the final temp of the mixture is  
a. 10°C                      b. 30°C                      c. 20°C                      d. 40°C
- The quantity of heat require to change the unit mass of solid to its liquid state, while temp remains constant is called  
a. Heat                      b. latent heat                      c. specific heat                      d. latent heat of fusion
- I during constant temp, we feel colder on a day when the relative humidity is  
a. 85%  
b. 60%  
c. 50%  
d. 25%
- When a bubble bursts in a boiling liquid, its pressure is  
a. Equal to the atmospheric pressure  
b. Larger than atmospheric pressure  
c. Equal to the vapour pressure in its surroundings  
d. Larger than the vapour pressure in its surroundings.
- A artificially heated rooms are dry. Which of the following may be the reason?  
a. Temp of the air is large  
b. Pressure of the air is large  
c. Pressure of the air is low  
d. Humidity of the air is low.
- A liquid is boiling in an airtight vessel. Using an exhaust tube, the vapour is slowly removed from the vessel. What happens to the liquid?  
a. Temp goes down, boiling continues  
b. Temp goes down, boiling stops  
c. Temp goes up, boiling continues  
d. Temp goes up, boiling stops

9. What energy transformation takes place when ice is converted into water?

- a. Heat energy into kinetic energy
- b. kinetic energy into Heat energy
- c. Heat energy to latent heat
- d. Heat energy to potential energy

10. Unsaturated vapour

- a. Do not obey gas law
- b. Fully obey gas law
- c. Obey Boil's law but not Charle's law
- d. Partially obey gas law depending on the degree of instauration

11. At boiling point the SVP of a vapour above a liquid is

- a. Equal to the external pressure
- b. Less than external pressure
- c. More than external pressure
- d. Equal to SVP at room temp

12. Ice is slippery when a man walks on it for

- a. Its surface is smooth
- b. There is no friction
- c. Increase of pressure causes melting of ice
- d. None of this

13. The boiling point of the solution of a solid in a liquid is

- a. Greater than that of the solvent
- b. Less than that of the solvent
- c. Same as that of the solvent .

14. Sublimation refers to

- a. Vaporization of solid without first becoming a liquid
- b. The melting of solid
- c. The vaporizing of the liquid
- d. The condensation of gas into a liquid

15. When a vapour condenses into liquid

- a. It absorbs heat
- b. It evolves heat
- c. Its temperature rises
- d. Its temp drops

Name of the teacher – Soumitra Maity